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Into the shadows: sanctions, rentierism, and economic informalization in Venezuela

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Abstract

This article studies the effects of sanctions on different economic sectors in Venezuela, framed as a rentier capitalist state. We analyse four sectors: hydrocarbons, agriculture, manufacturing, and what we call "emerging sectors" (mining and cryptocurrency activities). We argue that sanctions and counter-strategies employed by the state have produced multiple transformations, such as the informalization and criminalization of the economy, which undercut the recovery of Venezuelan economic development and democracy. These effects manifest themselves in an increase in the barter-economy, de facto dollarization, the expansion of activities such as mining and cryptocurrency use, and the spread of illegal actors and military intervention in critical sectors. This study is inscribed in comparative and international politics traditions, related to the interactions of international constraints with domestic political economy actors and structures. Through a qualitative approach, we fill an important gap both in the literature on Venezuelan sanctions, and on sanctions more broadly. *Keywords*: sanctions, rentier capitalism, oil, regime change, Venezuela, gold mining, Nicolás Maduro.

Resumen: Hacia las sombras: Sanciones, rentismo e informalización económica en Venezuela

El artículo estudia los efectos de las sanciones en diferentes sectores económicos en Venezuela, visto como un estado rentista. Analizamos cuatro sectores: hidrocarburos, agricultura, manufacturas y lo que denominadmos "sectores emergentes" (actividades mineras y de criptomonedas). Sostenemos que las sanciones y contra-estrategias empleadas por el Estado han producido múltiples transformaciones, como la informalización y criminalización de la economía, que socavan la recuperación del desarrollo económico y la democracia venezolana. Estos efectos se manifiestan en un aumento de la economía de trueque, dolarización de facto, la expansión de actividades como la minería y las criptomonedas, y la propagación de actores ilegales e intervención militar en sectores críticos. Este estudio se inscribe en tradiciones políticas comparativas e internacionales, relacionadas con las interacciones de las restricciones internacionales con los actores y estructuras de la economía política nacional.

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A través de un enfoque cualitativo, llenamos un importante vacío tanto en la literatura sobre sanciones venezolanas, como sobre sanciones en general. *Palabras clave*: Sanciones, capitalismo rentista, petróleo, cambio de régimen, Venezuela, minería de oro, Nicolás Maduro.

Introduction

The consequences of the use of sanctions to support regime change or achieve other policy goals is highly contested (Hufbauer et al 2007; Peksen 2019a). This is no less so regarding the sanctions introduced against the regime of Nicolás Maduro between 2006 and 2019. Particularly the financial and oil sanctions imposed by the United States in 2017 and 2019 generated a heated debate about their economic impact and social cost (Bahar et al. 2019; Weisbrot & Sachs 2019; Rodríguez 2019). Sanctions is the deliberate government-inspired withdrawal or threat of withdrawal of trade or financial relations (Hufbauer et al. 2007: 3). The literature generally distinguishes between *comprehensive* and *targeted* sanctions, the latter being sanctions directed toward individuals or specific sectors. Venezuela is the object of targeted sanctions. However, it is our contention that due to the extreme level of dependence on oil and domination of state owned companies in strategic sectors, in Venezuela sanctions have an effect similar to comprehensive sanctions.

In this article, we study the effects of sanctions on different sectors and their relationship to the Venezuelan state. The starting point for our discussion is an understanding of Venezuela as a case of rentier-capitalism. Oil rents are distributed to other sectors through subsidies and an overvalued currency. Because of the nature of the Venezuelan oil economy, sanctions on the oil sector affect other sectors, making them rather comprehensive in their effects. These other sectors are also dependent on a number of additional factors, including the evolution of the rule of law, the availability of credits and tax burdens. We analyse four sectors: hydrocarbons, agriculture, manufacturing, and what we call "emerging sectors" (most notably mining and cryptocurrency activities, which have thrived in part because of the crisis).

We argue that it is difficult to disentangle the effects of sanctions from the counter-strategies employed by the Venezuelan state. However, combined, they have produced multiple transformations in an economy that was already deeply affected by adverse economic trends and governmental policies. The most general and alarming effect of the sanctions is further informalization and partly criminalization of the economy that undercut the recovery of Venezuelan economic development and return to democracy. Informalization takes place in the form of increase in the barter-economy, de facto dollarization, the expansion of informal activities such as mining and cryptocurrency use, as well as the spread of illegal actors and military intervention in critical sectors.

This study is inscribed in comparative and international politics traditions, especially related to the interactions of international constraints, such as sanctions, with domestic political economy actors and structures. The article em-

ploys a combination of official numbers for production and GDP in different sectors, and 55 formal in-depth interviews in Venezuela and Colombia from October 2018 to July 2019. We collected information from business chamber representatives, individual business leaders as well as public officials. In addition, we have conducted a number of interviews on Skype from Oslo, throughout 2018 and 2019. Through a qualitative approach, we fill an important gap not only in the literature on Venezuelan sanctions, but in the literature on sanctions that tend to be based on static quantitative data, which overlooks the effect of the dynamics between sanctions and government-business reactions to them (Peksen 2019a). Existing contributions seek to establish the impact of sanctions based on the comparison with other non-sanctioned oil producing nations (Rodríguez 2019). Rather, we seek to understand how sanctions and governmental policies interact with the long-term political economic dynamics in each sector. Inevitably, we also analyse the private sector's strategies to confront government policies and adapt to sanctions. The article is outlined as follows. The first section briefly summarizes the sanctions imposed on Venezuela. The second section discusses what to expect from the sanctions based on recent literature, highlighting an increasingly well-established connection between sanctions, deepening authoritarianism and informalization. In the empirical part, we discuss the hydrocarbons sector, agriculture, manufacturing and finally emerging sectors including mining of minerals and cryptocurrency.

Sanctions imposed on Venezuela

The United States, the European Union, and Canada are the main jurisdictions imposing sanctions on Venezuela. Some Latin American countries also imposed sanctions limiting entry to their territories of high officials from Venezuela's government. The United States has engaged in sanctions for over a decade, first as a result of a crackdown on lack of compliance with policies regarding drug trafficking, terrorism and human trafficking. Venezuela's defiant foreign policy to United States' interests and alternative defence doctrine, including building alliances with Colombian armed groups, prompted mistrust on United States' authorities. Sanctions began in 2005 and 2006 and eventually mounted to banning all United States' commercial arms sales and retransfers to Venezuela. In Table 1, we show a systematic view of the sanctions imposed on Venezuela to-date. Due to the 2014 protests and repression, the United States' Congress enacted the Venezuela Defense of Human Rights and Civil Society Act. In consequence, the president imposed sanctions (asset blocking and visa restrictions) against those deemed responsible for significant acts of violence or serious human rights abuses. In 2015, president Obama issued Executive Order (E.O.) 13692, targeting individuals who are considered responsible for violations of human rights and undermining democracy.

Table 1. List of sanctions imposed on individuals and financial sanctions on Venezuela

Date	Legal instrument	Description	Imposing jurisdiction
2005	Foreign Relations Authorization Act, FY2003 (P.L. 107-228, §706; 22 U.S.C. 2291j).	Decertification for anti-drugs and human trafficking cooperation.	United States.
2005	Kingpin Act; P.L. 106-120, Title VIII; 21 U.S.C. 1901 et seq.	Individual and company sanctions for illegal narcotics trade.	Treasury Department, United States.
2006	Section 40A of the Arms Export Control Act (22 U.S.C. 2781).	Arms sale embargo for failure to support anti-terrorism efforts.	State Department, United States.
2014	Trafficking Victims Protection Act (P.L. 106-386, Division A, 22 U.S.C. 7101 et seq.).	Aid restrictions.	State Department, United States.
2014	Venezuela Defense of Human Rights and Civil Society Act of 2014 (P.L. 113-278; 50 U.S.C. 1701 note).	Asset freeze, visa restrictions.	Congress, President of United States.
2015	Executive Order 13692 to implement P.L. 113-278, and the Treasury Department issued regulations in July 2015 (31 C.F.R. Part 591).	Asset freeze, visa restrictions.	President of United States.
2016	Extension of Venezuela Defense of Human Rights and Civil Society Act of 2014 P.L. 114-194.	Asset freeze, visa restrictions.	President of United States.
2017	Council of the EU Press release 13/11/2017 09:40; COUNCIL DECISION (CFSP) 2017/2074.	Gun embargo, travel restrictions and asset freeze.	European Union Council
2017	E.O. 13808.	United States' financial markets banned for Venezuela.	President of United States.
2017	Special Economic Measures (Venezuela) (SOR/2017-205).	Asset freeze, visa restrictions.	Canada
2018	E.O. 13827.	Banned Venezuela's digital currency.	President of United States.
2018	E.O. 13835.	Prohibition of purchasing Venezuela's debt.	President of United States.
2018	Regulations Amending the Special Economic Measures (Venezuela) Regulations (SOR/2018-114).	Asset freeze, visa restrictions.	Canada
2018	E.O. 13850.	PDVSA's assets in United States' blocked. Banned gold purchase from Venezuela.	President of United States.
2019	E.O. 13884.	United States' companies and individuals blocked from doing business with Maduro's government.	President of United States.

After the suspension of the recall referendum signature drive by the opposition in 2016, a mediation effort was launched with the support of UNASUR. The agreements never materialized (see more in Alfaro Pareja, 2020), and in 2017, protests escalated with the government's attempt to close down the National Assembly. The protests were crashed with repression from state and para-state groups and the government's decision to convene a National Constituent Assembly (ANC), in charge of re-writing the constitution and capable of overriding the power of any institution. In this context, the United States expanded the sanctions. President Donald Trump imposed financial sanctions on Venezuela through three additional EOs. First, E.O. 13808 restricts the Venezuelan government's access to United States' debt and equity markets. Second, E.O. 13827 prohibits transactions involving the Venezuelan government's issuance and use of digital currency. Third, E.O. 13835 prohibits transactions related to the purchase of Venezuelan debt.

In November 2018, president Trump issued E.O. 13850, setting forth a framework to block the assets of, and prohibit certain transactions with, any person to operate in the gold sector or to be responsible or complicit in transactions involving deceptive practices or corruption. This was followed by the designation of the Venezuelan oil company PDVSA Treasury Department's Office of Foreign Assets Control (OFAC) after the speaker of the National Assembly asserted that he was the legitimate interim president of Venezuela, the designated PDVSA as subject to sanctions. All property and interests of PDVSA in the United States were blocked. In essence, the Maduro government was blocked from accessing the accounts of CITGO. In 2019, the United States' administration banned United States' individuals and companies from engaging in transactions with the Maduro government and secondary sanctions on third-country parties who do so (with humanitarian exceptions). By that time, the purpose of the sanctions had moved from cracking down on specific violations of United States' regulations, to explicitly seeking regime change through a combination of increased opposition, and the disintegration of the Maduro-regime support coalition, especially within the military.

The European Union first agreed on sanctions in November 2017. They consist of an arms' embargo and on material that might be used for repression, as well as a travel ban and assets' freeze. The measures can be reversed depending on the evolution of the situation in the country, in particular the holding of credible and meaningful negotiations, the respect for institutions, the adoption of an electoral calendar and the liberation of political prisoners. The sanctions were extended in November 2018.

The effect of sanctions in a crisis-ridden rentier regime

Economic sanctions have been controversial ever since their use increased post-World War II. While initially considered a means to reduce the use of force, already in 1967 Galtung criticized their inefficiency and harmfulness.

Sanctions, he argued, were based on a "naïve theory of economic warfare" positing that the higher the economic hardship inflicted by sanctions, the greater the harm might be on leaders' legitimacy and coercive capacity, which would subsequently pressure them to acquiesce to external demands (Galtung 1967). He argued that this logic overlooked the ability of receiving states to adapt and adjust to new economic realities. Since then, the question of whether sanctions work has been linked to their impact in the target country as well as the ability of recipient states to adapt. Up until the late 1990s, the consensus was that sanctions were inefficient. Hufbauer et al. (2007) summarized the reasons for this as follows: sanctions may be inadequate for the task at hand (failing for example to hurt those with power); create their own antidote by unifying the target country; prompt reactions from allies of target countries – so called "sanction busters" offsetting their effect; and alienate allies and business in the sender country.

The imposition of sanctions and subsequent invasion of Iraq, led to a concern for sanctions' collateral damage and a general condemnation of the use *comprehensive sanctions*. As a response, so called *targeted sanctions* emerged seeking to inflict costs on the target regime and its supporters while reducing social costs (Rosenberg et al. 2016). Later research found that while sanctions are still inefficient means to achieve foreign policy goals (Peksen 2019a), efficiency improve if sanctions are multilateral rather than unilateral (Bapat et al. 2013), and if there is a pre-existing foreign-aid relationship between sender and target (Early & Jadoon 2019). Moreover, modest policy changes are achievable, while few successes were found in achieving regime change. Hufbauer et al (2007) found that sanctions succeeded in imposing regime change in less than a third of the cases (31 percent). *Targeted* sanctions have zero success rate in coercing a regime change, unless carefully designed and planned along with other diplomatic measures to influence a negotiated solution (Biersteker 2015).

Sanctions are also found to be less efficient when used towards authoritarian regimes (Faulkner 2018), although depending on the number of "veto-players" (Jeong & Peksen 2017), and institutional characteristics (Peksen 2019b). Yet, worse, sanctions *contribute* to more autocratic forms of governance. Measures of political stability, voice and accountability, government effectiveness, and regulatory quality all decline appreciably in the target countries (Rosenberg et al 2016; Peksen 2019b). Along with the decline in the quality of governance, economic sanctions tend to encourage corruption and criminal activity (Biersteker 2015) and strengthen shadow economies in target countries (Early & Peksen 2018). In other words, the literature leaves little hope for success of the mainly unilateral, uncoordinated sanctions imposed on Venezuela in coercing a return to democracy, upon an increasingly authoritarian government. The literature rather predicts a descent into further authoritarianism and informality. However, as noted by Peksen (2019a) the majority of the studies of the impact of sanctions use static data from existing sanctions databases. These approaches limit the understanding of how aspects of state-society rela-

tions condition the consequences of sanctions. Furthermore, using static data, they are unable to identify *interaction effects* between sanctions and governmental responses. This study seeks to contribute to filling this gap.

To understand the impact and the possible success of the sanctions, one has to start with the understanding of Venezuela as a rentier economy as this shapes the strategy of adaptation to new constraints of loyalists as well as opponents. Venezuela's political institutions as well as social organizations are reliant on the inflow of considerable rent income from abroad. Despite some disagreements, there is a basic consensus around some of the effects of wealth derived from petroleum rents. According to Ross (2015), dependence on oil rents makes authoritarian regimes more durable; it encourages corruption; and it can lead to violent conflict, especially in ethnic-divisive societies. The most common economic dysfunction of rent dependence is the so-called Dutch disease, which refers to the relative overvaluation of the currency due to windfall revenues in foreign currency, hampering the prospect of diversifying the economy. In terms of political institutions, hydrocarbon rents tend to contribute to a broad weakening of institutional capacities, encouraging the emergence of fiscally autonomous elites associated with powerful cronies (Dunning 2010).

The state manages the oil wealth in its dual role of the owner of subsoil resources and main stakeholder in the oil industry. Historically, the government controlled the oil industry through the application of royalties and taxes and then channelled these revenues through budgetary mechanisms. The distribution of revenues occurred in the context of a pacted democracy that was inspired in a corporatist system, comprised of political parties, productive sector interests, and trade unions (Coronil 1997; Urbaneja 2013). Under the Bolivarian Revolution, these mechanisms have been altered. New parallel institutions were established and alternative mechanisms of rent distribution created (Vera 2008; Perez S 2011). A critical one was the manipulation of the exchange rate to channel subsoil rents through foreign currency subsidies to specific constituencies (Rosales 2016; Purcell 2017). In addition, the government created extra-budgetary funds that undermined institutional accountability and contributed to the centralization of power in the president (Corrales & Penfold 2011).

In 2012, a crisis began due to the debt-induced fiscal deficit and a growing monetization of that deficit that sparked inflation. Compounded by economic inefficiencies and the decline in oil production, this led to a decreased capacity for redistribution and imports, resulting in scarcity and skyrocketing inflation, and sparking recurrent demonstrations. With the stacking of the Supreme Court in 2015 and the establishment of the ANC in 2017, most institutional checks and balances were eroded (Straka 2017). Rather, the state heavily repressed opposition, in the midst of institutional deterioration and a decline in the rule of the law. By the time sanctions were introduced, Venezuela had fallen into a defensive authoritarian rentierism in which oil rents were used primarily to sustain the government in power and undermine opponents. An example of this strategy is the political use of the food rationing and distribution program

Comités Locales de Abastecimiento y Producción (CLAP), which functions as a mechanism of social control and surveillance (Penfold 2018).

The argument that we develop is that the sanctions have hindered existing routes of rent appropriation. The ability to capitalize on oil rents shrunk because external financing is cut off with the financial sanctions; the transfer of oil and gold into rents is hindered due to the oil and gold sanctions, and the individual ability to hoard rent is affected by the individual sanctions. The natural way of adaptation of rent-seekers within and outside governmental circles is to find new sources or new routes for rent-appropriation. Sanctions busters (in this case, Russia, China, and Turkey) may facilitate such new avenues. The strategies applied by the domestic actors will depend on the strength or weakness of formal legal and political institutions, but the rent-seeking impulse will encourage the breaking of both national laws and the limitations imposed by sanctions. This in turn may create new "informal institutions", with the possibility of creating a certain temporary and often local regulation of economic activity adapted to the new circumstances, but with long-term negative consequences for economic development and democracy.

The transformation towards deinstitutionalization in different sectors

Hydrocarbons sector

Venezuela's oil sector represents the productive backbone of the country and a great source of rent around which other sectors organize in order to survive and expand. The notion of "sowing the oil" has been present in the country's imaginary and political discourse since the 1930s, as a way to use the benefits of oil revenue to strengthen agriculture and industry (Straka 2019). Sanctions imposed on PDVSA joined pre-existing domestic problems related to governance deficiencies in the industry. The financial sanctions first contributed to a reduction of oil production in PDVSA-managed fields and, later, the oil trade embargo sharply cut Venezuelan oil exports to the United States' market.

Venezuela's hydrocarbon industry underwent important transformations in the past decades accounting in part for the wider changes occurring Venezuelan society.[1] In the 1990s, PDVSA successfully internationalized and the oil industry was opened up for upstream investments (Mommer 2002). The internationalization process encompassed the purchasing of major assets abroad, including the United States' operator CITGO (Loung & Sierra 2015), and the establishment of refineries and gas stations in the Caribbean, Europe, and the United States (Hellinger 2016). Nationalist scholars argue, however, that this strategy responded to the desire by managers of isolating PDVSA's revenues from government spending (Mommer 2002).

The *apertura petrolera* translated into investments plans in the Orinoco River belt (heavy and extra-heavy crude) within a flexible framework with lower royalty and corporate taxes and conflict resolution mechanisms that gave

international tribunals and arbitration courts pre-eminence (Philip 1999; Manzano & Monaldi 2010). PDVSA's assets abroad (such as CITGO), "shielded" the investments that large foreign companies would be committing (Giusti 1999). With such attractive conditions, investments flowed into these fields. By the end of the 1990s, the corporate logic of the company had been established as the centre of the country's oil policy. Venezuela increased output by about 800,000 bpd to over 3.5 million bpd (Manzano & Monaldi 2010). According to Urbaneja (2013: 352), with the oil opening: "there was a productive philosophy regarding oil – rather than a rentier one – which pointed to the expansion of the industry and production even at the expense of rent per barrel."

The Chávez government sought to reverse these policies and bring Venezuela back to its traditional role of defending oil prices. It strengthened the regulatory capacity of the Ministry of Oil over PDVSA, to increase the state's intake of rents via royalties (Lander 2002; Rodríguez Araque 2012). Nonetheless, the Chávez government did not want to fully alienate foreign investors, as it needed their capital and expertise to keep output flowing, especially because the Orinoco belt was considered a crucial bargaining chip to bolster the country's international leverage. The initial changes to the legal framework governing oil approved by executive decree in 2001, raised royalty levels to 33 percent and forcing a major overhaul in the stakeholder structure of private investments. Joint-ventures were forced to have state majority asset and control, although some level of governance autonomy was later permitted (Rosales 2018). PDVSA's managerial elite protested these changes, first joining forces with rebel military leaders in a coup attempt to overthrow Chávez, and later through a devastating strike. Yet, the government assured control and purged PDVSA of dissenting voices, costing the company a great deal of technical expertise (Philip & Panizza 2013).

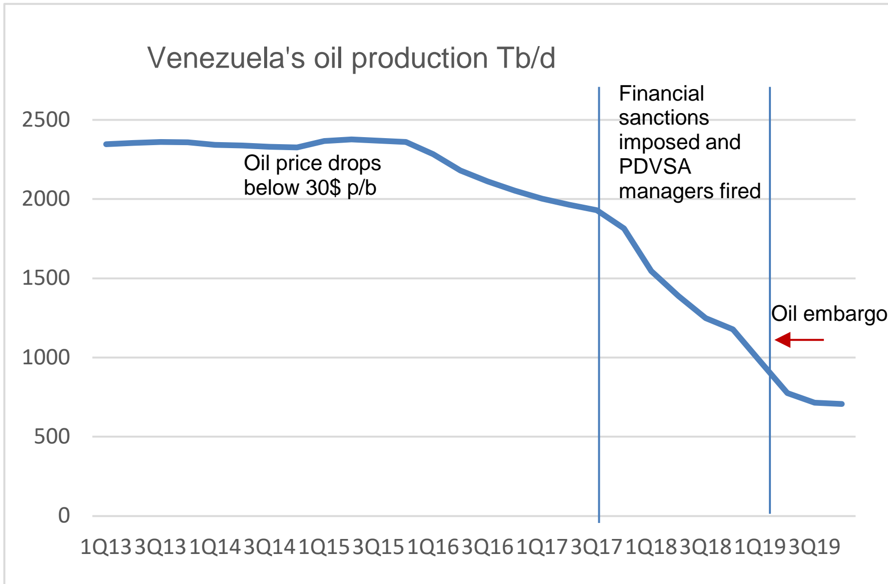
Through direct political control over PDVSA, the Chávez government managed to establish its ambitious social spending programs and rolled out an expansionary spending regime that increased imports and benefited foreign partners through oil bill subsidies. However, it also became more dependent on foreign investors and high oil prices (Monaldi 2018). By 2006, with increasing oil prices, the government decided to retroactively apply the 2001 legal framework on the joint-ventures agreed upon during the oil opening. The forced migration to the new framework and the imposition of progressive taxes in 2008 was received with scepticism by investors, some of whom rejected the deals and launched lawsuits against Venezuela. While oil production never recuperated to the 1990s levels, during most of Chavez's government, the output remained at around 3 million bpd. The migration to the 2001 legal framework was the start of a series of actions that undermined confidence among investors and affected the country's production (interview with authors, July 2019). However, production declines were largely offset by increasing prices from 2003 onward.

During Nicolás Maduro's tenure, the main problem affecting the sector was related to currency and macroeconomic distortions. The widening gap of the official exchange rate and the market illegal one, made the oil industry suffer, as it was required to sell dollars to the central bank at the official exchange rate while paying for equipment, salaries, and liabilities in an increasingly inflationary context. Investors as well as former policy makers in the oil sector, especially Rafael Ramírez, made calls to abandon the government's currency policy and unify the exchange rate at a competitive rate (Toro 2017). These distortions worsened as the oil price declined in 2014. Maduro's response was to purge PDVSA of personnel close to Ramírez, appointing instead military officers and *maduristas* to managerial posts. Over 65 PDVSA officials were dismissed and persecuted for corruption charges since 2016. In addition, former Minister of Oil Eulogio del Pino was arrested together with former Citgo CEO Nelson Martínez, in late 2017. The latter died soon after in dubious circumstances (Bahar et al. 2019). Ramírez resigned from his post as ambassador to the United Nations in late 2017 and a month later, the government-appointed Attorney General issued an international arrest warrant against Ramírez. General Manuel Quevedo was appointed the company's CEO and Minister of Oil in 2017.

The persecution of the managerial elite was combined with desertion from lower ranked workers who saw no economic benefit in working due to rapidly devaluing wages, insecure environments, and threats by superiors and military. According to workers' reports between 25,000 and 40,000 have left their posts in the past years (Buitrago & Ulmer 2018; Ulmer & Parraga 2018). National Guard officers have replaced these workers but their lack of expertise and vulnerability to extortion complicate the industry's recovery. Industry representatives referred to corruption in the supply chain to be an endemic problem, contributing to making daily industry operations extremely cumbersome.[2]

The effect of the imposition of financial sanctions of 2017 that banned both PDVSA and the Venezuelan treasury from rescheduling debt must be understood in the context of these domestic factors. Rodríguez (2019) argues that the 2017 financial sanctions had an adverse effect in oil production and export. He estimates that "financial sanctions were associated with economic losses of USD 16.9 billion per year" (Rodríguez 2019: 51). In addition to this loss of revenue from 2017 onward, the trade restrictions imposed in 2019 account for an increased burden as the United Stats' market was sharply closed to Venezuelan production. While PDVSA temporarily attempted to sell its United States-bound oil to India and other international buyers, it has not found enough costumers to substitute for the over 400 thousand bpd that the United States' market represented. Venezuela's output remained around the 700 thousand bpd, which threatens Venezuela's condition of net oil exporter.

Figure 1. Venezuela's oil production, tb/d (source: authors' elaboration with data from OPEC monthly reports, secondary sources.)



Moreover, the United States has pressured third countries to comply with the oil sanctions imposed in April 2019, inhibiting them from dealing Venezuelan oil. Indian purchases of Venezuelan oil have thus decreased after an initial spike in 2019 (Parraga 2019). Similarly, Rosneft and CNPC have reduced their investments within the Orinoco belt. Financial and oil sanctions have affected oil production drastically, which together with governance deficiencies analysed earlier, explain a sharp decline in the industry and subsequent loss in revenues in 2019.

Agricultural sector

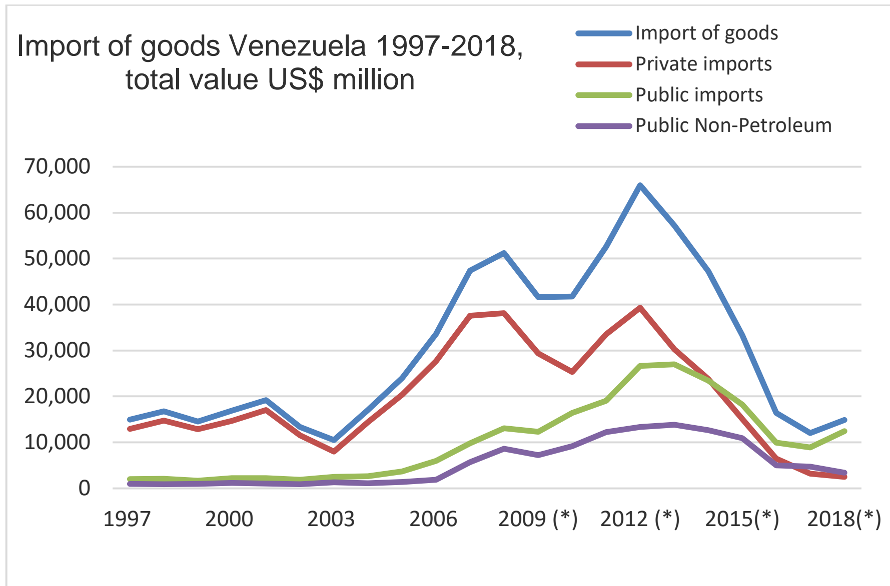
The main agricultural-related argument about the impact of sanctions in Venezuela, has been that they contributed to food insecurity. In the following we show that this is not correct as food imports actually increased after oil and financial sanctions. However, the sanctions further informalized and militarized an already deeply crisis-ridden agricultural sector. When Chávez took power, he pledged to ensure both food security and food sovereignty, through productivity increases and redistribution. The agricultural sector was characterized by both low productivity and inequality in land distribution and corresponding underutilization of land. Problems were compounded by the domination of private monopolies, such as Empresas Polar in food and beverage production, and Agroisleña in distribution of agricultural inputs. These formed part of the system of rent-distribution, as they received subsidized raw material

and foreign exchange from the government (Purcell 2017). From the start, Chávez' attempts at transforming the agricultural sector was marked by a deep conflict with existing agricultural producers. This started already with the introduction of the Law on Lands and Agricultural Development from 2001 (Giacalone et al 2017). The purpose of the law was to make uncultivated land available for producing key foods for the Venezuelan diet (Jaimes et al. 2002), but it set off a number of spontaneous expropriations and invasions of large estates with the government's endorsement. In 2001, the Corporación Venezolana Agraria (CVA) was established to absorb the expropriated farms. Furthermore, the government created the Mercado de Alimentos CA (MERCAL) that sold basic food from medium and large food producers at below the regulated price at 14.000 outlets across the country. MERCAL was under direct responsibility of PDVSA rather than a regular ministry, adding to the oil company's duties and share of expenses into social policy.

In the period after 2002, the government implemented more elaborate plans to expropriate farms, control prices, and later control production through state companies, first in the production of sugar, cereals and oilseeds, and milk. With the adoption of the first national development plan (2007-2013) came a change in the laws on food security, price controls and the development of the popular economy, and later also a reform of the Law of Lands. This led to further increases in expropriations that also started to encompass agribusiness industry. In 2007, PDVSA-Agro was created as a subsidiary to participate directly in production of agricultural products as raw material for the food industry. The number of state supported agricultural cooperatives also experienced a steep increase (Purcell 2017). The result was an increase in the percentage of land cultivated, as well as production increase. By 2008, the expropriation of idle land had contributed to an increase of 46 percent in cultivated land compared to 1988, after a reduction the decade before (Chacón 2011). Driven by state subsidies, between 2003 and 2008, production increased as well. However, due to consumption increases, scarcities also increased. In 2007, products in MERCAL were 42 percent more scarce than the commercial establishments (Chacón 2011).

The beginning of the end to the production increase was the expropriation of the agricultural supply company Agroisleña in 2010 (it was then renamed Agropatria) (Banko 2019). While Agroisleña had held a dominating position of around 40-45 percent of the market for agricultural inputs, Agropatria, became a complete monopoly. It soon became the centre of a number of corrupt practices such as reselling or manipulating access to subsidized agrarian inputs. In consequence, only a year after its launch it recorded major losses (Purcell 2017). At the same time, with the government enjoying record high oil prices, imports increased, peaking in the election year of 2012 when they reached a value of 59.000 million dollars (Hernández 2015) (See figure 2).

Figure 2. Imports of goods (source: authors' elaboration from Venezuela's Central Bank)



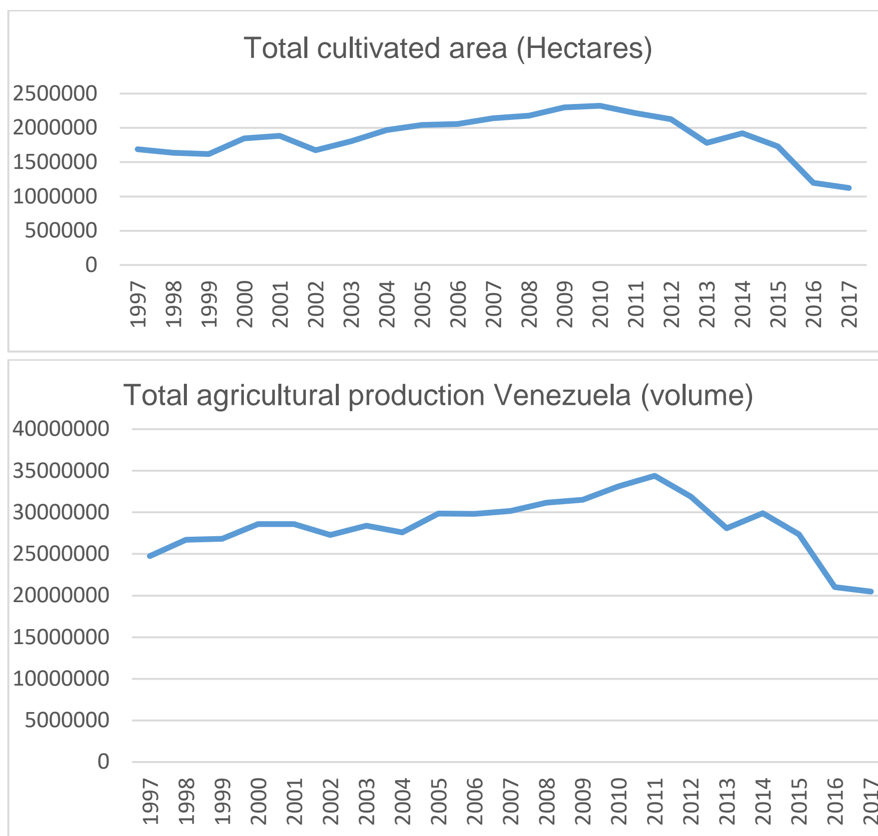
With the entering of the Maduro government and the drop in oil prices, three additional factors added to production decline: hyperinflation and currency scarcity, increased military control, and the expansion and institutionalization of corrupt practices. The government increasingly blamed the producers themselves for the fall, and started to acquire stronger control over all the parts of the chain of production. In April 2016, the CLAPs were established to bypass private intermediaries in distribution and providing people direct alimentary support. Later in 2016, the Gran Misión Abastecimiento Soberano Seguro was created placing the CLAP under military control, while PDVSA-Agro was transferred to the Ministry of Agriculture and Lands. By 2019, 74.9 percent of the population received the CLAP-boxes, and as shown in a series of journalistic reports, they have opened up a new window for corruption for a small group of government aligned business actors. The CLAP policy has also served as a significant mechanism of social control, associated with election manipulation and coercive tool to appease protest.

While the distribution networks of Agropatria had long been politicized, later they also became militarized. In 2013, the Agropecuaria de la Fuerza Armada Nacional Bolivariana (AgroFan) had been established to satisfy the food supply needs for the armed forces. By 2018, as both agricultural supplies and foreign currency got increasingly scarce, Agropatria begun to channel the majority of its imports (around 80 percent according to sector representatives) to AgroFan. Furthermore, as one of its first actions after its establishment, the ANC created the agricultural conglomerate Agrosur in September 2017 to control all parts of the agricultural production chain, from distributing input to production and sale. By 2019, it was fully operating and it came to control

around 90 percent of agro-industrial supplies. While private producers previously had been obliged to sell between 20-30 percent of their crops to Agropatria, they now had to sell up to 50-60 percent (depending on state and products) to Agrosur, at prices decided by the government.[3]

While state control expanded formally, it also did so informally through the increasingly precarious situation of accessing currency for agricultural input, leaving any producer that fell out of favour of Agropatria and later Agrosur, with no access to fertilizers and other supplies. Thus, traditional producers increasingly cut down on the cultivated area due to lack of seeds, fertilizers or ability to repair equipment (interviews agri-business representatives, July 2019). The next phase of the troubles for the agricultural sector came with the government's attempt at reducing inflation. In addition to a steep devaluation, in February 2019 the government obliged the banks to maintain a reserve of between 60 and 100 percent of deposits. This radically restrictive monetary policy ended access to credit for the non-government aligned agricultural sector (Salomón et al. 2019).

Figure 3. Agricultural production and area cultivated (source: authors' elaboration. Data from Ministerio de Agricultura Productiva y Tierras, collected by Fedeagro)



The monetary restrictions came only a week after United States had announced the introduction of oil sanctions. These had the immediate consequence of causing gasoline shortages. While in large cities like Caracas, the gasoline crisis was largely overcome within a month, in the agriculture producing areas in the Andean and plains' region (the states of Táchira, Mérida, Barinas, and Portuguesa) the gasoline crisis continued (Ostos 2019; Pérez 2019). This prevented farmers from transporting crops to markets and agro-industries, and large amounts of agricultural products decomposed (Herrera & Kurmanaev 2019). The consequences were twofold: First, agricultural producers increasingly used informal channels for food distribution, including selling online through contacts with payments in different currencies; second, since the access to such channels is not generalized, it increased the role of companies established by military officials that controlled territories, had access to transport, and had wide networks of contacts.[4]

Manufacturing sector

The Venezuelan manufacturing sector has been in a process of long term decline since the late-1970s, with a growth period after 2003, but steeply declining after 2014. By 2019, it produced less than a third of the value it did before Chávez entered power, and less than a fourth compared to the peak years of *chavismo*. In order to understand the effect of the sanctions, it is necessary to understand the dynamics of the long term decline, as well as the period of increase. Like agribusiness, the manufacturing sector was born at the back of petroleum exploration. The twentieth century saw the rise of three large industrial groups that spread into other sectors: Mendoza, Cisneros, and Polar. These and other groups had achieved privileged access to oil rents and according to some they "captured the Venezuelan state" (Rangel 1972).

The post 1958 industrial strategy aimed at reducing oil dependency, modernize the economy, enhance self-sufficiency, and ensure full employment was pursued (Straka 2019). It increased industry output to 17 percent of GDP as of the late 1970s, most of it oriented toward internal consumption. Production was diversified from traditional or basic industries (food processing, beverages, leather, and footwear), to intermediate products (paper, petrochemicals, rubber, plastics, and industrial minerals), and heavier industries (iron, steel, aluminium, transport equipment, and machinery). However, industrialization suffered from dependency on imports of capital goods; geographical and ownership concentration; a weak internal credit market and entrepreneurial sector; lack of export capacity; and lack of internal integration (Bitar & Troncoso 1982).

The oil boom of the mid-seventies undermined the growth of industry as imports inundated outcompeted domestic production. The state responded by expanding public ownership, growing from representing 5 to 18 percent of manufacturing output between the early 1970s and the late 1980s (Di John 2014). The consequent collapse in production is explained by the inflow of

imports due to the overvaluation of the currency, and negative consequences of state involvement. However, it was also affected by political pressure for a wide distribution of oil rents, jeopardizing a consistent industrialization strategy (Di John 2014). In the 1980s, the industrial slow-down accelerated.

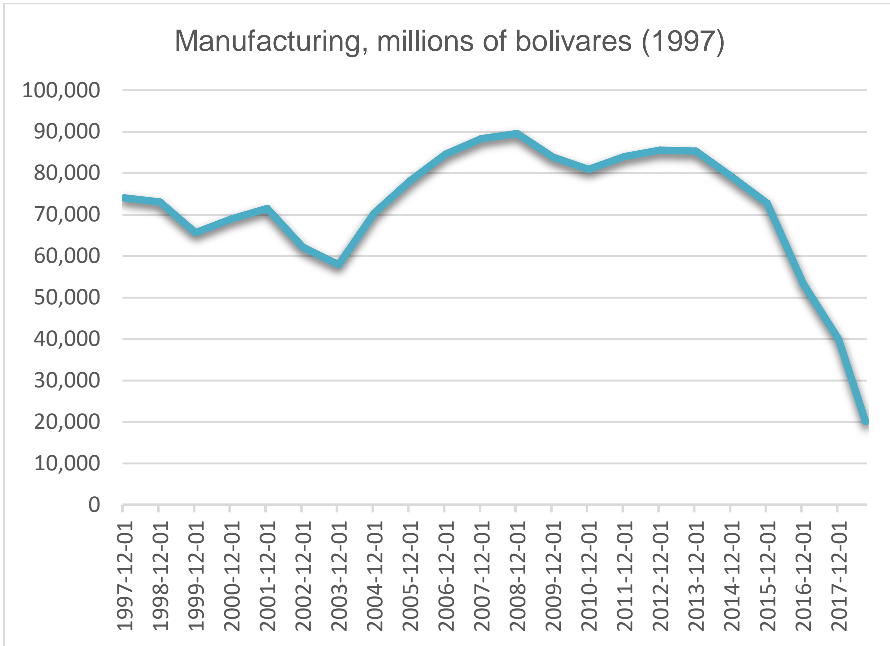
Chávez' promised to rebuild industry based on the creation of cooperatives and "social production companies", expropriation of larger companies in strategic sectors, and introduction of work training programs (Vera 2008). These policies took off after Chávez gained control over PDVSA in 2002 and oil prices spiked in 2003. In the years that followed, the combination of an overvaluation of the currency, direct funding and tax-exemptions for the cooperatives led to their multiplication, from 35,000 in 2003 to 130,000 in 2007 (Vera 2007). At the same time, the decline of other non-oil manufacturing companies continued, as Chávez consciously channelled preferential dollars away from those that had supported the coup-attempt (Ellner 2019). Between 1999 and 2006, 3,600 manufacturing companies disappeared and the percentage of the population employed by them declined from 14,3 percent in 1999 to 11 percent in 2006 (Vera 2008). In spite of this, manufacturing output increased after 2003. Extraordinary oil rents allowed for a large subsidy to the import-dependent manufacturing sector through an overvalued currency (Dachevsky & Kornblitt 2017). Moreover, the sector benefitted from increased consumption due to the distribution of oil rents through social programs. As expressed in interviews, even business leaders that were exposed to hostile acts from the government, and increasingly rigid price controls, admitted that it was the start of a period of extraordinary profits.[5]

The 2007-2013 National development plan (Presidencia 2007) introduced a new phase. Chávez announced the establishment of over 200 Social Production Companies to produce electronics, motorcycles, housing and building materials and more (Carlson 2007), and started a new wave of expropriations, targeting strategic industries such as cement, petrochemicals, and oil supplies. The distribution of cheap dollars was used increasingly strategically. First in line was the state owned companies; then those that imported basic and strategic goods including food and medicine; then those that imported raw material for strategic sectors (including food industries); and finally the rest of the industry. While some industries, such as automotive, were hit hard, others thrived, leading to a concentration of income and ownership in the hands of few, many of which had transnational connections and were able to diversify their investment strategies and business relations. As argued by a Colombian businessperson with 20 years of experience in Venezuela: "whoever says he did not make money until Chávez died is lying. We made a lot of money. There were profit margins in Venezuela that the Colombians could only dream of."[6]

The death of Chávez invoked immediate changes. First, imports peaked with Maduro's election campaign in 2013, sucking up much of the dollar surplus and flooding the market with cheap imports. Second, while the debt burden had started to put pressure on liquidity in 2012, inorganic money began

flowing, raising inflation. With the oil-prices tumbling in 2014, the access to subsidized dollars became severely limited.

Figure 4. Manufacture total output (source: authors' elaboration. Data from Venezuelan Central Bank)



The most important effect of the new dollar scarcity was the reduction of access to necessary raw material and other inputs. Transnational companies initially made up for that by taking up internal loans from their headquarters. Over the years, most either closed their doors or reduced their operations to a minimum, awaiting a regime change and better times. National companies that sold their products or services to transnational companies were paid in part in dollars in order to continue operations.[7]

The skyrocketing of inflation starting in 2016 hit the manufacturing sector. The steep and unilateral state-imposition of wage increases led many companies to bankruptcy. Moreover, many workers saw no reason to show up for work as wages were worthless. Strategies employed by the companies included paying the employees a portion in bolivares, another in goods, and a third in dollars that was deposited to accounts abroad. Yet, a large number of companies shut down, and the historical decline of industrial output reached a completely different dynamic (see graph). Part of the reason was also that the purchasing power of Venezuelans dropped steeply. Grupo Polar, still the main food-producing company in the country, reported that the consumption in 98 of the most common products was cut in half between 2011 and 2016.[8]

The financial sanctions had four main consequences in a sector already in decline. First, they led to difficulties in accessing credits from abroad. Banks would generally seek to avoid transacting with Venezuelans due to fear of being sanctioned. It was mainly private manufacturing companies supplying PDVSA or one of its many subsidiaries that suffered from this, but also other companies reported to have experienced reduced access to credit as a result of what Rodríguez (2019) calls "financial toxification", leading banks to stop providing services to the Venezuelan government, often citing increased reputational risk.[9] Second, it led to reductions in access to raw materials. This was partly a result of problems in accessing dollars, but it was compounded by the decline in productivity in agriculture and the fact that most of the raw material producing companies were state-owned, and directly hit by the 2017 sanctions. The oil sanctions of 2019 further closed off credits for the many companies producing goods for some PDVSA-associated company. Third, while the purchasing power of the Venezuelans had been in steep decline for years, the 2017 and later the 2019 oil sanctions limited domestic demand further as they limited governmental spending. Lastly, as the government experienced a decline in income from the hydrocarbons sector, tax pressure increased on the manufacturing and commerce sectors. By 2019, the government demanded weekly tax payments to make up for the loss of income.

To access credits, businesses tried to "triangulate", transferring payment in euros or Russian rubles, to bitcoin and from bitcoin to dollars. In this way, they continued to sell to the state with input from abroad. It was, however, estimated to add 10 percent to the cost. A consequence of the combination of increased tax pressure and increasingly randomly implemented regulations and controls, more companies decided to move all or parts of their operations into the informal sector. Some closed the formal doors, but continued to sell on an informal basis. As explained by one business chamber leader, "In the period of CADIVI, there was an 'over-billing' (*sobrefacturación*) of 20 percent by private companies, 45 percent by public companies. Today it is the other way around: now we 'under-bill' our customers, as we try to evade taxes".[10] In order to curb inflation, as of August 2018, the government allowed for private access to foreign currency. Over the coming months, the price controls that had been introduced partly to avoid private companies not transferring the advantage given to them through the currency subsidy to their customers, were de-facto lifted. However, by that point the cash flow and access to credit had become so limited that few companies could benefit from it.

Emerging sectors

The decline in economic output was due mainly to pre-existing and continuing economic policies, but worsened by sanctions. However, the deep crisis has contributed to the emergence of alternative sources of revenue. Alternative enterprises have emerged in the shadow of legality and the state has embraced

new rentier practices growing largely outside, at times even against, formal mechanisms and institutions. While gold mining has been a traditional activity in Venezuela for centuries, because of the economic downturn and later the sanctions the government has sought to scale it up. The areas of El Callao and Tumeremo have the longest history of gold extraction, historically dominated by artisanal and small-scale mining (Rosales 2019a). In the second half of last century, industrialized mining emerged in the Bolívar state area focused on iron, steel, bauxite, and aluminium. It was largely controlled by state-owned enterprises that together made up the Corporación Venezolana de Guayana (CVG), a complex of heavy metal industries geared to support the country's industrialization efforts.

In the 1990s, the government privatized the CVG affiliates and opened up the gold sector for foreign investment, especially in Las Cristinas. The opening of gold mining was characterized by legal disputes between different concessionaires and the state. Some attempts of collaboration between large-scale investors and artisanal and small-scale miners emerged but were not successful in the long term (Wotruba & Davidson 2005). Meanwhile, small-scale miners have continuously been present in these areas. At the height of the oil price in 2008, the Venezuelan government revoked the concessions of Crystallex and Gold Reserve on grounds of environmental degradation. Ultimately, in 2011, the government decreed the nationalization of the gold sector. Similar to the renegotiation process of oil contracts, the government sought to increase its participation by securing majority assets in joint ventures (República Bolivariana de Venezuela [RBV] 2011). While legal disputes between government and companies were taking place in mining concessions, irregular mining spread throughout Bolívar state. After the onset of the deep economic crisis in 2013, irregular mining expanded by the hand of armed groups that control territories.

One of the main initiatives to counteract the looming economic crisis was the creation of the Orinoco Mining Arc (OMA) by Nicolás Maduro in 2016. The OMA is a special development zone, ruled by flexible fiscal arrangements, labour, and environmental governance to encourage foreign investments. The OMA covers an area of 111,843 square kilometres, and is subdivided into units according to the strategic minerals located in their subsoil (RBV 2016). According to official sources, only 5 percent of this territory is appropriate for mineral exploitation.[11] Executive Decree Nº 2.248 stipulates the creation of the special development zone and underscores the state of exception that governs this territory. The interests of unions, indigenous communities, and other groups is subordinate to advancement of mining activities defined as being in the "general interest" of the nation (RBV 2016).

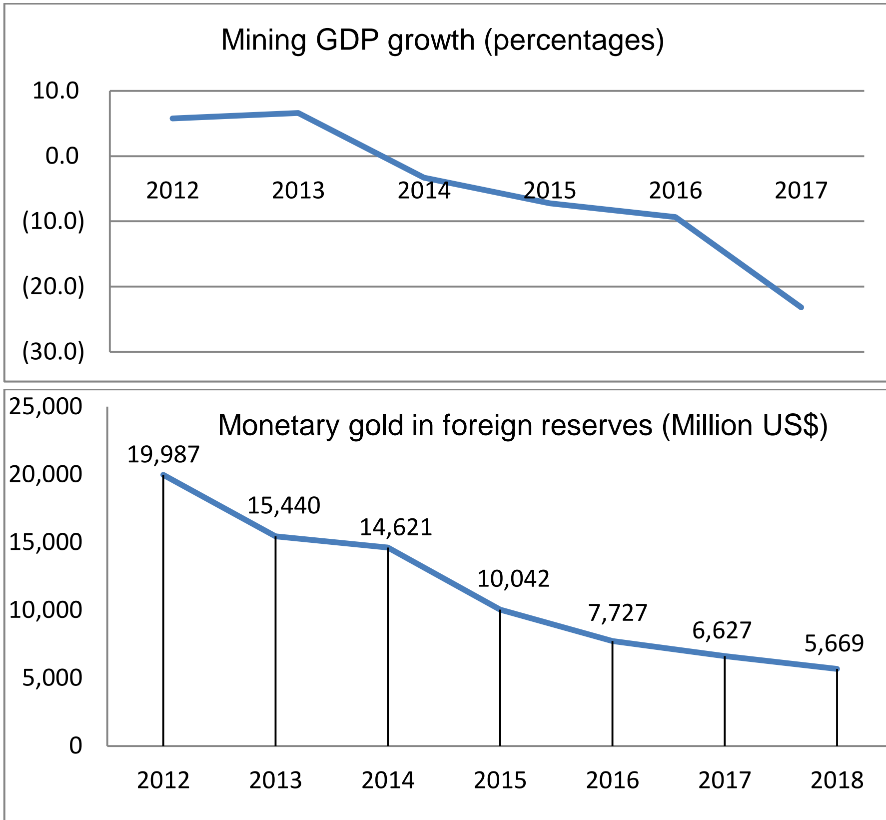
There are several governance inconsistencies in Maduro's mining policy. First, the OMA is not a prospective policy to open for extraction in the *future* as much as it is the legalization of *existing* mines and mining activities in a delineated territory, outside of national parks and protected areas. Second, actual mining taking place is not restricted to the OMA. Much of the Venezuelan

Guiana region (southeast of the Orinoco River) is affected by mining activities, including the Amazonas state, national parks, and indigenous lands. Third, rather than encouraging formal investments from foreign capital, the OMA has formalized alliances between the Maduro government, the armed forces, and a network of illegal actors that exert control over mines. Among them are the gangs known as *sindicatos*, Colombian guerrilla groups, the Ejército de Liberación Nacional (ELN), and factions of the Fuerzas Armadas Revolucionarias de Colombia (FARC-EP) (ICG 2019). The withdrawal of state control over these territories and the spread of illegal armed actors further complicate the prospects of a transition to democracy and the rule of law. Territorial disintegration and violence in the context of a criminal economy adds another layer of actors, interests, and material structures to consider.

However, the OMA has failed to attract foreign capital. In the words of the deputy minister of ecological mining development, Franklin Ramírez, "attracting foreign capital for a besieged country like Venezuela is very hard, particularly since the United States imposed sanctions on us limiting foreign institutions from making transactions with Venezuela."[12] For this reason, the government decided to focus its efforts on local investors. It has approved setting up 57 cyanidation plants with local capital, and has signed "strategic alliances" with some 700 small-mining cooperatives (RBV 2018). These alliances include traditional small-scale miners and miners subjected to exploitation by armed groups and the Venezuelan military, which is formally present in the mining business via joint-ventures. The result of this is that during the past few years, mining activities have increased. However, mining's share of GDP as well as the gold portion of the country's international reserves have remained stagnant or decreased (see graphs below). The decline suggests the continuation of smuggling or irregular sale of gold with government officials' support. Recently, the Dutch islands of Aruba, Bonaire and Curaçao (ABC) have initiated investigations on the transport of gold from Venezuela to Europe, the Middle East, and Africa through their airports (Boon & Meléndez 2019). Curaçao's gold exports have become more significant in recent years. With no proven gold reserves of its own, it is sensible to assume that Curaçao's increase in gold exports accounts for gold transported from Venezuela.

Several gold sales have taken place to Ghana, Turkey, and United Arab Emirates, although the details of the conditions of such operations remain opaque (Pons 2018; Armas 2019; Laya 2019). In the investigations advanced in the ABC islands, the joint-venture Oro Azul, whose main shareholders are former government officials, appears to be the main operator of the sales. The sanctions prohibiting the purchase of gold from Venezuela ushered a deepening of the irregular nature of gold extraction and the expansion of this sector. Nevertheless, the government's participation in the business is unaccounted for and the revenues procured are part of a growing illicit and informal economy.

Figure 5. Mining GDP and monetary gold in foreign reserves (source: authors. Data from Venezuela's Central Bank)



Another consequence of the combination of hyperinflation and financial sanctions has been the gradual abandonment of the bolívar. The use of dollars has become more notorious recently in retail, real estate, and other business. From 2013, as bitcoin prices surged cryptocurrency mining emerged as another emerging sector, and as a safeguard from inflation and a mechanism to obtain scarce foreign currency (Rosales 2019b). As business representatives explained, the use of cryptocurrencies as exchange vehicle from bolívares has been a pivotal strategy to confront monetary restrictions and sanctions. For individual miners, cryptocurrency mining became lucrative. Before 2018, miners reported making profits of at least US$ 300 per month. As it was dependent on cheap subsidized electricity, cryptocurrency mining can be understood as a new way of reaping natural resource rents. As one miner said: "we don't even enter electricity into our cost structure, it is impossible for us to calculate that when all prices hike and the electricity bill doesn't".[13]

Much like gold mining, the government followed the lead of common citizens and decided to legalize cryptocurrency mining in 2018 and launch its own cryptocurrency, backed by untapped oil reserves, the petro (RBV 2018). While

it has been difficult for the government to turn the petro into a trustworthy investment, it was used to acquire foreign loans bypassing the regular financial institutions, itself a tool that may attract funds from shady activities. The petro was born because of the financial sanctions and was launched with support of Russian technical expertise (Shuster 2018). Nevertheless, it has not picked up steam and the government attempts to use it as a tool to channel remittances from the Venezuelan diaspora.

Sanctions imposed on individuals have become incentives for the private sector as well as individuals linked to officials to use their dollars domestically. But the financial restrictions and domestic controls over currency exchange and lack of cash has also incentivized the use of cryptocurrencies. Cryptocurrency banking and other tools have become more common in Venezuela and their use is more frequent at times when the government has imposed policies restricting access to credit.[14] De facto dollarization of the economy as well as the rise in the use of cryptocurrencies ushers informalization, complicating national accounting, and transparency.

Conclusion

The case of Venezuela confirms many of the conclusions from the literature on sanctions. First, sanctions have strengthened the informalization and criminalization of the economy. As private companies have found it too costly or difficult to operate in the formal sector, they have used emerging financial tools such as cryptocurrency and informal dollarization, or simply moved into the informal sector. The state has lifted or stopped enforcement of laws and regulations in order to benefit the inflow of funds, while also increasing taxes and other burdens on economic sectors to make up for shortfall of revenues. Thereby, they have further increased private companies' incentives for informalization. In that context also criminal activities (such as smuggling, illegal goldmining or cryptocurrency mining) have thrived. Second, sanctions have been imposed largely isolated from – and even contradicting – other strategies, such as negotiations and multilateral diplomacy. This has hampered their options to succeed (see also Smilde & Ramsey's forthcoming), as they have been strongly undermined by "sanctions-busters" including Cuba, Russia, Turkey, and China. Third, although it is difficult to point to a direct causal mechanism, the imposition of sanctions has coincided with the deepening of authoritarianism, as the literature predicts. However, the case of Venezuela also provides new insights of value to the literature on sanctions. It is important to emphasize that the common distinction between targeted and comprehensive sanctions is of limited value in the case of Venezuela. Since the country's economy is so dependent on one sector and it is largely state-controlled, targeted sanctions directed towards the state may have similar effects to comprehensive sanctions. In spite of this, imports increased after the introduction of sanctions, and thus sanctions cannot be held responsible for either food scarcities or the humanitarian crisis.

The ability to increase imports is probably a result of the support provided by close allies, particularly Russia. To explain the failure of sanctions to achieve their goals, we must thus also explain the persistence of the support by key governmental allies. One main explanatory factor is obviously Venezuela's vast oil reserves that makes a partnership a long term proposition. Another factor is not discussed in the sanctions literature, namely an upheaval of the world order (see also Legler, forthcoming). The sanctions literature is mostly written in an era dominated by the United States. The failure of the sanctions against Venezuela testifies to a shift in the world order in which old means of economic warfare may be obsolete.

The Venezuela-case should also serve as a methodological warning. Most of the newer sanctions literature is based on large databases with static data. Through a more dynamic and historical approach to the evolution of different sectors, we have been able to observe how sanctions feed into existing sector dynamics. They have had the effect of further weakening the private sector, while strengthening the militarization of the economy, and the lack of transparency in transactions. The governing elite has managed to adapt to strenuous circumstances by tapping into new sectors and transferring control to key constituents, especially military officials, of productive enterprises with opportunities to reap benefits from foreign currency allocation, import allowances, and mineral extraction. This transferring of control allows increasing interdependence of military officers and the governing elite, which in the face of individual sanctions, increase the costs of defection and promotes loyalty.

Ultimately, this increased incentive for loyalty among key constituents, combined with the rise of informal and criminalized operations affect the effectiveness of what the sanctions are trying to achieve. The rise of revenues that are unaccounted for, via gold sales or through dollar transactions, allows for alternative means of survival for the government and for business and cronies. Informalization and criminalization further diminishes incentives for powerful constituents, mainly in the military, to turn against their principals especially because, in the event of a transition, their main sources of income would disappear.

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Notes

1 For more on these changes, see: Mommer 2002; Urbaneja 2013; Rosales 2018.
2 Interview with authors, 2019.
3 Interviews agri-business representatives, July 2019.
4 Interviews agri-business representatives, July 2019.
5 Interviews with business leaders in Barranquilla, Caracas, Bogotá, 2019.
6 Interview, Bogota, March 2019.
7 Interviews, Caracas, and Barranquilla, October 2018, March 2019.
8 Interviews, Caracas, July 2019.
9 Interviews, Caracas, July 2019.
10 Interviews, Caracas, July 2019.
11 Interviews senior officials, Caracas, February 2019.
12 Interview, Caracas, February 2019.
13 Interview, Caracas, February 2019.
14 Interviews with crypto-entrepreneurs, February 2019.

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