Inflation and hyperinflation in Venezuela (1970s-2016) – a post-Keynesian interpretation

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Abstract

This paper aims to explain the causes of rapidly increasing prices in Venezuela and establish whether the current episode can be considered to be of hyperinflationary nature from the post-Keynesian theoretical approach. The chosen approach highlights the role of distributive conflict, indexation mechanism, balance of payments constraint, devaluation expectations and gradual rejection of national currency in favour of foreign currency. We argue that the root cause of the precarious economic situation in Venezuela lies in the long term failure to implement structural changes, ensuring industrial diversification and lessening the dependency on oil exports. The symptoms of the Dutch disease are observed in the prolonged currency overvaluation during the high oil revenue periods. In the face of a growing external constraint, the authorities introduce severe foreign currency rationing. This in turn ignites inflation due to external bottlenecks since many sectors face supply constraints as they depend on imports of inputs of production. This leads to a regressive distribution of income, which contributes to the growing distributive conflict and fuels inflation further, as workers oppose to the lowering of real wages. Moreover, the currency rationing puts pressure on the black market for exchange as the devaluation expectations increase, leading to a parallel market devaluation-inflation spiral, which threatens to turn into hyperinflation. Nevertheless, we argue that hyperinflation, according to the proposed post-Keynesian framework (the flight to foreign currency), does not materialise despite skyrocketing prices because of the particular institutional setting – the exchange controls, which have been in place since 2003, prevent full currency substitution.

Keywords: hyperinflation, foreign exchange, distributive conflict, expectations, Dutch disease, Venezuela

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1. Introduction

In the present paper we aim to explain the reasons behind the current episode of rapidly increasing prices in Venezuela and establish whether it can be considered to be of hyperinflationary nature. The analysis is done within the post-Keynesian framework of hyperinflation developed by Marie (2014) around the case of Argentinian hyperinflation of 1989. This theoretical framework was chosen because certain commonalities, such as the importance of primary sector exports, a tendency to currency overvaluation and a negative experience with IMF reforms, can be found between the two Latin American economies. In order to determine the nature of accelerating inflation, the recent developments in the Venezuelan economy, including economic, social and political circumstances, are analysed, highlighting the role of distributive conflict, balance of payments constraint, expectations and flight from domestic currency to foreign currency, as proposed in the theoretical framework.

This research is considered important, firstly, because the phenomenon of hyperinflation has not been studied extensively within the post-Keynesians tradition. Although the episodes of hyperinflation are rare and short-lived, the mechanism behind their occurrence should be well-understood because it reveals the nature of money – the existence of a currency is based on the confidence in it, and because of its considerable consequences for the economy, such as the loss of sovereign monetary policy or adverse real effects. Secondly, although the recurring periods of high inflation since the late 1970s in Venezuela have been researched by some, the current situation, which appears to be of hyperinflationary nature, has not been studied yet within the post-Keynesian framework. Therefore, in this paper, we try to contribute to a better understanding of the developments leading to high inflation (and eventual hyperinflation) in general, and in Venezuela in particular[1].

We find that the current high inflationary environment is a result of the balance of payments problems, which can predominantly be explained by the years of real exchange rate overvaluation (the Dutch disease) and low private investment, as they led to a tightening of the balance of payments constraint. In the face of growing external constraint, foreign currency rationing was introduced, leading to shortages, output contraction and growing pressure on the parallel exchange market. As a result, the devaluation expectations augmented, causing the parallel market devaluation-inflation spiral, which threatens to turn into hyperinflation as the loss of confidence in the national currency is observed.

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[1] In case of Venezuela we argue that hyperinflation, according to the proposed post-Keynesian framework does not materialise despite skyrocketing prices because the exchange controls prevent full currency substitution.

The paper is structured as follows: section 2 provides the definition of hyperinflation in the post-Keynesian tradition and presents the theoretical framework, which is applied in the empirical part. In section 3, we analyse the macroeconomic trajectory of the Venezuelan economy since the 1970s and focus in greater detail on the developments since 1999 until the beginning of 2017. Section 4 provides an assessment of our case study against the proposed theoretical framework and section 5 concludes.

2. Theoretical framework: post-Keynesian theory of hyperinflation

The phenomenon of hyperinflation in the orthodox literature is defined as a period of very rapid inflation. Although the threshold is arbitrary, the most common criterion used by mainstream economists refers to the value proposed by Cagan (1956), where he defines hyperinflation as a monthly inflation exceeding 50 percent. The definition of hyperinflation in the post-Keynesian perspective, on the other hand, focuses on its *qualitative* characteristics and not merely on the quantitative criteria proposed by the orthodox school.

The seminal work on hyperinflation in the post-Keynesian tradition for a *closed* economy was done by Kalecki (1962, p. 275), where he defined hyperinflation as "a very rapid rise in prices and a general tendency to convert money into goods". In this framework, the role of inflation expectations plays a crucial role as the hoarding of goods and the flight from money is explained by the anticipation of continuous and rapid increases in prices. In turn, the velocity of money depends on the anticipated rate of inflation, which is based on the past inflation rates. Thus, as agents expect inflation to accelerate, they will try to dispose of their money, which accelerates the speed of circulation of money and triggers galloping inflation.

Inspired by Kalecki's work, Charles and Marie (2016, p.1) provide the following definition of hyperinflation in an *open* economy: "a very rapid rise in prices and a general tendency to convert units of domestic currency into foreign currency". It is crucial to understand that the phenomenon of hyperinflation in the adopted post-Keynesian framework does not mean high or very high inflation, but is rather associated with another important indicator: the loss of the central bank's ability to conduct monetary policy. Thus, the crucial criterion used to determine whether hyperinflation takes place is the gradual rejection of national currency and the dollarisation of the economy, where another country's currency is used in exchange for or in addition to the national currency.[2] The reason behind the substitution of national currency

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[2] On the other hand, not all dollarised economies struggle with hyperinflation.

with foreign currency in the high inflation environment can be explained by liquidity preference, which is a preference for holding highly liquid assets whose values are stable (Charles and Marie, 2016). If the domestic currency's value is not stable as a result of high domestic inflation or depreciation, foreign currency can better meet the liquidity preference. The process of currency substitution first begins when savings start being held in a foreign currency. Subsequently, the use of the dollar (or another foreign currency) as a unit of account is observed, which is followed by an increased tendency to make payments in a foreign currency. The loss of confidence in the national currency and its rejection can be observed quantitatively in the fall of the real value of the monetary base, as the ratio *M/P* falls (*M* refers to monetary base and *P* to the level of prices), which according to Orléan (2007) is an important characteristic of every hyperinflationary episode. During hyperinflation, as the prices increase faster than the money supply, the real value of the total currency in circulation desired by the economic actors falls, revealing the loss of confidence in the national currency.

In addition to divergent definitions of hyperinflation, post-Keynesian authors propose a theoretical framework which explains the mechanism behind the emergence of hyperinflation. According to the orthodox theory, hyperinflation, like inflation, is an excess demand phenomenon caused by the excessive money supply, which is exogenously controlled by the central bank (Cagan, 1956). This view corresponds to the quantity theory of money and it maintains that the excess money supply is a result of government's irresponsible fiscal policies (government issues large amounts of money to pay for its fiscal expenditure, which in turn causes inflation). This view is opposed by post-Keynesians, who believe that money is endogenous and thus reject the idea that inflation is caused by the excess supply of money (Lavoie, 2014, Chapter 8). Instead, as we explain below, in the post-Keynesian framework, inflation is a result of a conflict over the distribution of income.

2.1 The role of distributive conflict

Before discussing the role of distributive conflict in the inflation generating process, pricing theory has to be briefly explained. While neoclassical pricing theory is based on the equality of marginal cost and marginal revenue and the notion that firms are price takers, post-Keynesians argue that firms are in fact price makers in that they set prices based on their costs, to which they add a mark-up (Lavoie, 2014, Chapter 3). Since the wage bill forms the biggest part of capitalists' costs, the variation in wages will have an important impact on price changes. However, this does not imply that wages by themselves determine prices. It is a conflict over distribution of income between labour and non-labour constituents of the firm

that will trigger inflation (Lavoie, 2014, Chapter 8). Inflation will arise when workers increase nominal wages and firms increase prices in order to achieve their respective target income shares (Blecker, 2011).

The rate of inflation will then depend on the relative bargaining power of labour and the market power of firms and the discrepancy between their respective wage targets, known as the "aspiration gap" (Lavoie, 2014, p.549). Workers' ability to increase their wages will be positively correlated with their bargaining power, which is in turn determined by formal or informal institutional settings that reduce the conflict over income (Setterfield, 2007), including the level of unemployment (Rowthorn, 1977), and presence and strength of trade unions (Susjan and Lah, 1997). If workers' bargaining power increases, they will increase their wage targets, which impacts the "aspiration gap". Firms' market power, on the other hand, and thus their ability to lower their wage targets (or increase mark-up targets), is influenced by the presence of oligopolistic markets, changes in overhead costs (mark-up being elastic to different overhead costs, including gross profit claims), and the rate of capacity utilisation (if capital utilisation is low, firms tend to increase output if effective demand increases, not prices). Another important cost that can affect firms' mark-up is the financial cost or the interest rate. If the interest rate increases, firms may try to pass on the higher cost of financing their borrowing by increasing their prices (Charles and Marie, 2017). Apart from bargaining powers, wage and price setting behaviour of workers and firms will also be impacted by the changes in exchange rates. The phenomenon of *exchange rate pass-through* measures the effect of changes in exchange rate on import prices and hence domestic inflation (Lavoie, 2014, Chapter 7). Depreciation of domestic currency will usually lead to a higher cost of imported consumer goods, which reduces workers purchasing power, inducing them to demand higher nominal wages; it also increases the cost of imported materials and semi-finished products used in domestic production, prompting firms to raise prices, in order to recover profitability (Blecker, 2011).

2.2 Indexation mechanism
If inflation caused by a distributive conflict is high and volatile, agents will develop wage indexation mechanisms in order to protect their real incomes (Frenkel, 1979). The role of indexation as an inflation propagation mechanism was pointed out by many neo-structuralists who studied institutional mechanisms that maintained high inflation rates in Latin America in the 1970s/80s (Câmara, and Vernengo, 2001). As argued, for example, by Carvalho (1993), indexation practices not only maintain the current level of inflation, but can also contribute to

its acceleration. If expectations regarding future inflation change because agents anticipate an acceleration in inflation, the "inflation regime" based on indexation breaks down because the expectations of rising prices are reflected in the present level of prices. As prices increase, the current income levels fall below the acceptable level (lags in adjustments cause real incomes to fall) and agents will react by demanding higher compensation. As a result, the current system of indexed contracts can become disrupted, leading firms to anticipate increases in prices and change the way their costs and mark-ups are calculated, thus accelerating the current inflation further. Thus, an inflation regime characterised by indexation cannot be sustained because ultimately it does not solve the distributional conflict, but merely institutionalises it until an external shock hits the economy and breaks down the regime. Although indexation mechanisms are important propagators of inflation, they may not be a sufficient condition for the development of hyperinflationary dynamics (Charles and Marie, 2016).

2.3 Balance of payments, external indebtedness and expectations

In addition to distributive conflict and indexation mechanism, the effect of balance of payments dynamics, external indebtedness and exchange rate expectations have to be considered, as these aspects are especially relevant to the emergence of hyperinflation. According to Câmara and Vernengo (2001), balance of payment problems, which in Latin America had their source in the structural dependency on capital imports and a shortage of foreign reserves, led to a depreciation in the domestic currency and hence are an important part of the inflationary dynamics (the already mentioned *exchange rate pass-through* mechanism). Accordingly, any shock to the terms of trade could trigger an inflationary process, which would then be propagated by distributional conflict and indexation mechanisms.

Thus, in the structuralist approach, the open economy issues play a central role and inflation is considered to have its origin in external pressures. Primary-exporting countries tend to experience "external bottlenecks", which appear when "a country lacks the foreign exchange required to maintain its productive capacity fully employed" (Diamand, 1978, p.20). In other words, the external bottleneck appears when a country, whose productive activity depends on importing an essential input of production, faces insufficient foreign currency to import such inputs. In that case, the balance of payments and the supply side can become binding constraints.

Finally, firms' expectations regarding the future nominal exchange rate are crucial for the development of hyperinflation. As mentioned by Frankel (1979), pricing decisions of firms do not depend only on their costs, but also on the level of uncertainty, information and perceived future risks. Therefore, if the economy is indebted in a foreign currency and has a current account deficit, agents can develop anticipations of devaluation (if the exchange rates are fixed) or depreciation because it would enable the economy to improve its competitiveness and diminish its trade deficit (Marie, 2014). Such devaluation will have inflationary consequences because it will raise import prices and the value of external debt, which will in turn induce firms to increase their prices in order to protect their mark-ups. Thus, firms which anticipate devaluation can increase their prices today and consequently incite inflation. Additionally, the anticipation of devaluation can trigger a run on the reserves of foreign currency where agents try to replace as quickly as possible the domestic currency with a stable foreign currency (Marie, 2014). As a result, the domestic currency can be rejected in favour of a foreign currency. This triggers more devaluation followed by reinforced inflation and the economy enters a vicious circle of inflation and devaluation. The rejection of the use of domestic currency is the crucial component of the post-Keynesian theoretical approach to hyperinflation (Marie, 2014).

3. Venezuela – case study

In order to understand the most recent developments in the Venezuela (discussed in sections 3.4-3.6), certain structural features of the economy (3.1) as well as the economic and political events (including the development of the inflation regime) prior to Chavez's ascendency to power have to be discussed (3.2 and 3.3).

3.1 The role of oil, Dutch disease and collapse in private investment

The defining feature of the Venezuelan economy is its heavy reliance on oil rents, which has shaped its economic and social policies and influenced considerably most of the macroeconomic outcomes in the country during the past decades. The rentier nature of the Venezuelan economy means that its development and growth came to depend on volatile economic activity (oil rents), which is subject to external factors that are beyond its control, making the whole economy vulnerable (Palma, 2011).

The discovery of oil in the early 20th century enabled Venezuela to experience its golden years between the 1920s and the 1970s (Hausmann and Rodriguez, 2014). However, oil revenues started to fall in the late 1970s, which reduced considerably the sources of export

and fiscal revenues.[3] A reduction in oil production translated into a fall in the share of oil in GDP, which fell from an average of over 40 percent between 1965 and 1974 to 20 percent between 1985 and 1994, before increasing again to over 25 percent between 1995 and 2002 (Manzano, 2014). The reduction in the importance of oil was not, however, replaced by other thriving export industries. The lack of alternative export sectors (non-oil exports accounted for 7 percent of total exports in 1981) and lack of capacity to develop new export industries in response to a fall in oil revenues meant that Venezuela was incapable to recover from the adverse oil shock (Hausmann and Rodriguez, 2014). Thus, following 50 years of rapid economic expansion, the Venezuelan economy entered a long period of economic decline with per capita GDP falling by a cumulative 18.6 percent between 1978 and 2001 (Hausmann and Rodriguez, 2014).

We will argue that the main explanation behind such a dramatic shift in economic development is the phenomenon of the "resource curse" or "Dutch disease", which postulates that abundant natural resources can harm the prospects of economic development. According to Bresser-Pereira (2012), the Dutch disease is responsible for the chronic overvaluation of the resource-abundant country's exchange rate, which prevents structural change (country's industrial diversification) or can lead to premature deindustrialisation, harming the prospects of stable and sustainable economic development. The exchange rate has a tendency to overvaluation because resource-abundant countries can export their commodities, which are not reproducible by labour, at a more appreciated exchange rate ("current account equilibrium level") compared to the exchange rate that would result from exporting manufactured goods, which compete in international markets ("industrial equilibrium level") (Bresser-Pereira et al., 2014).

It can be observed that since the 1970s, Venezuela has been struggling with many symptoms of the Dutch disease. The overreliance on oil exports and incapacity to develop other export sectors and move resources to alternative industries is put forward by Hausmann and Rodriguez (2014) as one of the main factors explaining the collapse in economic growth following the late 1970s crisis. Another important factor explaining the dramatic drop in GDP growth since the 1970s is a large fall in productivity, which occurred in the same period. Puente et al. (2010) point out that the currency appreciation and protective measures such as

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[3] The fall in oil revenues was due to both lower prices (since the early 1980s) and declining oil production. According to Manzano (2014), the oil production was reduced as a result of a misguided belief formed in the 1970s that oil reserves were near exhaustion and thus limits on extraction were introduced.

trade barriers, unconditional subsidies, tax exemptions and price controls in certain non-tradable sectors led to a transfer of resources and labour from tradable and higher productivity sectors to non-tradable and lower productivity sectors. This in turn contributed to a large fall in total factor productivity between 1970 and 1983 (it fell by 40 percent) and labour productivity between 1974 and 1988, which fell by over 30 percent. Such a collapse in productivity levels had negative long-term effects on the productive capacity of Venezuela and its long-term growth.

The fall in productivity can also be explained by the collapse of private investment since the end of the 1970s (Figure 1). According to Gutiérrez and Labarca (2003), over-accumulation of capital led to declining profitability and thus discouraged investment. While the over-accumulation argument can have some merit in explaining the very rapid increase in private investment from the early 1970s and its consequent collapse in the late 1970s, it cannot explain the very low private investment levels that followed in the 1980s, 1990s and early 2000s. We will argue below that the low level of investment persisted mainly due to the overvalued real exchange rate – a consequence of the Dutch disease.

Figure 1: Private investment as a share of GDP (%), 1950-2001
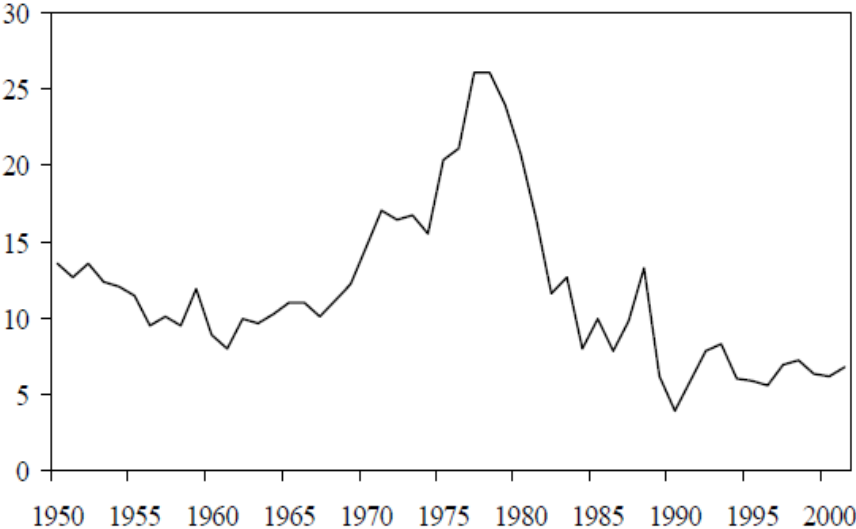
Source: Gutiérrez and Labarca (2003, p.7)

Given the importance of imports of intermediate inputs and raw materials for domestic production in Venezuela (Vera, 2017), a growth constraint based on foreign currency or external bottlenecks can arise. Consequently, Venezuela's economic growth could become limited by the balance of payments (BOP) performance: as the primary sector surplus falls, the current account deficit emerges, followed by a currency devaluation and usually a deep

recession. According to Thirlwall's law (Thirlwall, 1979), the maximum growth that the BOP-constrained countries can attain will positively depend on the income elasticity of demand for exports by foreign countries and the (exogenous) world demand growth rate, and negatively on the income elasticity of demand for imports. Bértola and Ocampo's (2012, p. 29) estimations for Venezuela show that while the income elasticity of demand for exports was higher than the income elasticity of demand for imports during different periods between 1870 and 1980, the 1980 to 2008 period was characterised by a large increase in the import elasticity, which meant that the Venezuelan economy became increasingly dependent on imports.

This dramatic deterioration in elasticities can be explained endogenously by considering the impact of the real exchange rate. As pointed out by Bresser-Pereira et al. (2014, p.7), chronic overvaluation of the exchange rate affects the productive structure of the economy by "inducing a perverse specialisation process in production of goods intense in natural resources and causing low growth due to de-industrialization". As we have already mentioned above, the currency appreciation in Venezuela contributed to the transfer of labour and resources to low productivity, non-tradable, sectors. In addition, a persistent real appreciation of the bolivar had a negative effect on private investment, as it reduced the competitiveness of Venezuelan products and negatively affected the firms' profit margins. Thus, the currency overvaluation can partly explain the falling rates of private investment since the 1980s (Figure 1) and premature deindustrialisation since the mid-1980s (Vera, 2011), which in turn impacted the income elasticities (income elasticity of demand for exports fell, while income elasticity of demand for imports increased). In this context, the continuous currency appreciation[4] (Figure 2) can explain the observed worsening of income elasticities in Venezuela since the 1980s.

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[4] No data was available for the prior 1990 period, however Palma (2008, 2011) reported that since the late 1970s the Venezuelan authorities have been struggling with excessively appreciating domestic currency as the regime of moderate inflation started in the mid-1970s and the exchange rate was kept fixed.

Figure 2: Real exchange rate, 1990-2013, 2005=100
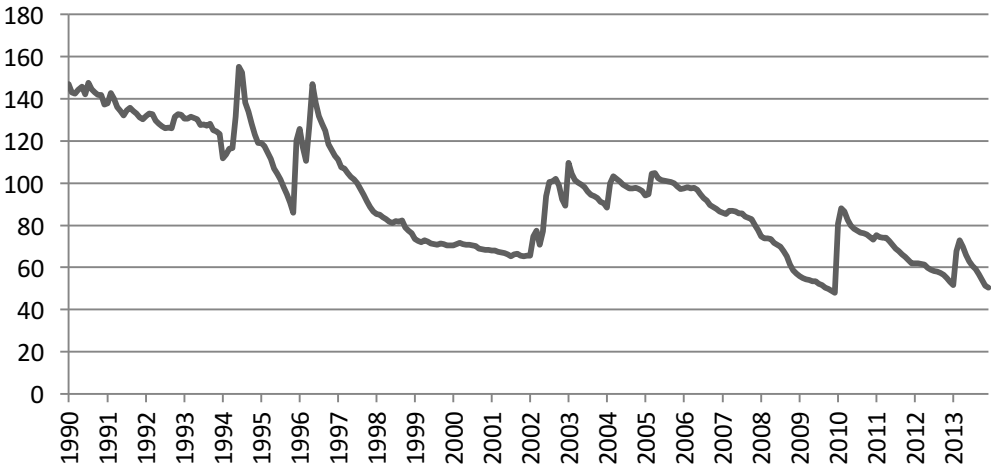
Source: ECLAC (2016)

The chronic currency overvaluation, as defined by Bresser-Pereira et al. (2014), thus negatively affected the productive structure of the Venezuelan economy and led to the tightening of the BOP constraint. The loss of competitiveness in non-oil sectors translated into an increasing dependence on imports, especially of inputs of production, which in turn has made local production dependent on the economy's capacity to import, which is constrained by the availability of international reserves. Thus, the economy's performance has become constrained by external bottlenecks, which arise every time export revenues fall or import costs increase.

3.2 Rising costs of production, exchange rate policy and distributive conflict

After decades of price stability until the mid-1970s – a sign of Venezuela's ability to contain and regulate distributive and social conflict (Di John, 2005), the economy started experiencing rising rates of inflation (Table 1) following the oil boom of the 1970s.

Table 1: Average inflation rates, 1950-1999

Period	Average inflation rate (%)	Standard deviation of average inflation rate
1950-1959	1.3	1.9
1960-1969	1.4	1.1
1970-1979	6	3.2
1980-1989	19.4	16.2
1990-1999	47.4	22

Source: Based on Guerra (2002, p. 16), author's presentation

The oil shocks of 1973 and 1979 had particular consequences for the Venezuelan economy. On the one hand, the oil windfall allowed for a rapid demand growth, which, however, had to be accommodated by an increase in imports given that many sectors in the Venezuelan economy faced supply constraints (Vera, 2016). On the other hand, higher energy prices following the oil shocks meant that the prices of most of the Venezuelan suppliers increased considerably, thus leading to higher costs of imported inputs of production for Venezuelan firms (Ortiz, 1987). In addition, Venezuelan firms faced higher labour costs following a number of pro-labour legal reforms that were introduced in 1974, such as the establishment of national minimum salary and a general increase in wages, up to 25 percent for the lowest salaries (Portillo, 2004). Moreover, the average nominal wage growth between 1973 and 1980 was well above the growth in labour productivity (Ortiz, 1987), which also contributed to rising inflation.

Thus, growing costs of production in the form of higher wages and higher input costs since 1974, and since 1979, in combination with the higher costs of financing (following the restrictive monetary policy), induced firms to raise prices in order to protect their profit margins. In addition, in August 1979 there was a partial abandonment of price controls (Portillo, 2004), which also partly contributed to an increase in inflation rates from 9.2 percent in 1979 to 20.1 percent in 1980. The 1974 pro-labour market policies and very low unemployment rate (in 1978 it was only 4.3 percent) strengthened the bargaining power of labour. Thus, when firms increased their prices, workers reacted by demanding higher nominal wages in order to preserve their purchasing power, which in turn resulted in moderate inflation rates during the 1970s that were unknown in previous decades (Table 1).

Nevertheless, the increases in inflation rates in the 1970s were minor compared to the acceleration that took place in the 1980s and 1990s following the changes in exchange rate policy and resulting distributive conflict. The exhaustion of the accumulation model based on oil revenues became increasingly evident in the 1980s (Lander, 1996), and had an important effect on price dynamics. The crisis in Venezuela that broke out in February 1983 was characterised by declining terms of trade (due to a fall in oil prices) and a massive increase in capital outflows (a result of growing expectations of devaluation). In addition, the outbreak of the 1980s Latin American debt crisis contributed to the development of pessimistic expectations regarding Venezuela's ability to repay its external debt and forced the government to devalue the bolivar (for the first time since 1973) and introduce exchange

controls with multiple exchange rates that would remain in place until 1989 (Kelly and Palma, 2004).

**Figure 3: Yearly average inflation rates (%), 1980-1998**
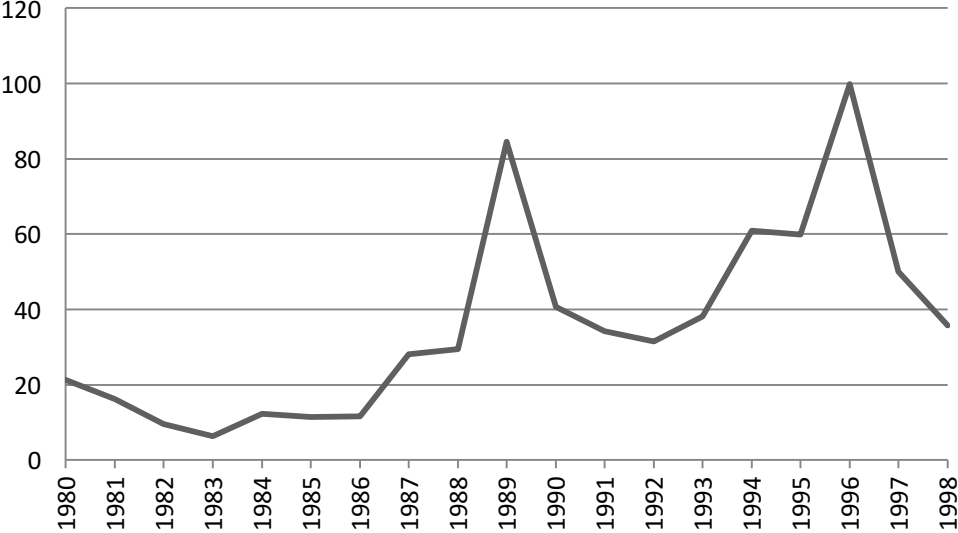
Source: IMF (2016)

The introduction of exchange controls and devaluation in 1983 had an important impact on the distributive conflict. On the one hand, it increased the cost of imported materials and intermediate goods for firms. On the other hand, the cost of imported consumer goods also increased thus reducing the purchasing power of workers. The fall in firms' profitability was not, however, counteracted by an increase in prices (in fact inflation slowed down in 1983 and increased somewhat in 1984, stabilising thereafter, Figure 3) as firms were able to reduce workers' wages in order to preserve their profit margins. The subsequent severe recession and growing unemployment reduced significantly the bargaining power of labour. As a result, the wage share in national income fell from 50.2 percent in 1983 to 39.8 percent in 1984 (Figure 4).

Although the economy recovered already in 1984, the 1986 oil price collapse worsened significantly Venezuela's external position. The terms of trade dropped considerably, leading to a large current account balance decline from a surplus of $3.3 billion to a deficit of over $2 billion. The authorities reacted by carrying out almost a 50 percent devaluation in December of 1986 (Palma, 2011), which led to a renewal of the distributive conflict and an increase in inflation rates – firms' market power remained high, as the economy grew at an average rate of 5.8 percent between 1986-1988, and workers' could demand higher wages as the

unemployment rate was falling since 1985. As a result, the inflation rate increased from 11.5 percent in 1986 to almost 30 percent in 1988 (Figure 3).

Figure 4: Percentage share of wages in GDP (%), 1982-1992
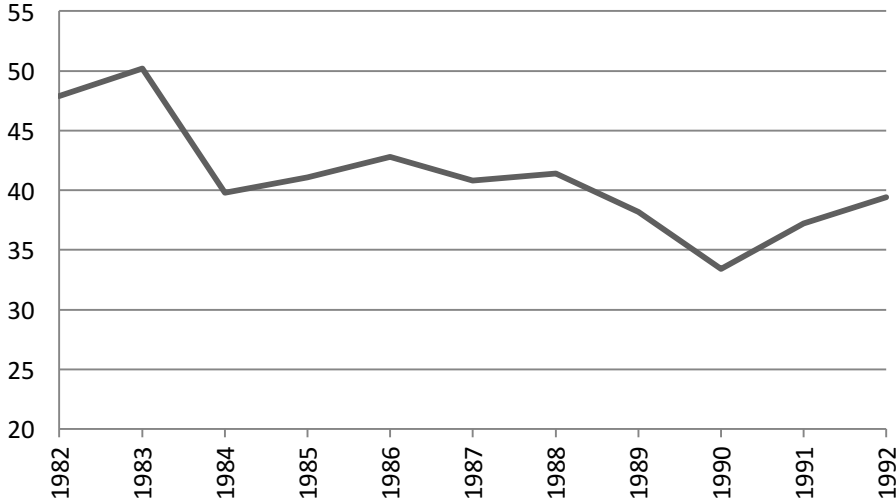
Source: Based on Lander (2006, p. 135), author's presentation

3.3 The neoliberal adjustment, banking crisis and changes in exchange rate policy

While Venezuela was able to avoid the IMF intervention during the 1983 crisis, the growing macroeconomic disequilibria in the late 1980s, prioritisation of external debt repayment[5] and growing private capital flight forced the country to finally make an adjustment in 1989 (Lander, 1996).The IMF adjustment programme in Venezuela was similar to those adopted in other Latin American countries as it aimed to re-establish macroeconomic equilibria by restricting public expenditure, eliminating price controls, liberalising trade and introducing a single floating exchange rate (Lander, 1996). As a result, in March 1989 the exchange controls were abolished and a unique floating rate equal to the free market rate of 40 bolivars (Bs) per US dollar was introduced, which implied another large devaluation (previously controlled rates were equal to 14.5 and 7.5 Bs/$) (Palma, 2008). Such a large exchange rate adjustment, combined with the elimination of subsidies and price controls, increases in prices of public services and goods, rises in nominal wages and growing costs of investment financing as the interest rates increased, had a significant impact on prices, with the inflation rate rising to 84 percent in 1989 (Palma, 2008).

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[5] Unlike many Latin American countries, Venezuela did not default on its external debt during the 1980s debt crisis.

The results of the adjustment were disastrous and led to a reduction in real wages (the wage share in total income fell from 41.4 per cent in 1988 to 33.4 per cent in 1990), higher income concentration (the Gini coefficient increased from 0.45 in 1989 to 0.48 in 1995), dramatic fall in private investment (Figure 1) and deterioration in living conditions. In addition, instead of reducing oil dependency, Venezuela saw the oil's share of total exports increase further (Lander, 1996). In this context, Vera (2009) points out that starting in the late 1980s the Venezuelan economy, traditionally heavily protected and regulated, has been experiencing premature deindustrialisation following the orthodox macroeconomic adjustment and markets liberalisation of 1989 (manufacturing employment and the share of manufacturing in GDP reached their peaks in 1988 and have been falling ever since). Although the GDP growth recovered between 1990 and 1992, the political unrest, including two unsuccessful coup attempts in 1992 and the impeachment of president Pérez in 1993, prevented stabilisation and weakened further the Venezuelan economy (Kelly and Palma, 2004).

The deterioration in the political system and the deepening political crisis, coupled with low oil prices, led to more economic problems under president Caldera, who took office in 1994. Just as the new government came to power, a financial crisis erupted in January 1994 with the bankruptcy of one of the largest banks, the Banco Latino (Kelly and Palma, 2004). With many financial institutions affected, there was large capital flight despite the central bank implementing very restrictive monetary policy. This situation forced the authorities to introduce new exchange controls with a unique fixed exchange rate in July 1994 (Palma, 2011). The severe foreign exchange restrictions (foreign exchange transactions outside the official market were illegalised) and high interest rates had a negative impact on investment and production, leading to shortages, which contributed to rapidly accelerating prices. Moreover, since the end of 1995, the pressures from the depreciating black market rate led to the formation of expectations of devaluation in the official exchange rate with firms increasing prices as they expected their future replacement costs to rise (Palma, 2008).

Thus, in the face of growing real exchange rate overvaluation (Figure 2), the authorities decided to adjust the fixed exchange rate in December 1995 by devaluing the currency from 170 Bs/$ to 290 Bs/$, which led to an increase in the annualised inflation rate from 72 percent in October 1995 to 150 percent in January 1996 (Palma, 2008). A further large devaluation was carried out in April 1996 before the exchange rate controls were scraped in July and replaced by a crawling band system.

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Table 2: Exchange rate systems in Venezuela, 1964-2017

Period	Exchange rate system	Capital controls
1964 – 1983	Fixed exchange rate, free convertibility	
1983 – 1989	Exchange controls with multiple exchange rates	X
1989 – 1994	Floating exchange rate (1992-1994, unofficial crawling peg), free convertibility	
1994 – 1996	Exchange controls with single fixed exchange rate	X
1996 – 2002	Crawling band, free convertibility	
2002 – 2003	Floating exchange rate, free convertibility	
2003 - present	Exchange controls with multiple exchange rates	X

Source: Based on Palma (2008), author's presentation

The overall effects of the liberalisation period in Venezuela left labour's bargaining power considerably weakened. The rate of unionisation fell from 26.4 percent of the workforce in 1988 to only 13.5 percent in 1995, while the rate of informality increased from the average of 39.5 percent of the non-agricultural labour force in 1980-1990 to the average of 48.5 percent in the 1994-1995 period (Di John, 2005). According to Di John (2005, p.9), the fragmentation of Venezuelan politics and growing informalisation of employment contributed to "de-institutionalisation of conflict mediation capacity in the Venezuelan polity" because it weakened the social bases of support for the political parties.

3.4 From the political unrest and economic collapse to temporary economic boom (1999-2008)

Following two decades of erratic economic policies, which failed to address the structural problems of the economy and merely postponed the dramatic adjustments that contributed to declining living standards, growing inequality and poverty, corruption and a deteriorating political system, it does not come as a surprise that Venezuelans were looking for a change in how their country was managed. According to Lampa (2016), the rise of Chavism can be partly explained by the negative and violent social reactions to Pérez's neoliberal adjustments. After a campaign full of anti-political and anti-neoliberal rhetoric, Hugo Chávez was elected president at the end of 1998 and took office in 1999.

The new administration continued the exchange policy of the crawling band, which had been in place since 1996, with an aim of using the exchange rate as a nominal anchor to keep the inflation under control (Palma, 2008). The policy was successful in bringing down the inflation rate, which fell from 23.6 percent in 1999 to 12.5 in 2001 (Table 3). However, the

global recession that started in September 2001, as well as an increase in the oil production by the non-OPEC countries meant that the price of oil started falling again at the beginning of 2002. At the same time, the growing political uncertainty in Venezuela (discussed below) caused an increase in the demand for dollars as agents started buying foreign currency as a protection mechanism in case of a looming economic and political crisis (Palma, 2008). The Central Bank of Venezuela (Banco Central de Venezuela, BCV) responded to the speculative currency attack by selling dollars to satisfy the demand and by implementing a restrictive monetary policy (the lending rate increased from 21.1 percent in February 2001 to 53.6 percent in February 2002). However, the situation became unsustainable as the central bank's international reserves contracted rapidly (they fell from $21.2 billion in January 2001 to $16.7 billion in January 2002) and the defence of the crawling band system had to be abandoned. It was replaced in February 2002 by the single floating exchange rate with free convertibility.

The first few years of Chávez's presidency were marked by a rise in political turmoil, institutional uncertainty and capital flight (Vera, 2015). The adoption of new constitution in 1999, strengthening presidential powers and promoting transformative economic policies, was met with vehement opposition from business elites, but also from trade unions, which were closely linked with the old political regime and the AD (Acción Democrática) party, now in opposition. The antagonism to the proposed radical transformation of the Venezuelan economy led to a general strike in December 2001, which culminated in a failed coup attempt in April 2002 (Lampa, 2016). Another wave of strikes between late 2002 and early 2003 paralysed oil production for a few months, which had catastrophic consequences for the economy. The GDP fell by 25 percent in the first trimester of 2003 with many businesses going bankrupt (also a result of the very restrictive monetary policy since 2002) and the situation of labour worsening further (the unemployment reached over 18 percent and the rate of informal employment increased to 55 percent) (Kelly and Palma, 2004). The adverse economic and political circumstances led to a massive capital flight, bringing about a large depreciation (the value of bolivar fell by 47 percent between December 2002 and January 2003) and a decline in international reserves (Kelly and Palma, 2004). As a result, foreign exchange controls were established followed by price controls for basic consumption goods, which set some of the prices at below cost levels, forcing certain producers out of business and reducing market power of the affected firms.[6]

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[6] According to the Gaceta Oficial Nº 37.626 , a decree introducing price controls affected the producers of 45 basic necessity goods (mainly foodstuff) and providers of 7 services.

The foreign exchange controls with a single official fixed exchange rate were implemented in February 2003 and a Commission for Foreign Currency Administration (Comisión de Administración de Divisas or CADIVI) was established to manage it. All foreign currency earned from exports or from any other source, such as tourism or remittances, had to be sold to the central bank at the official exchange rate, while obtaining the foreign currency at the official exchange rate for imports or servicing of private debt was limited and subject to approval by the commission (Palma, 2008). In addition, a parallel market was created in order to satisfy growing demand for foreign currency where the exchange rate was determined by the law of supply and demand. The foreign currency could be obtained in this parallel market by exchanging bolivar-denominated securities for dollar-denominated bonds, which were later sold in the international markets (Palma, 2016). The parallel market remained an important source of legally available foreign currency until it was illegalised in 2010.

The uncertainty, political instability of 2002 and 2003, along with the introduction of exchange and price controls seem to have negatively affected the market power of firms. The restricted allocation of dollars meant that many importers and firms that relied on imports of materials and capital for their production had to use the parallel market to obtain the foreign currency, which implied an important increase in their costs. The retailers' profit margins suffered considerably due to a fall in sales and price controls, as they were not able pass over onto consumers the higher costs that they had to pay to their suppliers (the wholesale price index was rising faster than the consumer price index (Palma, 2008). Workers' bargaining power, already weakened following the neoliberal adjustments in the previous decade, was also negatively affected by high rates of unemployment (it increased from 13.4 percent in 2001 to 18.2 percent in 2003), which translated into a fall in real wages as the increases in nominal wages that workers were able to negotiate were far below the average consumer inflation rates in 2002 and 2003.

Table 3: Nominal wage growth and inflation (%), 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Public sector	14.8	31.8	36.9	5.1	5.3	37.7	26.6	29.6	23.4	27.6
Private sector	28.7	18.0	15.2	9.6	9.6	17.0	16.2	15.1	19.4	23.7
General	25.5	20.9	20.2	8.4	8.5	22.0	19.1	19.3	20.7	25.0
CPI (average prices)	23.6	16.2	12.5	22.4	31.1	21.7	16.0	13.7	18.7	30.4

Note: CPI refers to consumer price index

Source: Venezuelan Central Bank (2015) and IMF (2016)

Thus, the currency depreciation in 2002 and an increase in the cost of imported goods following the introduction of exchange controls as well as high costs of financing (restrictive monetary policy was introduced in 2002) jeopardised the distributional arrangement that existed between profits and wages. This led to a fall in real wages and the wage share (it decreased from 38.2 in 2001 to 33.3 in 2003), and contributed to accelerating inflation, which reached 31.1 percent in 2003, as compared to 12.5 percent in 2001.

According to Vera (2015), following the political turmoil of 2002-2003, the commodity boom and increasing state control of the oil rent enabled Chávez's government to pursue an economic regime based on the prominent role of the state in the economy. The regime was characterised by going beyond market mechanisms in their regulation of production and distribution of certain goods and services, which included the adoption of alternative ownership structures and control over the means of production as well as the expropriation of strategically important industries. In addition, more discretionary powers replaced the traditional institutions governing oil revenues, which allowed for a large expansion of domestic demand. The demand-oriented strategy pursued by the government was based on two pillars: an increase in fiscal spending on social programmes and a real exchange rate appreciation. The social spending as a share of GDP (including the spending by the state-owned oil company PDVSA[7]) increased from 8.2 percent in 1998 to 20.9 in 2006 (Weisbrot and Sandoval, 2007). As for the second pillar, Lampa (2016) points out that the strategy of keeping the currency appreciated and thus making the imports cheaper was a necessary condition for the implementation of the demand-led economic growth given the structure of consumption in Venezuela, which largely depends on imports. The combination of an expansion in aggregate demand and a real exchange rate appreciation (Figure 2) led to a massive increase in the volume of imports, from $8.3 billion in 2003 to $45.1 billion in 2008. Allowing imports to grow so dramatically required careful consideration of external and internal balances as well as sizeable stock of international reserves in case of a decline in oil revenues (Lampa, 2016). The Venezuelan government managed to achieve all these objectives between 2004 and 2008 by running a large current account surplus, reducing its public debt and increasing its stock of foreign reserves.

The combination of a spectacular rise in oil prices and large fiscal spending funded by oil windfalls resulted in an impressive 5-year average (2004-2008) real GDP growth of 10.5

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[7] PDVSA's (Petróleos de Venezuela) social spending in 2006 amounted to 7.3 percent of the GDP (Weisbrot and Sandoval, 2007).

percent. Consequently, the unemployment rate fell from 18.2 percent (2003) to 7.4 percent (2008). Social and inequality indicators also improved: the poverty rate fell to 27.5 percent compared with 55.1 percent in 2003, while the Gini coefficient decreased from 0.48 (2003) to 0.41 (2008). Moreover, the inflation rate declined considerably between 2003 and 2007[8] even though real wages grew in this period (Table 3), which suggests that the aspiration gap between workers and firms diminished as firms accepted lower mark-ups during the economic boom years (assuming that the productivity growth was lower than the real wage growth).

However, such economic expansion could only last as long as oil prices remained elevated. Lack of industrial policies[9] that would diversify local productive capacity and continued weak private investment (according to World Bank data, the share of private sector gross fixed capital formation in GDP was only 9.8 percent in 2008) contributed to a further increase in oil dependency. In this context, domestic growth was increasingly constrained by world demand for oil. Thus, when the global financial and economic crisis started in the second half of 2008, leading to a fall in demand and oil prices, the Venezuelan economy was severely impacted and all policy efforts had to be redirected to deal with the threat of external and fiscal crises (Vera, 2015).

3.5 Economic roller-coaster (2009-2012)

3.5.1 External constraint and exchange rate adjustments
As the oil prices plummeted, falling from $129 per barrel in July 2008 to only $31 per barrel in December 2008 (Palma, 2008), Venezuela's GDP contracted, driven primarily by the reduction in exports and investment (Table 4). In addition, the government slowed down its fiscal expenditure, which had increased only by 1.5 percent, in order to maintain fiscal balance as the oil revenues fell by almost 40 percent in 2009 (Vera, 2015) and the current account surplus almost disappeared, falling from 10.8 percent of GDP in 2008 to only 0.2 percent in 2009.

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[8] The inflation rate increased in 2008 to 30.4 percent due to partial price liberalisation at the end of 2007 (Palma, 2011).
[9] According to Vera (2011), Chávez's administration left the industrial policies in limbo and did not undertake any important initiatives to reverse the process of premature deindustrialisation that has been taking place in Venezuela since the late 1980s. In fact, between 1999 and 2007 the growth of manufacturing GDP was the worst during the last 40 years (Vera, 2009).

Table 4: Rate of growth of GDP and demand components, 2007-2014

	2007	2008	2009	2010	2011	2012	2013	2014
GDP growth rate (%)	8.75	5.28	-3.20	-1.49	4.18	5.63	1.34	-3.89
Growth rate (%):								
Consumption	16.89	6.32	-2.92	-1.87	4.02	7.02	4.72	-3.36
Gov. Expenditure	13.75	4.78	1.54	2.14	5.92	6.26	3.34	0.64
Investment	28.16	2.19	-19.08	1.04	15.19	24.06	-13.95	-22.92
Exports	-7.55	-0.98	-13.68	-12.88	4.66	1.59	-6.17	-4.66
Imports	33.01	1.36	-19.56	-2.89	15.39	24.40	-9.69	-18.53

Source: Venezuelan Central Bank (2015), author's calculations

In the face of the economic crisis, the central bank adjusted the interest rates downwards and prompted credit allocation for manufacturing in order to stimulate economic activity. On the other hand, instead of allowing the currency to float and absorb the economic shock, the Venezuelan authorities decided to reduce the allocation of foreign exchange for import payments in order to maintain the fixed parity (Vera, 2015). This led to a significant decrease in imports (-19.6 percent) and had a negative impact on the local production, which is heavily dependent on imports of intermediate inputs and capital goods. As a result, the economic activity slowed down, despite expansive monetary policy, contributing to a reduction in the inflation rate (from 31 percent in 2008 to 25 percent in 2009).

Despite some recovery in oil prices in 2010, the recession persisted mainly because of the continued fall in exports (due to low world demand) and domestic consumption, as well as due to the lack of expansive fiscal policy (Table 4). The considerable loss of foreign reserves and a significant drop in the terms of trade in 2009 forced the authorities to finally adjust the exchange rate in January 2010 (for the first time since 2005) by introducing a two-tier exchange rate system. The exchange rate of 2.6 BsF (bolivar fuerte[10]) per US dollar devalued from 2.15 BsF/$ and was reserved for the imports of selected products, such as food, drugs, machinery and equipment, while the new rate of 4.3 BsF/$ was to be used for other imports. In addition, in June 2010, the authorities introduced another type of exchange rate equal to 5.3 BsF/$ reserved for non-urgent imports, which had to be authorised by the newly created commission called SITME (Sistema de Transacciones con Títulos en Moneda Extranjera) (Lampa, 2016). SITME effectively replaced the parallel market, which became illegal in May

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[10] The bolivar (Bs) was revalued in January 2008 and it was renamed the bolivar fuerte (BsF). The revaluation was the at the ratio of 1 to 1000 so that 1000 bolivar became equal 1 bolivar fuerte and the dollar exchange rate changed from 2,150 Bs/$ to 2.15BsF/$.

2010. While it operated by exchanging securities and thus was similar to the parallel market, the rate at which the exchange could take place was fixed and access to the system was restricted (Palma, 2016).

In January 2011, the official exchange rate (CENCOEX) was effectively devaluated when the dual exchange system was eliminated and the official exchange rate became unified to 4.3 BsF/$. At the same time, the SITME exchange rate (5.3 BsF/$) was maintained. The economy recovered (GDP growth was 4.2 percent in 2011 and 5.6 percent in 2012), however, it was mainly due to the improvement in oil prices and not to the devaluation strategy (Lampa, 2016). The increase in the value of oil exports allowed the government to increase its spending, and at the same time the investment saw a significant upturn growing 15 and 24 percent in 2011 and 2012 respectively with imports growing at the exact same pace as investment (Table 4).

According to Vera (2015), the political cycle played a key role in the economic recovery during 2011 and 2012, as Chávez was preparing to run for the third term in office. The devaluation enabled the government to lessen the fiscal gap since it was now receiving more local currency for the same amount of dollars it earned in exports (Vera, 2015). This allowed for an increase in total public spending as percentage of GDP from 22.9 percent in 2010 to 26.4 and 28.4 percent in 2011 and 2012 respectively (Vera, 2015). Massive fiscal expansion, which focused on spending on housing infrastructure and a number of social programmes directed at Chávez's core electoral base, comprised mainly of low-income households, consolidated the economic growth and enabled Chávez to win the elections.

3.5.2 Growing distributive conflict
In the second half of 2012, the external constraint became apparent again as the current account surplus fell to 0.8 percent of GDP and a drastic rationing of foreign exchange allocations to the private sector had started (Vera, 2015). While between 2010 and 2012 the inflation rate was higher than the depreciation rate in the parallel exchange market, by the end of 2012, the sharp increase in the rate of depreciation, driven by the decrease in the allocation of foreign exchange, capital flight and expectations of devaluation in the official exchange rate, seem to have been the main driver behind the acceleration in inflation rates.

Table 5: Nominal wage growth, exchange rate devaluation and inflation (%), 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Public Sector	14.3	39.7	30.0	36.4	NA	NA	NA
Private Sector	26.0	27.8	27.1	30.6	NA	NA	NA
Parallel exchange rate	5.7	2.8	99.0	299.3	153.6	393.9	293.9
CPI (end of period)	27.2	27.6	20.1	56.2	68.5	180.9	720.0[11]

Source: Venezuelan Central Bank (2015), IMF (2016) and Dollar Today (2017), author's calculations

Figure 5: Nominal exchange rates and inflation, 2010-2014
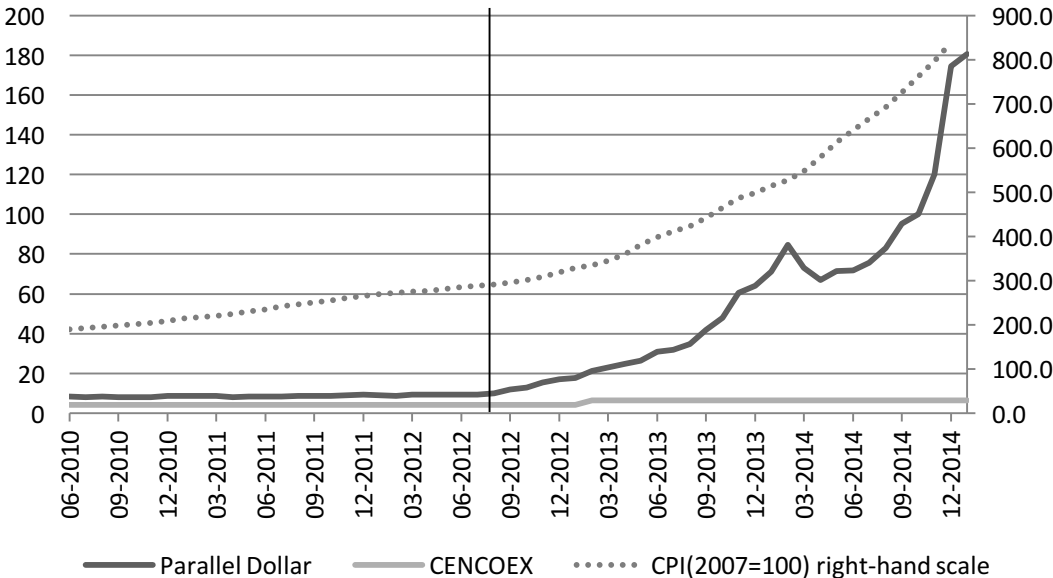
Note: CPI refers to consumer price index, CENCOEX (Centro Nacional de Comercio Exterior or the National Center for Foreign Commerce) refers to the official exchange rate administered by that government body.
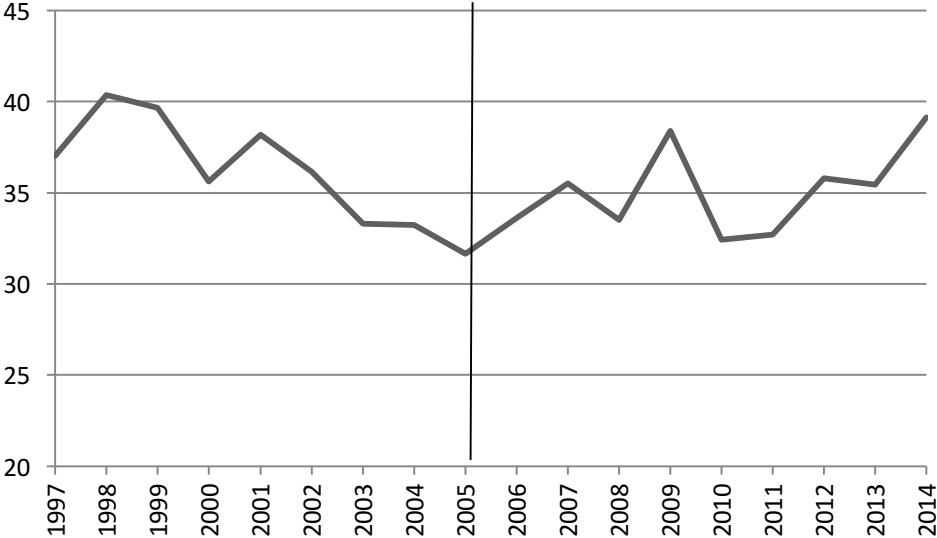
Source: Venezuelan Central Bank (2015) and Dollar Today (2017)

Thus, the inflationary dynamics between 2010 and 2012 appear to have been driven by the distributive conflict outlined in section 2.1. The growing distributive conflict can be observed in the increase in labour disputes between 2008 and 2011, which more than quadrupled in that period from 400 to 1800 per year (The Economist, 2014). Following the dramatic real wage decreases during the 2002-2003 crisis, workers' bargaining power seems to have been growing since 2005, as the wage share was increasing (Figure 6).

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[11] No inflation statistics has been published by the BCV since the end of 2015. The inflation rate for 2016 is according to the IMF estimates.

The relatively low unemployment since 2010 (it fell from 8.5 percent in 2010 to 6.7 percent in 2014) and falling rates of informal sector employment strengthened the bargaining power of workers who were able to increase their wage share from 32.4 percent in 2010 to 39.1 percent in 2014 (Figure 6). The increase in the workers' wage targets can also be explained by the increase in social spending as a share of public spending, which increased from 58.4 percent in 2005 to 70.8 percent in 2012, driven almost uniquely by the increase in spending on the social security (ECLAC, 2016). Higher unemployment benefits strengthened the bargaining power of labour and hence the workers were able to demand higher wages.

**Figure 6: Percentage share of wages in GDP at factor costs (%), 1997-2014**

Source : ECLAC (2016), and Venezuelan Central Bank (2015), author's calculations

At the same time, the output gap[12] decreased dramatically since 2003 and even turned positive during 2008-2009 and then 2012-2014 (Figure 7), which implies very high rates of capacity utilisation and hence higher market power of firms, which could charge higher prices. Moreover, the official exchange rate devaluations in 2010 and 2011 and the illegalisation of parallel exchange markets raised the cost of imported materials and intermediate goods used in production which had a negative impact on firms' profitability. It can be argued that following the increase in costs of production, firms attempted to increase their mark-ups over wages, and thus reduced the real wages by increasing prices in order to recover profitability,

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[12] The output gap measures the discrepancy between what is produced and an estimate of the output that could be produced without generating demand pressures on inflation. The concept of the output gap is based on the assumption of the existence of NAIRU (non-accelerating inflation rate unemployment) which states that whenever unemployment is below this unique rate, wage and price inflation will accelerate. However the NAIRU concept is rejected by the post-Keynesians (Lavoie, 2014, Chapter 8). Nonetheless, for the lack of data on capacity utilisation, here the output gap is used as an approximation for the rate of capacity utilisation.

which led to an increase in the aspiration gap between workers and firms and contributed to higher inflation rates. Thus, increasing bargaining power of both firms and workers seem to explain high rates of inflation that persisted between 2010 and 2012 despite the less restrictive access to foreign currency and growing imports in that period (Table 4).

Figure 7: Output gap (%), 1997-2016
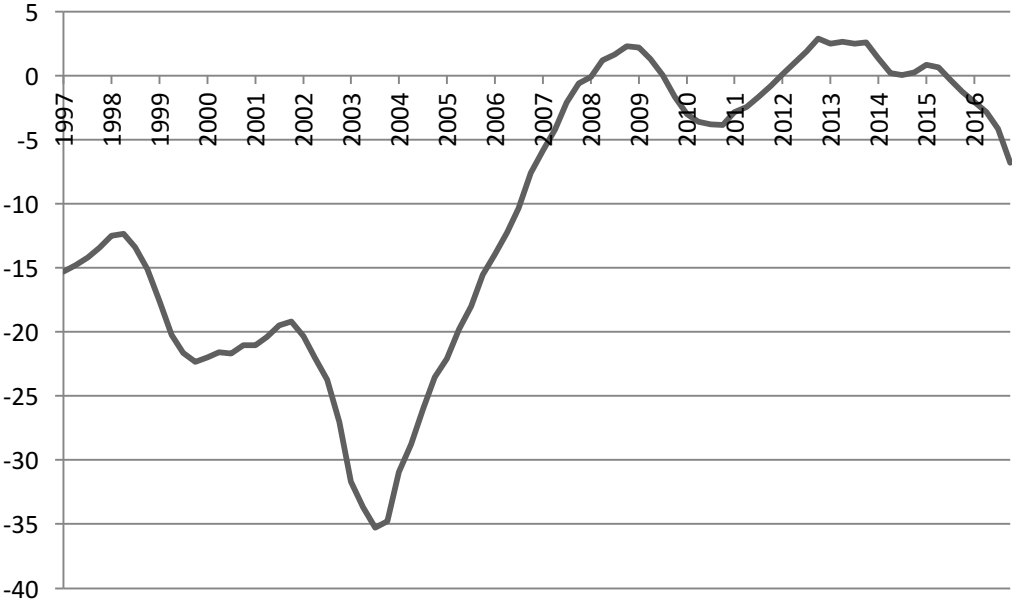
Source: DataStream (2017)

3.6 Towards transition to hyperinflation? (2013-present)

Venezuela has been struggling with double-digit inflation since the end of the 1970s, however the inflationary dynamic has been markedly accelerating since 2013. Driven primarily by the growing devaluation expectations, as the external constraint has been worsening since the end of 2012, it has increased the gap between the parallel and the official exchange rates and led to an acceleration in inflation rates. As can be seen in Table 6, the worsening of the external position, especially since 2015, is mainly due to a more than 50 percent fall in oil prices in that same year and continued low oil prices in 2016.

In addition to low oil prices, some authors point out the negative effect of capital flight on the price dynamics. According to Lampa (2016), one of the primary reasons behind growing rates of inflation has been an unprecedented capital flight since the government loosened controls on capital and increased regulation of the currency market in 2012 in advance of the upcoming elections. Since growing capital flight reflects expectations of higher inflation and higher black market dollar rates in the future, the depreciation of the parallel rate could have

been driven by the expectations of a reduction in foreign currency rationing, and hence imports, following the 2012 elections. It is possible that firms realised that the 24 percent increase in imports in 2012 was unsustainable and thus began to hoard dollars and/or convey capital abroad in anticipation of a devaluation and reduction in foreign currency provisions.

Table 6: Macroeconomic indicators, 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Average Oil Price (US$/bl)	71.4	98.2	103.4	99.5	93.7	44.7	35.1
Current Account Balance (Millions of US$)	5,585	16,342	2,586	4,604	3,598	-20,360	-11,205
Current Account Balance (% of GDP)	1.9	4.9	0.8	2.0	1.7	-7.8	-3.4
Net Financial Transfers (Millions of US$)	-19,853	-29,453	-14,681	-17,901	-12,691	8,834	NA
Terms of Trade (2000=100)	216	260	262	257	216	125	NA
Inflation, end of period consumer prices (%)	27.2	27.6	20.1	56.2	68.5	180.9	720

Source: Ministry of Energy and Petroleum (2017), IMF (2016), ECLAC (2016) and UNCTAD (2016)

Although it seems that capital flight slowed down since 2011 (Table 6), this statistic does not account for the illegal capital flight, which in case of Venezuela is known to be one of the highest in the world. The former president of the Venezuelan Central Bank admitted that in 2012 almost one third of the $59 billion authorised by CADIVI for imports, which was necessary for productive activities, were in fact embezzled by fake companies (Aporrea, 2013) and that Venezuelan firms systematically over-invoiced their dollar-valued contract (Lampa, 2016).

Therefore, since the end of 2012 the growing devaluation expectations led to a rapid increase in the black market value of dollar, which in turn fuelled inflation (Figure 5) as the firms, expecting devaluation, began to set their prices as if the domestic currency was weaker than the official exchange rate and thus increased their prices. Moreover, in light of expected devaluation, commodity hoarding became a common tactic and dollar hoarding became a more profitable form of saving when compared to the nominal funds rate which was kept very low despite high inflation rates (Lampa, 2016).

The growing gap between the black market exchange rate and the official exchange rate eventually induced the authorities to devaluate the bolivar in February 2013. The value of the nominal exchange rate fell by almost 50 percent (from 4.3 to 6.3 BsF/$), while the SITME

exchange rate was eliminated and replaced by an auction-based SICAD (Sistema Complementario para la Adquisición de Divisas). Following the devaluation, the amount of authorised foreign currency for imports was reduced as it became more expensive. Given Venezuela's dependency on imports for inputs of production (according to BCV (2013), the share of capital goods and intermediate products in total imports was 84 percent in 2012), a decrease in imports following inadequate supply of foreign exchange increased the costs of production, which in turn was passed on to consumers in the form of higher prices (inflation increased from 20.1 percent to 56.2 percent between 2012 and 2013). In 2014, the supply of foreign exchange continued to be inadequate, resulting in a large fall in imports (-18.5 percent in 2014) which had a negative effect on local production and consumption. As a result, the GDP contracted by -3.9 percent and inflation reached 68.5 percent in 2014.

As the current account deficit reached 7.8 percent of the GDP in 2015, the government decided to introduce yet again new types of exchange rates. In 2015, a floating rate SIMADI (Sistema Marginal de Divisas) was introduced where the exchange rate was supposed to float according to the supply and demand; its initial value was equal to 170 BsF/$, which at the time was almost the same as the black market rate. As the external situation did not improve in 2016, and the gap between the parallel dollar rate and the official rate (CENCOEX) increased to over 10,000 percent (Figure 8), the authorities changed again their exchange rate system. The official exchange rate used for importing priority products CENCOEX was replaced by a new exchange rate DIPRO (Sistema de Divisas Protegidas), also to be used only for priority imports, and whose value was set at 10 BsF/$. At the same time, the SIMADI was replaced by the DICOM (Sistema de Divisas Complementarias), which is a controlled floating exchange rate to be used only for certain foreign currency needs, such as foreign travels, credit card payments and exchanging dollars obtained from exports to bolivars.

Figure 8: Nominal exchange rates, 2015-2017
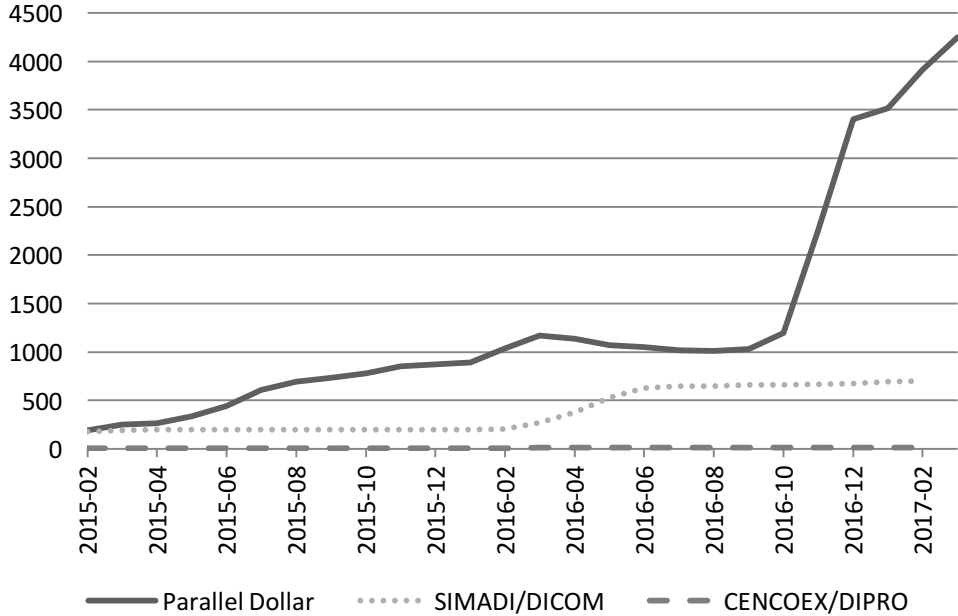
Note: SIMADI (Sistema Marginal de Divisas), DICOM (Sistema de Divisas Complementarias - complementary exchange rate), CENCOEX (Centro Nacional de Comercio Exterior or the National Center for Foreign Commerce), DIPRO (Sistema de Divisas Protegidas – protected exchange rate)

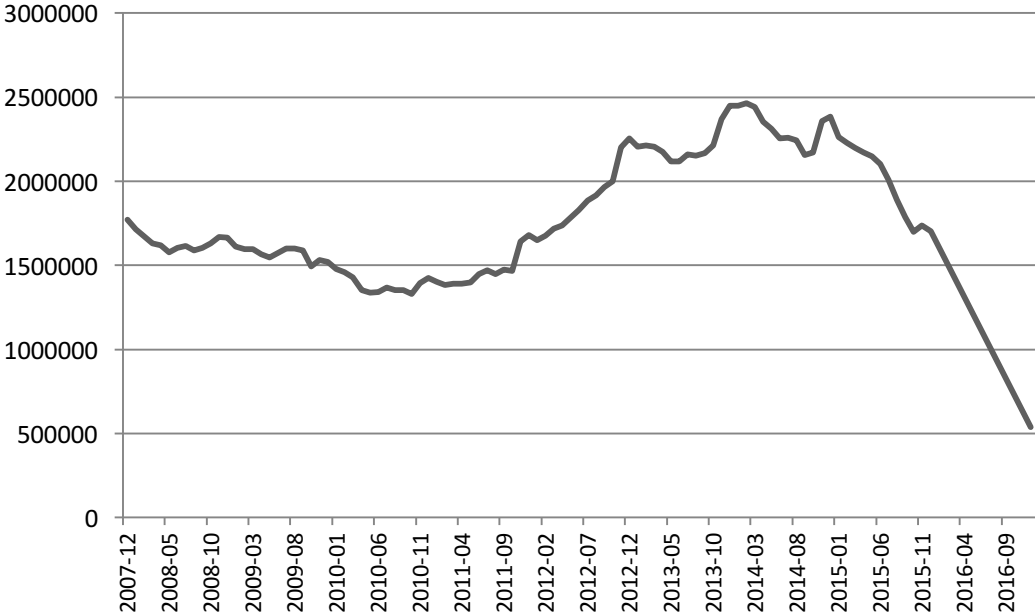Source: Venezuelan Central Bank (2017) and Dollar Today (2017)

Thus, over the last few years, the government's strategy to correct the growing external imbalance has been severe foreign exchange rationing, which has generated significant shortages in intermediate inputs and consumer goods thus contributing to the output contraction and to accelerating inflation (Vera, 2016). Moreover, the currency rationing has been putting increasing pressure on the parallel exchange rate market (Figure 8), whose "exponential" behaviour during the last few months of 2016 and the beginning of 2017 can suggest that further official exchange rate devaluations are expected.

At the same time, Venezuela's international reserves have been declining since 2008, and according to Vera (2017), by the end of 2012 the country had almost completely depleted the liquid level of its reserves. In addition, the growing external debt service and debt servicing ratio to total exports have been raising concerns among international investors and limiting Venezuela's access to external financing. Moody's Investors Service downgraded Venezuela's debt at the beginning of 2015 from Caa1 to Caa3 (Vera, 2016) and in March 2016 it changed its outlook from stable to negative. While between 2008 and 2012 the debt service accounted for 20 percent or less of total exports, its value started to increase rapidly since 2014 as the oil prices plummeted (Vera, 2017). Moreover, since 2010 the state-own oil

company PDVSA has been responsible for an important part of the external debt. The growing debt of the oil company is due to the increasing role of the government's social spending programmes. According to Vera (2015), the state-owned oil company was used by the government to finance social development programs, food imports, infrastructural programs and also presidential campaigns. Moreover, the government has been using the PDVSA to monetise its budget deficit by borrowing on the bond market using the oil company via its American subsidiary Citgo Holding, as the latter has access to lower borrowing rates (Albert and Jude, 2016). Thus, social spending and low oil prices in recent years have negatively impacted PDVSA's finances and contributed to underinvestment, leading to lower production and further worsening of its debt position. At the same time, PDVSA benefited from a law passed in 2009 that allowed the central bank to purchase the bonds issued by the oil company, which enabled it to close its financing gap in the domestic currency (Vera, 2015). According to Vera (2015), this led to an expansion in the monetary base (Figure 9) and an increase in the liquidity in the Venezuelan economy.

To summarise, the current skyrocketing inflation rates are a result of the balance of payments problems, which have been troubling Venezuela since the decline in oil prices at the end of 2014. However, the root cause of the current economic ills lies in the years of inadequate exchange rate policies, which allowed for the bolivar's excessive appreciation and in turn prevented the necessary structural changes that would ensure industrial diversification and decrease the dependency on oil exports. In the face of growing external constraints, current account deficits and increasing external debt, the authorities introduced foreign currency rationing, which led to shortages and output contraction and also put pressure on the black market for exchange as the devaluation expectations augmented. As a result, the Venezuelan economy has been experiencing a parallel market devaluation-inflation spiral, which threatens to turn into hyperinflation as the real value of the monetary base has been declining rapidly since 2015, suggesting a loss of confidence in the national currency (Figure 9).

Figure 9: Real value of the monetary base (M2), millions of bolivars, 2007-2016
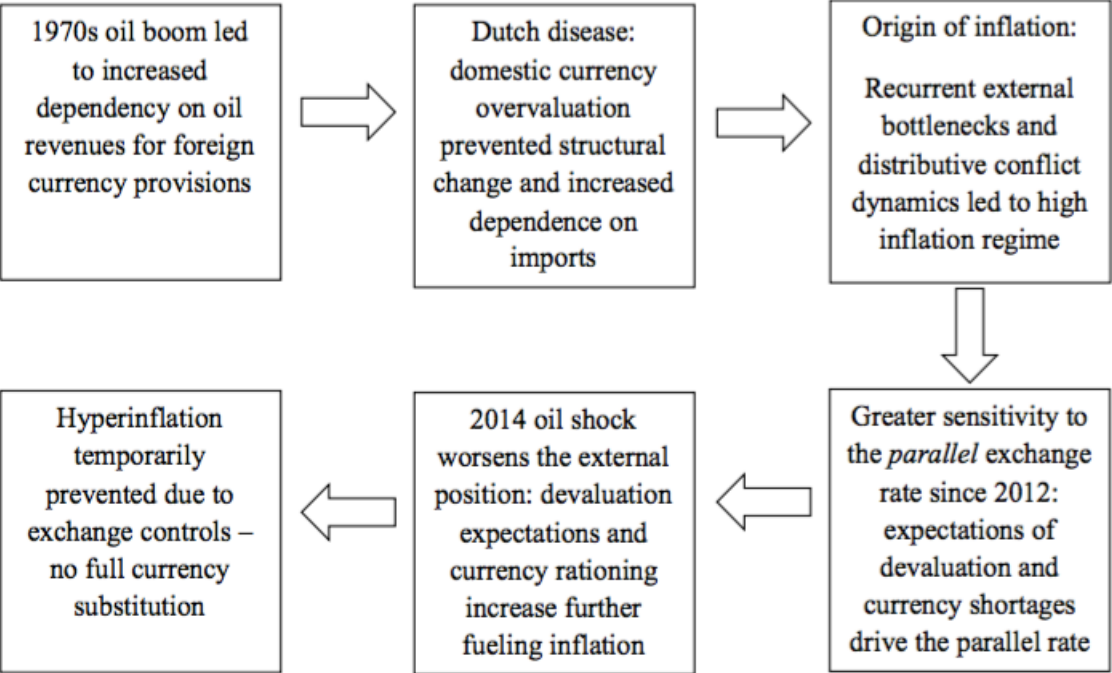
According to our framework, falling confidence in the national currency should lead to gradual dollarisation. Although Venezuela has had strict foreign exchange controls since 2003, and the parallel market for foreign currency has been illegal since 2010, it is possible to observe a certain degree of dollarisation of the economy. Given the high rates of inflation, it can be assumed that the dollar has taken over the function of a store of value. According to Lampa (2016), between 1997 and 2011, the government and the PDVSA issued $60 billion worth of dollar-denominated bonds thus incentivising the dollarisation of savings. Moreover, in the case of certain goods, the dollar serves *de facto* the role of the unit of account as the firms that import goods have their sales catalogues denominated in dollars, which means that local currency prices fluctuate according to the daily black market exchange rate quotations. Furthermore, the prices in the black market for goods also vary in accordance with the daily parallel dollar rate. The situation in Venezuela is thus similar to that of Germany during the 1923 hyperinflation; as it was put by Kaldor (1982, p. 61): "[…] in Germany in September 1923, everything from newspapers to railway tickets and to daily wages was 'indexed' to the daily market price of the US dollar. […] If the dollar remained unchanged for a day, prices and wages … remained stable for the day". Thus, the only function of money that the bolivar is currently serving is the medium of payment. Although Venezuela is presently experiencing rapidly increasing prices and the confidence in the national currency is falling, hyperinflation

is prevented by the institutional settings – exchange controls – which means that a full flight to foreign currency has not taken place as yet.

4. Assessment

Given our analysis in section 3, we can propose the following causal sequence:

1970s oil boom led to increased dependency on oil revenues for foreign currency provisions	⇒	Dutch disease: domestic currency overvaluation prevented structural change and increased dependence on imports	⇒	Origin of inflation: Recurrent external bottlenecks and distributive conflict dynamics led to high inflation regime
Hyperinflation temporarily prevented due to exchange controls – no full currency substitution	⇐	2014 oil shock worsens the external position: devaluation expectations and currency rationing increase further fueling inflation	⇐	Greater sensitivity to the *parallel* exchange rate since 2012: expectations of devaluation and currency shortages drive the parallel rate

The above presented sequence for the Venezuelan case is largely in line with the post-Keynesian theoretical framework presented in section 2, however, certain particularities are observed. Firstly, no formal indexation mechanisms were introduced in Venezuela and yet the regime of high inflation was continuously present since the late 1970s. Secondly, the exchange controls since 2003 led to the growing importance of the parallel exchange market and since 2012 the changes in the parallel dollar market became more significant than the changes in the official exchange rate in fuelling the inflation rates as they were reflecting devaluation expectations. Finally, despite accelerating prices, a full rejection of domestic currency is not observed (although the confidence in the bolivar is falling) because the exchange controls are preventing flight to the foreign currency.

5. Conclusions

In this paper we analysed important economic, but also social and political, events that led to rapidly accelerating inflation rates in Venezuela and tried to establish whether the current high inflation can be considered hyperinflation from the post-Keynesian theoretical perspective. We found that high inflation levels in Venezuela since the 1970s can be explained by the combination of external bottlenecks and distributive conflicts, which are usually sparked by currency devaluations. The structural dependency on oil revenues, as a source of foreign currency necessary for imports of intermediate inputs and capital goods for production (as well as consumption goods), meant that Venezuela has been experiencing accelerating prices every time production was constrained by the insufficiency of foreign currency and the BOP constraint was hit. This in turn induced devaluation pressures and led to prices hikes (due to higher costs), which fuelled the inflation further as workers opposed to falling purchasing power and demanded higher nominal wages, inciting a devaluation-inflation spiral. While this dynamic has been present since the 1970s, what sparked the most recent inflationary episode was the dramatic increase in the parallel exchange rate at the end of 2012, driven by the devaluation expectations, which eventually determined the devaluations of the official exchange rate. In addition, an external shock coming from a massive fall in oil prices at the end of 2014 worsened the external position and fuelled further devaluation expectations, leading to a rapid increase in the value of the black market rate for dollar. This in turn has translated into accelerating rates of inflation as the authorities reduced the provision of foreign currency.

While the confidence in the bolivar has been markedly decreasing since mid-2015, the currency substitution is prevented by the exchange controls. Although savings are held in dollars, and for certain goods and black market goods the dollar is used as the unit of account, the payments are still done in the local currency. Thus, while we can say that to a certain degree there is a flight to foreign currency, which is a defining feature of hyperinflation, it is evident that the domestic currency has not been completely rejected. The particularity of Venezuela's exchange policy means that classifying the current period of rapidly accelerating inflation rates as hyperinflation from the post-Keynesian perspective remains ambiguous, as exchange controls prevent the full substitution of the bolivar with the US dollar. If the government decides to remove the currency controls or/and let the official exchange rate float, we could expect a run to the foreign currency and a full substitution of the domestic currency with the dollar.

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