FROM CRISIS TO PROSPERITY

A Case Study of Economic Development Theory and a Proposal of a Path Towards Prosperity in Venezuela

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1 Executive Summary

This thesis conducts an analysis of the crisis in the Bolivarian Republic of Venezuela through development economics. The purpose of this study is primarily to examine if theories of economic development can serve to examine economic disasters and secondarily investigate what can be done to solve the crisis and re-create Venezuela as a prosperous country.

Regarding methodological choices, the case study strategy is adopted as this is a contemporary event on which the researcher has no control. Data for the thesis is based on interviews with Venezuelan economists related to the field, on secondary reports and data by major institutions, and on limited data supplied by the Venezuelan government. Due to lack of transparency on Venezuelan economic data, triangulation has been key to establishing validity in the study.

The thesis first conducts a literature review on development theory, concluding that of the many variables used within the field, analysing the formal institutions, natural resources and macroeconomic management was particularly useful for understanding this case. It concludes that the economic crisis is a result of decades of deteriorating institutions and political stability, a reduction in the governance and talented management of their oil reserves, and a recent macroeconomic meltdown through excessive debt and a rapidly increasing money supply.

My recommendations provide solutions to fix the Venezuelan economy. First, the government should partner with NGOs with expertise in humanitarian aid to ensure that the basic nutritional and medical recovery of the population does not become political. Second, they should remove all hidden expenditures and incomes to ensure that the government has full overview of the public budget. Third, they should abolish the price control system that has removed the supply of goods and replace it with a system of subsidies on basic goods, to allow access to these goods. Fourth, the dollar should be adopted, to remove exchange rate risks, hyperinflation, reduce transaction costs between them and the US. Fifth, they should seek to achieve a "haircut" on their debt with current bondholders, upon which they could obtain new funding through IMF. Sixth, changing the legal status and assurance of both property rights and petroleum exploration, would enable the necessary foreign capital to enter the country. Finally, they should identify a set of key industries upon which Venezuela can achieve structural change, alleviating their dependence on oil.

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2 Introduction

Venezuela is currently experiencing the greatest economic collapse of an economy in peace time. While the Great Recession in the US saw a drop in GDP of 3%, Venezuela has since 2014 seen a drop in GDP of 50% (Hausmann, 2018; IMF, 2019). While the largest inflation level previously experienced in Latin America was 23,000% in Bolivia, Venezuela saw prices increase by 1,370,000% in 2018. Venezuela is also experiencing the largest emigration crisis in the world, with estimates of 10-15% of the population having left the country (Hausmann, 2018). Furthermore, the health system has collapsed, meaning that there have been polio and dengue outbreaks. This predicament comes despite the fact that Venezuela currently has the largest known oil resources in the world, pristine nature and one of the most advanced education systems in the region. Furthermore, in the 1980s Venezuela was the model upon which democracies in developing countries were based. Consequently, it has the potential to be one of the wealthiest countries in the world (ACEI, 2019; ICG, 2019).

2.1 Motivation

This paper seeks to investigate the background for the collapse and the potential revival of the Venezuelan economy. The motivation for undertaking such an academic investigation is two-fold.

First, Venezuela provides an extremely interesting case from the perspective of economic recovery. While traditional recommendations to rebuild entire countries usually occur after civil wars, foreign invasions, or natural disasters, there appears to be consensus that the Venezuelan crisis is caused by internal mismanagement rather than external shocks. Investigating the detailed elements of the economic mismanagement is therefore of interest to understand what exactly went wrong and what actions can be proposed for Venezuela to improve living conditions and achieve prosperity. Furthermore, the analytical focus of the Venezuelan crisis has, until now, been more political than economic. This thesis seeks to serve as an economic analysis of the crisis and use the academic field of economic development to suggest economic initiatives. While politics has played a crucial role in the current situation, this thesis focuses on the economic consequences of the policies implemented by these governments, rather than their political standpoints.

Second, this case is interesting as it brings the discussion of factors influencing economic development, economic growth and overall prosperity to a tangible case. Traditionally, literature on economic growth is focused on understanding relevant factors that can explain regression differences in income

across countries. Consequently, it focuses on understanding what has worked for developed economies in achieving their current status and try to formulate a general framework with universal applicability to developing countries across the globe.

This thesis provides an opportunity to discuss the primary variables, as identified by the economic development literature, and analyse them in relation to the case of Venezuela. While traditional economic research has tried to establish causality between specific variables and economic growth, this paper seeks to investigate the opposite. That is, if the deterioration of the Venezuelan economy can be linked to poor performance on the same subset of variables that the literature suggests contribute to economic growth. If the analysis supports this relationship, it will enable an interesting discussion on how to solve the current situation. Additionally, when cases have been investigated in an economic context, they have been performed in retrospective, serving to understand growth miracles. The ultimate goal of this thesis is more predictive and forward-looking in nature, seeking to recommend tangible policy initiatives to achieve sustained economic development.

Traditionally in academic papers of this type, the primary measurement of development is GDP per capita. However, due to the unreliable fixed exchange rate regime and the unwillingness of the Venezuelan government to publish credible data covering the most recent years, only guesses by economic experts are available on GDP. Consequently, this paper seeks to investigate other economic measures as proxies for economic development. These include exports and inflation, amongst others, which seek to provide insights on the development. While the literature has intense discussions on other ways to measure development, such as education levels, health of the population, or the reduction of people living in poverty, the data available on such variables is judged by the author to be too unreliable. Thus, while the author acknowledges the importance of these as measurements of how the welfare of a country is increasing, the focus will be on economic measures of the situation.

2.2 Research Question

Based on the discussion above, this thesis seeks to answer the following research question:

"How can economic development theory help understand the current economic crisis in Venezuela, and what specific policy recommendations can be proposed to develop a prosperous Venezuela?"

To further drive the structure of this thesis, three sub questions have been formulated:

1. "How can economic development literature help analyse the situation, and which specific variables within economic development are most critical in understanding the emergence of the current situation in Venezuela?"
2. "How has the Venezuelan governments performed throughout time on the chosen subset of variables?"
3. "What specific policy recommendations and structural changes can be recommended to develop the country, discussing the difficulty and timeline of the implementation of each?"

2.3 Delimitations

This paper seeks to provide a set of recommendations for the legislative body of Venezuela on alleviating the current crisis. As such, the goal is to focus on potential actions, within economics, to be taken by the government. This makes the actions of individuals and companies out of the scope of this thesis. Additionally, a thesis cannot expect to investigate all potential factors influencing growth. Thus, only a subset of the potential variables is in the scope of this thesis. These were selected by the author based on what the existing literature suggested to be the most important variables and a judgment on their applicability to the unique case of Venezuela. Finally, while politics proved to be the primary driver of the crisis, the understanding political actions were not the primary unit of interest – rather it took these as exogenous and investigated the impact on economics.

2.4 Thesis Structure

This thesis is structured as follows: **Chapter 3** investigates the existing body of literature within the area of economic growth theories and economic development. It seeks to provide the reader with the background information on this topic, to introduce the variables that existing literature deems most important for a country to achieve sustained growth, and to explain the structural shortcomings that have inhibited countries from achieving economic development. **Chapter 4** seeks to synthesize the literature and present the primary variables of interest in this thesis, consequently answering sub question 1. **Chapter 5** explains the methodological approach the author takes in answering the research question and discusses the advantages and disadvantages of these. **Chapter 6** seeks to

analyse the Venezuelan situation through the variables discussed in chapter 3, hereby answering sub question 2. The analysis seeks to understand the current crisis and the economic impact of implemented policies in the past. **Chapter 7** presents a set of macroeconomic and structural recommendations for the government of Venezuela which will enable the country to achieve economic prosperity, thus answering the final sub question. **Chapter 8** concludes and **chapter 9** provides a discussion of further research on Venezuela, macroeconomic recovery and economic development.

3 Literature Review

The complex issues of economic development have through centuries paved the way for an extensive body of literature investigating development in a country (Dang & Pheng, 2014). This chapter seeks to review the literature on economic growth. It will by no means be an exhaustive review of economic development theories, but will seek to provide the reader with an in-depth understanding of economic growth in the context of Venezuela and to establish the theoretical framework from which the crisis can be analysed. First, it will review the classic theories on economic growth and discuss how they relate to the case of Venezuela. Second, the theories discussing why developing countries have shown difficulty in advancing their economic status will be reviewed and their ability to explain the Venezuelan situation will be discussed. Finally, a review of variables that academics believe promote economic development is provided.

3.1 Classic Development and Growth Theories

The review begins with a discussion of the major theories within economic development that have shaped policies and academic discussions for centuries.

3.1.1 Early Theories

The academic focus on development economics started with arguments on economic development by renowned economists such as Adam Smith, Karl Marx and David Ricardo (Dang & Pheng, 2014). Their literature created the foundation for the theories investigated in the remainder of this chapter.

In his book "Wealth of Nations", Adam Smith discusses the role of protectionism, the division of labour and the role of the invisible hand (A. Smith, 1776). As a result, this book is considered the foundational work for how to see capitalism. Smith argues that protectionism, imperialism, and the exploitation of the British colonies was detrimental to wealth-creation both in Britain and abroad, concentrating power at the hands of the few. Next, he argues that division of labour is intended to lead to specialization and increased efficiency, promoting exchange across borders. Finally, his work includes the introduction of the invisible hand, by which he argues that government interference is detrimental to economic growth and should rather let markets act freely.

David Ricardo, the British economist known for coining the term "comparative advantage" in 1817, argues for free trade between individuals and countries to take advantage of differences in factor endowments and technological progress. He believes that even if one country has absolute advantage in producing all goods, they should pursue the good in which they are comparatively better than others and engage in trade (Ricardo, 1817).

Later, in 1867, Karl Marx published his work "Capital". In his work, Marx goes against the capitalistic arguments proposed by Adam Smith, arguing that the wealth of capitalists comes from the exploitation of the working class (Marx, 2011). Consequently, according to Marx, private property and free market mechanics were the direct causes of poverty, which instead should be managed by the government for the greater benefit of all members of society.

This paper integrates these arguments into the theoretical discussion of chapter 4 – namely, it seeks to understand the developments of private property rights, the opportunity of comparative advantages and the economic actions of the government.

3.1.2 Post-World War II

Following World War II, interest emerged on how to mitigate the differences in GDP per capita across countries. Major voices in this debate were Rosenstein-Rodan and Nurkse, with further academic support from Murphy, Shleifer & Vishny.

In his 1943 work "Problems of Industrialisation of Eastern and South-Eastern Europe", Rosenstein-Rodan argues that supply international capital to developing countries in Europe would work together with the abundant labour to increase the GDP. He argues that the method of a "*big push*" of international capital is a stronger and faster way to develop these countries, as opposed to other development models, such as the Russian, which focuses on a vertically integrated economy that uses domestic capital to develop all capabilities within a country. By allowing capital from abroad, he suggests, the economies that utilize international trade and specialization of labour will achieve rapid economic growth (Rosenstein-Rodan, 1943). Murphy et. al. extend this work, suggesting that a "big push" into multiple sectors is advantageous to a narrower focus, as the spillover effects increase domestic demand and the ability to export – *"simultaneous development of many export sectors may be necessary to sustain any one of them"* (Murphy, Shleifer, & Vishny, 1989, p. 1024).

Nurkse further discusses the issue of economic growth in "least developed countries" (LDC). He proposes that developing countries are maintained in a vicious circle of poverty, where the inter-relation of low income, low savings, low productivity and low investments leads countries to stay poor (Nurkse, 1953). He suggests that the government in any LDC must engage in large investments to increase the domestic market, increase productivity and consequently induce private investments (Dang & Pheng, 2014). These views support the premise of this thesis, as both capital investments and government activity are potentially important components of Venezuela's recovery.

3.1.3 Linear-Stages of Growth

Building on the issues of investments, the following growth theories suggest that economic development follows certain stages (Dang & Pheng, 2014). These are based on the historical successes of the developed Western countries. The two dominant ones, discussed below, revolve around the simplified learnings that large injections of capital drive growth (Todaro & Smith, 2012).

3.1.3.1 Rostow's Five Stages of Growth

Rostow's argument follows the foundational discussion by Nurkse and others regarding the role of capital flows in economic development. In his book "The Stages of Economic Growth: A Non-Communist Manifesto", Rostow (1960) argues that all societies must past through five stages in their life-time. The model proposes that as a country passes through the stages, they have to follow a set of rules to reach self-sustaining economic growth. Rostow argued, that as countries were to move along the five stages, it was necessary to promote the importance of savings and capital investments as preconditions for economic growth (Todaro & Smith, 2012). Furthermore, he argued that these increased capital investments must be placed strategically within a few key sectors – a thought that follows the idea of "comparative advantage" discussed earlier (Rostow, 1960).

3.1.3.2 Harrod-Domar Growth Model

The idea that more investment leads to more economic growth is supported by the other major linear-growth theory, the Harrod-Domar growth model (Domar, 1946; Harrod, 1939). This model suggests that GDP growth is determined by the national savings rate and the capital-output ratio,

a measure of a country's productivity (Todaro & Smith, 2012). Their model suggests that the more countries save, the more an economy will grow, while the exact relationship between savings rate change and GDP growth rate change depends on the capital-output ratio. There are reasons why the model does not explicitly explain the role of labour and technological progress. First, because the model is based on developing economies, labour is assumed to be an abundant input factor. Second, the model argues that capital-output ratio captures technological progress as an advancement in technology leads to a decreasing need for capital, and consequently a lower capital-output ratio (Aghion & Howitt, 2010; Todaro & Smith, 2012).

The discussion following the two different models of stages has revolved around their inability to predict growth in developing countries. The explanation of their failure is that even though investment is a necessary condition for development, it cannot promise development alone – facilitating factors, such as institutions, infrastructure and human capital are also necessary to ensure that economic development is achieved (Todaro & Smith, 2012). Furthermore, according this terminology, Venezuela used to be at a higher level of development than today, making it unable to explain the demise of Venezuela.

3.1.4 Solow Growth Model

Solow (1956) builds on the Harrod-Domar model in its pursuit of explaining growth, but differs by his introduction of labour as an endogenous growth factor and the inclusion of technology as an exogenous variable, thus leading to the characterisation of this model as an exogenous growth model. His assumptions differed, however, as while there were diminishing returns to both capital and labour on their own, there were constant returns to their joint effect (Todaro & Smith, 2012). Solow proposes that output growth depends on improvements in labour, through education or population growth; capital, through increased savings; or technology, the exogenous factor. Therefore, the model suggests that growth does not depend on economic conditions and he argues that public policy has no impact on the long-run growth rate (Aghion & Howitt, 2010). In this thesis, the underlying assumption is that endogenous actions have led to the economic downfall of Venezuela, suggesting that the path towards prosperity must be based on endogenous actions.

3.1.5 Endogenous Growth Models

Following the inability of the Harrod-Domar and Solow models to either explain what led to economic growth, or be directly applicable to the economic aspects of the Venezuelan crisis, endogenous growth models emerged, emphasizing that economic growth comes from increasing returns to knowledge, as opposed to just labour and capital. They consequently endogenized knowledge to account for the "Solow Residual": the share of GDP growth that was unexplained by the Solow model (Todaro & Smith, 2012). The primary changes lie in abandoning the assumption of diminishing marginal returns to capital investments and rather assuming that investments in human capital generate direct productivity improvements, making the technological progress endogenous to the model (Aghion & Howitt, 2010). This thesis adopts the view of endogenous growth, seeking to understand which factors have had adverse effects on growth and what actions can be taken in order to achieve prosperity going forward. Romer, Lucas and Barro primarily investigate knowledge accumulation and government role, which will be discussed in subsection 3.3.

3.2 Qualitative Explanations of Underdevelopment

This subsection evaluates the dominant theoretical explanations on the persisting underdevelopment of specific countries, particularly relevant to the Venezuelan crisis.

3.2.1 Structural Change

Structural change theorists argue that developing countries predominantly focusing on agriculture suffer from inefficient resource allocation and insufficient capital savings (Nafziger, 2012; Todaro & Smith, 2012). They argue that a change in the structure of the economy will increase savings and investments, leading to increased GDP. The primary theories belonging to this school of thought are the ones proposed by W. Arthur Lewis (extended by Fei and Ranis) and Hollis B. Chenery, with the latter one being excluded from this literature review due to its focus on domestic demand and international trade, which is not believed to be the primary cause for the Venezuelan crisis (Dang & Pheng, 2014; Nafziger, 2012; Stiglitz & Meier, 2000; Todaro & Smith, 2012).

In the Lewis-Fei-Ranis two-sector model, an underdeveloped country consists of two industries: a traditional agriculture industry and a high-productivity industrial sector. Due to the zero marginal

productivity of labour, workers in the agricultural industry can easily be transferred to the industrial sector at zero cost (Todaro & Smith, 2012). Due to these workers not receiving significantly higher wages, industrial companies earn higher profit, that in turn lead to increased investments (Dang & Pheng, 2014). Through these increased profits and investments, this model suggests that as workers move from the agriculture industry to the industrial sector, output grows due to it being higher in the industrial sector than in the agricultural sector (Nafziger, 2012). This process is supposed to continue until all surplus labour in the underdeveloped industry has been transferred into the industrial industry; at this stage, the cost of taking workers out of the agricultural industry will be higher than zero, known as the "Lewis Turning Point" (Todaro & Smith, 2012). There are certain issues with the underlying assumptions of the model, among which the largest ones are massive surplus labour in the agricultural sector, full employment in urban areas and the assumption of country acting without any foreign interaction (Ghatak, 2003; Todaro & Smith, 2012). While the two-sector model cannot explain the magnitude of the economic crisis, it does raise an important point of economic diversification. It proposes an argument for diversification and less dependence on oil in the Venezuelan case.

3.2.2 Dependency Theory

Dependence means that the prosperity of one country is dependent on the progress of others (Seligson & Passé-Smith, 2003). As economic growth failed to occur as strongly as suggested by the economic theories discussed until now, the concept of dependency theory was put forth by Argentinean Raul Prebisch in the 1960s (Black, 2007; Ferraro, 1996). He argued that the low levels of development in LDC's was due to their labour being focused on primary goods, and developed countries exploiting LDC's through deterioration in their terms of trade (Black, 2007). Two theories will be discussed.

3.2.2.1 Neo-colonial Dependence Theory

The neo-colonial dependence model follow the line of thought proposed by Marx, where a few developed countries that have achieved their place through historical events take advantage of a capitalist system to exploit poorer countries (Nafziger, 2012; Todaro & Smith, 2012). While the theory does not say whether this exploitation is the outcome of intentionally exploitive policies or policies that have a genuine interest in improving the situation in the poor countries, the outcome is

the same – the unequal relationship between rich and poor nations makes it impossible for poor nations to create self-sustaining domestic growth. This is held in place also by the capitalist structure in the poorer countries, where a "controlling elite" serves their individual interest by furthering societal exploitation within the country (Todaro & Smith, 2012).

3.2.2.2 Prebisch-Singer Hypothesis

The Prebisch-Singer hypothesis argues that the downward price trend of primary goods has been a disadvantage to producers of agriculture and raw materials, while it has been an advantage to countries processing it (Lutz, 1999). Thus, the theory argues that the producers of these goods will be at a disadvantage in international trade, as the price they can charge will decrease more than efficiency gains, thus making a focus on primary goods bad for developing countries (Nafziger, 2012; Toye & Toye, 2003). Furthermore, evidence suggests that this downward trend in commodity prices is a phenomenon that has persisted over the past centuries (Arezki, Hadri, Loungani, & Rao, 2014; Harvey, Kellard, Madsen, & Wohar, 2008). This theory argues that unless structural changes are made to the way trade is conducted, the current goal of free trade will be at an advantage to developed, central countries and at a disadvantage to developing, peripheral countries (Todaro & Smith, 2012; Toye & Toye, 2003).

These two views on dependency add certain perspectives to the foundation of the framework of analysis proposed in the following chapter. First, the historic dependence of Venezuela on Europe and the US has helped shape their institutions and culture; secondly, diversification is important in this global economy, due to downward price trends.

3.2.3 Economic Consensus

Next, economists have sought to establish a consensus around development economics, a "blue-print" to ensure prosperity. The "Washington Consensus", which was established as a set of guidelines of actions that developing countries should undertake to develop their economies, has failed to explain certain growth miracles of the past 50 years. This failure led to the emergence of the "Beijing Consensus". Both will be discussed below.

3.2.3.1 Washington Consensus

The term "Washington Consensus" was coined by John Williamson in 1989, when he brought together 10 reforms that were all supported by the dominant Washington institutions: the IMF, the World Bank and the US Government (Serra & Stiglitz, 2008). These 10 proposals included, among others, fiscal discipline, deregulation, trade liberalization, increased protection of property rights and competitive exchange rates to facilitate exports (Nafziger, 2012). There were still many disagreements on issues such as the environment, capital flight and military spending, but this list included what they could agree should ensure economic development in underdeveloped countries (Serra & Stiglitz, 2008, p. 18). Thus, this free-market approach suggests that limited government involvement and well-functioning markets will ensure growth in these developing countries, based on the adoption of these proposals.

Since the "Washington Consensus" on reforms was proposed, it has been the recipient of much criticism (Serra & Stiglitz, 2008; Todaro & Smith, 2012). First, it has struggled to explain the success of South Korea and Taiwan from the 1950s to the 1990s, in that the 10 points fail to factor in the importance of a strong government. It has had the same difficulty with China recently (Todaro & Smith, 2012). In addition to the consensus failing to consider the role of governments, Joseph Stiglitz has contended how it has failed to reduce inequality. Instead, it has benefitted the few in power of these countries while failing to promote health, environment and education (Meier & Stiglitz, 2000; Nafziger, 2012).

3.2.3.2 Beijing Consensus

As an alternative to the "Washington Consensus", the focus turned towards the economic advancements of China. In opposition, Ramo coined their development initiatives the "Beijing Consensus", with a focus on domestic innovation and human capital capabilities, the rejection of GDP being the overarching measurement of development, and independence from Western institutions such as IMF and the World Bank (Li, Brødsgaard, & Jacobsen, 2009; Ramo, 2004). While there has been critique of this view, as China with its high factor endowments of labour and flows of Foreign Direct Investment (FDI) from foreign-based Chinese citizens had certain advantages, it still presents an interesting alternative to the "Washington Consensus" (Li et al., 2009; Serra & Stiglitz, 2008). China has achieved growth through a long-term focus, high exports, a stable political arena with a coherent focus on achieving industrialization, development and poverty reduction while

being careful and flexible towards financial liberalization and other government policies (Bird, Mandilaras, & Popper, 2012; Huang, 2010; Li et al., 2009). The underlying economic perspectives on the matters outlined above are discussed in depth in subsection 3.3, where the role of the government, free trade and macroeconomic measures are viewed in their ability to help understand the Venezuela.

3.2.4 Coordination Failure

Coordination failure suggests that some developing countries achieve the poorer of two potential equilibria due to their inability to coordinate actions when complementarities between actions of players are high (Todaro & Smith, 2012). Because of game theory and network effects, it would be profitable for the country and individuals alike to coordinate their actions – however, because they do not, they reach a lower equilibrium with less prosperity (Todaro & Smith, 2012). If this coordination failure is not addressed, it may lead to a country being stuck in an underdevelopment trap, with underdevelopment maintained in the long-run. One way of solving this coordination failure is through the previously discussed actions proposed by Rosenstein-Rodan and Nurkse, with government actions providing the necessary investments enabling others to follow, moving the equilibrium state of the economy upwards (Meier & Stiglitz, 2000). Another way is to establish a coherent focus on connecting education and infrastructure in a long-term government plan. This is extremely relevant to the case of reviving the economy of Venezuela, as the actions of a credible government, taking a role in designing the overall productivity planning for the country could bring Venezuela out of the current equilibrium.

3.2.5 New Institutional Economics

As the literature of economic growth has struggled to assure that capital and population growth account for the differences in income per capita, economists turned to other factors that could explain why many countries are stuck in low-income situations (D. Romer, 2019). "New Institutional Economics" investigates the interaction between institutions and organizations (Menard & Shirley, 2005). The discussion of institutions started with Ronald Coase and his emphasis on transaction costs, which has been further developed by O. Williamson who defined the concept in 1975 (Coase, 1998). Institutions are defined as either (1) written rules that cover contracts, (2) laws that cover government, politics, finance and society, or (3) societal and cultural norms and beliefs (Menard &

Shirley, 2005). The basis of this theory is that transactions indeed matter and from this standpoint, economists and practitioners take an explicative attitude to uncover, on a case-by-case basis, what institutions achieve and how they develop (Williamson, 2000). The institutional development of a country can be placed at one of 4 levels; level 1 is based on informal constraints, and focuses on culture, habits and traditions. Level 2 introduces formal institutions, such as constitutions, laws and property rights. He further argues that on Level 2, *"[t]he definition and enforcement of property rights and contract laws are important features."* (Williamson, 2000, p. 598). Level 3 investigates the governance of such property rights. Williamson defines governance as *"... an effort to craft order, thereby to mitigate conflict, and realize mutual gains"* (Williamson, 2000, p. 599). Finally, level 4 is considered to be a situation in which agency theory and efficient markets achieve efficient allocation of goods. This perspective is relevant to understand how the country has moved between these four layers and how this can explain the crisis.

3.3 Variables of Economic Development

Following the discussion of economic theories, their ability to explain and/or predict economic growth, and their relevance in the context of this thesis, this subchapter seeks to discuss the major variables influencing economic growth, review these through the context of empirical studies, and discuss their relevance in the Venezuelan crisis. This subchapter thus forms the base from which to choose the variables in our framework.

3.3.1 Human Capital

Paul Romer (1986, 1990) and Robert Lucas (1988) investigate the importance of human capital development within endogenous growth models. Their main proposal is removing the assumption of diminishing returns to capital, as knowledge is a non-rival good that can be used at zero additional cost once produced, and the introduction of knowledge-creating agents which he analyses on the basis of microeconomic foundations, such as rational utility-maximizing agents (P. M. Romer, 1986). Other authors additionally argue that government policy has a big role in developing knowledge, and consequently, the growth of a country (Dang & Pheng, 2014). They argue that due to private actors not being able to capture the full gains of their knowledge advancements or public investments, policy initiatives should focus on complementary actions improving the general economy in the long-

run. Thus, they add to Solow's view, which contends that economic growth only depends on labour effectiveness, by refining the definition. They argue that it depends on the accumulation of knowledge with increasing returns to scale – a concept since then defined as human capital (Stiglitz & Meier, 2000). The following seeks to explain empirical findings on human capital and growth.

First, Psacharopoulos investigates the return on investment within education (Psacharopoulos, 1994). In general, he finds that globally there are positive returns to education from both a private and public perspective. Second, he finds that the rate of return declines as education levels increase, suggesting that returns are higher in developing countries. Guisan and Neira (2006) discuss the interrelation of human capital and other indirect factors, such as industrial development and free trade. Their econometric analysis suggests that the indirect effects of increased education levels are very important, potentially even more important than the direct effects. It thus supports the fact that to grow an economy and improve the situation in Venezuela, education is key.

Beine et. al. (2001) investigates "brain drain" and propose two different outcomes. First, they propose the "brain effect", which means that when emigration of human capital occurs, the level of human capital decreases, leading returns on investment to increase, suggesting higher investments. Second, the "drain effect" is the loss of human capital that follows emigration. The overall effect on the economy depends on which effect dominates, and while the Venezuelan exodus suggests that the "drain effect" dominates, it is worth investigating its impact and whether this has a direct or indirect effect on the crisis. However, as an exodus of people is of an indirect nature, this is not considered to be a primary point of analysis. It will be considered in the discussion.

3.3.2 Foreign Direct Investment

FDI is also considered a major variable influencing economic growth, suggested as the second most important variable for developing countries (Petrakos & Paschalis, 2008). Lucas discusses the importance of capital flows and the underlying factors that explain the lack of cross-border investments in LDCs (Lucas, 1990). This gave way to the Lucas Paradox: countries with lower capital per worker should present higher returns on investment, while this does not appear to be the case in reality (Alfaro, Kalemni-Ozcan, & Volosovych, 2008). Empirical research has found that institutional quality is the leading explanation for this, and that improving institutions will have positive effects on FDI (Alfaro et al., 2008). Thus, the effect of FDI on economic growth depends on country-specific characteristics - an argument supported by Zhang (2001), who states that the effect of FDI depends

on trade regime, education levels and macroeconomic stability. As capital investment in Venezuela was large in the past, it is suggested to have an indirect effect on the crisis rather than a direct explanatory effect.

3.3.3 Knowledge Accumulation

In addition to discussing education levels, Romer (2019) investigates what determines the allocation of resources working to increase the amount of knowledge in a country. More specifically, he investigates various factors and examines their impact on knowledge. First, he argues that support for basic scientific research conducted by public and non-profit-seeking entities, carries positive externalities to society. Second, he investigates incentives for private entities and whether private advancements in knowledge are advantageous to the country as a whole. He argues that private R&D carries three externalities: the consumer-surplus effect, which is the benefit that consumers get above of what they pay, is positive as profit-maximizing firms cannot perfectly price discriminate; the business-stealing effect, the effect that outdated technology of existing firms has on their competitiveness, which is negative; and the R&D effect, which is the effect forcing other private actors to engage in knowledge creation, which is positive to society. Romer argues that it is important for the most talented individuals to engage in activities with positive social returns while achieving personal gains, as opposed to simple rent-seeking, defined as activities done to capture existing wealth rather than creating it. Thus, understanding knowledge creation, the incentives for rent-seeking as opposed to creating positive social returns and private R&D may help understand the early stages leading to the crisis.

3.3.4 Formal Institutions

Petrakos & Paschalis (2008) argue that dependable formal institutions, an umbrella term including property rights, the judiciary system and the tax system, are the third most important factor of economic growth in developing countries due to their impact on business and government decisions. This subchapter examines some empirical evidence on formal institutions and growth.

Henisz (2000) derives a new measure of the workings inside political institutions, and conducts a regression on economic growth, finding it to be a statistically significant explanatory power. Esfahani & Ramírez (2003) seek to investigate the effect of infrastructure on growth, and find that the

credibility and effectiveness of government policies are particularly important if infrastructure is to achieve economic benefits. They argue that infrastructure has an indirect impact on growth through its effect on the allocation of resources and the return on such investments. Regarding property rights, Acemoglu and Johnson (2005) take an IV regression approach to the relationship between property rights and economic growth, and find that these rights have a strong impact on long-term growth and investment levels – a hypothesis touched upon previously in the dependency theory subchapter. This is supported by the empirical investigation by Knack and Keefer (1995), who evaluate factors such as the risk of expropriation and contract enforceability, and find this to have important long-term effects. It is therefore of great importance to investigate these and understand if these institutional factors have influenced the crisis.

In addition, Romer (2019) discusses the impact of social infrastructure and corruption. He argues that social infrastructure, defined as institutions and policies intended to align private and social returns to activities, has an explanatory effect on differences in income across countries (D. Romer, 2019). He argues that there are three groups within social infrastructure. First is the government fiscal policy, and how it affects rent-seeking through devoting resources to tax evasion, which does not improve social welfare. Second, he groups together factors that determine the environment that private decisions are made in; that is, if crime is unchecked and property rights are low, private rewards to investments are low and overall output falls. The third group is activities by the government itself that are rent-seeking in nature, including government expropriation and corruption. Thus, if a country is poor performing on these three elements of social infrastructure, economic growth is expected to be low. It is interesting in the context of Venezuela to understand how these three groups have developed over time and analyse their contribution to the crisis.

3.3.5 Trade Policies

The degree of openness in trade and the ability to freely import and export goods across borders influencef growth. The degree of openness in trade is related to the aforementioned Prebisch-Singer hypothesis and the theory of comparative advantage.

First, Yanikkaya (2003) investigates trade liberalization, through two variables: trade intensity and trade barriers. The empirical findings on trade barriers go against the "Washington Consensus" - for developing countries, trade barriers are positively correlated with growth. This supports the notion that protection of certain sectors of the developing economy may be beneficial to overall growth.

Harrison (1996) finds that the direct line of causality is ambiguous when the analysed country is developing. Next, an empirical study applies an identification through the heteroskedasticity methodology to account for the endogeneity of this relation (H. Y. Lee, Ricci, & Rigobon, 2004). When controlling for the reverse effect, growth on openness, they still find a positive causality, albeit of a smaller magnitude than previously estimated. Grossman & Helpman (1990) find that it is particularly significant when knowledge spill-overs are important. By increasing trade, the learning effects from working with more advanced countries bring particular benefits.

As there is dispute over the sum of the effects from free trade, Chang et. al. (2009) investigate what factors influence the overall effect on growth, apart from the level of economic development. They find that it depends heavily on the complimentary policies implemented by the government, suggesting that the full effect of trade policies cannot be determined ex ante. While the sum of these can be extremely powerful in advancing or inhibiting growth, their overall effect depends equally on the policy regime that they are following. Thus, the empirical evidence suggests that their interaction with other variables is important, despite the indirect nature of trade policies.

3.3.6 Infrastructure

Following the lines of the coordination failure discussed earlier, infrastructure investments are the type of investments that have high societal value, but carry a low up-front value to individuals. Additionally, infrastructure investment carries large elements of network effects, as the more users there are, the higher the benefits. Many academics have investigated the relationship between infrastructure and growth.

Felix Rioja (1999) investigates the effects that an increased spending on public infrastructure has. He finds that it promotes private investment, as public highways and telecommunication increase the productivity of both individuals and companies. Still, as network effects in general suggest, it may reach a point in which additional spending has negative welfare implications. The author concludes that an optimal level of public investment is approx. 4% of GDP (Rioja, 1999). Aschauer (1990) follows this argument and adds that in addition to economic growth, infrastructure investment also has positive effects on health, welfare, leisure activities and safety, further supporting the argument that this type of investment is important from other perspectives than just the economy. Devarajan et. al. (1996) further investigate the notion of public infrastructure investments, and find that not only absolute size, but also the nature of the expenditure is key. They find that developed

countries place a higher emphasis on current expenditures, such as maintenance and repair, compared to the investment in new facilities. They argue that developing countries should seek to reconsider their infrastructure strategy and focus on projects that carry higher returns, rather than the ones with the highest level of novelty in society. Finally, it is also worth considering private investments into infrastructure. Here, it should be noted that if private actors are invited to invest in infrastructure, it must be made by investors with a long time horizon, such as sovereign wealth funds, insurance companies and pension funds (Inderst & Stewart, 2014; Peters, 2014).

Infrastructure has the potential to positively influence Venezuelan recovery indirectly through its effect on private investments and welfare in general, and through an increasing opportunity for private actors to complement governments.

3.3.7 Natural Resources

For decades, it has been a puzzle to academics and policy makers how countries with an abundance in valuable natural resources, such as gold and oil, have been performing poorly in reducing poverty and achieving economic growth. While such abundance should give countries every opportunity to achieve growth, there has been a tendency towards the opposite. This has opened up the discussion amongst academics of whether resources are in fact a curse to an economy (Moene, Mehlum, & Torvik, 2006; Ploeg, 2011; B. Smith, 2015).

Ross (1999) argues that there are four primary explanations for the observation of the "resource curse": (1) a deterioration in the terms of trade in primary goods, which follows the Prebisch-Singer hypothesis discussed earlier, (2) the instability of international commodity markets, (3) poor economic linkages between resource and non-resource sectors and (4) the concept of the "Dutch Disease", in which the strength of one sector causes an appreciation in currency making other sectors uncompetitive. Additionally, Ross gives three explanations of why resource-abundant countries manage themselves so poorly; (1) short-sightedness of policy makers, (2) unequal distribution of benefits, empowering a limited number of actors that favour growth-impeding actions or (3) the weakening effect on the institutions of a country (M. L. Ross, 1999). The fact that institutions play an extremely important role in the success of resource abundance is supported by Mehlum, Moene & Torvik (2006), who show that institutions are a key determinant of whether resource abundancy achieves economic growth or not, as they help alleviate the short-sightedness of politicians (Robinson,

Torvik, & Verdier, 2006). Finally, the impact of resource abundancy on entrepreneurship has also been of interest to researchers. Torvik (2002) discusses the impact of a dominant, primary resource sector on the development of other aspects of the economy, and shows that natural resources cause entrepreneurs to engage in rent-seeking of existing value as opposed to value-creating endeavours. Thus, as the value lost from insufficient entrepreneurial business is larger than the economic gains from resources, he concludes that as a whole having abundant resources is negative to the economy (Torvik, 2002). These two contradicting arguments aside, there is a massive potential if these natural resources can be put to optimal use. Given the size of the Venezuelan oil reserves, any macroeconomic recovery plan must incorporate a plan for optimal utility of these resources.

3.3.8 Macroeconomic Measures

There are multiple macroeconomic variables that influence growth and this subchapter will outline and discuss the most important ones. While the variables discussed until now impact the overall economy, and are thus macroeconomic in nature, this section seeks to investigate the exchange rate regime, inflation rates and government debt (Chirwa & Odhiambo, 2016).

3.3.8.1 Public Debt

Here the relationship between debt and economic growth is investigated. Due to the levels of public debt in Venezuela, this subchapter will focus on sovereign defaults, foreign denoted debt and its relationship with growth.

Panizza & Presbitero (2014) conduct an IV regression to study the direction of causality between public debt and growth where they find that there is a relationship between increasing debt and lower growth. However, when controlling for endogeneity this relationship disappears. They consequently conclude that there is no causal effect of public debt on growth. This is extended by Kourtellos, Stengos and Tan (2013), who reach similar conclusions. However, when including measures for level of democracy, they find strong evidence that low democracy-scoring countries do see increased debt level as an inhibitor to economic growth (Kourtellos, Stengos, & Tan, 2013). Finally, Reinhart and Rogoff (2010) find that in addition to depending on the level of democracy, the effect of debt depends on the denomination and size of debt relative to GDP. They find that debt has a negative effect on growth once it reaches 90% of GDP, leading to a median growth rate

decrease of 1%. Additionally, they find that when the borrower is an emerging economy, the threshold at which debt becomes an inhibitor of growth is 60% of GDP, with the consequence of a median growth rate decline of 2%, making high debt levels more severe.

One way in which additional debt levels can negatively impact growth is through sovereign default. Traditionally, there are two costs resulting from a sovereign default: reputational costs, which would limit a country's ability to obtain future financing, and direct sanctions, such as international trade sanctions or seizure of private property in other countries as collateral (Borensztein & Panizza, 2008; Eaton & Gersovitz, 1981). Due to the sovereign debt being much harder to enforce than private debt, where the legal search for collateral in firm assets is easier, the introduction of an institution facilitating sovereign defaults should take place (Panizza, Sturzenegger, & Zettelmeyer, 2009).

3.3.8.2 Exchange Rate

Traditionally, when considering the exchange rate regime of a country, the question is whether to peg the currency to another, or to let it float freely (Chang & Velasco, 2000). History has shown that maintaining a pegged rate requires strong a financial situation and solid political policies (Chang & Velasco, 2000). Empirical evidence suggests that maintaining a stable and competitive real exchange rate through policies is good for economic growth (Guzman, Ocampo, & Stiglitz, 2018). In addition, the exchange rate policies implemented depend heavily on the relationship between imports and exports and the nominal level of foreign debt, as a depreciating exchange rate makes it more expensive for countries to service debt (Staveley-O'Carroll & Staveley-O'Carroll, 2018). Whether it is important to achieve a relatively expensive or cheap exchange rate is disputed in academics; most, however, agree that when cross-border good, currency movements are large, and when foreign debt is substantial, the exchange rate impacts economic growth.

3.3.8.3 Inflation

Venezuela has witnessed hyperinflation and a consequent reduction in private wealth since 2016. Most academics agree that high inflation is detrimental to growth (Cavallo, Cruces, & Perez-Truglia, 2017; Lucas, 2000). Furthermore, evidence suggests that hyperinflation has large adverse effects on future growth (Guerrero, 2006). It is interesting to understand the actions of the Venezuelan government regarding inflation, and what policies they have implemented to curb increasing inflation.

3.4 Conclusion on Literature Review

This chapter has reviewed the literature, suggesting economic theories and models that can help explain economic growth. It presented how theories such as dependency theory, theories on structural change, economic consensuses, institutions and coordination failure by governments are considered the primary reasons upon which economic development has been analysed. Secondly, the literature review also suggested eight primary variables that contribute to economic growth. While these are considered to be facilitators of economic growth, they may not be directly explanatory towards an economic crisis. The following chapter seeks to discuss this, and other elements, presenting the specific framework adopted to answer the research question.

4 Theoretical Approach

For the purpose of this thesis, a theoretical framework is built to analyse the situation. This framework is based on the perspectives towards growth discussed in the literature review and an assessment of the utility of each particular variable in explaining the Venezuelan crisis. The approach is not a regression model; it rather serves as a framework to explain that the economic prosperity depends on a set of variables, seeking to understand the different variables in depth. The purpose of this chapter is to discuss the literature review, assess the potential variables of interest and decide which are the most applicable to answering the research question. This theoretical framework is intended to establish the baseline from which the analysis on Venezuela is done and the context in which the results should be interpreted. Furthermore, this section intends to elaborate on how to apply each variable.

4.1 Perspective on Economic Development

This subchapter outlines the underlying perspectives on economic development. The model of endogenous growth creates the baseline of this analysis. As population and technology growth have shown not to provide stable growth, other factors have worked to inhibit and promote growth in Venezuela. For this reason, this thesis believes growth can be attributed to endogenous factors, which will be defined later. The fact that the Venezuelan economy has, over the past century, experienced much volatility, suggests that linear stages of growth do not have much power in answering the research question. Moreover, Venezuela's past history, with ample foreign and domestic investments, shows that capital has not directly been the cause of the crisis. As such, the "big push" that helped develop post-WWII Europe is not believed to provide the solution to this crisis. The author adopts the "Beijing Consensus" element that the government carries a large role in the advancement of the Venezuelan economy. Additionally, overcoming coordination failure by proposing a plan to secure development within a few industries that can foster economic growth in other sectors of the economy, falls under the government's responsibility. Still, the author does not fully neglect the "Washington Consensus", as property rights and trade in general are considered important for the rebuilding of the country. The perspective adopted is thus a combination of the two consensuses. In line with this, "New Institutional Economics" is expected to help understand the crisis. It supports the idea that

well-functioning institutions are key to ensuring a well-functioning government and consequently a high performing economy.

Structural change is important in the context of Venezuela, as it is estimated that oil exports accounted for 98% of total exports in 2018 (OPEC, 2019). As such, it is important to understand both developments in oil revenues and the ability for oil to cross-subsidize a structural change, to ensure a diversified economy. As structural change promotes that developing countries must move away from dependency on primary goods in the long run, the above figure does not support this; it is thus important to understand Venezuelan actions on structural change and see if they have contributed to the current crisis. This is supported by the on the previous discussion on the Prebisch-Singer hypothesis.

As a final note, the severity of the crisis suggests that Venezuela has economically declined to a low level. Assessing the World Economic Forum (WEF) competitiveness report, which distinguishes between basic requirements, efficiency enhancers and innovation, and sophistication, the current economic level recommends that focus should be on the primary stage (WEF, 2018). This suggests a focus on institutions, macroeconomics, health and education. Based on these underlying attitudes towards growth, the next part outlines the specific framework used to answer the research question.

4.2 Variables of Interest

The literature review presented many variables of interest that could assist in answering the research question. This thesis seeks to examine a set of variables to find the direct causes contributing to the Venezuelan crisis. Due to the scope of the thesis, three of the eight potential variables have been selected: "Formal Institutions", "Natural Resources" and "Macroeconomic Management". The following pages will be devoted to discussing these, justifying their importance to this particular case, and explaining the expected relationship between them and economic development.

4.2.1 Formal Institutions

This thesis seeks to understand the qualitative developments that have taken place in Venezuela, how they have influenced the institutional level and how these are expected to have contributed to the economic crisis.

Within formal institutions, three primary aspects are investigated: (1) the historic developments of political cooperation, (2) corruption and (3) the status of property rights. The goal is to understand what actions have influenced the development of these three areas, how they have developed and how they are viewed by independent observers. Furthermore, it is important to assess the timeline of these events. The longer the institutions of a country have been in decline, the higher the extent in which the changes have been ingrained in the culture, thus making reversal more difficult. The author expects to see a decline in the strength of independent institutions limiting market mechanics in Venezuela and influencing the efficiency of both macroeconomic management and natural resource management.

4.2.2 Natural Resources

Given the size of the Venezuelan oil reserves and the fact that they are the primary fiscal revenue for the government, it is important to understand their role as a potential contributor to the economic crisis. As oil revenues are earned through the nationalized oil company Petróleos de Venezuela, S.A. (PDVSA), understanding the performance of the company is integral to understanding the situation. From a quantitative side, an investigation of production quantities, the allocation of revenues and development of costs will be made. Regarding costs, the focus will not be on specific extraction costs, but rather CAPEX and maintenance developments, as a potentially explanatory reason for production growth. Qualitatively, the analysis investigates changes in management composition, the level of talent in employees and how the company's relationship with the government has been. Furthermore, it is anticipated that PDVSA also holds a large potential for future developments and achieving structural change in the economy by moving away from primary products and facilitating economic growth.

4.2.3 Macroeconomic Management

Analysing the performance of the Venezuelan macroeconomic management suggests a three-way split, assessing (1) fiscal policy, (2) monetary policy and (3) regulatory policy.

Regarding fiscal policy, this thesis seeks to understand the budget of the Venezuelan economy in the past; its relationship between incomes, from both taxes and oil rents, and their expenditures, into welfare, education and infrastructure. The goal is to understand if Venezuela has been running a

balanced budget with different types of expenditures. The primary way of financing a budget deficit has traditionally been with debt, but given the hyperinflation in the value of the bolívar, it investigates the printing of money (OECD, 2017).

Fiscal policy must be investigated in conjunction with the monetary policies of the country. This will seek to understand the public debt issued from two angles: (1) its size relative to the economy and (2) debt from the perspective of its currency denomination, the actors holding it, and the potential consequences for the economy. Additionally, the thesis will investigate the inflation levels in Venezuela. The analysis will also look into why hyperinflation is an issue and what actions, if any, have been done to curb its development. It will furthermore be connected to the real exchange rate developments, and their effects on imports and exports – a measure suggesting even further implications for fiscal policies. This is also influenced by capital constraints and the ability to hold foreign currency, which will also be assessed.

Finally, this thesis will investigate the legislative and regulatory aspects of the economy and what the government has done to influence these; focusing primarily on their actions to influence free market mechanics, such as expropriations of private companies and price controls.

4.2.4 Excluded Variables

Based on the scope of the thesis, the nature of the economy in Venezuela and the literature review conducted earlier, the three areas of interest discussed above have been selected for the framework. Consequently, a set of variables has been excluded for the purpose of this analysis. Free trade, despite the ambiguous direction of causality, is important to economic growth, but has been deselected for the purpose of this thesis. The author has not seen major events within flow of goods across borders expected to have impacted growth and has additionally judged that free trade is simply a variable that enhances and improves existing trade. Thus, free trade in itself is judged not to cause a crisis of this proportion.

Capital availability and investments by individuals and firms has been considered key to economic growth for many years, as exemplified by its importance in the "big push". Ceteris paribus, the returns to investment in Venezuela should be attractive due to the potential they had for decades and a sudden capital flight is thus not expected to have directly influenced the crisis. If a sudden capital flight was the primary event, this would be expected to just cause potential returns to increase,

reaching a similar equilibrium as before. Rather, the suggested direction of causality is that other factors may have led to investors exiting Venezuela. Thus, while it potentially has helped amplify the crisis, and should also be considered when rebuilding the economy, the author assumes this not to be a direct cause of the crisis. Infrastructure is defined by WEF as a basic requirement to growth and development. It benefits the economy indirectly by promoting private investment and trade, and has a long time horizon. Infrastructure can consequently not be the primary reason for the current economic crisis – even if early 2019 has shown massive infrastructure issues (Newman, 2019). Similarly, human capital is not expected to be a primary driver of the crisis, given that the diaspora started in the 2010s and given that during the first decade of the Chávez presidency, investments in education had actually increased. While the exodus of people has definitely contributed to the current situation, it is not believed to be a primary reason for it (Hausmann, 2018; Osorio, 2019). Finally, a government focus on knowledge accumulation is considered a great enhancer to economic growth, but the lack of it is not expected to cause a crisis. The variables that are expected to have the highest explanatory power in understanding the economic situation in Venezuela has been selected to drive the analysis of this thesis from which recommendations will be proposed.

5 Methodology

The objective of the methodology section is to outline how the author seeks to answer the research question, focusing on the design of the study, the choices made on how to study the situation, and the consequences of these. The methodology involves both the establishment of a framework that can be applied to the case and the analysis of the case itself. The structure follows the "research-onion" methodology as proposed by Saunders et. al. (2012) for business research, supported by Yin (2018) providing specific insights on methodology in case studies.

5.1 Research Philosophy

Research philosophy examines the nature of knowledge and how this knowledge is obtained (Saunders et al., 2012). The idea is that the elements that constitute knowledge vary by area of study. In the natural sciences, facts are observable by all actors, whilst in social sciences and humanities the measurements and observations that point towards a set of conclusions are often socially constructed. Four dominant research philosophies exist in business and management research: pragmatism, positivism, realism and interpretivism, which in turn represent different views on epistemology, axiology and ontology. The fact that this thesis investigates economic growth, a socially constructed idea that cannot be verified through natural sciences, affects the philosophical stance adopted.

There are multiple philosophies adding perspectives to the findings of this thesis. First, pragmatism is focused on results that support action. This means that the importance of the findings of a research paper depends fully on its practical consequences (Saunders et al., 2012). This falls in line with the research question of this thesis, as the answers to the research question are intended to promote actions dealing with the current crisis. Thus, the philosophical stance that all findings could potentially support direct actions, creates the foundation of this thesis.

Second, positivism reflects a philosophical stance investigating an observable and objective reality, creating law-like generalizations (Saunders et al., 2012). This usually follows hypothesis testing and investigating causal relationships. This is not applicable to this thesis, as the measures of economic growth are in the case of Venezuela disputed by many, consequently not constituting an objective reality. Furthermore, economics are socially constructed, and influenced by how the attitudes towards prosperity measurements have changed over time and the fact that the causes of growth are still disputed disqualifying them from the positivistic view. We can therefore not claim that the findings

of this thesis constitute a positivistic result. Furthermore, limitations of data availability influence the potential for conducting positivistic research significantly in the case of Venezuela.

Realism is a philosophical stance in which objects present a reality that is independent from the foundations of the human mind (Saunders et al., 2012). It can be subdivided into direct realism, which states that what we see presents an objective reality, and critical realism, which states that what we see are subcomponents of the reality. Additionally, when adopting the critical realism view, reality depends on the socially constructed setting which is both the basis of how we see reality and what the basis of it is. As such, the fact that the reality of the Venezuelan situation depends on the socially constructed lenses through which we observe it, means that we can consider the critical realism as a perspective on this thesis.

Finally, interpretivism contends that the world is too complex to be defined by small generalizations, which would lead to a loss of understanding (Saunders et al., 2012). This suggests that we must adopt an empathetic stance and understand the social behaviour of the actors in this case. While all of this must be considered when conducting an analysis of such a disputed topic, it is not directly related to this subset of economics, as the individual point of view is of less importance, compared to economically agreed facts, when investigating direct actions to facilitate change.

This thesis adopts the philosophies of both pragmatism and critical realism in its approach to investigate the research question. Pragmatism is adopted due to the ultimate goal of proposing change in the country. Consequently, the recommendations are intended as suggestions for facilitating change in Venezuela. Critical realism is useful as it states that we can only understand the situation in Venezuela through a thorough understanding of the social structures that drive it. While it is acknowledged that the findings are interpretivist in the sense that the legitimacy of the findings depend on the perception and opinion of the reader, the goal is that some will consider the findings positivistic as generalizations that can shape future crisis management. Despite this, a positivistic conclusion is not the expected outcome of this thesis.

5.2 Research Approach

The next layer of the "research-onion" is the research approach (Saunders et al., 2012). The goal is to understand the dynamics of the relationship between data gathering and theories used to derive

a conclusion to the research question. There are three types of reasoning, that can help derive an answer to the research question – deduction, induction and abduction (Merriam Webster, 2019).

Deduction is a line of reasoning in which a theory and a hypothesis are developed and a research strategy is designed to test them. This means that if the data is in line with the theory, then the conclusion must be true. This is the dominant research approach in natural sciences, with objective, law-like generalisations used to explain phenomena (Saunders et al., 2012). Induction, on the other hand, investigates a cause-and-effect relationship and seeks to derive at general theories that can explain this relationship. Finally, abduction tries to investigate what Saunders et. al. describes as a "surprising fact", a conclusion that surprises researchers, before testing plausible theories on how it occurred.

In answering the research question of this thesis, we first seek to analyse the situation in Venezuela. Data on the current situation is used along with existing theory on the area to understand how the actions undertaken by different governments can explain the current crisis. Thus, the analysis uses the abductive approach, on which we establish a framework presenting what actions have contributed to the situation in Venezuela. Abduction is also adopted as we investigate the data available and see how it can explain the "surprising fact" that is Venezuela. Deductive reasoning is used to formulate a set of recommendations which, if enacted, anticipate an improved economic situation. Thus, both abductive and deductive reasoning are used to answer the research question.

5.3 Nature of Research Design

Research traditionally follows an exploratory, descriptive or explanatory purpose (Saunders et al., 2012). Each has different advantages and disadvantages to the study, as shall be discussed below.

First, exploratory studies investigate open-ended questions to clarify a problem. They are extremely flexible, as there is no specific agenda or end-goal. This is an approach that ensures that the research can change as new data appears (Saunders et al., 2012). Descriptive studies, on the contrary, seek to gain accurate information on an event. Traditionally, this is not considered sufficient in academic research, which is why descriptive is often used in conjunction with exploratory or explanatory designs. Finally, explanatory studies seek to establish a causal relationship between variables.

This thesis is both explanatory and exploratory in its nature. The analysis is explanatory, as it seeks to establish a framework with particular areas of interest and analysing if an argument for causality

can be made for contributing to the crisis. The thesis has identified a set of variables of interest, in which data is analysed to assess the relationship of these with the economy. Following the explanatory analysis, this thesis seeks to explore future options for the government of Venezuela by proposing recommendations to solve the crisis.

5.4 Research Design

The research design is the overall plan of how the research question will be answered (Saunders et al., 2012). This section intends to highlight both the methodological choice regarding quantitative or qualitative research design.

A quantitative research intends to use data and data analysis procedures to arrive at conclusions, whereas qualitative research is used when e.g. interviews and other non-numerical data provide the foundation for the analysis (Saunders et al., 2012). As Saunders et. al. discuss, combining the critical realist and pragmatist philosophy, as done in this thesis, is often done when adopting a research design that relies on both quantitative and qualitative data. This thesis follows both methods. The quantitative aids by measuring the impact of how the economy has developed, and providing tangible data that can explain the contribution of subcomponents to the crisis. Thus, numerical government data such as oil production and money supply fall under the quantitative design. Within areas such as institutional development, the qualitative aspects are better equipped to provide insights. This thesis applies a concurrent triangulation design, bringing together the advantages of numerical factors and the intangible factors of qualitative research, allowing them to be interpreted together and provide a richer response to the research question, through a single data collection phase. It should be noted that both methods are used in a complementary and not mixed manner in this mixed research design (Saunders et al., 2012).

5.5 Time Horizon

Saunders et. al. (2012) discuss the time horizon of the study in relation to the research design. They distinguish between cross-sectional studies, in which a study is conducted at a specific point in time, and longitudinal studies, where studies are conducted over a longer time period. This analysis of Venezuela is cross-sectional, given that it is a time-constrained study, investigating the situation in the country in early 2019. While the nature of the study develops back in time, there is no continuous

multi-year study, evaluating events as they occur. It should be noted that the time period analysed contains a natural break at the election of Hugo Chávez in 1998. Thus, the analysis will investigate the period before this point based on the variables chosen and the period from 1999 until now. Recommendations will be provided in order to bring the analysis together looking into the future. The data collection and research period took place from November 2018 until the conclusion of the thesis in early May 2019, with the interviews done in April and May of 2019.

5.6 Research Strategy

Next, the strategy on how to answer the research question is outlined. In business and management there are multiple applicable research strategies. Conducting experiments, surveys, action research or case studies all have different levels of applicability and advantages, depending on the specific nature of the research and research question (Saunders et al., 2012).

Traditionally in development economics, academics have adopted one of three strategies (Hausmann & Rodríguez, 2014; Saunders et al., 2012). First, the strategy of growth diagnostics seeks to follow a procedure of asking questions in different areas of multiple economies, combining the findings to establish an overall impression of the performance of the economy relative to others. The second option entails collecting data on multiple variables from multiple countries and then conducting a regression analysis to understand the behaviour of these variables and their impact on e.g. GDP per capita, before investigating qualitative aspects to explain these developments. Finally, the third option, and the one adopted in this thesis, seeks to either group together similar countries or investigate individual countries as stand-alone cases. This strategy seeks to develop specific criteria and then group countries based on these, before conducting an analysis on how these developed.

Yin (2018) argues that case study research is applicable when three factors are true: (1) the research question is a how or why phrased question, (2) there is little or no control over behavioural events and (3) the focus is contemporary rather than historical. Additionally, Yin argues that the case study research is particularly appropriate when adopting the philosophical stance of realism. Consequently, this thesis adopts a case study strategy. Saunders et. al. (2012) supports this by arguing that the case study strategy is suitable for exploratory and explanatory studies, using both quantitative and qualitative methods – just as in the case of this study. By adopting this strategy, the triangulation technique is applied to ensure that the interpretation of data is in line with different sources to

achieve validity. Triangulation is *"[t]he use of two or more independent sources of data or data-collection methods within one study in order to help ensure that the data are telling you what you think they are telling you"* (Saunders et al., 2012, p. 179). This is in line with the mixed methods approach discussed above, as the application of these provides the different arguments necessary to triangulate the data, and aligns with the case study strategy (Yin, 2018). Yin further seeks to determine whether specific case studies are holistic or embedded. Whether the case is placed on the holistic or the embedded scale depends on the unit of analysis (Saunders et al., 2012). This thesis focuses on the economic sub-unit within the country, given that political affiliations and microeconomic actions by individuals are out of scope. Since this thesis takes a government perspective on the crisis, it is a holistic case study.

Saunders et. al. (2012) further argue that a case study is worthwhile when analysing existing theories in a new context or when using it as a way to challenge existing theory and propose new areas to investigate. This supports choosing the case study approach, given the nature of the research question and that the thesis incorporates different areas of development theory to establish a framework. The academic area of economic development has previously relied on case study strategies in order to investigate unique phenomena, as Leff (1972) and Gelb (1988) exemplify.

The advantages of the case study design are that it enables the use of theoretical considerations to one specific case that seeks to explain contemporary events with lack of control over variables, it is flexible in its approach to collect and analyse information, and it focuses on gaining a deeper understanding of the case rather than on following the rules of academia rigorously (Yin, 2018). Finally, while economic development in the past has defined "one-size-fits-all" solutions as ways to ensure economic development, this thesis adopts the case study methodology to support the notion that countries are unique and that replication is complicated.

One of the main weaknesses of adopting a case study design is its inability to establish external validity. As there is no control over events, the findings of this thesis may be restricted to help explain cases that are similar to the case being investigated, which is extreme in its nature. Adopting a case study research may therefore not help explain overall growth theory, nor help advance general growth theory advancement, but be restricted to extreme cases. While discussing primary points of interest applicable to the Venezuelan case does not advance overall growth theory, improving the methodology of understanding and selecting variables for individual cases is worthwhile. Furthermore, while a regression analysis might have improved the internal validity of the study,

given the contemporary status of the case and the irregularity of the secondary data published by the Venezuelan authorities, conducting a regression analysis would bring weaknesses to the study. The issue of research validity will be further discussed in the next section. Certain issues are associated with the data collection techniques. When collecting data, this type of research will be easily biased by the interpretation of the researcher, as contended by critics of the case study method, if not transparently outlined. While the author has absolute freedom to seek advancements on the knowledge, he must disclose the process. This will be discussed in the data collection section, the final subchapter of the methodology chapter.

5.7 Quality of Research

The discussion of validity and reliability of the study is important to assess whether this thesis constitute good research. To ensure that the findings and conclusions presented on the case of Venezuela are reliable and valid, the way in which the author ensures quality must be outlined (Saunders et al., 2012).

Traditionally, there has been a split in how positivistic studies achieve validity, as opposed to how pragmatist and realist researchers do it. While pragmatists conduct research with reliability as well as construct, internal and external validity in mind, they must make other considerations to achieve quality research (Saunders et al., 2012). Yin (2018) argues that following four principles in the data handling helps increasing the quality of the thesis substantially. First, he argues that using multiple sources of evidence, previously referred to as triangulation, is key to ensure quality and credibility in the study. He argues that this principle is more important in case study research than elsewhere and this thesis will seek the application of triangulation and multiple sources of evidence to discuss findings. Second, Yin argues for a coherent database for the organization and storage of data. For this thesis, Mendeley is used for articles, whereas Excel helped providing overview of quantitative data storage. Third, he argues that maintaining a natural chain of evidence, in which all data is included and reported, is key to ensuring that the reader does not question whether data has been removed or lost in the process, which will be adhered to in this thesis. Finally, he argues that social media should be used with caution, due to its reliability. This paper seeks to question the sources, cross-reference arguments and data, and employ a rigorous data collection and storing method to ensure the highest academic quality. Reliability and validity of the study is achieved by continuously

keeping the four criteria for evaluating case study research in mind: credibility, trustworthiness, confirmability and dependability (Riege, 2003; Yin, 2018).

5.8 Data Collection

When establishing a framework for analysis and investigating both the causes of the crisis and the potential for new policies, the use of primary data, obtained through semi-structured interviews, and secondary data, obtained through public government records, previous academic research and third-party observers, is necessary to apply triangulation.

5.8.1 Primary Data

Primary data is the data originally collected by the researcher for the purpose of the study (Saunders et al., 2012). In this case, primary data collection was made through personal contract. Given the explanatory and exploratory nature of this research, semi-structured interviews are well-suited as they allow to understand not just the "what" but also the "how" and "why" of the situation in Venezuela (Saunders et al., 2012; Yin, 2018). This enabled the author to begin with a set of questions, adjusted to each interviewee's expertise, and to ask follow-up questions, ensuring validity. Individuals with knowledge within the different areas were found to complement the secondary data of this thesis. In contrast to a questionnaire, an interview provides the opportunity to go deeper into the material, ensuring validity. Thus, interviews were chosen as a way to support triangulation of data through a deeper understanding of the details. Validity and generalisability of the primary qualitative research design excludes us from making statistical generalisations, much in line with our philosophical stance (Yin, 2018).

Due to the ongoing situation in Venezuela during the writing of this thesis, interviews with local experts proved more difficult than anticipated. These were limited to written exchanges, which have been transcribed in appendices, and audio files, which have been submitted in MP3 format along with the paper. This strengthens the reliability of the research, as it ensures a coherent understanding of the interviews by allowing to revisit and review the interviews continuously (Kvale & Brinkmann, 2014). While interviews were conducted in a different language than the first language of the researcher and the interviewees, the effect on the insights drawn from these are considered negligible.

In this thesis, primary data was gathered through contact with Miguel Ángel Santos, Carlos Salas Lind, and Luis Oliveros. Miguel Ángel Santos is a Venezuelan economist and Director of Applied Research at the Center for International Development at Harvard University. He has participated in research into the Venezuelan crisis, both from the US and in the country. Carlos Salas Lind is an expert on Latin American political economy, and is an external lecturer at Copenhagen Business School who has served as an expert on the Venezuelan crisis in Danish media. Luis Oliveros is a Venezuelan economist and professor at the Central University of Venezuela, specialised in petroleum economics.

5.8.2 Secondary Data

Due to the magnitude of the crisis, this case has been of interest to multiple actors over the past decades. This section presents the various methods for collecting secondary data and their accompanying issues of reliability. The secondary data includes academic studies, books, macroeconomic data and country analyses released by both independent organisations and Venezuelan authorities. The advantage of secondary data is its limited need of resources to gather evidence (Saunders et al., 2012). The weakness lies in its lack of control over data quality.

First, academic literature was collected through research databases provided by the Copenhagen Business School, in particular Scopus, Business Source Complete, and JStor. Note that in these databases, the Subject Area was limited to "Social Sciences", "Economics, Econometrics and Finance" and "Business, Management and Accounting", to avoid excessive and unrelated search results.

Saunders et. al (2012) argues that articles should be collected through (1) search terms, (2) review of journals in which search terms were applied, (3) backtracking from bibliographies of articles, and (4) seeking out additional material from selected authors. For this research, articles are also found through affiliations with selected institutions, both academic and intergovernmental, due to their focus on associated issues. Search terms are found through reading articles and books on the issue and following a discussion with librarians at CBS. The search terms are the following: "economic development", "economic growth", "Latin America economy", "economic crisis" and "factors of economic growth". Following these search queries, titles, abstracts and authors were evaluated and, if deemed applicable by the researcher, included in the database of academic literature for the literature review. These keywords were used within a set of academic journals, as judged by the "Academic Journal Guide 2018", which is the commonly used journal ranking source at CBS.

Following this list, the author identified 7 key journals based on their presence in already uncovered articles, their ranking and their scope; see appendix 1. Third, as the first search queries yielded a number of relevant articles, their bibliography posed an additional way for applicable articles to be uncovered. The bibliographies of relevant articles were reviewed, ensuring that previously undiscovered articles were found and confirming relevant articles when referenced in multiple papers.

Fourth, a set of authors were deemed particularly relevant due to either their knowledge on economic development, their knowledge on Latin America and Venezuela, or both. These authors are (1) Joseph E. Stiglitz, (2) Ricardo Hausmann, (3) Dani Rodrik, (4) Jose Antonio Ocampo and (5) Roberto Rigobon. These were chosen due to their devotion to development economics and the case of Venezuela and the academic reviews of their papers. Next, the researcher used Scopus to search for articles published by these authors. Due to the massive body of literature uncovered through this exercise, only papers referenced by +300 papers in Scopus were considered. Finally, following the previously established research for academic journals, it became apparent that many authors and papers were affiliated with a set of institutions. Publications, both finished papers and working papers, from institutions were investigated for further available research. These institutions included (1) Center for International Development at Harvard University, (2) Initiative for Policy Dialogue at Columbia University, and (3) World Bank Working Papers, and were selected for their expertise in Latin American development. Secondary data was also collected through books associated to the academic literature. However, as only a limited set of books were deemed applicable to the nature of this research question, it was limited to releases of the disclosed authors of the academic papers.

Secondary, quantitative data has been collected from various sources. There is a lot of uncertainty regarding this data, as the Venezuelan Central Bank has been inconsistent in providing data since 2016, with the reliability until 2016 questioned by experts (Rosati & Vasquez, 2018). Thus, there is general uncertainty, as official figures and intergovernmental institutional figures are lacking updates and credibility. Despite this, triangulation helps evaluate the data at hand, by leveraging estimates from multiple sources to arrive at approximate figures. The same uncertainty exists in publishing country reports. Thus, Venezuela's current situation has an impact on the overall credibility of data associated with the country, impacting the validity of this study. While the author of this thesis is aware of the issue, it is outside the scope of this thesis to thoroughly deal with it.

5.9 Limitations

While the author of this thesis has no conflict of interest in terms of preferring some findings over others and the thesis follows a detailed and thorough methodology, there are several limitations that must be assessed when evaluating the findings of this thesis.

First, the research design brings a risk of "selection of studies" bias, which can potentially impact the findings as it excludes less acknowledged publications, and data bias, following the dispute over macroeconomic data on Venezuela between the official Venezuelan figures and those published by intergovernmental organizations. Second, substantial amounts of published literature within the field of economic development have been left out, as only few journals and core theories have been included in comparison to the entire body of published journals. While this is considered necessary to answer the problem statement, it does potentially limit the findings of the thesis. Third, although the author has some theoretical background within economics, the author's lack of extensive theoretical experience within this subject presents a risk to both the validity and importance of the findings and to whether the research design will yield as conclusive findings and as applicable recommendations as would potentially be achieved with a more experienced academic researcher conducting the study. Finally, there is a pressing time-scope for conducting the study and writing this thesis, which could also pose a risk to the validity and importance of the findings, as the author may have had to exclude interesting areas of analysis due to these constraints.

6 Analysis of Venezuela

This chapter seeks to analyse the situation in Venezuela, applying the framework outlined in chapter 4. It is structured sequentially, seeking to understand the developments within institutions, resource policy, focusing on oil, and macroeconomic development. It seeks to understand these throughout time, including events taking place both before and after the election of Hugo Chávez in 1998.

6.1 Formal Institutions

"It appears that the only trail to a democratic future for developing societies may be the one followed by Venezuela.. Venezuela is a textbook case of step-by-step progress." (Karl, 1987, p. 63). Such was the opinion on Venezuela in the early 1980s. This chapter investigates the democratic governance of Venezuelan institutions. As this qualitative assessment is hard to quantify and judge, this paper will rely on measures by external organizations, primarily the World Bank's World Governance Indicators: rule of law and corruption. The chapter first investigates how the institutions developed historically, hereby setting the stage for the Chávez administration, by adopting Spiller, Stein and Tommasi's concept that political cooperation and institutional strength are interlinked (2003). While the chapter does not seek to investigate specific political orientations, such as socialism or conservatism, it does investigate how the institutional and governmental structures explain the lack of growth experienced in recent decades.

6.1.1 Historic Developments

First, an analysis on the institutional developments that enabled Chávez to take power and their consequences was performed. The chapter begins with the period right after Venezuela became a democracy in 1958, followed by institutional uncertainty in the 1980s and 1990s up until Chávez' election, with a detailed analysis into the increase of authoritarian rule over the recent decades. This section seeks to understand the relative strength of the executive and legislative branch, the level of political cooperation across parties, the stability in existing policies and the relationship between these and the oil price.

6.1.1.1 Puntofijo Pact: Consolidation of Political Cooperation and Democracy

1958 marked the end of the dictatorship of Marcos Pérez Jiménez, known for his close ties to the US, poor human rights record and heavy infrastructure investments (Corrales, 2001). Following a short period of instability, the "Puntofijo Pact" was signed with the intention of promoting stability and democratic elections in Venezuela (Corrales, 2001). This enabled a de facto three-party rule, as only Acción Democrática (AD), COPEI and Unión Republicana Democrática (URD) were accepted for the 1958 elections, that led to the election of Rómulo Betancourt (AD) (Nohlen, 2008). What made the pact so remarkable was that all three parties acknowledged and accepted losing the election to stand firmly behind the democratic process, as a way to ensure long-term progress – the start of what made Venezuela known as the strongest democracy through the decades to come (Karl, 1987).

The pact of the three parties adopted the 1961 constitution, which had the ultimate goal of increasing democratic cooperation across parties, decreasing the powers of the executive branch and creating strong political institutions – all of which were necessary given that the previous dictatorship emerged through the failure of working institutions (Monaldi & Penfold, 2014). They abolished the possibility of immediate re-election, forcing presidents to wait 10 years before seeking re-election, while removing term limits for members of congress, ensuring an increasing power at the hands of the legislative branch (Monaldi & Penfold, 2014). Next, they adopted a very centralist system, with high power in the government and less power in the regional districts (Monaldi, Pacheco, Obuchi, & Penfold, 2006). This aided the ease of policy-making, as less actors had influence. Finally, they made it practically impossible for other parties to emerge, limiting external political competition. It should be noted that this period also experienced relatively stable and increasing oil prices. The period until 1973 saw high cooperation, no fiscal deficits, low levels of public debt and a very stable economy (Hausmann, 1992). Additionally, the period saw preservation policies in which oil taxes were continuously increased until oil was finally nationalized completely in 1976. It also marked the beginning of "Sowing the Oil": policies intended to diversify the economy with high investments in infrastructure, health and education were formulated and introduced (Hausmann, 1992; Manzano, 2014a; Monaldi et al., 2006).

All of this suggests that the goal of these policies were stability, cooperation and repeated interactions. There were high levels of cooperation among interest groups, both from businesses and labour unions, and across parties, ensuring that policies were done with a limited set of people, to ensure efficient policy-making (Hausmann, 2001; Karl, 1987). In this way, they avoided the authoritarian fate of most other large oil producers, achieving the best economic record in the region

during this 30-year period. Yet, the well-functioning economy and democratic situation was highly influenced by the volatile years in the late 1970s and early 1980s, largely attributed to the oil income decline. Even though the period saw institutions such as the Supreme Court and the Central Bank work efficiently and autonomously, government expenditures increased dramatically, and monetary and fiscal policies were inefficient at dealing with the external oil shocks (Monaldi & Penfold, 2014). This led to a decade of instability starting in 1989.

6.1.1.2 Post-Oil Shock: Deconsolidation of Political Cooperation and Democracy

In contrast to the period under the "Puntofijo Pact", the period after 1989 was a period with political instability having high consequences on the future democratic path of Venezuela. The period from 1989 to 1998 saw multiple riots, two attempted military coups, social and political protests, and significant changes to the system through institutional reforms (Monaldi & Penfold, 2014). It was a period of political instability, in which successful and economically "correct" reforms were reversed as the legislative power changed, leading to increasing distrust in congress (Monaldi et al., 2006). This period was characterised by an increasing level of power of federal states, with individual state governors and county mayors receiving more power, increasing polarization and reducing presidential power (Hernandez & Monaldi, 2016). Consequently, the efforts and time of newly elected governments were devoted to changing policies of the past; gone were the days of broadly negotiated policies and a stable democracy. This is highlighted through the volatility in election patterns, with an increasing amount of substitution of seats in congress at each election (Monaldi & Penfold, 2014, p. 296). Finally, a set of institutional reforms were implemented, resulting in changes to the electoral system, the constitution and the role of the judicial system (Monaldi & Penfold, 2014).

Consequently, the period from 1989 to 1998 saw less power to the executive, an increased role of the military through their attempted coups, decreased levels of political cooperation with increased efforts spent on undoing previous policies, and a higher level of decentralization with individual states holding more power. It was a period of increasingly flexible elections, causing higher volatility and seemingly poorer governance. The period saw multiple amendments to the constitution, influencing both electoral systems and the judicial power, which consequently affected the strength of the democracy. As the oil price movements continued to distort the economy, the situation for Venezuelans did not improve, making a democratically weak Venezuela ready for Chávez.

6.1.1.3 Chavista Revolution

This period saw multiple institutional changes, with increasing centralization of the executive power, less political cooperation across the political sphere, and an increasing oil price enabling Chávez to form a system with increasingly authoritarian powers, maintained through increased military strength (Monaldi et al., 2006; Monaldi & Penfold, 2014; C. S. Lind, Personal Communication, 2019). The ensuing attack on the established institutions began after the elections with the constitutional rewriting. The electoral system changed from favouring minorities to favouring majorities, who won 121 of 125 seats in the assembly and were tasked with writing a new constitution, winning just 60% of the votes (Freedom House, 1999).

Year	**1958-1989**	**1989-1999**	**1999-2018**
Presidential Power	Medium	Low	High
Cross-Party Cooperation	High	Low	None
Centralization vs. Decentralization	Centralization	Decentralization	Centralization
Political Stability vs. Change in Government	Stable	Volatile	Stable
Oil Price Movements	Stable (1958-1978), Volatile (1978-1989)	Volatile	Increasing (1999-2013), Decreasing (2014-2018)
Power of Military	Low-Medium	Medium	High
Strength of Institutions	3	2	1

Table 1 - Summary of Institutional Developments. Source: Own Creation

The table above summarizes the findings until now, showing how the decreasing political cooperation, increasingly unstable political arena, and a president with more power, enabled Hugo Chávez, and subsequently Nicolás Maduro, to create an authoritarian government. Based on the institutional

rankings discussed in the literature review, based on a score of 1 to 4 of increasing institutional quality, the overall assessment is that institutions are deteriorating, from a score of 3 at the height during the 1960s and 1970s, to a low of 1 presently. Regarding governmental expenditures, Hugo Chávez quickly used his power over the institutions to channel money away from established programs. The "Fondo Unido Social" (FUS), intended for antipoverty programs, started receiving less money than allocated by the government, shortly after the election of Chávez. The guidelines of "Fondo para la Estabilización Macroeconómica" (FIEM), which was created to force the government to save funds in oil booms to survive the storm of oil busts, were also not adhered to. However, Chávez established "El Fondo Nacional para el Desarrollo Nacional" (FONDEN), intended for government expenditures at the discretion of the president (Ellsworth & Chinea, 2012; Toro, 2015). As these institutional changes enabled Chávez to abuse their intention and associated funds, they are key in understanding the crisis and will be discussed in later chapters.

6.1.2 Governance Indicators

This chapter has until now argued that the political events of the period 1989-1999 enabled Hugo Chávez to fill a vacuum, taking power and consolidating it on his mandate. This section seeks to investigate the World Governance Indicators (WGI), as suggested by The World Bank, and how they contribute to the understanding of deteriorating institutions in the country.

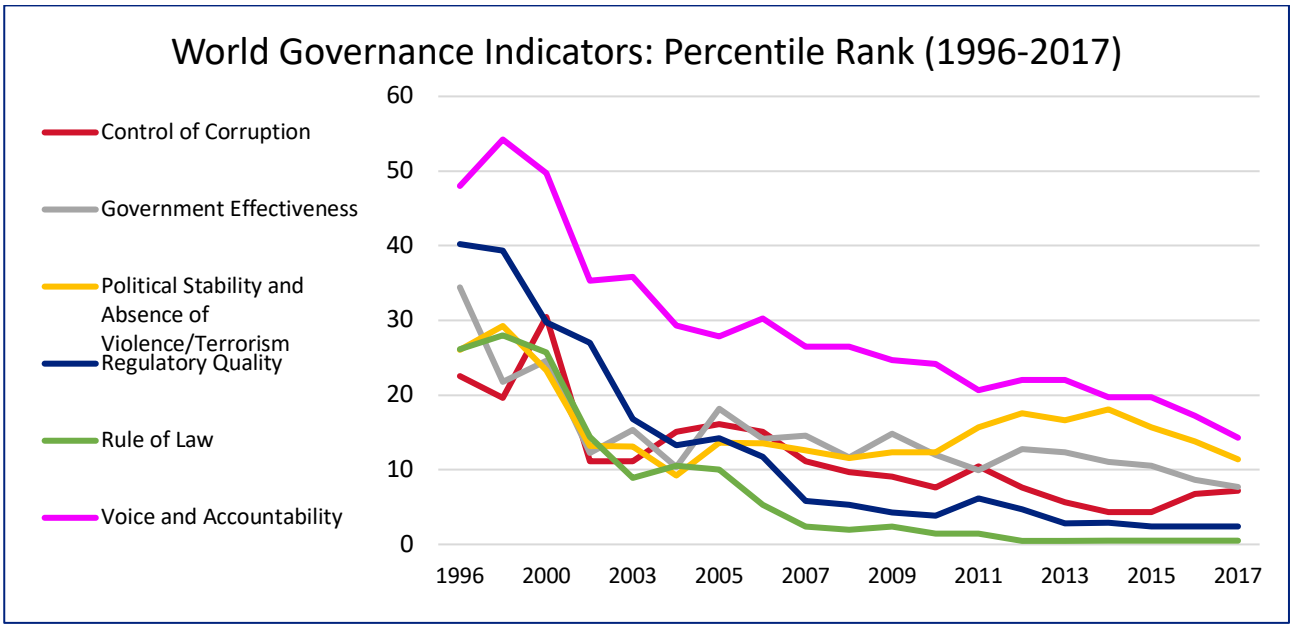

Figure 1 – World Governance Indicators: Percentile Rank (1996-2017). Source: (The World Bank, 2019)

The rankings of Venezuela compared to the rest of the world over the past 20 years suggest that governance has plummeted on all levels, on all six indicators, scoring among the 15% worst performing countries. While arguments could be made on all six indicators, focus is on "Rule of Law" and "Corruption", as these are the ones with the most tangible economic impact in line with the literature review, and two of the three lowest-scoring categories.

6.1.2.1 Corruption

Corruption is damaging to the economy, as individuals extract personal rents over societal gains and consequently achieve a suboptimal equilibrium of political instability and private investments (Mo, 2001; Paolo, 1995). The "Corruption Perception Index" (CPI) suggests that Venezuela has scored consistently low since 1995, with an all-time low of 17/100 in 2016 (Transparency International, 2019). While the negative trend suggested cannot be directly supported, the CPI reports an absolute score rather than the score in relation to other countries; as Venezuela is scoring consistently low on CPI, it seems that other countries have improved, suggesting a lower relative ranking.

One example of the failure of the institutions in Venezuela, and the corruption of public office, is the power of the military instated by Hugo Chávez shortly after taking office, due to the importance of the "Civil-Military Alliance", as he called it (Strønen, 2016). This led to an unprecedented empowerment of military leaders, which is highlighted by the fact that currently 12 out of 32 government officials in charge of central units such as PDVSA and food distribution services are related to the military (Melimopoulos, 2019). Following the increasing power of a ruling elite with strong support from military personal, Venezuela emerged as a "Mafia State" – a country in which government officials enrich themselves and their families by exploiting political and military power to partner with criminal syndicates (Naím, 2012). In Venezuela, this is exemplified through multiple reports on government officials and high-ranking military personnel using their position to benefit from drug trade (Insight Crime, 2018; Walsh, Gallón, & Castrillon, 2019). Another way in which politicians abuse the system is by leveraging the exchange rate to their own advantage. With an increasingly unrealistic exchange rate, as will be explained in a subsequent chapter on exchange rates, they use the fixed exchange rate to exchange bolívares for USD, before using the black market rate to converge the money back, making a risk-free, arbitrage profit (Lind, 2019; Talley & Vyas, 2019; Weaver, 2019). While multiple examples of the deterioration of the corruption in the country exist,

the government conducting actions deemed illegal by most other countries is possibly the strongest example of the deterioration of the institutions of the country.

6.1.2.2 Rule of Law

Rule of law is the lowest scoring indicator and the one where the drop is most remarkable; from 26th percentile to the worst 1 percentile. This is notable, as rule of law is the foundation for modern society, through property rights, fair judiciary systems and overall equality (The World Bank, 2019). The low score on the WGI is supported by the investigations of Property Rights Alliance, ranking Venezuela in the 123rd place out of 125 countries, with a particularly low rating on judicial independence (Property Rights Alliance, 2019). This is particularly noticeable following the call to build 21st century socialism in 2005 through the introduction of a new land law, suggesting that owners must prove consistent ownership since 1848 to qualify for full property rights – if not, they face expropriation by the government (Albertus, 2015). This led to the emergence of mass expropriation programmes of "key" industries such as banking, steel, minerals, supermarkets, communications and others, initiating the ultimate WGI decline (Vera, 2015). Note that expropriations happened on an inconsistent ad hoc basis, with both political and economic explanations used while circumventing the legal system (Rodriguéz, 2008). This has supposedly been used as a way to disempower the opposition and provide wealth for political allies (Albertus, 2015; Strønen, 2016). One important consequence of these expropriations, in addition to the wealth redistribution to political allies, is the issue of running these companies. Data suggests that most of the expropriated companies, which is estimated between 500 and 1000 companies, are barely operational in the years following expropriation (Lind, 2019; Wyss, 2017). This has led to a massive structural shock to the economy, with Venezuelans increasingly relying on oil as their only real production good, intended to suffice for importing all other goods for the economy. The relationship between imports and exports will be assessed in the following chapters and carries massive consequences to the economy, which were initiated by the fall in the institutional governance and the mass expropriations of private ownership.

6.2 Natural Resources

The conclusions of the previous chapter suggest that the volatility of oil booms and busts has had a remarkable impact on the political and institutional situation of Venezuela. Data on the relationship between oil and the economy further highlights its importance, with oil being responsible for 98% of exports in 2018 (OPEC, 2019). It has also been the primary income for the government and the largest sector in the economy, being responsible for an average of 60% of total government revenues and 25% of the GDP in recent decades (Restuccia, 2018).

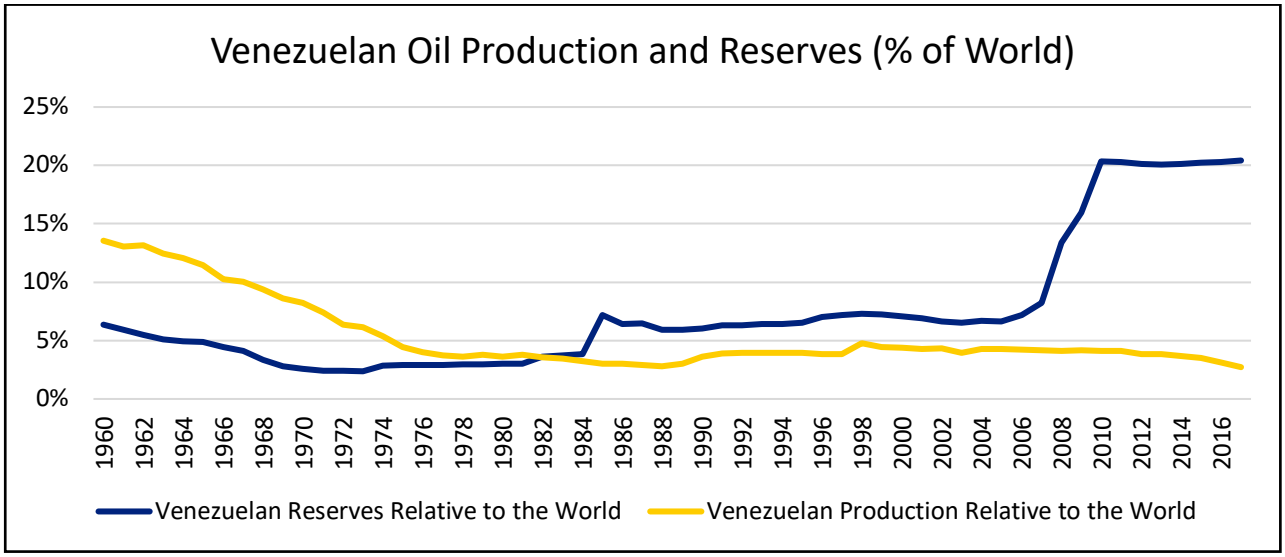

Figure 2 - Venezuelan Oil Production and Reserves Relative to the World. Source: (OPEC, 2019)

This chapter seeks to show how various policies have influenced oil production, productivity and governance, and how the utilization of Venezuelan oil reserves has contributed to the economic downfall. Focus is on production, as production has more explanatory power in explaining performance than price, as this is within the power of the company. While Venezuelan oil production has been very volatile throughout history, it shows a long decreasing trend of their production relative to the world, despite growing reserves.

6.2.1 The Initial High Growth Stage (1920-1975)

Before 1920, Venezuela was a poor country focused on agriculture (Bello, Blyde, & Restuccia, 2011). Since 1926, however, oil has been the primary produce and biggest export in Venezuela, largely driven by foreign companies conducting the exploration, extraction and refining of oil (Bello et al., 2011;

Manzano & Scrofina, 2012). The Venezuelan government had no direct control over the production, but gained through taxation of revenues and through local employment. This meant that income in Venezuela improved over time, with GDP per capita relative to the US increasing from 20% in 1920 to around 90% in 1960 (Bello et al., 2011; Manzano, 2014). Still, Venezuela understood the importance of a diversified economy and initiated a structural move towards becoming less reliant on oil. In 1959 the government presented "CORDIPLAN", a strategy consisting of 5-year plans intended to diversify the economy. This was done through import-subsidy policies, where the government subsidised domestic industries producing goods that were primarily imported. In general, the Venezuelan government in this period followed the strategies of "sowing the oil", meaning that oil should seed other future economic growth; and "preservation", meaning that oil should be saved and used carefully because it is a finite resource (Vera, 2015). Venezuela was also one of the founding members of OPEC in 1960 which intended to permit oil producing countries to influence the price through a cartel, maximizing revenues for future generations (OPEC, 2016).

This period saw high internationalisation in the Venezuelan oil industry, with foreign players such as Royal Dutch Shell and Exxon taking part (Labrador, 2019). As the government became increasingly interested in extracting a larger share of the rents, it initiated a process of nationalisation of the gas industry in 1971 and the iron and steel industry in 1975 (Bye, 1979; Rapier, 2019). International players suspected where the oil industry was heading and decreased investments in the early 1970s, before 1975 when the nationalisation of the oil industry was written into law. The nationalisation was finally put into action with the creation of PDVSA in January 1976 (Bye, 1979).

6.2.2 Nationalisation and Increased Volatility (1976-1989)

The nationalisation of the oil industry meant that the previous subsidiaries of multinational corporations maintained the previous organizational structure, although under Venezuelan ownership through the new national oil company, PDVSA (Bye, 1979; Manzano, 2014b). In the nationalisation law two elements were of particular interest. First, article 5 meant that foreign entities were not allowed to conduct actions in Venezuela without a partnership with PDVSA, with the latter controlling at least 60% (Bye, 1979; Labrador, 2019; Wiseman & Béland, 2010). Second, all foreign currency was required to be sold to the central bank in exchange for local currency (Cerra, 2016; Restuccia, 2018). This helped Venezuela sustain the fixed exchange rate.

The period was characterised by increased volatility in the oil market, while the nationalisation of the industry also led to large reductions in productivity and production (Bello et al., 2011; Restuccia, 2018). Productivity, measured in barrels per worker, fell from approx. 55,000 barrels per worker in 1970 to around 20,000 in 2008 (Baptista, 2011). Production has simultaneously seen a decrease since 1970, suggesting that PDVSA alone did not possess the required capabilities to fully leverage the oil reserves or take advantage of technological advances in the industry in general. Thus, while the governments in this period were good for democracy, human rights and stability, they were not good at managing the increased volatility in the oil market, with nationalisation causing an unprecedented slump in productivity and production.

6.2.3 Apertura Petrólera (1990-1998)

Following decades of decreasing oil activity, the governments initiated a set of policies intended to slowly re-open the petroleum industry. In 1991, "Convenios Operativos" enabled foreign companies to access oil fields not in use by PDVSA; in 1993, "Asociaciones Estratégicas" enabled these companies to extract heavy crude oil; and finally, in 1996 "Apertura" enabled foreign companies to access light and medium crudes (Manzano, 2014b). Although the intention of these policies was a gradual opening to foreign companies, the fact that the areas given to the private sector were not the most productive ones suggested that foreign companies did not participate on a sufficiently large scale.

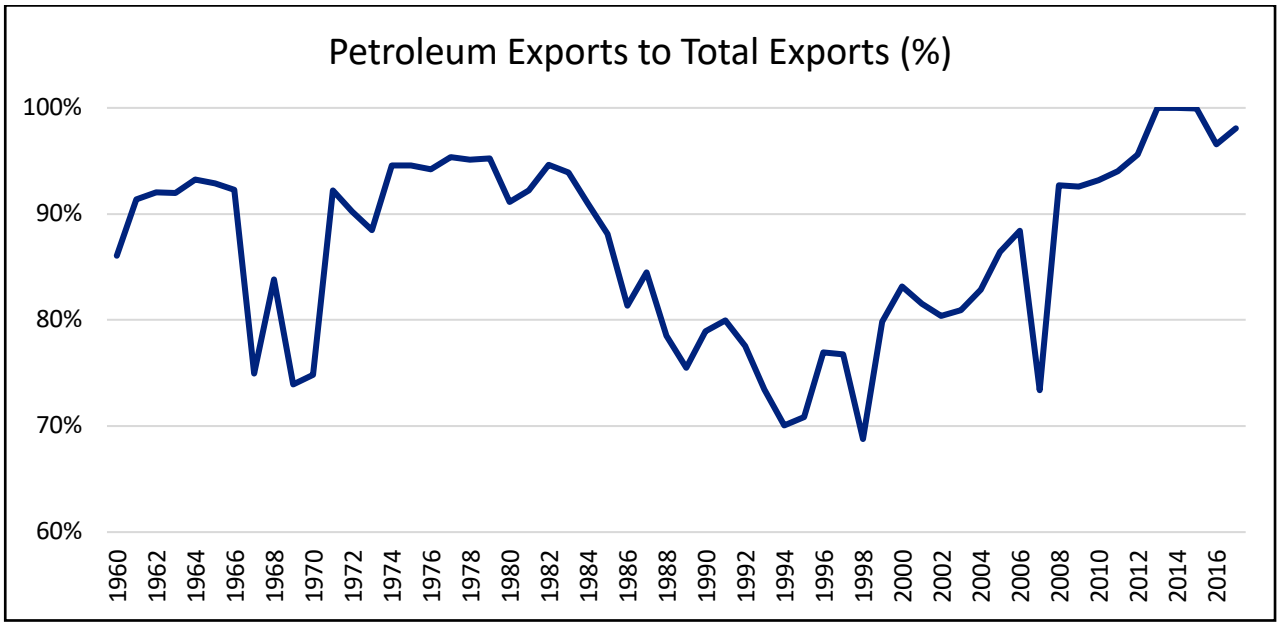

Figure 3 – Petroleum Exports as Percentage of Total Exports. Source: (OPEC, 2019)

It seems that the issue was that the policy changes were too small, with the institutional setup for the extraction of oil insufficiently changed (Giusti, 1999; Luis Oliveros, Personal Communication, 2019). Another reason this policy failed to substantially change the course of oil exploitations were external factors. The progress was injured by an economic collapse - despite economists believing this was in fact a good period, with governments trying to clean out the closets of the past, the instability of the country meant that good initiatives, such as "Apertura", were unsuccessful (Halff, Monaldi, Palacios, & Santos, 2017; Restuccia, 2018).

While they were successful at decreasing the share of oil as a percentage of exports from 95% to around 68%, as seen in the graph above, they also introduced a measure intended to save more in booms to cover the deficits in bust periods (OPEC, 2019; Rodríguez, 2006). A rather simple policy, it required money to be saved if the price of oil today was above the previous 5-year average and allowed money to be spent if the price was below the previous 5-year average (Manzano & Scrofina, 2012). This period therefore saw governments attempting to reverse the decreasing trend in productivity and production of oil, alleviating some of the risks in the economy.

6.2.4 Political Consolidation and Nationalisation (1999-2019)

Following the election of Hugo Chávez in 1998, the political landscape became increasingly consolidated in one party, as described previously. This had multiple consequences for PDVSA. First, 2002 saw a general strike initiated by the opposition and PDVSA workers, intended to shake the government. This both reduced managerial talent, suggesting the massive drop in production since then, and the enablement of Chávez to use PDVSA politically (Oliveros, 2019). He fired 18,000 employees (approx. 40% of the total workforce) and fired the previously independent oil experts to replace them with political allies (Labrador, 2019). This meant that the technical expertise of the company decreased dramatically, meaning that the ability to extract oil from heavy-crude reservoirs decreased and investments in future capabilities decreased. Furthermore, the governance of the company became more consolidated on political capabilities rather than tangible knowledge of the oil industry (Oliveros, 2019; Rapier, 2019). This enabled the government to divert oil rents towards discretionary spending, such as FONDEN, and allowed Chávez to place oil production at the heart of his expansion of public expenditures (Labrador, 2019). Next, as oil prices increased and preliminary research suggested that the heavy-crude Orinoco belt contained the largest oil reserves in one single reservoir in the world, Chávez moved to nationalise the elements of the oil industry that had been

opened in the 1990s (Elliot, 2007). This gave the government an even tighter control over the oil fields and while it seemed that the company did not possess the technological know-how for extracting this oil, it was a political victory for Chávez and his allies (Miguel Ángel Santos, Personal Communication, 2019). The consequences of increased politics within oil production were multiple. First, petroleum as a percentage of oil exports increased dramatically. While previous governments had successfully decreased petroleum's share of total exports Chávez reversed the trend and increased it to 98% in 2017 (OPEC, 2019). He made the economy much more susceptive to oil shocks.

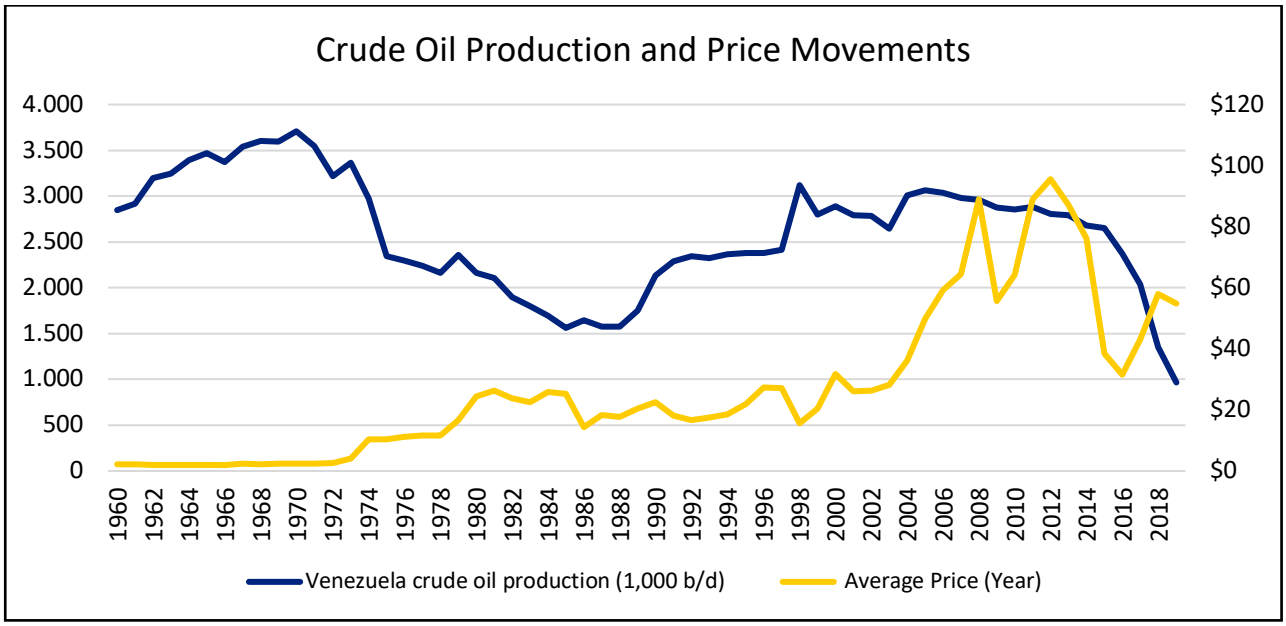

Figure 4 – Production of Crude Oil versus Average Price of Merey Oil. Source: (BP, 2018; OPEC, 2019)

Second, the increasing use of PDVSA in politics, the removal of key industry expertise and the dramatic decrease in investments meant that production decreased. While it was not noticeable in the 2000s, with PDVSA trying to maximize the oil production, the consequences of failing to invest sufficient CAPEX in machinery led to the collapse in production seen through the 2010s (Oliveros, 2019). These insights highlights the crisis; despite production of oil collapsing from 3,120 thousand barrels per day (tb/d) in 1998 to 966 tb/d in 2019, its importance in the economy increased. Finally, Chávez used his political role to make PDVSA an independent contributor to the "Misiones Bolivarianas". Social expenditures where higher than investments in exploration and production for most of Chávez's presidency (Monaldi, 2015). The increased politicization enabled the circumvention of the FIEM intention, by not saving money during the oil boom of the 2000s. This meant that despite the rule of a socialist government throughout the largest oil price boom in history, any long-term benefits from the oil reserves to the citizens of Venezuela were foregone.

6.3 Macroeconomic Management

This chapter seeks to investigate the macroeconomic management of the Venezuelan economy. It has already been established that the economy has proved extremely dependant on oil revenues and that the political aspect of oil utilization, as well as the fall of the institutions on the country, has facilitated the economic crisis. This subchapter seeks to build on these, investigate macroeconomic elements of the economy and explore how the failure to properly respond to the economic developments has further weakened the economy.

6.3.1 Exchange Rate

This section will investigate the exchange rate policy, analysing its consequences on politics, foreign reserves and imports. The reason the exchange rate has had massive impact on the economy is because the primary product, oil, is denoted in USD, while at least some of the input factors are local currency denominated (Varnagy-Rado & Levi-Carciente, 2011). The past governments of Venezuela have tried fixed and floating exchange rate systems, with both single and tiered exchange rates, as outlined in Appendix 2. Note, however, that due to the law requiring PDVSA to sell all foreign currency to the central bank, they are expected to have influenced the exchange rates indirectly even during relatively free floating regimes. This exchange rate system suggests interesting conclusions.

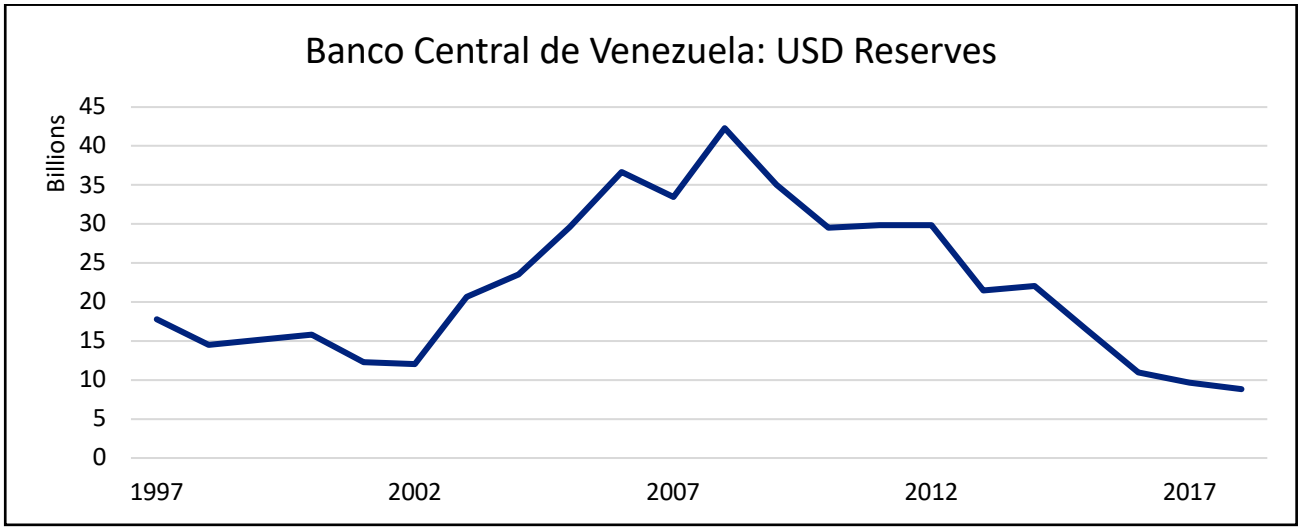

Figure 5 – Foreign USD Reserves (1997-2017). Source: (Banco Central de Venezuela, 2019b).

First, they often overvalued the bolívar relative to other currencies, with the primary advantage being cheap imports (Hsing, 2006). This is coherent with a decade-long tradition of importing even

basic goods. The primary disadvantage, of course, is that structural change and the development of export industries, other than oil, was difficult. The long-term growth path of Venezuela over the past 4-5 decades has probably been negatively influenced by this overvaluation, give that academic research suggests that undervaluation traditionally leads to more growth (Rodrik, 2008). Thus, maintaining a stronger bolívar, relative to what the market considered fair, enabled cheaper imports, but removed the incentive to produce goods at home, making the economy focus on services and oil.

Secondly, the government's attempt to maintain a fixed exchange rate led to the depletion of their currency reserves, most notably the US dollar, as the difference between the black market rate and the official rate has increased recently (Banco Central de Venezuela, 2019b). While the early 2000s saw national reserves increase due to rising oil sales, the recent turmoil has seen the central bank struggle to maintain a functioning exchange rate, revealed by a black market premium of 2,584% in 2018 and waning dollar reserves (Hanke, 2018; Santos, 2019).

Third, the exchange rate system since 2003 has enabled members of government to take advantage of arbitrage opportunities to profit from the discrepancy between official and the black market rate. Former government officials suggest that people in powerful positions have taken advantage of the favourable system to profit an estimated $300m USD (Eyanir & Pons, 2016). The exchange rate has influenced both capital and price controls, further deepening the crisis.

6.3.2 Capital and Price Controls

When operating a fixed exchange rate regime with a local currency stronger than perceived by the market, the country must either enact strict capital controls, facing excess demand for reserves and a decrease in imports, or face a balance-of-payments crisis (Cerra, 2016). Venezuela opted for the former, as they have since 2003 enacted tight control over the ability to purchase USD through the central bank – a restriction that under the Argentinian crisis of 2002 was referred to as a "Clamp" (The Economist, 2013). Thus, while the strong bolívar was intended to make imports cheaper, it became a restriction to the economy. Imports must be bought at black market rates, effectively making goods too expensive to import and further depreciating the bolívar to levels lower than if it was freely trading. Consequently, estimates suggest that products in Venezuela are 10-15 times as expensive as in neighbouring Colombia (Wu, 2016). This effect is amplified by the difficulty of capital flight, making USD increasingly valuable and the bolívar lose its status as an asset (Cerra, 2016).

In addition to capital controls, the government has enacted strict price controls (Cedice, 2019; Gillespie & Hernandez, 2016). Introducing price controls carries two risks, compared to a well-functioning free market – either prices are set too high, resulting in a loss to consumers who will decrease consumption, or too low, resulting in a loss to producers who will decrease production (NAO, 2008). The socialist ideals, which intended to enable poor citizens to purchase basic goods at subsidized prices, have failed. In collaboration with the exchange rate regime and the capital controls, imports have become too expensive. Consequently, no imports enter the country and Venezuelans are not interested in producing at the government set prices (Benzaquen, 2017; Schwartz, 2016). Accordingly, the supply has dropped dramatically, increasing the black market prices of the scarce goods. The combination of an overvalued bolívar, price controls and capital controls has contributed to the shortage of basic goods, the increase in the inflation and further drastic economic deterioration.

6.3.3 Fiscal Budget

The fact that Venezuela is highly dependent on oil price movements, is highlighted by the government revenues-to-GDP ratio, levelled around 25% since 1973, and the fact that oil revenues represent more than 60% of total government revenues (Restuccia, 2018). Consequently, Venezuela is highly vulnerable to changes in oil price – when the oil price fell dramatically in 2014, it left a lasting impact on the fiscal budget balance. Figure 6 supports the previous argument that the Venezuela is still extremely oil dependent and has not adjusted its economy to accommodate external shocks.

While governments before 2000 were able to adjust expenditures, with government deficits and surpluses interchanging year-on-year, the Chávez administration has since 2006 seen primary government deficits become regular and significant in magnitude, dropping to -32% of GDP in 2017 (IMF, 2019; Restuccia, 2018). In addition to increasing governmental expenditures, the government of Hugo Chávez also used the weakened institutions and the increasing presidential power to circumvent the governance system regarding the usage of public funds. Focusing on FONDEN, as touched upon previously in section 5.1, it paints a picture of a president taking advantage of the parliamentary situation for personal benefit.

FONDEN was established in 2005, initiated and managed at the discretion of the presidential office. The official purpose was to increase discretionary spending towards national development, with funds primarily from PDVSA and the Central Bank (SIPRI, 2019). Independent researchers have tried to investigate the allocation of FONDEN funds, with targets including military expenditures,

nationalized companies, poverty-reducing programs, all associated with high levels of corruption (Restuccia, 2018; SIPRI, 2019). Furthermore, the amount managed by the fund continuously increased, with a researcher suggesting that "... *extraordinary transfers, mostly associated with unprofitable public enterprises, and not central-government primary deficits, account for the increase in financing needs in recent decades*" (Restuccia, 2018, p. 1). While there is nothing wrong with a development programme of this sort, the poor governance suggests a severe misallocation of funds.

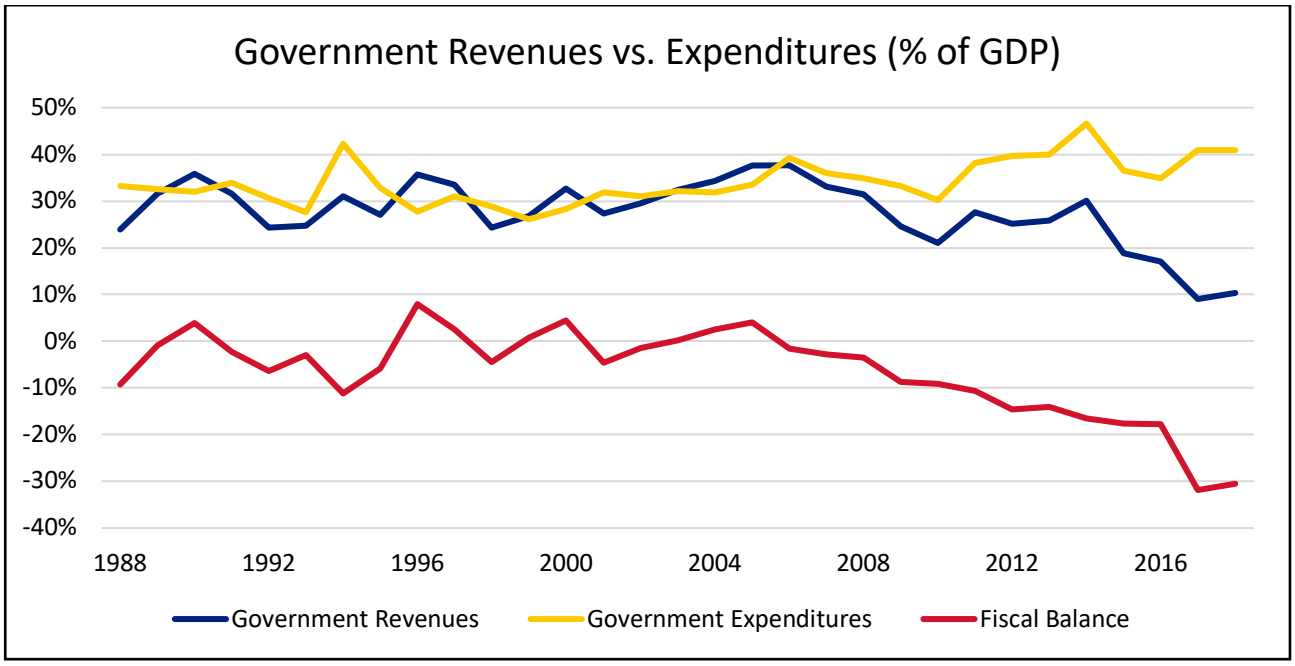

Figure 6 – Fiscal Budget Balance (1988-2018). Source: (IMF, 2019)

This suggests that in addition to the fiscal budget not being kept, FONDEN was used without sufficient governance to increase expenditures. The Venezuelan economy has had higher expenditures than revenues for the past decade, and the following subchapters investigate how the government turned to debt accumulation and money printing to deal with these systematic fiscal deficits.

Finally, it should be noted that the Venezuelan government has argued the economic crisis is due to external forces, such as US sanctions on Venezuelan individuals and companies. However, as both Figure 4 and Figure 6 suggests, the downturn in oil production and inability to balance the fiscal budget occurred much before the implementation of strong sanctions since 2014 (Gillespie & Hernandez, 2016; Talley & Vyas, 2019; Santos, 2019). Thus, while sanctions may have contributed to the crisis, by limiting trade, money and good flows, it has had a multiplied effect rather than a direct explanatory effect.

6.3.4 Public Debt

The public debt levels of Venezuela were assessed to understand if this was a measure used to cover the increased expenditures. While the country increased its expenditures along with increasing oil revenues, as seen by its commitment to long-term projects such as in infrastructure, the inherent external dependency on the oil developments has historically led it to accumulate debt following oil shocks (Restuccia, 2018).

First, a historic view of how credit rating agencies have viewed Venezuelan government bonds is provided. It is found that they have decreased their opinion of the Venezuelan bonds continuously. The credit ratings of Fitch, Moody's and S&P show how Venezuela was an AAA country in 1976, shortly after the 1973 oil boom, before steadily decreasing in creditworthiness to a C rating, default status, in 2017 (Trading Economics, 2019). This suggests that they have been poor at changing the structure of the economy, while debt has become increasingly expensive as credit ratings have declined.

Providing exact estimates of the debt developments over time are uncertain, as there is no public data available. Consequently, various sources must be consulted, looking for general patterns in the debt levels. For the purpose of this thesis, the estimates of economist Ricardo Hausmann, the Institute of International Finance (IIF) and the Economic Commission for Latin America and the Caribbean (ECLAC) are compared. Hausmann (2018) estimates that debt under Chávez has increased six fold from $25 bn USD to $150 bn USD, the IIF (2019) estimates that the debt from 2007-2018 increased from $64 bn USD to $157 bn USD, while ECLAC estimates that the period under Chávez and Maduro has seen debt increase from $27.8 bn USD in 1998 to $171 bn USD in 2015 (ECLAC, 2019). Of this, China is estimated to have lent $62 bn USD, underlining the strength of the relationship between China and Venezuela (Arsenault, 2018). These sources consequently confirm each other, in that debt has exploded under the current regime, as was stipulated following the larger fiscal deficit.

While the increase in absolute debt levels does suggest a problematic development, it must be compared to other countries before reaching any conclusions on the level of criticality. Traditionally, economists turn to the debt-to-GDP ratio to compare countries. However, due to the severe misalignment in the exchange rate of the currency, any estimate of the GDP has become a daunting task; Restuccia estimates that 2016 saw a factor 320 distortion between the black market rate and the official rate, suggesting a debt-to-GDP ratio exceeding 600% (2018). Consequently, most

reputable economic sources have stopped attempting to estimate GDP figures for Venezuela (Hausmann, 2018). Instead, as it is known that exports are 98% oil, denoted in USD, debt is assessed relative to exports reported by OPEC as a proxy measure of the debt levels in Venezuela.

The following chart suggests that debt has accumulated to dangerous levels, increasing by more than a factor of 6 between 1998 and 2015 and currently representing 542% of total annual exports. As a reference, Sudan had in 2017 the second highest reported debt-to-export ratio reported by the World Bank at 359%, with Ethiopia (288%) closing out the bottom three of performers on this metric, based on World Bank data (The World Bank, 2017). Figure 7 shows that the debt to exports ratio increased slowly from 2008 to 2014, as debt increased, before rising dramatically as exports disappeared.

In addition to the size of the debt, analysts are also noting its expensive nature. While it has not proved possible for this author to fully verify a claim by Hausmann that the average coupon of Venezuelan public debt is around 8.5%, which is very high for a sovereign country, Venezuelan bonds with coupons of both 8.5% and 9.25% are currently trading (Campos, 2018; Hausmann, 2018; Reuters, 2017). This suggests that the debt held by Venezuela is indeed very expensive.

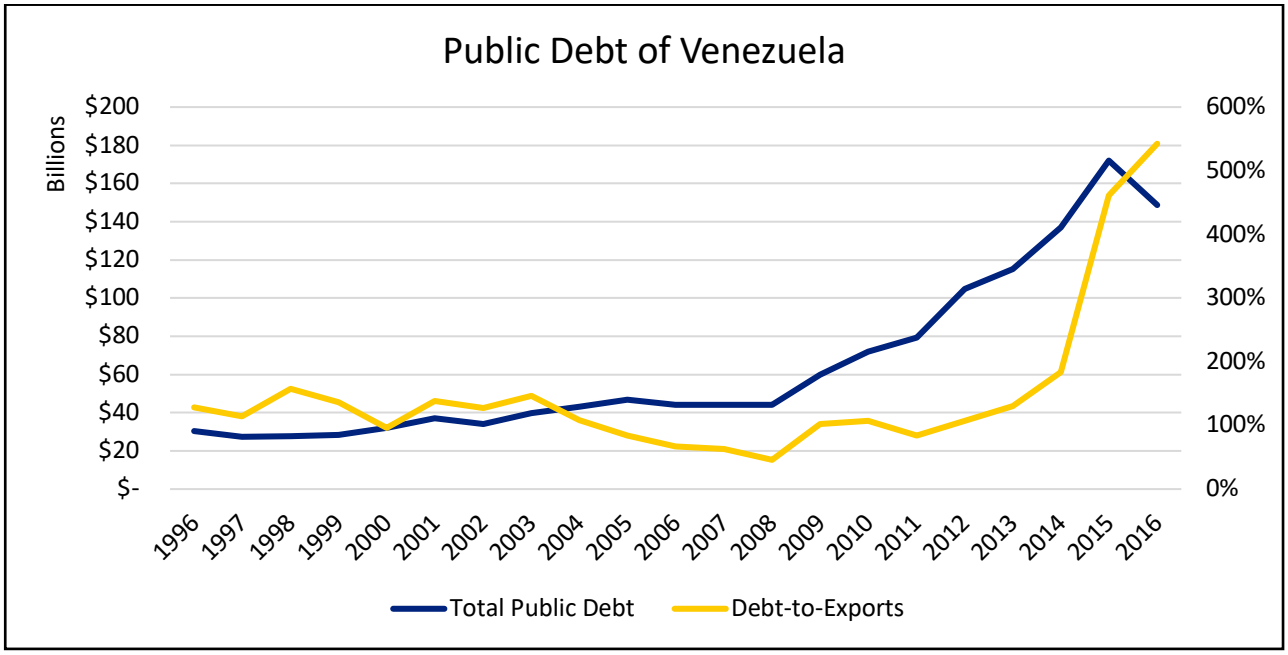

Figure 7 – Public Debt of Venezuela (1996-2016). Source: (ECLAC, 2019; OPEC, 2019; Own Calculations)

As argued previously, risk-reduction in oil economies lies in cutting expenditures during the good periods to run an expansionary fiscal policy in poor markets. Venezuela seems to have done exactly the opposite: increased spending and accumulated debt in boom markets with a complete negligence of risk planning for the inevitable bust that came in 2014. Venezuela stopped servicing debt payments

in 2017, which as of early 2019 had accumulated to $8 bn USD in unpaid interest, effectively defaulting (Reuters, 2019). They have relied on partners, particularly Russia and China, for both extensions on debt and changing the debt structure, enabling Venezuela to service their debt through payments of oil (Arsenault, 2018). Today, as the Venezuelan government has stopped servicing its debt, it has identified the most vulnerable bonds. In addition to the ones held by allies Russia and China, the bond containing Citgo as a collateral is of highest importance (Kassai, Zerpa, & Bartenstein, 2019). Economists believe this is due to the fact that obtaining Venezuelan assets by going through the courts is impossible, except for the Citgo bond, which has assets in the US (Oliveros, 2019). Citgo is a US refiner, which the government can use to get oil into the US, providing key access to the US market and US dollars (Scurria & Vyas, 2019). Furthermore, this bond matures in 2020, making it possible for the government to meet payments until then (Santos, 2019; Oliveros, 2019). While it is uncertain why lenders have not declared the country bankrupt, it is possibly because they believe that the future of the bonds in the case of a regime change is worth more than limited assets – excluding the Citgo – they could obtain through the courts. The size of the debt relative to the economy and the value of the exports present a dire problem for the country. An argument on how to deal with this will be made in chapter 7.

6.3.5 Money Supply and Inflation

Investigating the macroeconomic performance of the Venezuelan economy has shown that fiscal policy was poor, with debt increasing dramatically to cover the public deficit. Still, it must be investigated whether the central bank also engaged in printing money to cover the deficit, as this would help explain the recent hyperinflation period in the economy (BBC News, 2019; S. Ross, 2019). It was shown that the rate at which they undertook public debt decreased from 2015 onwards, suggesting that the oil bust prohibited further debt accumulation. Increasing the money supply is one, very dangerous, option to deal with a public deficit (Cassidy, 2015).

Assessing the data on money supply in the Venezuelan Central Bank and its relationship with inflation in Figure 8, suggests three noteworthy takeaways. First, there seems to be a remarkable correlation between the change in money supply and inflation, with money supply being a key explanatory factor to the current hyperinflation in the country. Second, the graph suggests that the amount of printing took off in 2016, the first year that the growth in amount printed surpassed 100%.

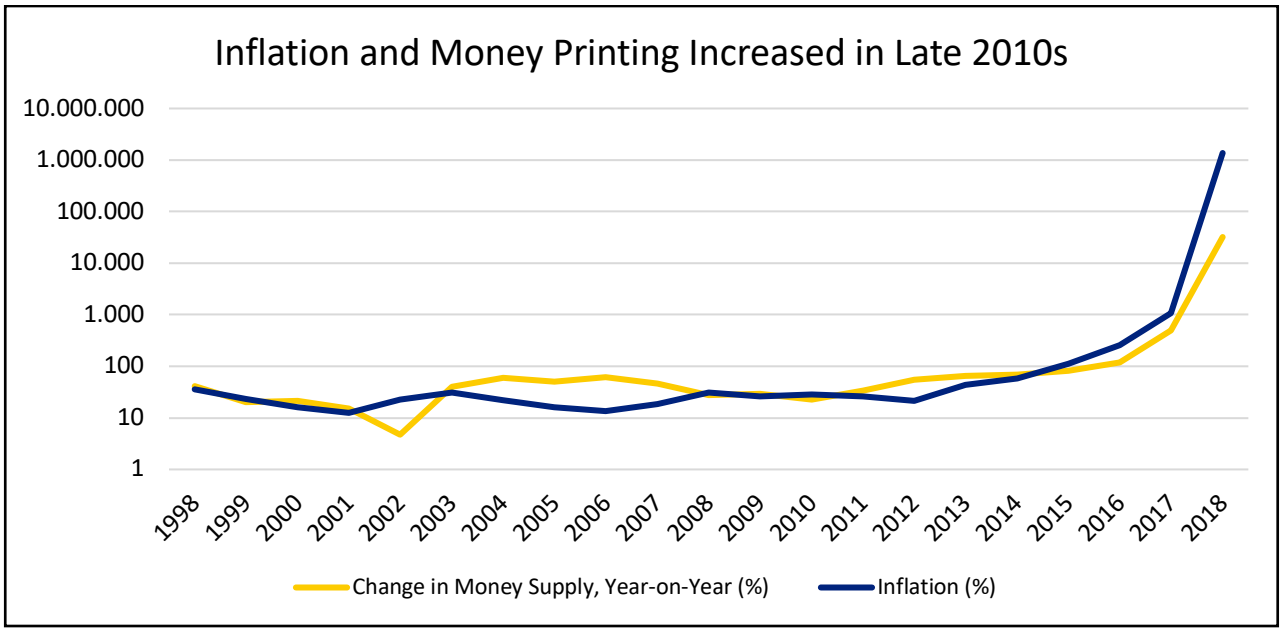

Figure 8 – Money Supply and Inflation (1997-2018). Source: (Banco Central de Venezuela, 2019a; IMF, 2019).

This coincides with the first year where total debt in Venezuela decreased, suggesting that the government did indeed turn to money printing when increasing debt further became impossible, using proceeds from an increased money supply to fund projects and meet existing debt obligations. It is noted that inflation started to grow faster than money printing in 2017, suggesting that at this stage bolívares had begun to lose value as an asset. Inflation being higher than money supply suggests an increase in capital flight. Finally, running an expansionary monetary policy decreases the value of the currency. This action seems at odds with the correct monetary policy for a fixed exchange rate system where people find the value of the currency to be lower than set by the central bank.

This suggests that while the socialist government initially obtained sufficient funds through their oil rents, they later had to take on more debt to cover their payments. Finally, as oil prices plummeted, borrowers stopped extending loans to the government, at which point the Venezuelan government turned to the simple measure of money printing to cover the government deficits, which is seen as the starting point for hyperinflation.

6.4 Conclusion

The analysis paints a dark and rather one-sided picture. The analysis concluded that Venezuela has crumbled from being one of the strongest democracies in Latin America, to one of the weakest, demolishing the strong institutions once governing the country. The history of democratic institutions

has had a volatile relationship with oil shocks and booms. Even if policies implemented were well functioning, the political and economic instability resulting from the external oil shocks in the period up to 1989 made policies more short-sighted, enabling a landslide victory for Chávez. The chapter suggests that path dependency theory has a high explanatory power on Venezuela, as historic events continue to shape current decision-making. Moreover, property rights, rule of law and corruption have been particularly important in contributing to the downfall of Venezuela. Chávez changed the laws of the country to circumvent cooperation across parties and to rewrite the constitution, ultimately leading to an abuse of power as funds to various social programs went missing, drug trafficking increased and political allies, with lack of competences, were awarded important roles in expropriated businesses. This follows the conclusion of Mehlum, Moene and Torvik (2006), who suggested that only countries with poor institutions experience the resource curse, explaining why the deterioration of the institutions was particularly damaging to Venezuela.

In terms of managing the oil resources, the initial period saw high growth and high international involvement, with governments understanding the value of the oil through the "preservation" and "sowing the oil" principles. The period following nationalisation reduced efficiency and investments and coincided with increased volatility in oil price, effectively pushing Venezuela into an economic crisis. They tried to reverse this in the 1990s, where the "Apertura" period reopened the industry to JV's with foreign players, but the aftermath of the 1980s, the increased political instability and the insufficient nature of the measures meant that recovery was not achieved. Finally, the current government removed PDVSA's political independence. They enacted full nationalisation of the oil industry and removed any governance of the management, leading to a production of 1/3 of pre-Chávez levels, hidden by the longest oil boom in history. As the oil prices plummeted in 2014, operational issues became apparent. The management of the oil reserves is an important factor when assessing the Venezuelan crisis.

Regarding the macroeconomic management, Venezuela has for decades been ruled by governments unable to diversify the economy away from its massive oil reserves. Debt was the usual response to oil price shocks, as their long-term investments required a constant investment flow. Chávez utilised the increasing oil price to fund his expansionary fiscal policies, and lack of institutional oversight enabled him to redirect money to political allies. However, as debt increased during this period, the consequences of an oil shock were ever-harder, hitting the economy as raising more debt was no

longer a possible way to cover deficits through an oil bust. The economy turned to money supply, initiating hyperinflation. In the meantime, the government has tried to maintain a fixed exchange rate system, overvaluing the bolívar dramatically, while also enacting strict limits on the purchase of USD and the ability to freely set prices on goods. Thus, the implementation of price controls, an overvalued bolívar, restrictions on capital movements, large fiscal deficits and increased discretionary spending outside the control of Congress have all facilitated the current crisis.

As seen throughout this analysis, many sequential actions have led to the actual economic disaster highlighted by hyperinflation since 2016. Venezuela has fallen from being an example to be copied, in terms of political and economic prowess, to the bottom ranking contender in terms of institutions, economic health and the ability of the government to take care of its citizens. It achieved this in 40 years, despite having the largest oil reserves in the world – no small achievement.

7 Discussion: Rebuilding Venezuela

The analysis highlighted how the destruction of the Venezuelan economy has been made by a government with an intention for economic progress and prosperity. Rather, the actions seem to suggest excessive rent-seeking and increased corruption favouring the few as the reasons for the Venezuelan meltdown. This discussion seeks to outline a set of recommendations for the country to remedy the situation and start recovering the economy. The underlying assumption of the recommendations and the timeline is that the political situation changes to one that enables and support economic development, for which these recommendations made by the author are applicable.

My discussion will focus on establishing the foundation, with 3 recommendations, before rebuilding trustworthiness, consisting of 5 recommendations.

7.1 Establishing the Foundation

Issue # 1: Humanitarian

The first and foremost objective of any government must be to provide satisfactory levels of nutrition and health to its citizens – enabling society to produce and prosper. Solving the humanitarian crisis in Venezuela is thus of vital importance. Today, citizens are not able to obtain sufficient calories to meet their daily needs because of unavailability and cost of goods. The health care system has collapsed and the country is experiencing alarming levels of malaria, dengue, zika and other diseases (Centers for Disease Control and Prevention, 2019; Daley, 2019; Pestano, 2019; Sequera, 2018). These aspects must be addressed immediately, through one of the two primary options available.

First, the government can opt to partner with national allies; either China, Cuba and Russia as one group, or the US, Europe and the Lima Group as another. Any of these partnerships could give them access to a network of countries, of which many are well performing with great resources available. Furthermore, both groups have political interests in helping Venezuela.

Another option is to partner with NGOs, such as International Red Cross or various UN agencies. The advantages of this option are that these agencies have experience in urgent crisis management, availability of resources to assist the country and no political interest in the future outcome. It is my belief that assistance from NGOs is to be preferred. As politics has played an important role in facilitating economic damage, it is important that politics remain excluded from the issue of solving

this humanitarian crisis. Enabling these NGOs to enter Venezuela with aid is potentially fast to implement, with no long-term consequences or political trade-offs.

Issue # 2: Public Budget

It is vital to obtain a full overview of the public budget. For too long, lack of governance has as demonstrated previously resulted in reduced oversight of government revenues and, particularly, government expenditures. Consequently, the government has to thoroughly examine the structure of taxes and oil rents, and understand the structure of government outflows. As an immediate action, this involves closing extrabudgetary expenditures like FONDEN, which has been heavily expanded under the current government. The goal is provide insights into how poorly the state of the public budgets and expenditures are. This budgetary overview is necessary to understand the options at hand for balancing the budgets – or accepting external funding in case expenditures are not met by current budgetary means - and ensuring that funds spent by the government create the highest possible social returns. This solution may present obstacles if the government does not possess sufficient political power to implement changes. It will also present obstacles due to accessing information on the flow of funds in the corrupt public sector. Still, this author believes it a necessary and immediate action that must be taken. Furthermore, it should be possible to achieve a close approximation rather quickly, allowing this to serve as a catalyst for macroeconomic recovery.

Issue # 3: Price Controls

My analysis shows how government ceilings has negatively influenced the economy by completely eliminating the supply of basic goods. Even though the suggested intention was to ensure ample goods for the low-income citizens, the lack of supply and the increasing power of the black market has resulted in the opposite. It is vital to ensure increased supply of goods, while achieving affordable pricing for the low-income citizens. There is a set of potential options to achieve this, depending on the market's speed of recovery.

The first option, is to completely remove price controls, as humanitarian aid ensures supply of nutrition for a limited period. The potential advantage is that this period enables both imports and domestic production of basic goods under free market powers. The disadvantage is that supply will

or may not grow fast enough, leaving the country with a continued shortage of goods, where prices are still above what consumers can pay.

The second option is a complete removal of price controls concurrently supported by government subsidies to domestic consumption in the short run, with the subsidies altered to only promote domestic production as the market develops. The advantage is that it further incentivises producers to increase supply. Furthermore, this can be implemented on a gradual scale, as the mechanics of the markets approach an equilibrium over the coming years. The disadvantage, however, is that the government will need to allocate funds to such a system, while also implementing a system that can ensure that the funds indeed achieve a lowered price for the end consumers.

Finally, a third option the is gradual removal of certain goods under price controls, depending on the degree of competition in the market for category of each goods. While the current market situation for almost all goods in the market are not mature enough to facilitate such a change, this suggest that the black market will continue to function.

The author recommends a complete removal of the price controls with a simultaneous implementation of a subsidy regime to domestic consumption that will be most efficient at increasing supply of goods in the country. While it will enable an increase of goods supply immediately through imports, it will facilitate domestic production as the country recovers, supporting a change from relying too heavily on imports as is the case today. Systems of subsidies to domestic production is currently existing in many countries, supporting this recommendation.

7.2 Rebuilding Trustworthiness

Issue # 4: Exchange Rate

The next issue is dealing with the decade-long tradition of overvaluing the bolívar to decrease imports. As the currency has effectively lost all value, with the latest devaluation in August 2018, they need to reconsider their decade-long principle of an overvalued currency to enable cheap imports, maintained through a fixed exchange rate. They should choose to restructure, either following a free floating rate or one of the options based on a fixed regime.

The first option is to adopt a free floating regime. This way, the value of the bolívar would be set by markets, depending on the need for local currency vis-à-vis foreign currency. This means that the

central bank no longer interfere directly in the money market, nor does it have to worry about the monetary actions of the central banks of the currencies to which it is pegged (Felipe et al., 2016). A free floating regime does not require large currency reserves used to influence the value, and it creates a natural protection against currency attacks, as an immediate fall in currency would only make that currency equally cheap, suggesting increased exports for the country (Calvo & Reinhart, 2000). Free float also carries risks as it is expected to devalue the currency, making foreign denoted debt more expensive. Furthermore, the current situation suggests that the imbalance between need for foreign currency in Venezuela and foreign need for Venezuelan currency suggests that it will become too cheap. This could be beneficial to exports, if there were any exporters able to take advantage of this relative price advantage. It will increase volatility, as exchanges are made continuously, which may be detrimental to the current situation of the country. Generally, country experiences suggest that four criteria are necessary for a successful transition to free floating exchange rates (Karacadag, Duttagupta, & Fernandez, 2005). There needs to be (1) a liquid foreign exchange market, (2) a coherent policy on central bank intervention, (3) an appropriate nominal anchor to substitute the fixed exchange rate, and (4) effective monitoring of exchange rate risk. The current situation suggests that Venezuela is not ready to adopt a free floating exchange at this stage – but may be an option later in the recovery process.

A fixed exchange rate regime, albeit under another set of guidelines, is another option for Venezuela. First option is the adoption of a foreign currency – traditionally the US dollar, known as "dollarization". This has during the past decade been selected by Ecuador and Zimbabwe as ways to combat their crises (Council on Hemispheric Affairs, 2016). A set of advantages of adopting this exists. First, there is no risk of a large depreciation or appreciation, nor are large-scale capital outflows a risk (Cohen, 2000). Second, it would solve the issue of inflation, as inflation would closely resemble that of the US (Council on Hemispheric Affairs, 2016). Third, it would remove the ability for the government to use monetary policy. While this is usually a good thing to maintain, Venezuela has abused this through their money printing policies – consequently, it would limit the macroeconomic measures of future governments to only include fiscal and structural elements (Wu, 2016). It therefore removes any moral hazard in place when a central bank is too closely aligned with the executive branch, as Venezuela is a clear example of (Council on Hemispheric Affairs, 2016). Additionally, it is a relatively cheap and simple option, with total costs of Ecuador's dollarization estimated at $800m USD (Wu, 2016). Finally, one of the key advantages to dollarization is the fact that transaction costs decrease, and studies have shown that it increases trade with other dollar-based countries (Berg &

Borensztein, 2000; Council on Hemispheric Affairs, 2016; Wu, 2016). Given that the dollar is already obtained through all petroleum sales, this may prove very beneficial.

There are disadvantages associated with a dollarization, however. First, the downside of losing the monetary policy instrument is that the government can no longer influence the value of the currency (Cohen, 2000). Consequently, an appreciation or depreciation of the currency is no longer in the hands of the country, but is decided primarily by actions of the US, which then influence dollarized countries. Given the remarkable differences between the economic situation in USA and Venezuela, this may end hurting the Venezuelan economy. Through dollarization, it is no longer at the hands of the central bank if they wish to maintain a stronger currency, making imports cheaper, or a weaker currency, making exports cheaper for foreign countries. Next, the central bank gives up its ability to serve as a last resort for funds to domestic banks (Cohen, 2000). Finally, the domestic currency traditionally carries a high symbolic value to its citizens, meaning that adopting the dollar may be perceived as giving up the national identity (Cohen, 2000). Given the recent performance of the Central Bank of Venezuela, dollarization does consequently seem to propose a solution for Venezuela to remove the poor performing central bank in exchange for a functioning monetary unit. Furthermore, the disadvantage of dollarization on exports is in the case of Venezuela negligible, as oil is always sold in dollars, and oil already accounts for 98% of exports.

Alternative options include pegging the currency within a pre-determined band, as currently experienced by the Danish Crown against the Euro, or adopting a currency board (HKMA, 2019). However, despite these being viable options towards battling inflation, and their ability to help achieve a slightly undervalued currency, they require a strong and trustworthy central bank. Given the recent performance of the Central Bank of Venezuela, it is the belief of this author that no actors in the financial markets would truly trust their actions at this stage. It is expected to end as Argentina in 2002, when the financial market lost trust in the currency board (Kiguel, 2011).

It is my belief that Venezuela should pursue a dollarization of the economy, as the traditional disadvantages are not perceived as risky in Venezuela because the dollar is already driving the majority of the economy. Dollarization will however eliminate the risk of continuing poor monetary policies. It is believed that dollarization will curb inflation, limit capital flight, remove the ability of printing money as a method to cover deficits, and be relatively easy to implement. Furthermore, it will remove the current issue of their debt holdings being denoted in USD. However, given the anticipated economic situation between Venezuela 2019 and 2029, it is a realistic option that

monetary actions of the US in 10 years may not align with what is best for the Venezuelan economy. Consequently, they should only consider dollarization as an immediate action, fixing the issues at hand, allowing Venezuela to focus on rebuilding other branches of the economy over the coming 5-10 years, before considering reinstating a central bank with a monetary regime that can promote exports. This allows us to focus on the next issue: debt.

Issue # 5: Debt Crisis

As the analysis concluded, Venezuela has increased their public debt to astronomic levels. While they have not declared themselves default, or been forced by creditors to do so, they have stopped paying interest, and must address this issue if they are to create a foundation for growth. Their oil reserves suggest that it may be easier to solve than other non-Venezuelan defaults, but the size of the crisis may suggest the opposite. To remedy this situation, I see two potential solutions.

1 is a long-term solution, which builds upon an imminent restructure of various aspects of the economy. The idea is that conducting this complete restructure of the institutions, the monetary policy and property rights, will facilitate foreign investments and get the economic wheels turning again. The advantage is that the government does not have to declare itself bankrupt, getting the reputation of being a poor lender, while the current bondholders would expect full payments on their bonds. The disadvantage, however, is that both the size of the debt and the need for additional investment is so large that a realistic turnaround without obtaining new debt is unlikely.

Option 2 is to turn to IMF as Venezuela does not have access to international capital markets – an institution that is known for not lending to troubled countries, without striking a deal with existing bondholders on a reduction in claims. This is known as a "haircut" (ECB, 2016).

Under a "haircut", current investors accept a decrease in the value of their claims on the debt. This way, the government of a country can reduce the size of its debt, often as a step in discussions with intergovernmental institution to obtain new loans, while the bondholders manages to save some of the value of the existing bond (Edwards, 2015). While the size of such "haircuts" differ based on the magnitude of the economic crisis a country is experiencing, recent events suggest that a large reduction in debt may be possible. Argentina saw an estimated cut of 75% in 2002, and Greece experienced a "haircut" estimated between 54% and 59% in 2012 (CFR, 2019; Kiguel, 2011; Moersch & Schmidt, 2015). While the Venezuelan crisis is more severe than any of these cases, suggesting a

higher "haircut", they also possess higher natural resources that can enable a quicker recovery. The abundance of oil may suggest that bondholders are more willing to hold on to their current assets. My conservative estimate is that the government could achieve a debt reduction of around $80-$100 bn USD, representing a "haircut" of 50-60%. While Venezuela is able to accept debt from both IMF or the Interamerican Development Bank (IDB), the difference in size and expertise on crisis recovery, suggests that Venezuela should seek to obtain new financing through IMF. While this would come with strings attached as to how they set their fiscal and monetary policies, this will in my opinion prove worthwhile.

It is my opinion that Venezuela should go to IMF to obtain additional funding and initiate a discussion on how to achieve a "haircut" on the existing debt. While this will mark Venezuela as a troubled economy and place high external oversight from IMF on the economy, it is the safest way for the government to get the necessary liquidity to restart the economy. While it is hard to estimate how difficult and expensive negotiations with bondholders will be, it is my opinion that this is the only realistic alternative. It is an expensive option and will come with strings attached, but it will increase credibility and speed – and as these factors are key to the turnaround, it is preferred.

Issue # 6: Property Rights

The Venezuelan government is required to address the issue of property rights in the country. The analysis showed how mass expropriations have reduced incentives for citizens to innovate and produce, and how investments in the private sector has fallen as a result of people being unsure of their legal ownership going forward. It is of paramount importance that the government reinstates public trust in the national institutions regarding ownership of land and production assets: making citizens believe that creating companies and hard work is once again a value creating activity. It is necessary to consider the legal aspect of ownership, before they can initiate plans for the companies that have been nationalized over the past decades.

Regarding the legal framework, the government has two options.

The first one involves adopting a system similar to the one in place before the election of Hugo Chávez, with small adjustments to account for the development of the world since. This will be the easiest option for the country, as history has shown that it worked in the past.

Option 2 is for them to look at the best performing countries of the world regarding property rights, and copy their legislation. This is a harder task, and requires more time, effort and risks, but may propel the country forward and work to truly signal that the economy will re-emerge after the failed policies of the past. Despite this great potential, I believes that the first option should be adopted as it is easier to implement, and allow for the government to re-instate a system that works, enabling them to focus on other critical matters.

Once the government has reinstated legal property rights in the country, they need to consider what to do with the existing nationalized companies. As the analysis pointed out, there are currently hundreds, if not thousands, of nationalized companies in Venezuela. These have proved not to function under the current government. As the government will have plenty of other economic focus points in addition to running these companies, it is my belief that the new government should seek to reprivatize some or all of their current holdings. For this, two options have been identified.

Option 1 suggests the reprivatisation of a small portion of their holdings. This will simplify the operations of the government, removing unnecessary managerial attention, while still maintaining control over industries of national security. The current government has used national security as an argument to expropriate companies in industries such as newspaper printing and steel production. I suggest keeping ownership of a few selected companies in strategic, including PDVSA. The key challenge, after identifying specific companies to maintain, is to increase the governance and management of these companies. They must enable them to function independent of governments politics, operating as professionally as possible. While this will be difficult, with corruption levels at very high levels, it should be possible to bring back Venezuelan oil executives situated around the world in an effort to rebuild their country.

The second option, which eliminates the issue of governance and enables the government to focus on other tasks than running companies, is to reprivatize all companies currently held. The disadvantage of this option is both the public opinion of selling PDVSA, which carries high symbolic value to the population, and the loss of important companies considered integral to the rebuilding of Venezuela. Selling these poor operating, yet strategically important, companies to what would most likely be foreign, private players may prove detrimental to the long-term growth of Venezuela as a whole.

It is the my belief that Venezuela should seek to reprivatize the majority of their holdings, either through auctions or silent agreements with established domestic or foreign players, while maintaining control over integral infrastructure. It carries a high sentimental value and it is believed that changing

too many symbolic elements may hurt the national identity. Furthermore, if professionalism and arms-length governance is reinstated, it is believed that these companies can operate somewhat efficiently, while keeping national interests higher than private companies would suggest. The companies kept under government control should seek to bring in talent and increasingly operate through partnerships and JVs to increase internal capabilities. Examining recent growth miracles, such as China or Vietnam, they have too been carried through by a strong government with state ownership over key industries (Cendrowski, 2015; Geng, Yang, & Janus, 2009; A. Lee, 2019; Wildau & Jia, 2018). Following the previously discussed "Beijing Consensus", maintaining control over control over companies in oil, financial services and communication can facilitate future growth, given that they can reinstall functioning governance of such companies.

Issue # 7: Oil Production

Next, they need to take a hard look at the oil industry. As the analysis pointed out, PDVSA has a monopoly over the exploration and production of oil, but has mismanaged it through increased corruption and decreased competencies. The current situation is that they do not have the capital necessary to invest in their run-down facilities, they have lost all managerial and engineering talent, while the laws do not allow others to enter the country and ramp up production. This crisis is further aggravated as the oil reserves are very difficult to extract, due to quality and geo-structural conditions. To re-establish the oil industry, they government has two primary options.

Option one revolves around the reopening of the economy in similar fashion to the "Apertura" model of the 1990s. This continues to place PDVSA at the center of all oil-related activities, but allows for joint ventures and partnerships with foreign companies that possess the know-how and the required capital. It would, however, require the government to provide better returns to the oil companies than in the 90s, through access to better oil fields, less restrictions on employment and size of fields and larger ownerships shares. This way PDVSA can remain at the center of the operations, with high returns as the advantage to foreign partners bringing new technology. One weakness of this proposal is the potential unwillingness for foreign partners to agree on terms with the government, due to the expropriations that occurred in 2007-08. The companies will remember past dealings with the Venezuelan government, and will require a new structure for these companies to re-invest in Venezuela.

A second model is based on the complete liberalisation of the oil industry, by setting up a trustworthy tax regime that ensures that both companies gain from entering the country with long-term investments, and that the country extracts appropriate rent. This carries a larger upside compared to the previous option, as companies will be able to enter on their own conditions, without having any involvement with PDVSA directly. On the other hand, though, it depends on the success of their changes to the property rights of the country. If these companies are to invest heavily in Venezuela, they will only do so if they believe they can earn a proper return over a long time horizon, adjusted for the country risk Venezuela will still be dealt with in the years to come.

While a third theoretical option does exist, namely to restructure PDVSA both financially and organisationally, this is deemed unviable due to the lack of capital and talent. The challenge is simply too large for that to be realistic – especially given that their oil reserves present a golden opportunity to rather quickly turning things around. It is my belief that bringing in foreign companies, skills and capital, while rebuilding a strong PDVSA, is the preferred option to achieve full potential.

Issue # 8: Structural Change

Finally, the last part of this thesis seeks to discuss opportunities for the Venezuelan economy in the decades to come. It seeks to discuss some basic initiatives that can help achieve a structural change of the economy, increasing the governance concerning oil rents and allowing the economy to become less reliant on oil.

It is my belief that Venezuela needs to rethink its entire economic structure to become less dependent on oil, using its geographical position and well-educated, yet underutilized, workforce to increase activity in other areas of the economy. Investigating one of the most coveted growth miracles of the past decades, China, suggests some perspectives for Venezuela. Evidence shows that they embarked on a journey of structural change in the 1970s, initially focusing on production in industries that were very labour intensive, before moving into skill and capital-intensive industries in the 1990s (Naughton, 2019). An initial focus on labour intensive industries may be a quick win for the population, as there is currently ample labour resources available.

Venezuela must carefully consider identifying a key set of industries to focus on. These could include agricultural products, such as raw cocoa or coffee beans, which Venezuela has a tradition of producing. Additionally, they could build upon this agricultural produce to establish capabilities in

the refinement of such products, such as chocolate. While these are low value-adding products, it may prove worthwhile as a quick and readily available industry. Venezuela should however focus on utilizing its strong base of engineers and its well-educated workforce, to immediately emerge as a nation with manufacturing capabilities. Looking to cluster theory, it is worth considering attracting foreign companies that can use these capabilities. In this perspective, Venezuela does have the advantage of a well-established trade route to the US, which is of great advantage to Venezuela in establishing itself as a relatively close, yet cheap, producer of goods. Venezuela should consider the role of universities and schools and how these can partner with companies to create a foundation for innovation. While this is decades away, it is worth considering, as the technological advancements have made economic catching up, and the ease of working remotely, easier than ever before.

8 Conclusion

This thesis sought to investigate the downfall of the richest country in Latin America and propose a set of recommendations to the next Venezuelan government for future economic recovery. Initially, a thorough literature review was conducted to establish the primary economic areas relevant for understanding the economic crisis. Based upon the analysis of these, a set of eight recommendations ware proposed for the revival of the Venezuelan economy.

Regarding the methodological choices of this thesis, the case study method was applied due to the nature of the research question, the contemporary situation and the lack of control over events. The thesis was driven by a pragmatic philosophical stance, as to understand the situation and properly address actions that can deal with the problems. This was further driven by a critical realistic stance, based on the socially constructed measures of economics. Abduction and deduction were applied to thoroughly understand the past, but also to create a basis for future recommendations. Consequently, the nature of this design was explanatory, in that it sought to assess the past decades of economic management, and exploratory, in its goal of supplying the country with a set of tangible recommendations for future recovery. To this end, primary data was used in a limited aspect, due to the difficulty of obtaining it, meaning that secondary data and reports were the primary drivers of this analysis. This carries a weakness of selection bias on the basis of the author, which I sought to control by rigorous use of triangulation for backing up claims.

The research question was broken down into sub questions in order to create a structure on which to base the thesis. Answering the first sub question, a comprehensive literature review was conducted, identifying both perspectives and core variables of analysis. While the literature suggested multiple variables as contributors of growth, I selected three parameters as the primary explanatory variables for understanding the growth collapse: the developments of the formal institutions in Venezuela, the management of their oil resources, and the macroeconomic management of the economy.

To answer the second sub question, an assessment of the performance of the Venezuelan governments over the past 50 years was conducted to understand the emergence of the crisis. It was concluded that a large reliance on oil for government revenues and its consequent volatility, contributed to the fall of the democratic institutions of Venezuela. What started as minor deteriorations of the institutions, turned into a path-dependent decline over the last decades. This enabled Chávez to climb to power, establish a corrupt system and increase the speed of the institutional collapse. Second,

the management of the country's oil reserves was assessed, concluding that a two decade long decrease in production was explained by the lack of managerial talent and investments in production. This was facilitated by Chavez using PDVSA as a political tool to fulfil his personal ambitions without proper governance. The increase in government income during the 2000s due to the longest oil boom in history, hid the fact that PDVSA was underinvesting in production – a point that became apparent in the 2010s. Consequently, Venezuela has failed to properly manage its valuable oil reserves. Finally, decades of poor exchange rate policies and capital constraints in combination with price controls, heavy debt accumulation and money printing suggests an outright catastrophic management of the economy. While certain elements, such as easing imports for the good of the people and actively fighting poverty were good seen in isolation, the measures taken were detrimental to the economy overall – and were based on a corrupt and mismanaged political structure.

As a conclusion to the third sub question, eight policy recommendations were put forth in the discussion. These propositions are intended to deal with some of the many challenges that emerged in the analysis.

1. It is proposed to let non-political humanitarian aid enter the country immediately to alleviate the issue of malnutrition and medication without making it a political matter.
2. The Venezuelan government need to get a full overview of the state of the public budget, by understanding their flows of income and expenditures. It is paramount that they collect all government-related expenditures within one public office, to ensure transparency.
3. They need to change the policy of price controls in the country and substitute it for a system with subsidies. This will ensure that the supply of goods will increase without making prices unattainable for Venezuelans.
4. It is proposed that they adopt the dollar as their legal tender, putting an end to hyperinflation and decades of currency overvaluations through fixed regimes that have hindered progress.
5. They must to engage in discussions with the IMF over access to development loans to rebuild the economy and subsequently negotiate a deal with creditors to accept a "haircut". This is expected to require IMF involvement in future policies, and while they do not have a spotless track-record, they have an interest in economic recovery.
6. They must also focus on changing the legal system of the country; seeking to reinstate the previous legal structure regarding property rights.
7. Following the change in property rights, they must enable foreign oil companies to enter the country and increase production through partnerships with an improved PDVSA.

8. They country is urged to identify a specific set of industries for the country to focus on. These should be based on their strong capabilities within engineering and natural science, their strong universities, and the available natural resources within the country.

It is the my belief that applying economic development theory contributed to understanding of the deeper layers of the crisis in Venezuela, providing insights into past events that enabled the current mismanagement. It has served as a powerful tool, with multiple useful insights applied towards recommendations for the country. Given the scope of the thesis, there are economic components that would have expectedly contributed to the crisis but have not been investigated in depth.

The research design enabled me to investigate and answer the overall research question, while providing the country with suggestions on how to rebuild the economy. There is an urgent need to address the institutional and other fundamental issues. While some recommendations are quick and easy to implement, such as accepting humanitarian aid and re-instating proper governance over government expenditures, others like attracting foreign capital and nurturing new export industries will prove difficult and risky, and will take time.

It is worth noticing, however, that Venezuela once had the strongest democracy in the region and still possess the largest oil reserves in the world.

There is hope for a prosperous and democratic Venezuela – but it will take leadership, credibility and hard work to remedy decades of severe mismanagement.

9 Future Research

Following the findings of this thesis, there are three interesting directions to take for future research into both development economics overall and the case of Venezuela. These research suggestions are all based on the methodological choices, and the consequent limitations, taken in this paper.

First, it would be interesting to investigate whether the recommendations made in this paper can be extrapolated to serve as a general blueprint for developing countries. This could be achieved by conducting an analysis on a set of different developing countries. Afterwards, a comparison should be done on their economic progress, investigating if the recommendations of this thesis can be linked to good economic performance. This would alleviate some of the weaknesses connected with the case study method adopted in this thesis, further helping the understanding of development economics.

Second, it would be interesting for future academics to conduct a longitudinal study of the recommendations presented here, to see whether the recommendations in fact achieve the hypothesised results. This would require the researchers to work with the government, as the study would become quasi-experimental in its nature, which might be difficult to achieve.

Third, it would be interesting for future research to investigate the variables excluded from this research and understand their impact on the crisis in Venezuela. While the author of this thesis has selected what was deemed to be most relevant, there are still plenty of variables available which may help explain how the crisis in Venezuela became what it is today. This includes the indirect effects of the mismanagement on the variables investigated in this thesis.

This thesis has investigated the use of economic development on understanding economic crises and helping design a solution to them. However, due to the magnitude of the Venezuelan crisis, many potential academic papers can be conducted to further understand the dynamics.

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11 Appendices

Appendix 1 – Journal Collection

Name of Journal	**Academic Journal Guide 2018 Score**
Journal of Political Economy	4*
Journal of Development Economics	3
World Development	3
Journal of Monetary Economics	4
Journal of International Economics	4
Quarterly Journal of Economics	4*

Source: (Chartered ABS, 2018)

Appendix 2 – Exchange Rate System

Period	System Name	Classification	Exchange Rate	Comment
1811-1982	Free Float	Free Float	1 to 4.3	
1983-1989	RECADI	Fixed Regime	4.3/6/7.5 to 42.31	Tiered
1990-1993	Free Float	Free Float	42.6 to 106.2	Unified
1994-1995	OTAC	Fixed Regime	106.2 to 289.3	
1996-2001	Exchange Bands	Fixed Regime	289.3 to 773.1	
2002	Free Float	Free Float	773.1 to 1,383	State Intervention
2003-2007	CADIVI	Fixed Regime	1,924 to 5,700	PDVSA Strike
2008-2012	CADIVI	Fixed Regime	5.35 to 17.32	Bs.B to Bs.F (Cut 1000)
2013	CADIVI (DIPRO-SITME)	Fixed Regime	18.7 to 64.1	
2014	(DIPRO-SICAD I and II)	Fixed Regime	79.88 to 173	CENCOEX
2015	(DIPRO-SIGAD-SIMADI)	Fixed Regime	182 to 910,58	CENCOEX
2016-2018	DIPRO - DICOM	Fixed Regime	984-3,915,000	
2018-Present	DICOM	Fixed Regime (Auction)	101.48 to 5,200	Bs.F to Bs. S (Cut 10,000)

Source: (Banco Central de Venezuela, 2019b; Ecoanalítica, 2019)

Appendix 3 – Transcript

Interviewer: How do you think the decline in oil production has contributed to the current economic crisis in Venezuela?

How do you think the change in management of PDVSA over the past 20 years has impacted the operations of the company?

What are, in your perspective, the biggest reasons for the decline in production of oil in Venezuela?

It seems, through international reports, that the facilities are quite run down. Do you have any idea if this is true?

If yes, how much capital is required to rebuild the oil industry?

How many years do you expect it to take, if begun right now, to rebuild the oil industry?

What other elements, except investments, would you believe are important to change the current situation in PDVSA?.

Luis Oliveros: The decline in oil production has contributed a lot to the current economic crisis in Venezuela. Oil income was about 50% of the total but with the decline, the goverment need money and use the Central Bank "machine" to compensate. The goverment cant reduce the fiscal deficit and the result was de Hiperflation

Sorry for my English

the decline in oil production = hiperinflation, decline in imports and GDP down

Hugo Chavez and then Maduro destroy the institucional system in Venezuela, in special in the oil industry

Before Chávez, Pdvsa was a free public company, where the best engineers and managers work together in the good way. Pdvsa was destroyed for Ch and Maduro, politicized and financially touch. Pdvsa was used to finance the politician proyect of Chávez. Of course, He take money and petroleum from Pdvsa and send his friends (Cuba, etc,)

Today, Pdvsa is one of the worst management company of the world

Chávez was a serial killer of institutions

3- the biggest reasons for the decline in production of oil in Venezuela: is a combination, lack in investments + desertion of human capital (enginers) + financial disaster (Petrocaribe, corruption) + institucional break

Pdvsa lost their focus: Chávez change the main reason of the company, was oil company and Chávez put the company in other way.

I hope you understand my english

Interviewer: Yes, it is perfectly understandable - thank you!

It is what I thought, and feared, was happening to PDVSA

Luis Oliveros: Today the situation of Pdvsa facilities is horrible

Interviewer: It's a sad story, but one that needs to be explained to the world

Luis Oliveros: for example: the refineries about 20 years ago work in 80% of their capacities, today maybe the number is 25%.

Venezuela has a lot of problem to produce gasoline

Interviewer: Do you think this the situation of the facilities is the reason why it has not defaulted yet? Because creditors think that the assets of the company are worthless?

Luis Oliveros: Pdvsa is in default

Pdvsa didn´t pays their external debt

Interviewer: No, but why don't people who should receive payments not do anything?

They should take them to courts, seeking to get some money back, no?

Luis Oliveros: because is very dificutl to try to find venezuelan assets to convert in cash

Interviewer: which explains why the Citgo bond is the only one they are still paying interest on

Luis Oliveros: Pdvsa just have one of this: Citgo and the company has a lot of debt

Pdvsa2020

because the warranty of this bonds is the 50% the stocks of the company. This bond is the only that Maduro is paying right now.

Between Republic and Pdvsa the payments in default are about $9 billions

Pdvsa don´t pay external debt, don´t pay to providers and aditional has a huge debt with China (about $20Bn) and Russia

Interviewer: So in a magical world, where everything was possible: What is needed to be done to fix PDVSA?

Luis Oliveros: How many years do you expect it to take, if begun right now, to rebuild the oil industry? It depends wich goverment We have in the future in Venezuela. If Maduro continue (its posible) the future ist darks, its imposible to fix Pdvsa

Interviewer: and with a new government? (which unfortunately seems difficult after the last two days...)

Luis Oliveros: If We have a new goverment and They attract private investment, the recovery could be fast, but... We need a lot of money. The oil companies knows the potential of Venezuela oil sector and They have interest, the problem is that the political disaster continue in Vzla

I´m pessimistic with the future in Venezuela.

But

Interviewer: Do you have any estimate of how much?

but this is sad to hear, however, you're not the first Venezolano who has said so

Luis Oliveros: Is clear: the solution of the economic problem in the country goes through for the elaborate a Petroleum Plan. The oil sector today is the only sector able to produce foreign exchange, to pay debt, increase imports, put the economy to grow, create jobs, etc..

But

For this

We need important political changes, institutional changes

And social changes

for example: Pdvsa does not charge for the gasoline

This implies a lot of monet that Pdvsa lost. In teh recent year, Central Bank print money to compensate the losses

And this generate Hiperinflation!!

To finish: the oil sector is in a critical situation, Maduro can´t fixed and the political crisis (today) is complicate to think that the (good) end is near.

Interviewer: Yes, it seems like the situation is extremely difficult

Hard to fully understand, to be honest

Well, Luis - Thank you for your time, and you clarifying messages. It has been much appreciated!

Luis Oliveros: Dont Worry. Sorry for my english. If you have another question, I try to respond.