MASTER'S THESIS

Natural Resources, Volatility, and Venezuela: A Study of Economic Collapse

by

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Abstract

According to proponents of the resource curse theory, a country that is overly dependent upon natural resources will suffer from economic instability and stagnation. Van der Ploeg and Poelhekke's research, in particular, has demonstrated that the volatility of commodity prices is what prevents economic growth in a resource-dependent country. Employing Venezuela as a paradigmatic case, this paper builds upon this theory by examining the role of oil-dependence and volatile oil prices in an economic crisis that has plagued the country since 2014. Through process-tracing, it explores how these factors can explain the breakdown of an economy that initially appeared to be prospering under Hugo Chávez and his vision of '21st-century socialism'. It additionally considers the role that U.S. sanctions and government leadership played in the crisis. By contextualizing Venezuela's crisis within its history, the paper finds that Venezuela's structural dependence on oil, along with falling oil prices, proved necessary in generating a decline of the country's major economic indicators. In addition, it discovers that the interplay of sanctions and government leadership played a significant role in exacerbating the crisis.

Keywords: economic crisis; oil; resource curse; state collapse; Venezuela

Introduction

What is the relationship between a state's possession of natural resources and its economic performance? According to the resource curse theory, the answer is a dire one. Typically, a country that is dependent upon natural resources is considered a likely candidate for economic stagnation (Auty 1993; Ross 2005). Recent literature, in particular, has highlighted the connection between the volatile nature of commodity prices and economic decline, claiming that it is the *volatility* of resource revenues, together with the structural dependence on natural resources, that drives economic conditions (Van der Ploeg & Poelhekke 2009). This paper investigates this feature of the resource curse theory by analyzing the case of Venezuela, a country steeped in petroleum resources - comprising up to 98% of export earnings and 25% of GDP (OPEC 2020). At the turn of the century, the country broke away from a decade of neoliberal economic policies and elected a populist, left-wing leader who ushered in a new era in Venezuela, promising the development of '21st-century-socialism' for its citizens (Maya 2018: 70). Indeed, the nation experienced a trajectory of economic growth and equality in the first half of the century.

However, the present situation appears vastly different. Venezuela is embroiled in the worst humanitarian crisis in its modern history (Kurmanaev 2019). Unemployment stands at 44.3%, poverty has reached nearly 90%, and inflation soared to 10,000,000% in 2019 (Alhadeff 2018; IMF 2019). Such a stark reversal of fortunes has sparked extensive research attempting to discern how the collapse occurred. Given the literature on market volatility and the puzzling upheaval of Venezuela's economy, this research paper asks: *Does the combination of national resource-dependence and volatile oil prices explain Venezuela's economic crisis?* The study

is theoretically guided by the work of Van der Ploeg and Poelhekke - two of the most prominent and recent scholars studying natural resources and volatility - and employs process-tracing to perform its analysis.

This paper builds upon the resource curse literature by assessing the role Venezuela's oil-dependence and volatile markets played in inciting its economic decline. Speaking more widely, it engages in the debate over the causes behind economic collapse, demonstrating how a relatively prosperous state can crumble so dramatically within a few years. Unlike traditional approaches to studying the resource curse, this paper contextualizes and historicizes Venezuela's current crisis. Rather than focusing on a particular factor, it considers the three most cited causes for the economic collapse found in the literature: the volatility of oil prices, the effects of U.S. sanctions, and government leadership – demonstrating how they interact with each other in a holistic relationship. Additionally, it utilizes the historical example of Venezuela's economic boom-and-bust crisis of the 1970s/80s as well as other states' experiences as comparisons to strengthen its results. This paper avoids the typically deterministic side of the resource curse theory that attempts to paint multiple countries with a single brush, recognizing that Venezuela is a unique state with its own history, leadership, and foreign relations. The research question is also both timely and salient. Venezuela remains deep in crisis, and it is more crucial now than ever to identify why it has ended up in its current situation to understand how to solve the problem. Indeed, vital lessons can be discerned that can potentially apply to other resource-dependent states in a similar position. The future of Venezuela is also relevant for the world of geopolitics – with the U.S., Russia, and China all attempting to influence the country's political situation, cognizant of its vital importance on the world stage.

Literature Review

This paper builds upon the resource-curse literature by producing a mechanistic narrative of how the process of economic collapse materialized in Venezuela. A wealth of scholarly work can be found defending, criticizing, and even denying the idea of a resource-curse (Badeeb et al. 2017; Di John 2011; Auty 1993). The theory was first postulated by Auty (1993), who discovered that natural resource intensity (the share of unprocessed commodities within exports) related negatively to economic growth rates. It was verified soon after by Sachs and Warner (1995) and verified several times since using statistical and scientific replication (Davis & Tilton 2005; Szalai 2018). Resource curse theory aims to solve the puzzle of why the possession of natural resources - which should intuitively lead to increased state income, higher levels of investment, and the financing of public goods – instead culminates in a less diverse and more vulnerable economy. Countries like Angola, Nigeria, Iraq, and Uganda have continuously been cited in the literature as cases where a surfeit of natural resources has fomented adverse economic conditions by increasing corruption, poor governance, and even violence (Vahabi 2018; Szalai 2018). This is in stark contrast to the East Asian Tiger economies, which saw staggering levels of economic growth in the span of a few decades, despite a lack of exportable natural resources.

Literature on the resource curse has continuously evolved over the past thirty years. Earlier proponents were advocates of the 'Dutch Disease', which alleges that as one segment of a state's economy grows (the oil sector for instance), an appreciation of the real exchange rate occurs, making other exports more expensive and less competitive globally (Gelb 1988). Scholars like Gylfason (2001) began to narrow the effects of natural-resource-dependence by examining, in particular, its relation to the savings, investment, and human capital of a state

(Ramez 2016). Since then, the majority of research on the resource-curse has functioned within this theoretical domain. Limi (2007) argues, for instance, that revenue from natural resources manifests in the economic overconfidence of policymakers, who feel less compelled to practice fiscal discipline as a result. More recently, Michael Ross (2015) has suggested that the resource curse is particularly nefarious when it comes to oil. It sustains autocratic rule by "enabling them to increase spending, reduce taxes, buy the loyalty of the armed forces, and conceal their own corruption and incompetence" (63). Ross belongs to one of the two primary schools of thought within the resource curse literature – representing those who advance a political (as opposed to economic) explanation as the mechanism for the phenomena. These scholars emphasize factors like rent-seeking, corruption, and weak institutions (Ramez 2016; Deacon and Rode 2012; Hodler 2006). However, one major problem with Ross and his contemporaries is they consider natural resources to possess intrinsic properties that can affect economic/social development (Wengraf 2017). This approach, often decontextualized and dehistoricized, ignores the myriad of potentially more entrenched causes for economic and political instability. Cavalcanti et al. (2011) points out that by making sweeping claims about how the resource curse operates across states (as Ross and others often do), they neglect a host of variables (institutions, colonial history, etc.) that vary across them.

Other resource curse theorists belong to an 'economic' school of thought, looking at how dependence on natural resources results in countries becoming largely reliant on conditions of the market. Recent research in particular claims that the *volatility* of natural resource prices in the global market lowers overall economic growth – a mechanism that Lima, Ross, and previous scholars have largely ignored (Moradbeigi 2016; Frankel 2010). Its cause was originally reduced to the uncertainty that arose from market instability, resulting in poor economic planning for the future. Van der Ploeg and Poelhekke (2009), representing some of

the most prominent and thorough research on volatility, suggest instead that there is a *causal* link between the volatility of a certain commodity price and economic instability. Whereas Ross and his contemporaries argue oil wealth alone proves detrimental to the economy, Van der Ploeg and Poelhekke allege it is the volatility of resource markets *along* with the structural consequences of oil wealth that fuels the resource-curse (Ibid).

Branches of the resource curse theory that ignore the mechanism of market volatility struggle to prove relevant in assessing the case of Venezuela. This is because, alongside being heavily reliant on natural resources (possessing the largest OPEC share of crude oil reserves in the world), the country is openly exposed to the capricious whims of the volatile oil market – a reality that plagued Venezuela historically (OPEC 2020). Van der Ploeg and Poelhekke's theory is thus a germane strand within the resource curse theory to utilize for this study. Given the twin dimensions of Venezuela's oil-dependence and volatile oil markets (specifically the 2014 price collapse), this paper expects to see a strong correlation between lower oil prices and collapsing economic indicators. Thus, the hypothesis claims: *Venezuela's dependence on oil (where oil exports represent over 90 % of GDP) combined with the volatility of oil prices proved necessary for the economy to collapse*. Here, a collapsing economy refers to a decrease in the relevant and crucial economic metrics of GDP and GDP-per-capita, the poverty rate, the Gini coefficient, and unemployment, mortality, and hunger rate. The paper builds upon Van der Ploeg and Poelhekke's theory by analyzing the mechanisms that lead from resource-dependence/oil volatility to economic collapse, elucidating how the resource-curse theory functions causally – something that is ill-understood in the literature. It also takes a historical approach to studying the Venezuelan economy, something that scholars like Michael Ross have often ignored. To discern whether oil-dependency and volatile prices are truly responsible for the crisis, however, other potential causes must be considered as well. The resource-curse

theory is only one branch of research that studies the causes behind the economies collapse of states; additional literature, stretching across multiple disciplines, also takes on this task.

Scholars that propose a narrower explanation to economic failures may look within the state for potential answers. Much literature has been dedicated, for instance, to analyzing cultural factors (Harrison 2000; Grondona 2000) as an explanation for economic conditions, such as Stacy Lindsay's (2000) proposition that cultural values play a role in influencing human decisions that can either beget or prevent development. Others have considered the ethnic divisions present within a state, testifying that they raise the propensity of income inequality and poverty (Bridgeman 2008; Alesina & Ferrara 2005). Another major thread of scholarship focuses on government ideology - recognizing it as the most auspicious measure for economic progress. Arguments of this nature sweep across the intellectual shore - from defending liberalism and free markets to avowing social democratic policies of nationalization and redistribution (Hayek 1944; Friedman 1962; Lipset 1959). Taking an even narrower perspective, some scholars focus on individual leaders and personalities as the primary agents directing the nation's economy (James 2014; Hook 1943), including B.F. Jones' (2005) investigation into the connection between the death of leaders and economic transformation.

When surveying the literature on Venezuela, these kinds of explanations that look within the state take several forms. For instance, numerous scholars have directed their focus on the role of socialist ideology. Policies hostile to the free market and private sector like generous welfare provisions, price controls, and land expropriations are labelled responsible for the economic crisis (Ellis 2017; Muravchik 2019). However, the most common sentiment expressed argues that it is not ideology but government leadership – described as centralized, populist, and authoritarian - that has hastened Venezuela's plight (Flores-Macias 2013;

Castañeda 2008; Naím & Toro 2018). Some have considered the incompetence of Hugo Chávez and Nicolás Maduro as the key to Venezuela's collapse, arguing that the leaders implemented ill-advised policies and lacked the expertise to administer the economy (Naím & Toro 2018). Castañeda (2008) has specifically put forward the argument that Chávez's anti-Americanism jeopardized his country's oil exports being sent to its principal market, thus instigating an economic plunge. While these explanations can offer us some insight, their purview remains myopic - granting an extraordinary amount of agency to individuals and groups rather than broader political structures, history, and external phenomena. Despite these limitations, narrower theories do offer some theoretical promise and must be granted some consideration. Thus, an alternative hypothesis this paper will examine is: *Venezuela's government leadership (defined as ideology, policies, and manner of governing) played a necessary role in the collapse of the economy.*

Contrasting literature, which takes a wider approach, concerns itself primarily with what occurs outside of states to explain economic conditions. Many of these scholars have stressed that observing the structure of the global governance system can provide evidence as to why economies collapse. They argue that wealthy countries have used their disproportionate influence in setting rules of international trade and finance to disadvantage the growth of developing nations - most famously expounded upon by world-systems theorists like Immanuel Wallerstein (2014; Hickel 2017). Others have advanced a historical approach - examining the destructive waves of colonialism and imperialism and their lingering repercussions on nations (Rodney 1973; Said 1993). A number of these scholars allege that elements of colonial relations, spurred by Western hegemony, persist between nations; countries like the U.S. can unilaterally impose sanctions, wage conflict and manipulate the global economy to serve their own needs at the expense of developing states (Chomsky 2003; Amin 2006).

When it comes to literature on Venezuela, these approaches take the form of identifying the international political structure as the reason behind the country's collapse - pointing to U.S. interest in Latin America, along with its foreign interventionist policies, as having contributed to its crisis (Antonopoulos & Cottle 2018). What this looks like in the literature, specifically, is the role of U.S. sanctions in causing Venezuela's economic decline (Rodríguez 2019; Weisbrot 2019). Yet, just as narrower theories can be accused of myopia, this indictment can be levied against those focused on influences largely outside the state. Indeed, many of these ideas can suffer from simplistic narratives and binary frameworks, as opposed to a more holistic method of inquiry. Nonetheless, these explanations remain prominent throughout the literature, and will be considered in this paper as the other alternative hypothesis: *U.S. sanctions were necessary for generating the collapse of the Venezuelan economy.*

Methodology

This paper employs a qualitative, single-case study of Venezuela. A small-N qualitative approach is efficacious for performing a detailed, nuanced, and contextual analysis of a case - one that provides a high degree of internal validity and navigates well through the causal complexity present in this study (Barakso 2013). A single case-study also permits one to refine and generate (rather than test) new hypotheses - fitting for the aim of this paper. A longitudinal analysis is performed to track the trajectory of the pink-tide government in Venezuela from its inception to the present, to discover not only how, but *when* the country suffered its economic reversal. This involves, in the words of Goertz & Mahoney (2012), "Identifying historical junctures when key events directed the case toward certain outcomes and appraising how these events link across time" (89). Case selection is determined on theoretical and methodological

grounds; concerning Van der Ploeg & Poelhekke's theory, Venezuela aptly fits the description of a resource-dependent country wrought with negative economic consequences. Methodologically, it represents a 'typical case' of a resource-dependent state, granting valuable insight into how a characteristic example of resource dependence leads to economic crisis. Exploring these mechanisms can help scholars refine and improve their theories - especially those that have examined the relationship between market volatility and economic decline, but not the operations involved in such a relationship.

The method utilized to draw inferences from the evidence gathered and to test the hypotheses is a variety of process-tracing detailed by Beach and Pedersen (2013). Process-tracing is particularly relevant for cases akin to this study, where many potentially relevant independent variables are involved - as it can test whether each variable is causally significant. The methodology focuses on an uninterrupted chain of evidence from a hypothesized cause to an observed effect; in this case, the degree of congruence between economic collapse and oil-dependence/volatility (Ibid). The objective is identifying causal mechanisms, with Bayesian probability used to form inferences about the presence/absence of said mechanisms (Ibid). This study adopts the 'theory-building' variety of process-tracing, meaning that its framework is not assumed to travel easily to other cases, due to the contextual nature of the causal mechanisms. Instead, this paper aims to reveal the process of the resource-volatility theory in Venezuela that previous studies have not yet explored.

Heeding the advice of Beach and Pedersen (2013), the analysis follows as such: first, a timeline is established based on the hypotheses. The timeline examined includes the years between 2000-2019; selected to correspond with the period where the country was under a pink-tide regime – allowing an analysis of the country's economic rise and fall (and period of

high and low oil prices). Subsequently, as the analysis progresses, a causal graph is constructed that traces a number of hypothesized causal mechanisms, leading from a dependent to independent variable. This helps to craft an empirical narrative of the case. Next, to affirm the relevance of said mechanisms, the hypothesis is run through a set of process-tracing tests. These evaluations help determine conditions both necessary and sufficient for an outcome to occur (Ibid). Finally, in addition to the central hypothesis, the two alternative hypotheses are similarly put through the aforementioned tests. These rival hypotheses, if discovered to possess merit, could potentially prove as amendments to the resource-volatility theory illustrated in the literature, or if proven false, could strengthen the central hypothesis.

How is a causal chain, leading from an independent to dependent variable, constructed? The paper follows Beach and Pederson's (2013) blueprint for gauging the inferential value of evidence necessary to shepherd this process. This involves testing for relevance, accuracy, and probability. First, considering what observations are relevant is driven by predictions regarding the hypotheses and the plausible causal mechanisms that might exist within them (linking variable X with Y). Second, observations are assessed for accuracy using case-specific contextual knowledge, illustrated by the formula O + K = E (Ibid). Put simply, observations are evaluated relative to an actor's intentions, interactions, and situations in which they find themselves. In practical terms, this entails asking the following questions when gauging the accuracy of a document: a). What is the source of the observation and the context (historical, situational etc.) in which it was produced? b) What is the purpose of the document and events leading to its creation? c) Who is it for and whom does it benefit? d) Who is speaking and to whom? (Ibid).

Finally, the inferential value of evidence depends upon its probability, grounded in Bayesian logic and determined by passing three relevant evaluations. The straw-in-the-wind, hoop, and smoking gun test determine whether evidence proves necessary and/or sufficient to confirm a hypothesis (Collier 2011). Importantly, these tests are not meant to be rigidly applied, but guidelines to assist in analyzing evidence. The goal, ultimately, is to seek to maximize the level of certainty and uniqueness regarding the evidence (Ibid). To test accuracy further, triangulation is employed to collect multiple independent observations from different sources of the same type (i.e. economic data produced by different institutions). This ensures that evidence is representative of general trends and measurement error is low (Ibid). The type of data gathered primarily includes secondary sources such as archival databases, scholarly papers, economic metrics, government documents, and press publications.

Before the Crisis: Venezuela's Economic Rise amid an Era of High Oil Prices

Venezuela's left-wing government emerged from mass discontent engendered by decades of neoliberalism. Hugo Chávez rode this wave of resentment over inequality and poverty through a sweeping presidential victory in 1999, causing the collapse of the traditional party system (Lampa 2017). Chávez actively turned away from the Washington Consensus, first by implementing forms of direct democracy. Introduced was a new constitution that provided recognition for indigenous people, along with broader citizen participation through popular referenda and local planning councils (whether these measures genuinely translated to increased democracy, as opposed to increased state centralization, remains a matter of contention) (Bean 2016; Lampa 2017). The constitution also fundamentally reshaped the relationship between state and market, recognizing the centrality of the former in the economy (Ruckert et al. 2017). Chávez also pursued a more independent foreign policy, establishing

organizations like ALBA and USAN to counter the neoliberal regional organizations like Mercosur or the Andean Community (Ibid).

The nationalization of key strategic industries - including oil, mining, electricity, and telecommunication - was a crucial government policy. The country used the increased revenues from resource exports to fund its distributive economic policies and to increase domestic demand - in other words, to expand the purchasing power of wage earners (Ruckert et al. 2017). In particular, Chávez re-nationalized the massive oil company PDVSA, providing the country with an enormous infusion of financial resources (Ibid). The government also introduced universal healthcare and education, receiving funding directly through state resource rents. Spending on social security rose, wages increased, and price controls were implemented for staple foods (Ibid). In addition, labour movements were allowed to reassert their authority. Agrarian cooperatives also helped combat poverty - part of Venezuela's strategy of utilizing national resource wealth and providing it to marginalized social groups (Ibid).

High oil prices buoyed most of Chávez's reign. Prices skyrocketed in 2003 – from $41/barrel to a height of $164/barrel in 2008, remaining around $100/barrel until 2014 (adjusted for inflation) (Macrotrends 2019). This provided the government with the necessary resources to pursue bold policy objectives. Oil rents allowed Chávez to double the percentage of GDP allocated to social spending, from 11.3% to 22.8% between 1999-2011 (Hetland 2018). During this time, unemployment has halved, child malnutrition declined almost 40%, extreme poverty declined 71%, university graduates doubled, and the number of pensioners quadrupled (Ibid). Additionally, between 2005-2012, the poverty rate plunged from 42% to 27% (Encovi 2018). Income inequality likewise fell, from a Gini coefficient of 46 in 2005 to 39.2 in 2012 (IMF 2019). Increased social spending meant the number of primary-care centres, emergency

rooms, schools, and rehab centres also expanded (Lampa 2017). The country, ultimately, appeared to be prospering.

What is the Role of Oil and Volatility in Venezuela's Crisis?

Figure 1: West Texas Intermediate (WTI) crude oil prices per barrel, adjusted for inflation (Macrotrends 2019)

Venezuela possesses the largest proven oil reserves in the world (OPEC 2020). Petroleum consists of over 90% of exports and half of fiscal revenue - this undiversified and oil-rent based economy being typical of a 'resource curse' afflicted country (OEC Venezuela 2019). Figure 1 illustrates that in 2013, oil prices lowered slightly, but remained close to U.S.$100/barrel. Prices then began to plunge in 2014. By 2016, the average price of Venezuelan oil was U.S.$35.2 per barrel, a 66% reduction from the 2012 value (Macrotrends 2019). Because of how tied the economy is with the price of oil, this fall proved financially devastating to the country.

Year	GDP (in bil; international $) (PPP)	GDP per capita (international $) (PPP)	Inflation (% change)	Unemployment (% of total labour force)	Total investment (% of GDP)	General government revenue (% of GDP)	Gross national savings (% of GDP)
2005	356.721	15,139.893	15.955	12.242	23.004	37.625	40.639
2006	403.799	16,378.584	13.663	9.958	26.922	37.662	40.708
2007	450.943	17,541.548	18.699	8.492	30.340	33.134	37.270
2008	483.977	18,189.957	31.441	7.354	26.826	31.418	36.662
2009	472.050	17,346.050	26.041	7.879	25.797	24.584	22.513
2010	470.441	16,837.099	28.187	8.508	21.972	26.359	31.591
2011	500.326	17,285.972	26.090	8.204	23.072	31.117	30.639
2012	538.611	17,996.472	21.069	7.823	26.597	29.838	25.635
2013	555.422	17,980.518	43.534	7.470	27.269	28.402	19.028
2014	543.891	17,039.990	57.311	6.700	24.810	34.566	9.136
2015	515.509	15,763.972	111.798	7.400	30.868	19.663	2.352
2016	432.339	13,037.879	254.391	20.638	0.102	14.317	4.015
2017	371.516	11,075.011	1,087.526	27.096	-3.744	14.708	-9.864
2018	n/a	9,487.127	13,864.589	33.350	n/a	7.709	13.061

Figure 2: Venezuela economic data, 2005-2018 (IMF 2019)

The collapse of oil prices is reflected by collapsing economic indicators. By 2016, real GDP contracted by -20% and GDP per capita fell by almost $5000, visible in Figure 2 (IMF 2019). By 2019, GDP had fallen almost in half. Unemployment skyrocketed to 33% and inflation to almost 14,000% by 2018; gross national revenue and savings likewise fell dramatically during the same period (Ibid).

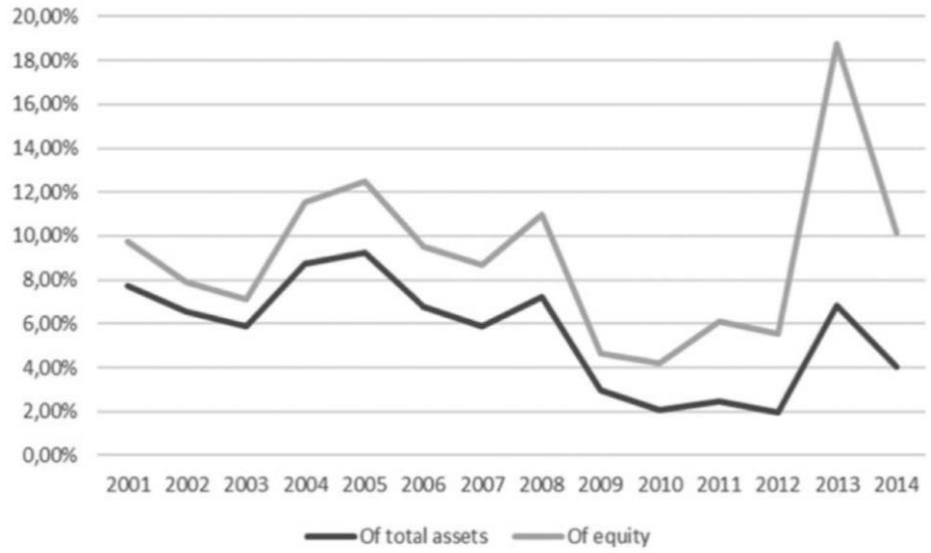

Figure 3: Profitability of PDVSA, 2001-2014 (Dachevsky & Kornblihtt 2017)

The oil price crash that began in 2014 was spurred by a fall in international demand for oil, a consequence of multiple factors - most importantly being a slowdown of large emerging economies like China and India (who only years prior pushed up the price of oil to fuel their growth, and now required far less of it) (DePersio 2020). As market logic stipulates, when demand for oil is low – price too, falls. This meant that Venezuelan oil not only had fewer buyers (i.e. fewer exports), but the oil it did sell made less profit (Ibid). As Figure 3 indicates, the profitability of Venezuela's largest nationalized oil company PDVSA plunged in line with the price of oil (PDVSA being the largest source of revenue for poverty-alleviating programs in the country) (Dachevsky & Kornblihtt 2017). Figure 4 also demonstrates that between 2014-2016, Venezuelan oil exports fell alongside global oil prices (Rodríguez 2018). However, what is curious is that from the second half of 2016 onwards, global demand for oil (and thus, oil prices) began recovering while Venezuelan oil exports did not. This is because Venezuelan oil *production* had begun to fall (Ibid). Economist Francisco Rodríguez (2018) explains that "A production decline is what one would normally expect in any industry that sees a price plunge of this magnitude, particularly if it has a high marginal cost of production." This reality is

visible in the case of Venezuela – where the cost of oil production is one of the most expensive in the world (due to its possession of heavy crude oil, which cannot cheaply and easily be pumped from the ground) (Johnson 2018). Indeed, oil production plummeted by almost *half* between 2016-2018 (Rodríguez 2018). Estimates reveal that if the country had sold as many barrels to the rest of the world as in 2015, it would have received $28 billion more in yearly revenue than today – potentially minimizing the reduction in living standards (Ibid). Thus, it appears that at the onset of the crisis, export decline could be blamed on oil *prices*, but since 2016 it can be ascribed to a fall in oil *production*. The causal mechanisms behind these claims will now be illustrated.

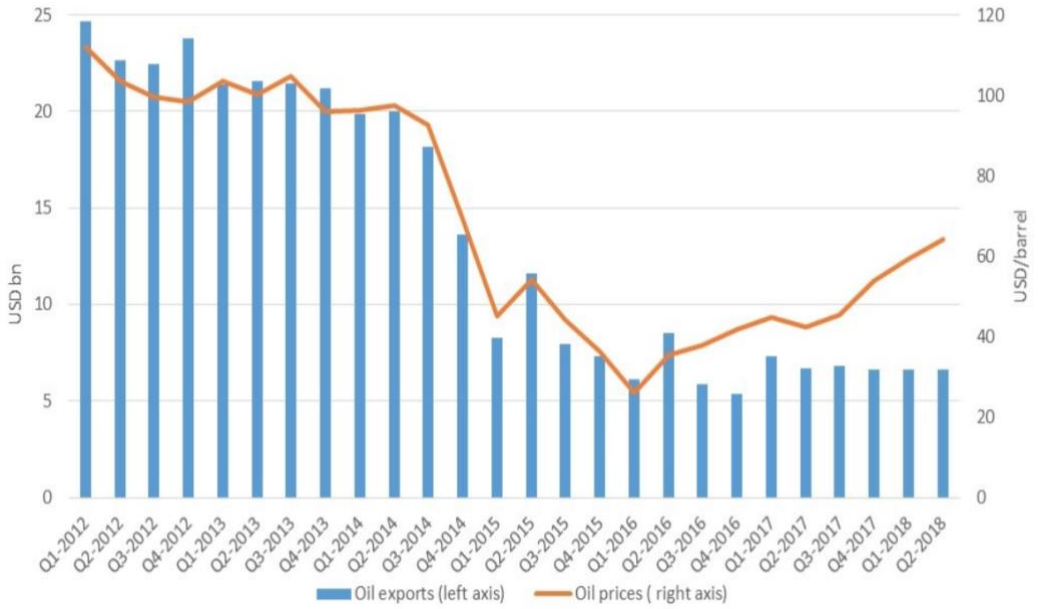

Figure 4: Venezuelan oil exports and oil prices (Rodríguez 2018)

What was significant about exports collapsing? First, since there was less purchasing of Venezuelan oil, foreign demand for the national currency (the Bolívar) fell (Carmody 2019). Consequently, this lowered demand for the Bolívar led to a drop in its value; the cost of essential goods rising in turn (Hetland 2018). Relatedly, a collapse in exports (and thus export

revenues) meant the country had less money to pay for imports - including those necessary to produce intermediate and capital goods. Because imports became more expensive, and Venezuela had less money to purchase them, they declined by 88% between 2012-2018 (Rodríguez 2019). In a highly import-dependent economy like Venezuela's, where imports have accounted for 79% of the variation in growth rates since 1997, their collapse was bound to cause a decline in growth (Ibid). There is proof of this. The raw correlation between economic growth and import growth in Venezuela is 0.83; the elasticity of GDP growth to import growth is 0.23 percent (Ibid). Spoken otherwise, a 4% drop in imports results in a 1% drop in GDP (Ibid). Thus between 2012 and 2018, GDP shrunk by 48% (Ibid). Figure 5 shows that average income also collapsed in the same period. Foreign reserves similarly declined two-thirds to under $10 billion (Hetland 2018). Gains in poverty reduction were wiped out - the poverty rate rising from 27% to 87% between 2013-2017 (Encovi 2017). Venezuela's living standards had collapsed.

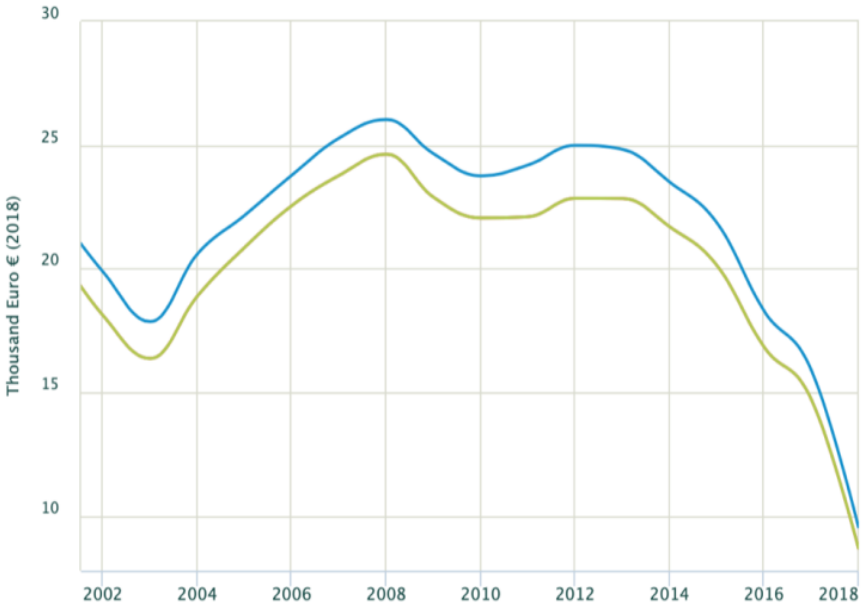

Figure 5: Evolution of average income in Venezuela (GDP in blue, average income in green) (WID 2019)

Social programs, traditionally receiving financing directly from high petroleum rents, lost effectiveness in alleviating the effects of the crisis (Dachevsky & Kornblihtt 2017). Health and living standards diminished accordingly. The rise in mortality, for instance, coincided with falling average income (Rodríguez 2019). Additionally, figures estimate that nearly 75% of the population lost up to 19 pounds amid the crisis, and unemployment levels reached that of war-torn Bosnia (Pestano 2017; Biller & Laya 2019). Rates of tuberculosis, typically associated with poverty, also increased due to widespread malnutrition and food shortages (Daniel 2019). Finally, lower living standards triggered soaring emigration rates - Figure 6 illustrating how they followed the decline in oil prices (Encovi 2018).

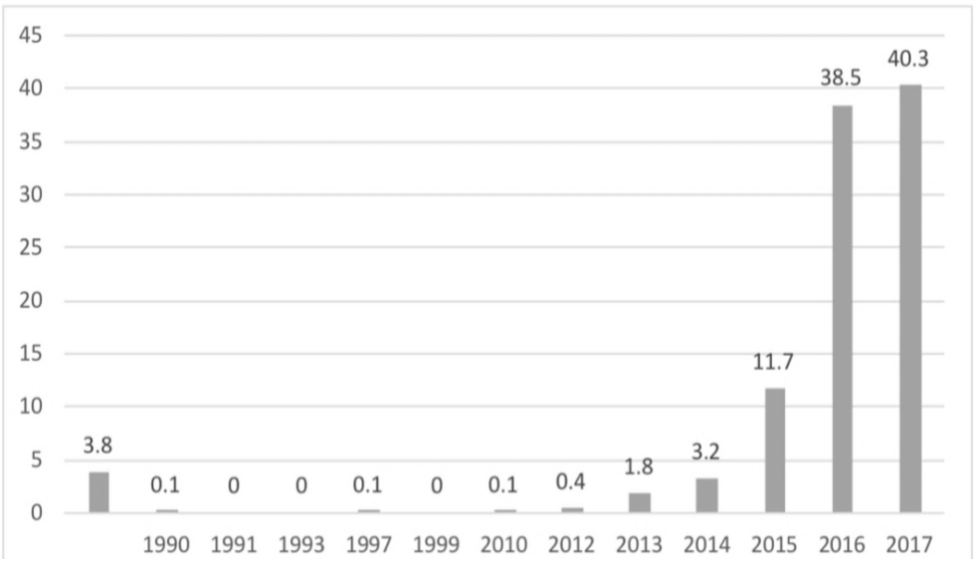

Figure 6: Percentage distribution of emigration from Venezuela (Encovi 2018)

In response to falling GDP and diminished living standards, Maduro began printing money as a solution to get over the short-term price shock (Carmody 2019). This only added to the supply of currency and pushed the value of the Bolívar down further. As prices continued to rise, the government continued to print more money to pay its debts, which contributed to hyperinflation (Ibid). Indeed, inflation leaped from 69% in 2014 to 181% in 2015 and 600% by mid-2017, making basic goods even more unaffordable (Ibid). There is also the issue of the

food shortage crisis, which intimately ties with Venezuela's structural dependence on oil. Because state revenue primarily accrues from oil exports, the use of agricultural rent to fund national development and industrialization was neglected (Purcell 2017). Likewise, the surplus of oil rent had been used to finance food imports and protect local industries through subsidies (Ibid). Thomas Purcell (2017) also explains that "The central mechanism of transferring oil rents to the rest of society has also been an overvalued currency, creating a significant bias against agriculture, as food imports have always been cheaper than national forms of production" (297). It is no surprise that, due to historically low levels of agricultural production, the country began facing food shortages after the oil price collapsed.

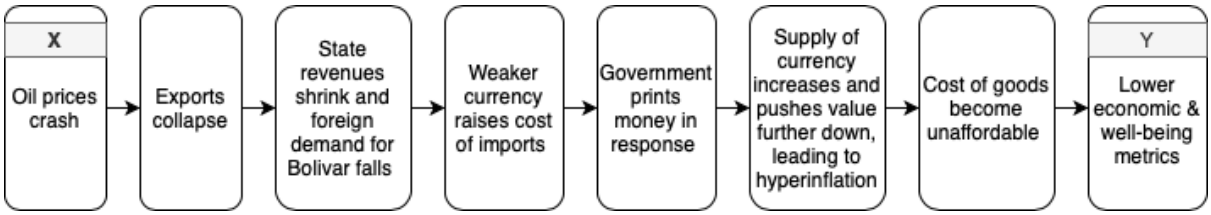

Figure 7: Proximate causal mechanisms leading to Venezuela's economic crisis

Figure 7 above conceptualizes the proximate causes of Venezuela's crisis into a mechanism with distinct parts, tracing how the independent variable affects the dependent variable. Nonetheless, to be more confident of the role of oil and volatility in fomenting Venezuela's economic upheaval, comparing the current crisis with one that occurred decades prior can prove fruitful. In 1974, the newly elected President Carlos Pérez promised to radically transform Venezuela and called for 'La Gran Venezuela' (a slogan unlike '21st-century-socialism'), which involved fighting poverty through greater state intervention (Hidalgo 2007). The government implemented price controls, and spending increased 26% per year (Restuccia 2018). New state-owned businesses were created, public investment heightened, a policy of

full employment was pursued, and the oil industry was nationalized with the establishment of the PDVSA in 1976 (Ibid). Akin to the Chávez era, these policies could be pursued because government revenues soared during this period. This, in turn, was a result of global oil prices rising dramatically between 1972-1981. Indeed, Venezuela's total revenue from oil rose from $8 million in 1972 to over $80 million in 1981 (Rindborg 2016). Increased government revenue and spending resulted in the quality of life rising considerably.

As under Chávez, both these periods of prosperity were funded by an oil-boom (Ibid). However, just like the current crisis, the 1970s boom spawned massive debt as a result of increased public spending and inability to save (Hidalgo 2007). Calamity struck in the mid-80s when global oil prices fell by 70% - as seen in Figure 8. Given that 60% of government revenue was derived from oil revenues, the economy experienced a massive shock (Ibid). The Bolívar was devalued, national debt multiplied, reserves decreased, and inflation increased to 84.5% in 1989 (Restuccia 2018). Living standards likewise collapsed, and inequality soared. Just like Maduro had attempted, the government tried to devalue the currency - but it did little to quell high inflation (Ibid). In 1989, the re-elected Carlos Pérez reversed tactics and implemented austerity and deregulation, in addition to taking out IMF loans. Nevertheless, inflation and fiscal imbalances remained (Hidalgo 207). The government could not reform the rentier economy and struggled to adapt to the volatile markets, akin to Maduro's struggle amid the current crisis (Ibid).

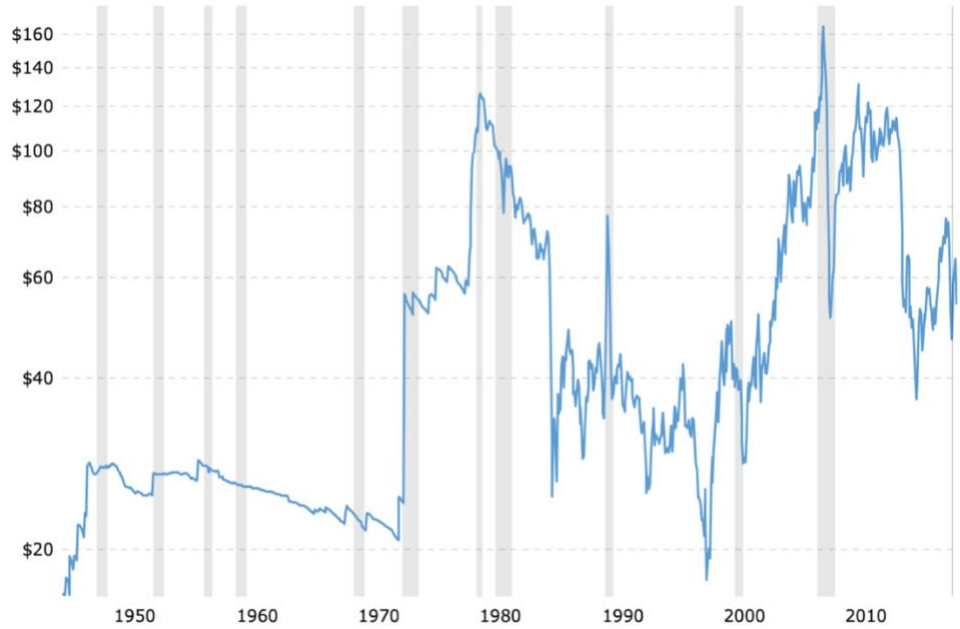

Figure 8: WTI crude oil prices since 1946, adjusted for inflation (Macrotrends 2019)

The connection between volatility and the economy can more clearly be discerned by examining Figure 9, which illustrates how historically, GDP per capita has fluctuated in line with oil prices. Figure 10 likewise reveals the historically close association between external public debt and oil prices (with oil price increases slightly preceding debt increases) (Restuccia 2018). Indeed, since oil prices began fluctuating in 1974 (before which they were relatively stable), government debt rose substantially in the country - reaching 70% in 1986 and 90% in 1995 (compared to less than 5% between 1960-1974) (Ibid). Debt levels in 2016 were, in fact, similar to levels during the crisis of 1989 (Ibid).

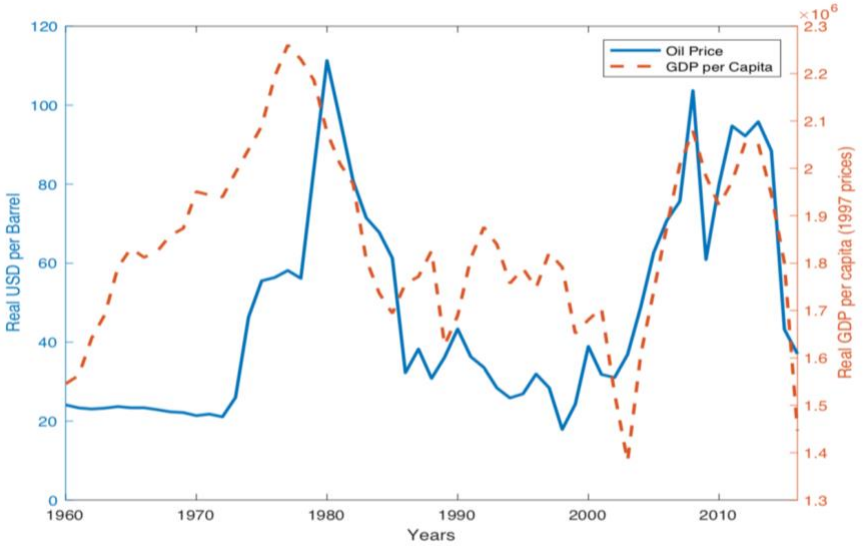

Figure 9: Real GDP per capita and oil prices (Restuccia 2018)

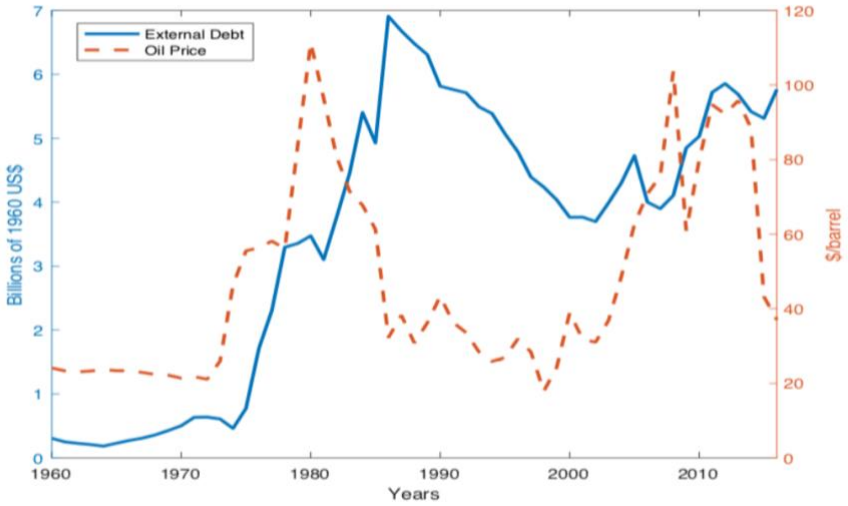

Figure 10: Real public external debt and crude oil prices (Restuccia 2018)

A final point to emphasize is that it is not resource-dependence or price volatility alone, but the marriage of the two, that has rendered Venezuela's economy so unstable. There is historical evidence of this. Since the discovery of oil in 1922, the country grew increasingly structurally dependent on the substance (Baumeister 2016). But this did not (at least initially) prove damaging for the economy, contrary to what traditional resource curse theorists would allege. In fact, from the 1950s to 1970s - when Venezuela was the top oil exporter in the world

- the economy flourished, and citizens earned the highest wages across the continent (McCaughan 2004). Public spending was high, food was subsidized, literacy increased, and welfare was generous (Ibid). This was because, prior to 1973, global oil prices never really fluctuated (see Figure 11). The economy was heavily dependent on natural resources - but was stable. Since 1973, however, oil prices have remained incredibly turbulent (Ibid). Amidst this age of volatility, Venezuela has continued to suffer deleterious boom and bust cycles – including the one that has generated the country's current crisis. Thus, it is the *combination* of structural resource-dependence and volatile oil prices that leads to economic decline.

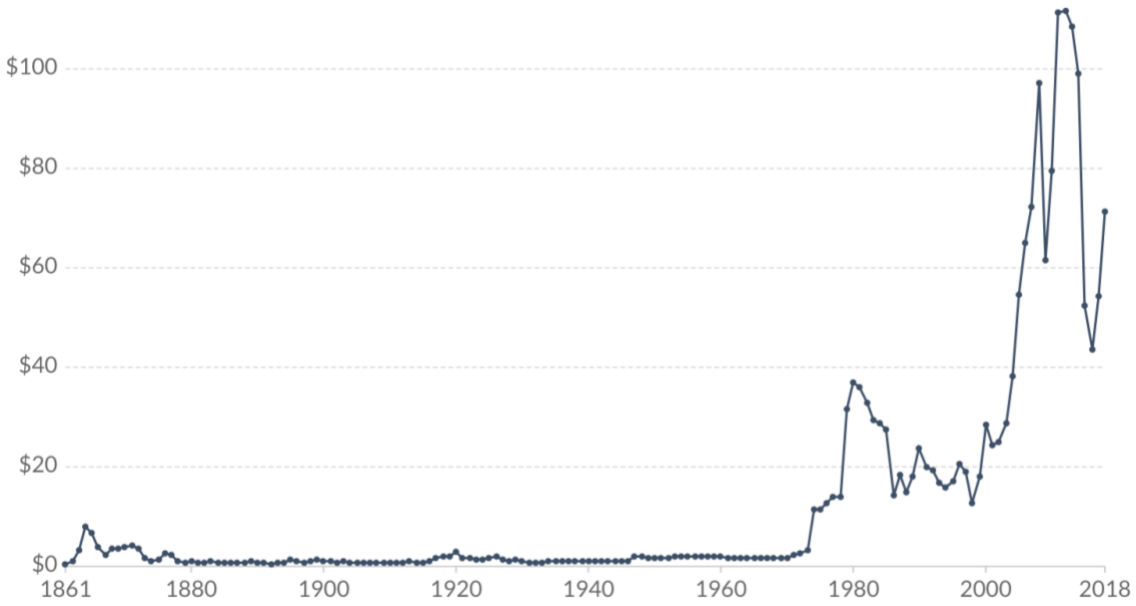

Figure 11: Crude oil prices, 1861-2018 (measured in 2018 US dollars/barrel) (Our World in Data 2018)

It is evident that Venezuela's dependence on oil, along with the collapse of oil prices, proved necessary in engendering the country's economic crisis. Crucially, this does not imply that it is a *sufficient* cause, as other factors could be involved in influencing the outcome. Indeed, the 1970s/80s economic boom-and-bust crisis can be understood to share two features with today's situation: both would not have occurred without a crash in oil prices and an economy immensely dependent on oil. However, the country in the 1970s/80s did not have a

populist, pink-tide government in power and was not under sanctions. Does government leadership and sanctions therefore possess explanatory power regarding the current economic crisis? An additional factor to consider is that the 2014 collapse in oil prices instigated an income shock of varying degrees to *all* the petrostates around the world (Naím & Toro 2018). Yet, amongst OPEC states, Venezuela was most economically devastated by the price collapse (Ibid). Why was the country an outlier? Oil volatility cannot provide a sufficient answer here. One potential explanation is that it was the only country (aside from Iran) that was under international sanctions. Let us, therefore, explore whether the sanctions hypothesis holds any validity in explaining Venezuela's economic crisis.

What is the Role of Sanctions in Venezuela's Crisis?

The previous section illustrated that the 2014 plunge in oil prices instigated a massive decline in exports, triggering an economic shock. The lack of savings procured during the decade-long oil boom only augmented this. However, it is difficult to blame low oil prices for the economy post-2017, given they had begun to rise again. Despite higher prices, imports did not rise. As mentioned, this was because oil production itself began to decline. Evidence that will now be explored points to sanctions as the reason behind this decline.

Sanctions were first announced by Barack Obama in 2015, specifically targeting government officials whom the U.S. deemed to be 'undermining democracy' in Venezuela (Seelke 2019). These sanctions were not intended to have a serious effect on the economy (Ibid). However, the 2017 financial sanctions launched by Donald Trump proved different. They coincided with the accelerated decline of oil production that occurred in the second half

of the same year (Weisbrot & Sachs 2019). The sanctions imposed an oil embargo that blocked U.S. purchasing of oil from the Venezuelan state oil company PDVSA (Ibid). It also prohibited transactions related to the purchase of Venezuelan debt. This, along with other executive orders, helped 'toxify' any financial dealings with Venezuela (Rodríguez 2019). Under U.S. pressure, many foreign companies ceased doing business with the country (Seelke 2019). It was evident that anyone making financial arrangements with Venezuela would suffer increased regulatory and reputational costs (Rodríguez 2018). Other countries were even threatened with sanctions themselves if they increased oil purchases from Venezuela (Ibid). Augmenting this, many financial institutions refused payments coming from Venezuela's public sector, meaning the country had trouble paying their creditors (Ibid). Sanctions also meant that Venezuela had lost significant access to international credit – leaving the country unable to acquire the finances necessary to invest and increase production in the non-oil sector (Ibid).

To make matters worse, a host of new sanctions were implemented in 2019, banning all oil trade with Venezuela (Weisbrot & Sachs 2019). Both the 2017 and 2019 sanctions left Venezuela without the funds, and the buyers, to continue producing oil. As mentioned in the previous section, falling oil production posed serious ramifications for the national economy – namely in the lack of revenue flowing into the state. This generated tangible human costs. One major study found that as many as 40,000 people may have died as a direct result of U.S. sanctions. Citizens had difficulties accessing food, medicine, and medical equipment, leading to a 31% increase in general mortality from 2017 to 2018 (Ibid). Sanctions have thus clearly exacerbated the crisis and made it difficult to stabilize the economy (Ibid).

Typically, when a state no longer has access to markets, they may sometimes regain access by engaging in a debt-restructuring process. However, this possibility was unavailable

to Venezuela, due to sanctions (Rodríguez 2018. It is recognizable, then, that sanctions played a significant role in how much oil the country could output. Thus, the decline in production (and hence, decreased state revenues) can justifiably be tied to the toxification of Venezuela's finances (Ibid). To strengthen this claim, oil production in Venezuela can be compared to that of Colombia, Argentina, and Mexico. Production in all three countries was stable between 2012 and 2015, showing a strong correlation with Venezuela (Ibid). However, in the second half of 2017, when oil prices began recovering, all three country's production stabilized. Only Venezuela's collapsed – and only Venezuela was struck with sanctions at this time (Ibid). Finally, examining the cases of Iraq and Iran can also demonstrate the effects of sanctions on oil production more broadly. In both states, oil output fell immediately after sanctions were imposed on their country – and rose again once these sanctions were removed, illustrated in Figures 12 & 13 (Ibid). This indicates that U.S. sanctions on Venezuela played a decisive role in reducing oil production, thus prolonging the economic crisis.

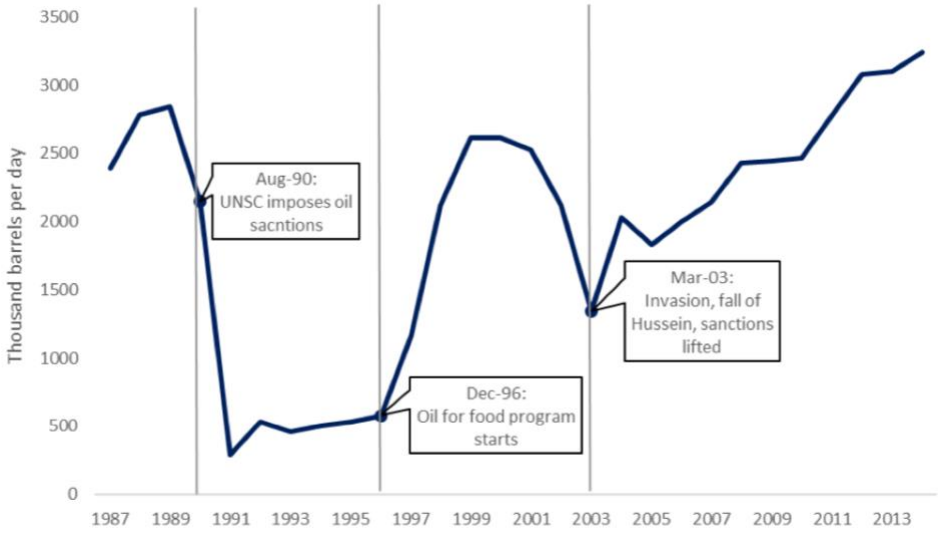

Figure 12: Iraqi oil production, 1987-2014 (Rodríguez 2018)

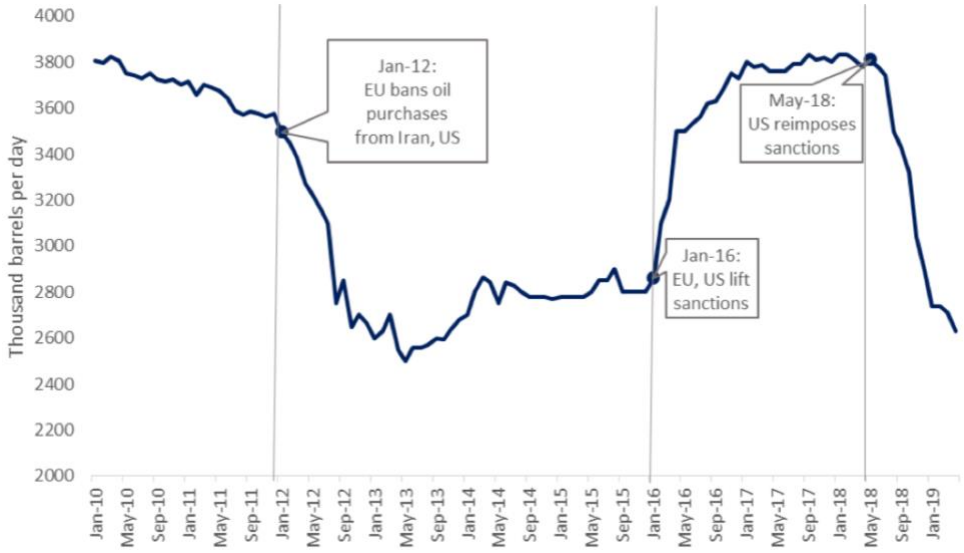

Figure 13: Iranian oil production, 2010-2019 (Rodríguez 2018)

Although sanctions unmistakably exacerbated the problem, they were not seriously present until two years after the crisis began - meaning the economy would still have initially collapsed without them. Sanctions alone cannot sufficiently explain the crisis, but it certainly played a necessary role alongside Venezuela's dependence on oil and market volatility in perpetuating the crisis from 2017 onwards. It is also noteworthy to refer back to the fact that Venezuela and Iran were the only OPEC states that experienced the 2014 price shock *while* under international sanctions. However, the Iranian economy did not collapse like in Venezuela. Could the missing factor be related to government leadership?

What is the Role of Government Leadership in Venezuela's Crisis?

Could the 'authoritarian' nature of Chávez and Maduro's leadership have served to foment the economic crisis? Authoritarianism, it is often argued, breeds clientelism, corruption, and instability. Chávez, however, legitimately won all five electoral contests, increasing

turnout after decades of continuous decline (Hetland 2018). Moreover, he immediately conceded upon losing his 2007 constitutional referendum and 2010 legislative elections (Ibid). Jimmy Carter even claimed that Venezuela's electoral system was "the best in the world" in 2012 (Ibid). Public opinion polls also demonstrated strong support for the leader. Indeed, there is no reasonable evidence to support the claim that Chávez was any variety of dictator (Ibid). This could also be said of Maduro during his first three years in power. However, beginning in October 2016, he cancelled an election recall referendum, cancelled gubernatorial elections two months later, and suspended the opposition-controlled national assembly the following year (Ibid). Unlike Chávez, Maduro had turned decisively towards an authoritarian form of governing.

Can Maduro, therefore, be blamed for sparking the crisis, especially considering his rise to power coincided with initial economic deterioration? This would imply that Maduro implemented certain policies upon his election that differed from Chávez and provoked economic backsliding. But Maduro, reluctant to make serious changes to any Chávez era policies that proved so popular, did not signify a break from Chávez's legacy - in rhetoric and governance (Gutierrez 2017). His 'five-year plan' introduced at the onset of his election victory was essentially a continuation of economic, social, and foreign policies already set in place (Ibid). These same policies had proven to be successful in lowering poverty and inequality. It is possible, however, to examine how Maduro *responded* to the initial economic crisis, as well as review the policies implemented by Chávez that might only have revealed themselves to be disastrous for the economy later on.

One Chávez-era policy that plausibly hastened the crisis was the implementation of a fixed currency exchange control in 2003. Crucially, this was not a uniquely 'authoritarian' or

'socialist' policy. Indeed between 1994-2003, multiple exchange systems were attempted, and many countries, including Saudi Arabia, have experimented with fixed exchange policies (Restuccia 2018). The controls were indeed necessary as a response to nation-wide strikes that disrupted the productive activities of the oil industry and sparked a sharp decline in external revenues (Ibid). Justifiably worried by capital flight, the controls were a strategic response that ultimately proved conducive to solving the crisis (Caraballo 2018). Nevertheless, the fact that the government did not change its currency policy after it outlived its usefulness provoked several problems. The fixed currency opened up a higher black-market currency rate, whereby a 3,500x difference between the official and black-market rates emerged in 2016 (Hetland 2018). This disparity aggravated shortages and prompted a decline in domestic production since businesses lacked the dollars necessary to import essential production inputs (Ibid). It also contributed to the inflation-devaluation spiral, where the real value of the Bolívar fell while prices increased (Ibid). Thus, the fixed currency policy ended up causing severe problems but only became a problem *following* the crash in oil prices.

Can the same thing be said of Maduro's policy of devaluing the currency to pay Venezuela's debts during the crisis? This, like the currency controls, was a predictable response to a severe economic threat. The same policy of devaluation occurred in 1983 in an attempt to solve the same problem of high debts (Karl 1997). It ultimately helped yield the worst recession in post-war Venezuela until this decade (Ibid). Together with inflation of nearly 100%, devaluation only exacerbated an economic crisis not entirely unfamiliar to the present one - where income plummeted drastically, just as in 2014 (see Figure 14) (Ibid). Thus, the experience of the 1980s corroborates the claim that Maduro's currency devaluation may have played an inadvertent role in inflaming the crisis. However, it did not itself *incite* the crisis – it

responded to it. Along with the currency controls, these were also neither 'authoritarian' nor ideologically 'socialist' policies but typical protocol within the historical context of the state.

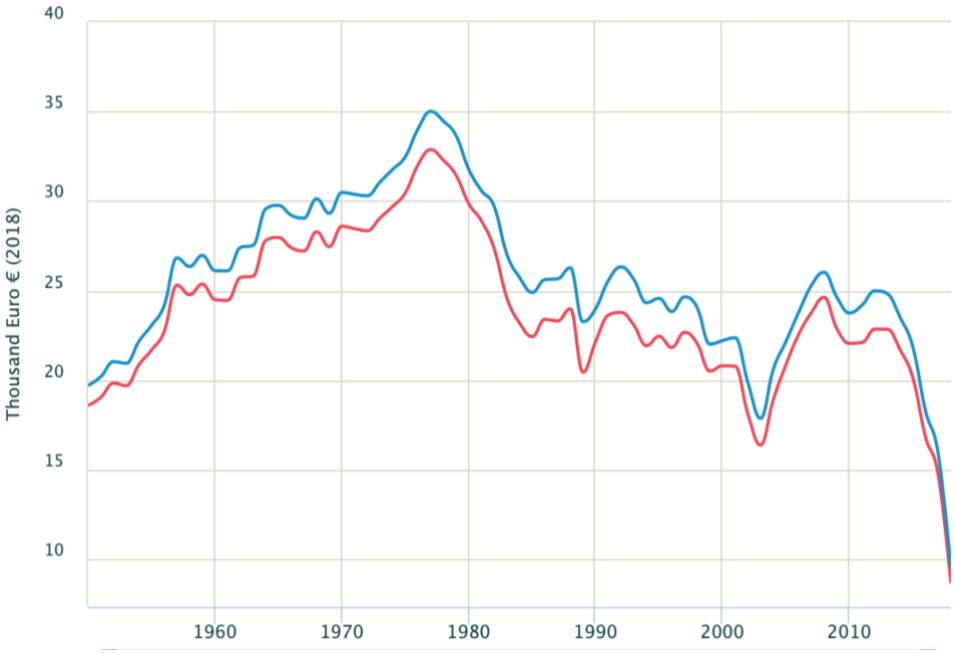

Figure 14: Evolution of average income, 1950-2018 (National income in red, GDP in blue) (WID 2019)

Perhaps the most crucial policy (or lack thereof) was the inability of the government to wean itself off oil-dependency. Figure 15 demonstrates that export earnings derived from oil rose from 80% to over 95% between 2000-2013. This distilled risk even further into a volatile commodity (Hecimovich 2017). Again, this was not unique to the pink-tide government. It is rather a feature of the resource-dependent country – as, during the 1970s oil-boom under an entirely different government, oil also accounted for 90% of total exports (Astorga 2000). Even the nationalization of PDVSA was not a uniquely Chávez-inspired policy. The company was originally nationalized in 1976 – Chávez's decision was, instead, a response to its privatization in the 90s (Ibid).

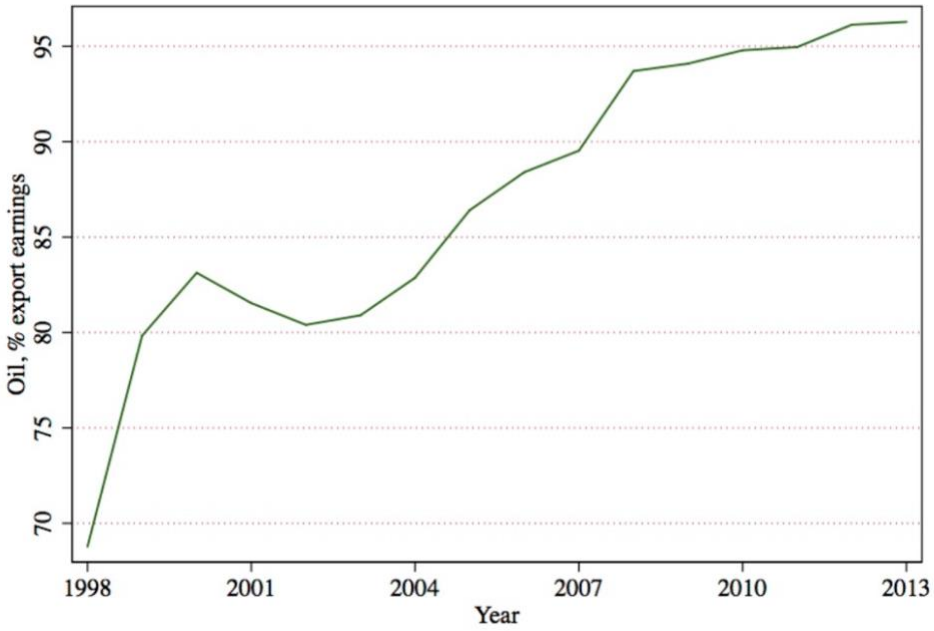

Figure 15: Oil as a percentage of export earnings, 1998-2013 (Hecimovich 2017)

This reliance on a monoculture economy has been the basis of Venezuela's economy since its inception. Spain guaranteed its colony would import more than it exported, engendering a trade debt owed to the metropole (Chasteen 2011). This was facilitated by the unmanufactured nature of exports – which included coffee, cocoa, and leather, and since the 1920s, oil (Bello 2011). Thus, pointing squarely to Chávez and Maduro's inability to wean themselves off oil-dependency as the cause behind the economic crisis fails to recognize that the leaders operate within, and are often constrained by, historical context. Nonetheless, could Chávez not have made any attempts to diversify the economy during the 2000s oil-boom? After all, Carlos Pérez attempted to lower dependence on imports by heavily investing in the state's manufacturing base in the 1970s (Buxton 2016). Chávez, in fact, tried to do the same - focusing investments on small/medium enterprises rather than heavy industry (Ibid). Both leaders' policies, however, proved futile and unsustainable so long as oil-dependence remained, as

neither strategies proved robust enough to weather the impact of an economic shock incited by a volatile market.

A related policy oversight of the Chávez/Maduro years is the lack of savings accrued during the oil boom, which, as previously mentioned, contributed to high deficits that prevented the country from attenuating the effects of the oil crash (Hecimovich 2017). Indeed, when exports fell after the 2014 price collapse, imports did not necessarily need to decrease if the country had possessed savings to cushion the loss. But Venezuela's international reserves were only $22 billion, enough to pay for five months of imports (Saudi Arabia, in comparison, had enough to cover five years) (Rodríguez 2018). Likewise, during the zenith of oil exports between 2004-2008, PDVSA's debt increased from $3.7 billion to $19 billion (Kott 2012).

Even under crushing financial sanctions, Venezuela might have fared somewhat better if it had possessed less debt. When the U.N. sanctioned Iran in 2006, targeting its oil industry, the country managed to avoid economic collapse; its national debt when struck with sanctions was 9% of GDP, opposed to 110% of GDP in Venezuela (Rodríguez 2018). Crucially, this lack of savings was not ideologically driven and unique to Chávez. The same thing occurred during the 1970s oil-boom under an entirely different government (indeed, deficits were even higher at 6-7% of GDP in 1974, compared to 3.6% of GDP between 2006-2016) (Restuccio 2018). The problem with volatile boom-bust cycles is they can lead to poor governmental expenditure decisions - including overspending during good years and budget cuts during bad ones (Ibid). Venezuela's modern history illustrates that these cycles, rather than whichever government happened to be in control, have held larger sway in directing the state's economy.

Government leadership's role in generating the crisis can also be discerned by utilizing the case of pink-tide Bolivia as a counterfactual. Importantly, counterfactuals function as heuristic devices, permitting researchers to identify hypothesized outcomes, but are not evidence in themselves (Ricks 2018). Bolivia and Venezuela both suffered from the commodity crash of 2014 and were run by populist, self-proclaimed socialist governments during roughly the same period (2005-2019 for Bolivia) (Ruckert et al. 2017). Both countries departed from the 'Washington Consensus' by nationalizing industries, allowing labour movements to reassert themselves, expropriating land, and implementing new constitutions that recognized the centrality of the state in the economy (Ibid). As Raúl Madrid (2017) contends, "To a large degree, the [Evo] Morales administration has followed Chávez's model" (16). Consequently, the two countries saw incredibly similar levels of decreasing poverty and inequality (Ibid). But unlike Venezuela, Bolivia remained economically stable into the 2010s and did not see its economic gains abolished. What can explain this divergence?

First, while Bolivia relies on natural commodities like natural gas and mineral resources, it is not nearly as oil-dependent as Venezuela (petroleum gas, its largest export, represents 44.12% of total exports, as compared to 95% in Venezuela) (OEC Bolivia 2019; OEC Venezuela 2019). That is not to say that it did not suffer in 2014. Indeed, Bolivia experienced a substantial decline in its commodity terms of trade – with income falling 14% alongside international prices (Thompson 2019). Its international reserves dwindled, and its surpluses became deficits (Ibid). However, unlike Venezuela, Bolivia's international reserves (built up over the years) acted as a buffer against the external shock of falling commodity prices. This prevented a balance of payment crisis (Ibid). Increased tax revenue from nationalizing the hydrocarbon sector also went partly into these reserves and public investment, allowing President Evo Morales to maintain a budget surplus until 2013 (Johnston 2014).

Bolivia managed to weather the commodity-volatility storm through to 2016 when global commodity prices began rising again. During the entire period, its pink-tide policies were maintained. Economic gains, therefore, continued to benefit the poorest in society (Ibid). The example of Bolivia helps demonstrate that pink-tide government leadership (leftist oriented, populist, and centralizing) itself did not necessarily lead to economic crisis in Venezuela. Other crucial factors must be considered - namely, how resource-dependent the economy is, whether the state faces sanctions, and if the government manages to save during commodity booms.

Given the role of oil volatility and sanctions explored in this paper, along with the historical and comparative analysis just presented – it is apparent that government leadership alone is not sufficient in explaining the crisis. However, this does not deny the role that certain policy decisions (chiefly increasing oil dependence and failing to increase savings) played in exacerbating the economic crisis. Indeed, while oil dependence and volatile markets were the proximate causes of the crisis – the interaction of sanctions and government policy ensured that the situation took the turn it did and why Venezuela, half a decade later, is still entangled in an economic crisis.

Conclusion

How do volatile commodity markets influence a resource-dependent state? Accordant with Van der Ploeg & Poelhekke (2009), the answer is an economy with low growth and perennial instability. This paper has built upon this theory by assessing how volatile markets specifically impacted resource-dependent Venezuela - a country that began the 21st century with signs of economic prosperity, only to see its gains decimated through an economic crisis. Through careful analysis, it has demonstrated that Venezuela's current situation was

engendered by the 2014 collapse in oil prices - revealing the mechanisms that led to its economic decline. Sanctions and government leadership significantly exacerbated the crisis, illustrating that the resource curse can never *merely* concern itself with resource dependence or volatility; cases often involve numerous factors that work together holistically to generate a particular outcome. The conclusion of this paper also offers a valuable perspective into how the resource curse functions historically, by examining how Venezuela's political economy operates and is constrained within the context of its past. Future research can benefit from evaluating additional factors involved in fostering the crisis, as the three hypotheses considered in this paper do not claim to be exhaustive. Further investigations into the resource curse theory should also consider assessing other relevant states and their histories in determining how resource dependence and market volatility affects national economies.

References

Agnani, Betty and Amaia Iza. "Growth in an Oil Abundant Economy: The Case of Venezuela." *Journal of Applied Economics* 14, no. 1 (2011): 61-79.

Alesina, Alberto and Eliana La Ferrara. "Ethnic Diversity and Economic Performance". *Journal of Economic Literature* 43, no. 3 (2005): 762–800.

Alhadeff, Samuel. "Venezuelan Emigration, Explained." Wilson Center, 2018. https://www.wilsoncenter.org/publication/venezuelan-emigration-explained. Accessed February 5, 2020.

Amin, Samir. *Beyond US Hegemony: Assessing the Prospects for a Multipolar World.* London: Zed Books, 2006.

Antonopoulos, Paul and Drew Cottle. "Venezuela's 2017 Crisis: A Failed Bolivarian Experiment or a Legitimate Claim of US Imperialism?" *Critique* 46, no. 1 (2018): 49-64.

Astorga, P. "Industrialization in Venezuela, 1936-1983: The Problem of Abundance." In *An Economic History of Twentieth-Century Latin Americ*a, edited by E. Cárdenas, J.A. Ocampo, and R. Thorp, 205-38. Oxford: Palgrave, 2000.

Auty, Richard. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. London: Routledge, 1993.

Badeeb, Ramez Abubakr, Hooi Hooi Lean, and Jeremy Clark. "The Evolution of the Natural Resource Curse Thesis: A Critical Literature Survey." *Resources Policy* 51 (2017): 123-34.

Barakso, Maryann, Daniel M. Sabet, and Brian Schaffner. *Understanding Political Science Research Methods: The Challenge of Inference*. New York: Routledge, 2013.

Beach, Derek and Rasmus Brun Pedersen. *Process-tracing Methods Foundations and Guidelines*. Ann Arbor: University of Michigan Press, 2013.

Bean, Anderson M. "Venezuela, Human Rights and Participatory Democracy." *Critical Sociology* 42, no. 6 (2016): 827-843.

Bello, Omar D., Juan S. Blyde, and Diego Restuccia. "Venezuela's Growth Experience." *Latin American Journal of Economics* 48, no. 2 (2011): 199-226.

Biller, David and Patricia Laya. "Venezuela unemployment nears that of war-ruined Bosnia, IMF says." Bloomberg, 2019. https://www.bloomberg.com/news/articles/2019-04-09/venezuela-unemployment-nears-that-of-war-ruined-bosnia-imf-says. Accessed May 9, 2020.

"Bolivia Exports, Imports, and Trade Partners." The Observatory of Economic Complexity, 2019. https://oec.world/en/profile/country/bol/. Accessed January 22, 2020.

Buxton, Julia. "Venezuela after Chávez." *New Left Review* 99, no. 2 (2016): 5-26.

Caraballo-Arias, Y., Madrid, J. and Barrios, M. “Working in Venezuela: How the Crisis has Affected the Labor Conditions.” *Annals of Global Health* 84, no. 3 (2018): 512–522.

Carmody, Michelle. “What Caused Hyperinflation in Venezuela: A Rare Blend of Public Ineptitude and Private Enterprise.” The Conversation, 2019. http://theconversation.com/what-caused-hyperinflation-in-venezuela-a-rare-blend-of-public-ineptitude-and-private-enterprise-102483. Accessed May 10, 2020.

Castañeda, Morales-Barba, Jorge G. Castañeda, and Marco Antonio. *Leftovers: Tales of the Two Latin American Left*. New York: Routledge, 2008.

Cavalcanti, Tiago V., Kamiar Mohaddes, and Mehdi Raissi. "Does Oil Abundance Harm Growth?" *Applied Economics Letters* 18, no. 12 (2011): 1181-184.

Chasteen, John Charles. *Born in Blood and Fire: A Concise History of Latin America*. New York: W.W. Norton, 2011.

Chomsky, Noam. *Hegemony or Survival: America's Quest for Global Dominance*. New York: Metropolitan Books, 2003.

Collier, David. "Understanding Process Tracing." *PS: Political Science & Politics* 44, no. 4 (2011): 823-30.

“Crude Oil Prices - 70 Year Historical Chart.” Macrotrends, 2019. https://www.macrotrends.net/1369/crude-oil-price-history-chart. Accessed February 22, 2020.

“Crude Oil Prices, 1861-2018”. Our World in Data, 2018. https://ourworldindata.org/grapher/crude-oil-prices. Accessed May 3, 2020.

Dachevsky, Fernando and Juan Kornblihtt. "The Reproduction and Crisis of Capitalism in Venezuela Under Chavismo." *Latin American Perspectives* 44, no. 1 (2017): 78-93.

Davis, Graham A. and John E. Tilton. "The Resource Curse." *Natural Resources Forum* 29, no. 3 (2005): 233-42.

Deacon, R. T. and A. Rode. “Rent seeking and the resource curse.” In *Companion to Political Economy of Rent Seeking*, edited by R.D. Congleton and A.L. Hillman, 227-247. Edward Elgar: Cheltenham UK, 2015.

DePersio, Greg. “How Does the Price of Oil Affect Venezuela’s Economy?” Investopedia, 2019. https://www.investopedia.com/ask/answers/032515/how-does-price-oil-affect-venezuelas-economy.asp. Accessed February 22, 2020.

Ellis, Evan. "The Collapse of Venezuela and Its Impact on the Region." *Military Review* 97, no.4 (2017): 22-33.

“Encovi 2018: Presentación Para Difundir.” Encovi, 2018. https://www.ucab.edu.ve/wp-content/uploads/sites/2/2018/02/ENCOVI-2017-presentaci%C3%B3n-para-difundir-.pdf. Accessed January 22, 2020.

Flores-Macías, Gustavo A. "The Triumph of Politics: The Return of the Left in Venezuela, Bolivia, and Ecuador.” *Perspectives on Politics* 11, no. 1 (2013): 336-337.

Frankel, Jeffrey. "The Natural Resource Curse: A Survey." NBER Working Paper Series 15836, Harvard University, 2010. https://www.nber.org/papers/w15836. Accessed January 16, 2020.

Friedman, Milton. *Price Theory*. Chicago: Aldine, 1976.

Gelb, Alan H. *Oil Windfalls: Blessing or Curse?* New York: Oxford University Press, 1988.

Goertz, Gary, and James Mahoney. *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences*. Princeton: Princeton University Press, 2012.

Grondona, Mariano. *A Cultural Typology of Economic Development*. New York: Basic Books, 2000.

Gutiérrez S, Alejandro. "Venezuela's Economic and Social Development in the Era of Chavism: Venezuela's Economic and Social Development." *Latin American Policy* 8, no. 2 (2017): 160-188.

Gylfason, Thorvaldur. "Natural Resources, Education, and Economic Development." *European Economic Review* 45, no. 4-6 (2001): 847-59.

Harrison, Lawrence E. "Promoting Progressive Cultural Change.” In *Culture Matters,* edited by Lawrence Harrison and Samuel Huntington, 296-309. New York: Basic Books, 2000.

Hayek, F.A. *The Road to Serfdom*. London: George Routledge, 1946.

Hecimovich, John Polga. “The Roots of Venezuela’s Failing State.” *Origins* 10, no. 9 (2017): 240-256

Hetland, Gabriel. "The Promise and Perils of Radical Left Populism: The Case of Venezuela." *Journal of World-Systems Research* 24, no. 2 (2018): 277-92.

Hickel, Jason. *The Divide: A Brief Guide to Global Inequality and Its Solutions*. London: Windmill Books, 2017.

Hidalgo, Manuel. “A Petro-State: Oil, Politics and Democracy in Venezuela”. Working Paper 49, Elcano Royal Institute of International and Strategic Studies, 2017. https://css.ethz.ch/en/services/digital-library/publications/publication.html/46855. Accessed April 5, 2020.

Hodler, Roland. "The Curse of Natural Resources in Fractionalized Countries." *European Economic Review* 50, no. 6 (2006): 1367-386.

Hook, Sidney. *The Hero in History: A Study in Limitation and Possibility*. New York: Humanities Press, 1950.

James, William. *The Will to Believe: And Other Essays in Popular Philosophy*. New York: Cambridge University Press, 2014.

Johnston, Jake. “Bolivia’s Economy Under Evo in 10 Graphs” Center for Economic and Policy Research, 2014. http://cepr.net/blogs/the-americas-blog/bolivias-economy-under-evo-in-10-graphs. Accessed February 25, 2020.

Jones, B.F., and B.A. Olken. “Do Leaders Matter? National Leadership and Growth Since World War II” *Quarterly Journal of Economics* 120, no. 3 (2005): 835-864.

Karl, Terry Lynn. *The Paradox of Plenty: Oil Booms and Petro-states*. London: University of California Press, 1997.

Kott, Adam. "Assessing Whether Oil Dependency in Venezuela Contributes to National Instability." *Journal of Strategic Security* 5, no. 3 (2012): 69-86.

Kurmanaev, Anatoly. "Venezuela's Collapse is the Worst Outside of War in Decades, Economists Say." The New York Times, 2019. https://www.nytimes.com/2019/05/17/world/americas/venezuela-economy.html. Accessed January 4, 2020.

Lampa, Roberto. "Crisis in Venezuela, Or the Bolivarian Dilemma: to Revolutionize or to Perish? A Kaleckian Interpretation." *Review of Radical Political Economics* 49, no. 2 (2017): 198-218.

Limi, Atsushi. "Escaping from the Resource Curse: Evidence from Botswana and the Rest of the World." *IMF Staff Papers* 54, no. 4 (2007): 663-699.

Lindsay, Stacy. *Culture Matters,* New York: Basic Books, 2000.

Lipset, S. M. “Some social requisites of Democracy: Economic development and political legitimacy.” *Political Science* 53, no. 1 (1959): 69–105.

Madrid, Raúl. “Leftist Governments in Latin America: A Comparison of Brazil, Bolivia, Chile and Venezuela”. Llilas Portal, 2008. http://lanic.utexas.edu/project/etext/llilas/portal/portal089/leftist.pdf. Accessed June 3, 2020.

Maya, Margarita López. "Populism, 21st-Century Socialism and Corruption in Venezuela." *Thesis Eleven* 149, no. 1 (2018): 67-83.

McCaughan, Michael. *The Battle of Venezuela*. London: Latin America Bureau, 2004.

Moradbeigi, Maryam, and Siong Hook Law. "Growth Volatility and Resource Curse: Does Financial Development Dampen the Oil Shocks?" *Resources Policy* 48, no. 3 (2016): 97-103.

Muravchik, Joshua. "How Socialism Broke Venezuela." *Commentary* 147, no. 3 (2019): 31-36.

Naím, Moisés, and Francisco Toro. "Venezuela's Suicide: Lessons from a Failed State." *Foreign Affairs* 97, no. 6 (2018): 126-138.

Pestano, Andrew V. “Venezuela: 75% of population lost 19 pounds amid crisis.” United Press International, 2017. https://www.upi.com/Top_News/World-News/2017/02/19/Venezuela-75-of-population-lost-19-pounds-amid-crisis/2441487523377/. Accessed January 22, 2020.

Purcell, Thomas F. "The Political Economy of Rentier Capitalism and the Limits to Agrarian Transformation in Venezuela." *Journal of Agrarian Change* 17, no. 2 (2017): 296-312.

“Report for Selected Countries: Venezuela.” The International Monetary Fund, 2019. https://www.imf.org/external/pubs/ft/weo/2018/01/weodata/weorept. Accessed January 22, 2020.

Restuccia, Diego. “The Monetary and Fiscal History of Venezuela 1960-2016.” UC Working Paper 59, Becker Friedman Institute for Economics, 2018. https://www.economics.utoronto.ca/diegor/research/MFHLA_paper.pdf. Accessed February 5, 2020.

Ricks, Jacob I. and Amy H. Liu. "Process-Tracing Research Designs: A Practical Guide." *PS: Political Science & Politics* 51, no. 4 (2018): 842-846.

Rodney, Walter. *How Europe Underdeveloped Africa*. Cape Town: Pambazuka Press, 2012.

Rodríguez, Francisco. “Crude Realities: Understanding Venezuela’s Economic Collapse.” Washington Office on Latin America, 2018. https://venezuelablog.org/crude-realities-understanding-venezuelas-economic-collapse/. Accessed April 6, 2020.

Rodríguez, Francisco. “Sanctions and the Venezuelan Economy: What the Data Says”. Torino Economics, 2019. https://torinocap.com/wp-content/uploads/2019/06/Sanctions-and-Vzlan-Economy-June-2019.pdf. Accessed January 25, 2020.

Ross, Michael L. "What have we Learned about the Resource Curse?" *Annual Review of Political Science* 18, no. 1 (2015): 239-259.

Ruckert, Arne, Laura Macdonald, and Kristina R. Proulx. "Post-Neoliberalism in Latin America: A Conceptual Review." *Third World Quarterly* 38, no. 7 (2017): 1583-1602.

Sachs, Jeffrey and Andrew M. Warner. “Natural Resource Abundance and Economic Growth.” *National Bureau of Economic Research* Working Paper no. w5398 (1995): 1-47.

Sachs, Jeffrey and Mark Weisbrot. “Economic Sanctions as Collective Punishment: The Case of Venezuela.” Center for Economic and Policy Research, 2019. https://cepr.net/report/economic-sanctions-as-collective-punishment-the-case-of-venezuela/. Accessed January 22, 2020.

Said, Edward. *Culture and Imperialism*. New York: Vintage Books, 1994.

Seelke, Clare Ribando. “Venezuela: Overview of U.S. Sanctions” Congressional Research Service, 2019. https://fas.org/sgp/crs/row/IF10715.pdf. Accessed February 22, 2020.

Szalai, László. "A Review on the Resource Curse." *Periodica Polytechnica Social and Management Sciences* 26, no. 2 (2018): 179-189.

Thompson, Andrew. “How Bolivia’s Morales Weathered Latin America’s Backlash Against the Left.” World Politics Review, 2019. https://www.worldpoliticsreview.com/articles/27778/how-bolivia-s-morales-weathered-latin-america-s-backlash-against-the-left. Accessed January 25, 2020.

“Unemployment rate.” IMF DataMapper, 2019. https://www.imf.org/external/datamapper/LUR@WEO/OEMDC/ADVEC/WEOWORLD. Accessed February 6, 2020.

Vahabi, Mehrdad. "The Resource Curse Literature as seen through the Appropriability Lens: A Critical Survey." *Public Choice* 175, no. 3 (2018): 393-428.

Van Der Ploeg, Frederick, and Steven Poelhekke. "Volatility and the Natural Resource Curse." *Oxford Economic Papers* 61, no. 4 (2009): 727-60.

“Venezuela and the IMF.” The International Monetary Fund, 2019. https://www.imf.org/en/Countries/VEN. Accessed January 22, 2020.

“Venezuela Exports, Imports, and Trade Partners.” The Observatory of Economic Complexity, 2020. https://oec.world/en/profile/country/ven/. Accessed January 22, 2020.

“Venezuela – Facts and Figures.” Organization of Petroleum Exporting Countries, 2020. https://www.opec.org/opec_web/en/about_us/171.htm. Accessed March 3, 2020.

“Venezuela – World Inequality Database.” World Inequality Database, 2019. https://wid.world/country/venezuela/. Accessed January 22, 2020.

Wallerstein, Immanuel. *World-systems Analysis: An Introduction*. Durham: Duke University Press, 2004.

Wengraf, Lee. “The Pillage Continued: Debunking the Resource Curse”. Review of African Political Economy, 2017. http://roape.net/2017/01/24/pillage-continues-debunking-resource-curse/#edn13. Accessed June 1, 2020.