

Populism-What Next? A First Look at Populist Walking-Stick Economies

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Abstract

The recent rise in populist governments has led to much work on the question "why now?". Our work takes the next logical step by asking "what next?". That is, given populists in power, what should we expect to be the economic consequences of populist regimes. To answer this, we characterize populist economic policies and argue that they generate an inverted J-curve effect, which we term a "walking stick" effect, in macro-level data, specifically GDP and inflation. To test this claim, we construct a unique data set on 13 Latin American countries from 1976 to 2012 and incorporate more modern and nuanced definitions of populism. Our contribution is both to test the walking stick claim and to present a novel dataset for studying the economic effects of populism. We find compelling evidence for our walking stick hypothesis in both GDP per capita and inflation, suggesting that the answer to "what next" is that we will see on average short-run booms followed by declines under populist regimes.

JEL-Codes: E390, E600, H110, N160.

Keywords: populism, Latin America, business cycle, political economy.

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Introduction and Motivation

With the rise of populist leaders and parties in both Europe and the United States in recent years, populism has become an increasingly hot topic of research. That populism began to rise now comes as something of a surprise and the question of "why now" dominates much of the new populism research (Inglehart and Norris 2016, Judis 2016, and Rodrik 2018). While understanding the causes of rising populism, and hence "why now", is important to understand, we are more interested in understanding where the recent rise in populism is leading and ask instead, "what's next?".

Our work focuses on the economic aspects of populism and makes three contributions to this growing area of research. First, we focus on what is next versus how we got here. In particular, we predict what we call a "walking stick" pattern in macro data during populist regimes. Second, we test whether economic growth and inflation under populist regimes exhibit our "walking stick" pattern or not. Third, we contribute a novel data set on populist regimes that we employ here to test the walking stick hypothesis. There are many past examples of populist regimes in a range of countries and times from which to draw lessons.

In addressing, "what next?" we draw on the fact that there are many past examples of populist regimes in a range of countries and times from which to draw lessons. In particular, we argue that effective populist governments should generate a "walking stick" pattern in key macroeconomic time series. In contrast to the well-known "J-curve" of increased long-term economic growth which is generated from a short run slowdown (often due to temporary austerity measures to reobtain macro-equilibrium), we claim that populist regimes employ a bundle of policies that generate the opposite effect in the data, an inverted J-curve, or a "walking stick". That is, they generate a temporary expansion followed by a slowdown.

While there was some literature on the theory of populist "walking sticks", a pattern sometimes referred to as "the populist cycle" (Sachs 1989), past work relied on anecdotal evidence and generally lacked a formal framework to take this to data more rigorously. We present a novel database on populist presidents in Latin America and use it to test for the presence of "walking sticks". The dataset is structured as a cross-sectional and times series database of 13 Latin American economies from 1976 to 2012 that incorporates our current understanding and definitions of populism and populist regimes.

To the best of our knowledge, this paper is the first to test the walking stick hypothesis for the broadest definition of populism and to utilize the subset of populists to check the robustness of our results. We find compelling evidence that populist regimes generate a "walking stick" in GDP per capita and consumer price inflation.

Literature Review on Populism

Throughout the 20th century, most regimes or political rules that were labeled populist were left-leaning or openly socialist. Today most regimes being called populist are right-leaning or openly nationalist. For both to be meaningfully called populist, there must be common elements in their political ideologies, worldviews and thus in the types of political and economic policies they favor.

We focus on two characteristics common enough to all populists/populist regimes¹ to define them as such. The first common characteristic is a worldview that is shared by all regimes generally recognized as populist and is generally the basis of their rhetorical campaigns. It is that populists define the world in terms of "us versus them" and claim to be the true representatives of "us". Once the "us" is defined as the inside group, the worldview is completed by identifying "them" as an outside group. The outside group is generally an elite group or class that exploits or attempts to exploit the inside group (Albertazzi and McDonnell, 2008).

In this world, the populist argues that they understand the true public will ("volonté generale"), generally uniquely defined in the context of the country in question (Houle and Kenny 2016, Kaltwasser and Taggart 2016), and defend the people against the elite outsiders. This can be defending the nation against foreigners but is more often a cultural, class or political distinction that can but need not, cross national boundaries. For example, a left-leaning populist might defend the workers against elite capitalists while a right-leaning populist might defend the native population against migrant workers or any such combination of groups posing a threat to "the people", or "us".

An interesting corollary also seems to follow, likely because "the people" are almost always defined in contradistinction to elites. The corollary is that populists generally do not like or trust elites and that includes elite intellectuals, policy advocates and the like. As a result, populists tend to display a distrust of expertise, instead preferring simple relationships and simple solutions to problems. This matters for our research because it means that populists do not necessarily adhere to an intellectually coherent package of policies, preferring to keep it simple and "do what works". We hope that part of our contribution is to help circumscribe populist economic policies in a meaningful way. We call them populist policy bundles.

A second common characteristic is that their political and economic policies offer short-term "protection" (Guiso et al. 2017) from perceived systemic insecurity. In the economic sphere, populists tend to promote distributive policies along with expansionary fiscal and protectionist trade policies without regard for macroeconomic constraints (Sachs 1989, Dornbusch and Edwards 1991, Guiso et al. 2017). In the political sphere, populists generally vow to abate migration flows and consolidate power to represent the true public will more effectively (Houle and Kenny 2016, Rodrik 2018, Sáenz and Bjørnskov 2018).

Most of the current literature on populism tries to explain why and when populism emerges. Doyle (2011) focuses on Latin America and, using cross-section panel data from 1996-2008, finds that distrust in public institutions drives the persistent success of populists that cast themselves as outsiders. Guiso et al. (2017) try to predict when populists emerge by modeling the demand for and supply of populism using voting data from European countries. The demand for populism seems to be based on "fear or enthusiasm" and is often driven by turnout incentives, economic insecurity, distrust, and negative sentiments towards outsiders (e.g., migrants, global financial elite, and others). The supply of populism tends to occur whenever established parties are unable to address a systemic economic or cultural security crisis.

¹ We generally blur the distinction between populist leaders and populist regimes since we are only interested in studying populists who came to power and ran a government. Obviously there can be populist leaders who don't run a government but they won't appear in our data set because they also have no or little influence on policy and our interest is in studying the economic effects of populist policies. So we will generally refer to "populists" as a catch all for the leader and the governmental regime. When a more subtle distinction is important, we will make it.

Other studies analyze whether populism emerges after salient economic crises. Funke et al. (2016) find that financial crises lead to an increase in voter share for far-right parties. Stankov (2018) analyzes the effect of severe economic recessions on populism in Latin America and Europe and finds that the levels of inflation and GDP per capita after a crisis increase populist electoral support. Rodrik (2018) indicates that globalization shocks, in general, are associated with increases in populist parties all around the world. He distinguishes between European populism for which international migration is salient and Latin American populism for which distributive issues are salient.

The logical question from the emergence of populism is what comes next? This depends on what populists supply as "short-term" protections and as policies to achieve economic expansion.² Sachs (1989) explains that populists faced with high-income inequality in Latin America engage in expansionary distributive policies which lead to a balance of payment crises and inflation. Dornbusch and Edwards (1991) argue that the initial conditions Latin American populists faced was a depressed or stagnating economy coupled with income inequality. This initial condition is what leads populists to engage in redistributive policies and to generate quick economic growth that may violate the government's intertemporal budget constraint. Most recently, Dovis et al. (2016) model populist cycles of fiscal policy by introducing a tradeoff between the level of inequality and the level of external debt that is necessary to finance redistribution.

Several papers assess the political and economic consequences of populism. For political consequences, Houle and Kenny (2016) look at the effect Latin American populists had on democratic quality between 1982 and 2012. They found that populist governments tended to erode institutions, measured as a decrease in the rule of law, constraints on the executive, and independence of the judiciary. More generally, Huber and Schimpf (2016) found that populist governments hurt democratic quality, while populists in opposition had a positive effect.

Economic consequences have been analyzed by Bittencourt (2012b) who tests the "populist view on inflation" to examine whether the democratization process of four Latin American countries (Argentina, Bolivia, Brazil, Peru) in the late 1980s and early 1990s led to hyperinflation episodes. Rode and Revuelta (2015) show that populists erode economic institutions, as measured in the Economic Freedom of the World Index. Grier and Maynard (2015), evaluate Hugo Chavez economic performance by comparing it to a synthetic control. Their analysis shows that the increase of real per capita income is higher in the synthetic control and conclude that the economic contributions of Hugo Chavez were adverse.

Our paper is best viewed as continuing this line of work. We argue that a bundle of preferred populist economic policies generates a "walking stick" pattern in GDP and increases of inflation to high levels under a populist regime. Our contribution to the literature is that we test for this pattern over several specific populist regimes in Latin America from 1995-2012. To do this, however, we must first define populist economic policies and their effects in an empirically meaningful way.

² Some studies show that even initially non-populist governments can offer populist policies in an environment where "us" versus "them" rhetoric is prevalent and rent-seeking opportunities for politicians occur. Acemoglou et al. (2012) model the interaction between the ideological "us" versus "them" rhetoric and offered policies. Their model shows that even incumbent politicians may choose populist policies to signal to the voter that they are not beholden to corrupt elite. In a similar vein, Matsen et al. (2014) argue that a rent-seeking incumbent president in an oil-rich economy will tend to offer oil rents to buy political support at unsustainable levels.

The Populist Policy Bundle and The Walking Sick hypothesis

Macroeconomists often use a J-curve to describe the pattern of economic growth associated with a positive but painful reform such as a fiscal austerity program.³ When austerity is introduced in a heavily indebted economy running large and persistent government budget deficits, the government tightens its fiscal belt by engaging in various policy reforms such as tax hikes and government spending cuts to generate a budget surplus and pay off debt. Economies undergoing such austerity programs generally experience a recession upon impact but eventually return to positive, and usually improved, GDP growth which generates a J-curve pattern in GDP data (Clinton et al. 2011).

It is worth noting that the most common reason governments impose austerity programs is to "regain macro balance" which usually means that the government is making the adjustments necessary to ensure intertemporal budget constraints are met. Politically it is often done because the economy has gotten so bad that either the political will emerges to take such action or an external agent like the International Monetary Fund has made austerity a condition for loans.

The fiscal restriction itself will usually cause a recession (the initial dip in the J-curve) but, when combined with quality reform, the economy emerges from the recession stronger and unleashes from the chains of crushing debt. It is worth noting that the policy-generated dip contains the elements that *cause* the subsequent boom.

The J-curve tends to be observed during the regime implementing it. This timing is likely intentional. If the recession takes too long, the government may be ousted in the coming election. This also explains the observation that there is a general reluctance on the part of democratic governments to initiate reforms (Williamson 1993) but, once implemented, there is a strong incentive to minimize the length of the painful period in the hope that growth will return before the next election.

The "walking stick"⁴ is an inverted J-curve in every sense. It is a short-run boom, driven by policy changes, that themselves sow the seeds of the economy's subsequent decline. The walking stick generally results from generating a temporary increase in output resulting from increased government spending, cutting taxes, or other demand-side stimuli such as expansionary monetary policy. In addition, economic freedom is reduced (Rode and Revuelta 2015).

In a macroeconomic framework, Sachs (1989) shows that monetary expansion in an economy with fixed exchange rates and capital controls leads to a short-run domestic demand expansion, real exchange rate appreciation, and higher real wages. In the long-run, however, this monetary expansion leads to trade deficits and a balance of payment crisis which in turn leads to a depreciation of the real exchange rate and a decline in real wages. Sachs considers this a common policy failure of Latin American populist regimes and terms it "the populist policy cycle" (Sachs 1989, pp. 11-14).

In Dornbusch and Edwards (1991), the walking stick has three distinct phases. The first phase exhibits growth in output, wages, and employment without problematic inflation. During the second phase, the economy runs into bottlenecks due to a lack of foreign reserves and low inventory. Populists generally

³ Note that we use the effects of an austerity package as an example that most macroeconomics will be familiar with and find uncontroversial. That being said, in terms of the modern research on this topic led by Alberto Alesina (see Alesina, Favero, and Giavazzi, 2018), our example better fits tax-based austerity than expenditure-based.

⁴ The "walking stick" may be a new term – at least we haven't heard it before – but it should be a familiar concept.

respond by implementing exchange rate controls and various industry protectionary measures like price controls and subsidies. The third phase is characterized by critical shortages, accelerating inflation, increasing debt, and capital flight. Populist regimes tend to collapse during this phase leading to a new government that implements orthodox stabilization policies with the help of the IMF (Dornbusch and Edwards, 1991, pp. 11-12).

In Dovis et al. (2016), the downturn results because the government cannot commit to a policy. When external debt becomes too high (and current governments default on their debt), future governments have to consolidate debt by implementing reforms, which increases inequality according to the authors. In their model populist cycles emerge due to a continuous change between two regimes: those that induce J-Curves and those that induce walking sticks.

The specific mechanisms for the downturn may differ for each populist regime. The premise of this paper is that, in general, there are enough common elements to meaningfully think of policy bundles that populists employ and that these policy bundles lead to a long-run decline in GDP growth and an increase in inflation since populists ignore intertemporal constraints.

J-Curve		Walking Stick			
Short-run (SR) bust that generates accelerated		Short-run (SR) boom that generates decelerated			
long-run (LR) growth	long-run (LR) growth	(accelerated decline)		
Common Causes of SR	Effects That Cause LR	Common Causes of SR	Effects That Cause LR		
Bust	Accelerated Growth	Boom	Decelerated Growth		
Fiscal contraction	Reduced debt- overhang (more fiscal freedom and lower future fiscal burden)	Fiscal expansion	Less future fiscal freedom, higher debt burden		
Monetary Contraction	Reduced high or medium inflation (and lower associated costs of inflation)	Monetary expansion	Higher inflation and associated costs of inflation		
Common Correla	ted Policy Effects	Common Correlated Policy Effects			
Privatization and trade liberalization	Reallocation of economic resources to higher valued use (improved economic efficiency)	Nationalization and trade restrictions	Reallocation of economic resources away from higher valued uses (reduced economic efficiency)		

TABLE 1: J-Curve and Walking Stick

Source: Authors' own construction.

Table 1 makes clear the logical connection between the J-curve and the walking stick for an economy. They are not just symmetrical graphically but are truly inversions of each other because the same economic relations underlie them both.

One of the clearest most cited examples of a populist regime that both employed these policies and generated a walking stick is the first Administration of Alan Garcia, Peru 1985-1990. His policy mix contained increases in public sector wages along with price and wage controls to combat inflation. Initially, real GDP per capita increased by 8.9 points in 1986 and inflation fell from triple digits to double digits.

However, over the boom period, the real exchange rate appreciated, the public-sector deficit increased, and the trade balance switched from an initial surplus to a deficit. While growth remained high throughout 1987, in 1988, the foreign exchange reserves were depleted and the economy subsequently collapsed in 1989 (Sachs 1989, Lago 1991).

The walking stick during under Garcia's rule is shown in Figure 1 to illustrate the pattern in the data we attempt to identify. The walking stick per se is seen in the "GDP growth %", left-side panel of Figure 1. The stimulus-driven expansion is seen in the early periods from 1985 to 1987/88, followed by a decline in growth rates which eventually turn negative for the 1988 to 1990 period. This generates an actual "walking stick" pattern in GDP in levels, for example. We use growth rates to identify walking sticks because it is an easier metric, especially when looking across countries, but the true walking stick presents itself in the levels of GDP, for instance. Inflation is also part of the general malaise seen later in the walking stick pattern and can be seen to reach hyperinflationary levels by the end of the Garcia period in the right-side panel of Figure 1.



FIGURE 1: GDP Growth, Inflation under Alan Garcia

The methodology of Testing the Walking Stick

In order to claim that "populism" itself leads to any consistent effects in the data, the effects must transcend policy specifics which differ across regimes both geographically and temporally. This is even more likely with populists since one of the acknowledged common aspects of the populist worldview is a general distrust of intellectual elites. This anti-intellectual approach means populists do not tend to adhere to any specific economic policy, favoring instead "whatever works". We must, therefore, explain clearly our hypothesis, how we identify populists, connect populists with a bundle of policies and then those policies to economic outcomes.

To state our walking stick hypothesis more clearly, we are claiming (a) that populists on average prefer a bundle of policies characterized by nationalization, trade restrictions and more importantly fiscal and monetary expansion without regard for intertemporal aggregate constraints, and (b) that those policies generate short-run booms and long-run busts. Empirically then, given the presence of a populist in power, the probability of this policy bundle being chosen increases and, when chosen, the policy bundle generates a specific boom-bust. Therefore, the crux of our empirical test is that the existence of a populist regime increases the probability of a boom-bust pattern in the data. To test, this we must first identify populists, then tie these policy bundles to populists and finally identify boom-busts.

Identifying Populists

Identifying populists is not entirely straightforward. To start, attributes of populism evolved with populists over time. In the early days of Latin American populism, populists like Peron were charismatic personalities supported by unorganized masses that simultaneously focused on expansionary policies, especially import substitution. In the 1970s and mainly the 1980s, populism was largely identified through economic policies such as expansionary fiscal policies and heterodox stabilization measures. Figures, such as Sarney of Brazil, were defined as populists for their economic policies even though they lacked the charisma of previous personalist leaders (Sachs 1989, Drake 1991). A subset of economic populists are socialists such as Salvadore Allende of Chile and Daniel Ortega of Nicaragua. Their inclusion into populism is problematic since they follow socialist ideals, which are characterized by a different political concept (Sachs 1989, Weyland 2001).

In the late 1980s and early 1990s, a new form of populism arose which was characterized by personality leaders with liberal economic policies. This class was referred to as 'bait-and-switchers' (Drake 1991). A prime example is Carlos Menem of Argentina, who had support from unorganized masses but implemented the policy recommendation of the Washington Consensus.

We identify populism in our data at the level presidents, which is adequate for the political structure of most Latin American countries (Rodrik 2018). We follow Rodrik's (2018) methodology by identifying populism through academic literature. If a president is considered a populist in the academic literature, we code a populist dummy to be one. Table A1 in the appendix shows all presidents we have identified as populists from 13 Latin American countries between 1975-2016. Our primary literature sources are Dornbusch and Edwards (1991), Weyland (2001), De la Torre (1997 & 2007), Doyle (2011), and Houle and Kenny (2016), Sachs (1989).

Weyland (2001) shows three approaches to defining a contested subject such as populism: the cumulative, redefined, and radial approaches. The cumulative approach defines populism as a combination of all possible attributes but requires that they hold simultaneously. The redefined approach focuses on a specific domain and disregards other attributes. The radial approach defines populism in the broadest sense, including the other two definitions. Our approach is to be as inclusive as possible and hence is equivalent to using Weland's (2001) radial definition. This approach, by construction, encompasses any combination of our two common characteristics on populism: the ideological rhetoric of "us versus them" and short-term protection.

While the radial definition is helpful as a "catch-all", that is also its drawback. Radial definitions help decrease the chances of false negatives (Weyland 2001, p. 3) and allow us to know that our definition is not tautological to populist cycles. However, radial definitions increase the number of conflicts due to

their imprecise borders that complicate distinguishing presidents that have been identified as populist to presidents that are non-populists. Moreover, radial definitions increase false positives. We try to remedy this and test the robustness by sequentially excluding sets of populists, so our analysis is transparent to the reader.

Connecting Populists and Policy Bundles

To tie the policy bundles to populists in a way that is independent of policy specifics, we use "guilt by association". That is, we assume that the existence of a populist regime implies the implementation of the policy bundle described in Table 1 (two columns on the right). We then assume that the existence of a non-populist regime implies that this Table 1 policy bundle is not implemented.

Our second challenge is to identify a boom followed by a bust that is not specific to a particular policy but is tied to the effects of the policy bundle likely chosen by the populist. This is the only way to test if populists themselves and populism as such have distinct economic effects or are just political labels.

We choose two dependent variables to focus on GDP per capita and inflation. These are both easily identifiable and it is clear that whatever the specifics of the policy bundle, they should affect these two variables. GDP per capita is usually a target of populists as they are attempting to boost the economy (Dornbusch and Edwards 1991). Both fiscal and monetary expansion, especially when done in a way that ignores intertemporal budget constraints, should lead to inflation.

Since we need a prediction that applies for all populists and is independent of their policy specifics, we start with the assumption that whatever the policies implemented, they should exhibit early successes (i.e., an increase in GDP) and problems should arise later. We capture this by breaking each populist's time in office⁵ into a first half and a second half using a dummy, LH, that is 1 in the last half of a populist regime. This exploits our assumption that timing is chosen to minimize the potential negative effects on elections.

This defines an "early" and a "later" period that is endogenous to the length each president was in office. To make our walking stick prediction conform then, we predict that we will observe the boom during the "early" period and the bust during the "later" period.

We, therefore, have two basic empirical predictions

- 1. $\hat{y}_{FH|Pop} > \hat{y}_{LH|Pop}$
- 2. $\hat{\pi}_{FH|Pop} < \hat{\pi}_{LH|Pop}$

These predictions claim that the walking stick exists conditional on the regime being populist. The first one says that GDP per capita growth should be higher in the first half (FH) than in the last half (LH) of a populist regime. The second says that inflation should be the opposite (i.e., higher in the last half). By implication then, these patterns should not be observed under non-populist regimes.

⁵ Time in office captures the years from when a president assumed office to the year they left office. By construction, each president's time in office implies a replacement of the incumbent. Hence, we do not look at legislature periods.

Data

We construct a novel dataset that is a cross-sectional time-series panel for 13 Latin American countries⁶ between 1976 and 2012. We use data from the World Statesmen (2019)⁷ to identify the time (years) in office for each president. For partial years, we allocate a president to a given year if he was in office on January 1st of that year. To identify walking sticks, we construct a dummy variable for the second half of each president's time in office.⁸ In this way we can distinguish the first half of time in office, when we expect to observe increased GDP growth, from the second half, when we expect to observe lower growth but increased inflation for populist presidents.

To measure output, which is our primary dependent variable, we use real GDP per capita growth in PPP (constant \$2011) from the Penn World Table (PWT) dataset mark 9.0⁹. Our second dependent variable is consumer price inflation in percent which we get from the World Development Indicators.

The control variables we need to include are those variables that determine growth (or inflation) and populist presidents jointly without controlling for aspects that vary with the populist policy bundle that leads to populist cycles as described above. Consequently, we do not want to control for government spending, debt, trade volume, and investment since these are the tools used by populist regimes to influence growth although there is evidence showing that they are relevant for economic growth in Latin America (Bittencourt 2012b and De Gregorio 1992).

There is evidence that unequal societies are more likely to choose populist leaders (Sachs 1989, pp. 2-5) and that the inequality itself may also affect economic growth or inflation (Albanesi 2007 and Aghion et al. 1999). We control for this by including the Gini coefficient from the World Bank's All The Ginis¹⁰ data. We also include oil rents as a percentage of GDP from the World Bank Indicators as populist have been associated with using a natural resource to maintain political support ("petrol-populism") (Matsen et al. 2016).¹¹

Populist regimes are not inherently tied to any specific legal-political institutional structure like Latin American socialism, but there is also evidence that the presence of democracy can affect growth (Aisen and Veiga 2008 and Acemoglou et al. 2014). To control for the effect of political regimes on growth more broadly we include Polity2 from the Polity IV Project (2014) as a broad indicator of regime type. Polity2 is an index ranging from -10 for the most autocratic regime to 10 for the most democratic.

Next, we construct three dummy variables as controls. Our first dummy indicates whether the predecessor government was populist or not. This is intended to control for a potentially weak economy left by a populist versus a strong economy left by a non-populist, in general accordance with our theory.

⁶ Argentina, Bolivia, Brazil , Chile, Columbia, Ecuador, Guatemala, Mexico, Nicaragua, Paraguay, Peru, Uruguay, Venezuela

⁷ <u>http://worldstatesmen.org/</u>

⁸ Note that this dummy is endogenously determined by the length of the time in office. Given that a president is longer than one year in office, every president has a last a half dummy. We believe that since time in office varies greatly, the endogenous determination of the first half and last half better allows us to attribute the state of the economy to the presidents. Moreover, the endogenous determination should counteract a survival bias.

^{9 &}lt;u>https://www.rug.nl/ggdc/productivity/pwt/</u>

¹⁰ We use the November 2014 version. <u>http://www.worldbank.org/en/research/brief/all-the-ginis</u>

¹¹ We include recode missing values for Nicaragua under the Sardinista regime to zero, since Nicaragua at that time did not have oil reserves and therefore could not have revenues from oil rents as percentage of GDP.

To control for political business cycles (Shi and Svensson 2006), we include a dummy for election years using the NELDA 4.0 dataset¹². Moreover, we use the Database for Political institutions to include a dummy for the political system. This dummy indicates whether an assembly – instead of the public – elects the president. Presidential election by assemblies dis-incentivize politicians to maintain cliental support.

A final potentially important covariable is central bank independence. In our basic version, we do not include central bank independence. However, we may believe that central bank independence should not be included as covariable since we think that a side effect the populist policy is coercing the central bank to implement an inflationary tax when needed. We test this hypothesis in the robustness check.

Empirical Analysis

As a first step, we explore whether any difference between populists and non-populists exists in the data at all. This is informative in itself and indicates which variables we expect to be more significant when we turn to deeper statistical analysis.

Figure 2 shows scatter plots over real per capita growth and inflation in consumer prices. Each graph shows the first versus last half of time in office (last half coded 1) for non-populists and populists. In line with our theory of the walking stick, the second half of populist time in office shows, lower growth, and higher inflation.



FIGURE 2: GDP Growth and Inflation by Populist and Time in Office

¹² National Elections Across Democracy and Autocracy. <u>https://nelda.co/</u>

Table 2 presents the summary statistics¹³ for the graphs in Figure 2. Figure 2 patterns in both the averages and medians show that growth was lower (2.7%) in the second half of populist regimes compared to the first half (4.7%). It is also interesting to note that mean GDP growth during the first half of populist regimes is also higher than both first half (1.6%) and last half (1.7%) of non-populist regimes.

The change in mean inflation is also consistent with our theory. The first half of populist regimes exhibit mean inflation of 230.3% compared to 700.1% in the last half, as a walking stick would predict. Additionally, this is distinct for populist regimes since inflation is 69.6% and 25% for the first and second halves of non-populist regimes, respectively. These patterns hold for both medians and means. However, the mean inflation rates are higher than the median rates indicating that high inflation rates are partially driven by bursts of high inflation (outliers). It is known that all hyperinflation episodes in Latin America were under populist regimes (Hanke and Krus 2013) which appears in the data and supports our claim. The summary statistics and scatter plots show that there are some extreme values in both growth and inflation. A possible solution would be clean outliers. However, we left them in the data since the theoretical background of populist cycles emphasizes crises and extreme values for growth and inflation will contain important information for our estimation.

Variables	Sample	Median	Mean	SD	Min	Max	Count
Growth	All	2.1	2.5	6.4	-37.4	27.2	481
	No Populist: First Half	1.6	1.5	5.2	-15.4	18.2	174
	No Populist: Last Half	1.7	2.2	6.3	-37.4	26.6	149
	Populist: First Half	4.7	4.6	7.6	-30.7	27.2	93
	Populist: Last Half	2.7	2.9	7.3	-18.1	26.7	65
Inflation	All	13.2	173.3	944.6	-1.2	11,749.60	476
	No Populist: First Half	12.5	69.6	310.5	-0.9	2,945.10	171
	No Populist: Last Half	11.6	25	34.8	-1.1	226	147
	Populist: First Half	17.1	230.3	1,092.50	0.2	10,205.00	93
	Populist: Last Half	18.9	700.1	2,069.40	-1.2	11,749.60	65
Source: Penn	Source: Penn World Table 9.0 , World Bank Indicators						

TABLE 2: Descriptive Statistics by Populist and Time in Office

Before running our estimation, we test for panel stationarity. Although our variables are mostly growth rates or indices and should, therefore, be contained, some of the growth rates have been extreme. Following Bittencourt (2012b) we use the Im et al. (2003) test for non-stationarity in country times series which allows for heterogeneous parameters and serial correlation. The test statistic for GDP growth is -14.388 rejecting the null hypothesis that all panels contain unit roots. The panel test on unit roots for inflation is also rejected (test statistic: -8.68)

Our generic model specification is the following for GDP growth¹⁴,

¹³ Summary statisics for the covaribales can be found in the appendix in table A.2.

¹⁴ Henceforth also refered to as growth.

 $Growth = \beta_{1t}Populist + \beta_{2t}LH + \beta_{3t}(Populist \times LH) + \beta_{4t}Growth_{t-1} + \delta X_{it} + \alpha_i + \alpha_t + \varepsilon_{it},$

and inflation

 $Infl = \beta_{1t}Populist + \beta_{2t}LH + \beta_{3t}(Populist \times LH) + \beta_{4t}Infl_{t-1} + \delta X_{it} + \alpha_i + \alpha_t + \varepsilon_{it},$

where *Growth* is real GDP per capita growth in percent, *Infl* is consumer price inflation in percent, *LH* is the dummy variable indicating the last half time in office for every president, *X* are the control variables, α_i are country fixed-effects, α_t are time fixed-effects, and ε_{it} are the idiosyncratic errors.

We include country fixed effects since the prevalence of populism varies over countries. While Argentina, Ecuador, and Peru elected many populists, Mexico, Guatemala, Paraguay, and Uruguay elected only a few. We also include time fixed effects because we believe that some world events, such as the rise in oil prices, the Brady Plan, the Washington consensus, and the financial crises of 2008, affected many countries in our sample simultaneously. In this way, some of the external forces that led to the collapse of emerging market economies should be controlled for (e.g., sudden stops that several Latin American countries suffered simultaneously). Since growth should be autocorrelated, we also include lags of GDP growth.

Our primary estimation method is a two-way fixed effects estimation based on Least Squares Dummy Variables (LSDV). With T=37¹⁵ years and N=13 countries including a dynamic, endogenous regressor, twoway fixed effects estimation can lead to a Nickell (1981) bias. Judson and Owen (1999) show that even with 30 periods the Nickell bias can reach up to 20% of the true value of the coefficient of interest. Bittencourt (2012b, p. 336) argues that with 38 time periods the Nickell bias may be sufficiently reduced. A typical solution to a dynamic, endogenous dependent variable is to use the Arellano Bond (1991) estimator which is a General Method of Moments (GMM) estimation technique (Roodman 2009). However, Arellano Bond estimation relies on large N and small T samples. Since our dataset has a T>N structure, the Arellano Bond estimator will also lead to biased results (Judson and Owen 1991, p. 14). Following Judson and Owen (1991), we focus our interpretation on the LSDV estimation results as they perform better than the GMM estimator of Arellano-Bond does, but we report both results (Judson and Owen 1991, p. 13).

Results

GDP Growth and Time in Office Baseline Estimates

We first analyze the effect of a populist regime on real GDP growth. The regression results of the three estimation methods are reported in Table 3. All estimation methods share the same qualitative result that for the first half of time in office, populists have higher growth rates (significant at the 1% level) than non-populists, but that growth declines in the second half of time in office. The magnitude of the populist indicator is the largest in each model, implying that populism is an important factor in explaining GDP growth in Latin America. The estimates of our preferred two-way fixed effects (two-way FE) estimation method show that, compared to the first half of non-populists, the growth rate under populists in the first

¹⁵ Totaling 481 observations for all key variables except: Gini coefficient 4 missing values (2012 Venezuela, 2010-2012 Nicaragua), Inflation with 5 missing values (Brazil 1976-1980).

half of their time in office is 2.5 percentage points higher. However, growth declines under a populist regime.

	(1)	(2)	(3)
	Country FE	Two-way FE	GMM
Populist	2.739***	2.488***	2.083***
	[0.97,4.51]	[0.90,4.07]	[0.74,3.42]
LH	0.438	0.435	0.468
	[-1.35,2.22]	[-1.68,2.55]	[-1.22,2.16]
Populist # LH	-1.637	-1.675	-2.035*
	[-4.61,1.34]	[-4.50,1.15]	[-4.28,0.21]
L.GDP growth %	0.207**	0.175**	0.231***
	[0.04,0.37]	[0.03,0.32]	[0.14,0.32]
Oilrents %	0.616***	0.450**	0.0233
	[0.24,1.00]	[0.08,0.82]	[-0.06,0.11]
Gini	0.236*	-0.726***	-0.0216
	[-0.03,0.50]	[-1.01,-0.44]	[-0.06,0.01]
Election Year	0.784	1.126	1.045*
	[-0.77,2.33]	[-0.45,2.71]	[-0.15,2.24]
Predecessor Populist	0.285	0.144	0.205
	[-1.31,1.88]	[-1.20,1.49]	[-0.91,1.32]
Polity2	0.0644*	0.0521	0.0094
	[-0.01,0.14]	[-0.07,0.17]	[-0.10,0.12]
Assembly Elected	0.683	0.469	0.773
	[-0.51,1.87]	[-0.95,1.89]	[-0.28,1.82]
Adj. R^2	0.16	0.31	
AR(2) ^a			-0.83
P-value AR(2)			0.41
Hansen ^b			0
P-Value Hansen			1
Observations	477	477	477
95% confidence intervals in brackets. *** p<	:0.01, ** p<0.05, * p<0.1. The in	nstruments used in the G	MM estimation are

95% confidence intervals in brackets. *** p<0.01, ** p<0.05, * p<0.1. The instruments used in the GMM estimation are lagged levels (three periods) of the dependent variable and the control variables (Oil, Gini, Election Year, Predecessor Populist, Polity2, and Assembly Elected President). a Serial Correlation is a test of the hypothesis that the error term in the error term is not serially correlated (AR(2)). P-values are shown in parenthesis. b The Hanse test is a test of the over-identifying restrictions where the null hypothesis is that the instruments are not correlated with the error term.

In Table 3, the interaction term between populism and the last half (LH) of time in office does not translate to the absolute differences between the first and last half growth under a populist regime. For this purpose, we calculate the predicted marginal effects of populism over time in office. Table 4 shows the predicted marginal effects by time in office as well as the p-values of the t-test on the equality of predicted margins.

	(2)			
	Two-way FE			
No Populist	1.947			
	[1.63,2.26]			
Populist	3.687			
	[3.03,4.35]			
FH	2.556			
	[1.93,3.18]			
LH	2.45			
	[1.72,3.18]			
No Populist # FH	1.753			
	[0.75,2.76]			
No Populist # LH	2.188			
	[0.98,3.39]			
Populist # FH	4.241			
	[3.35,5.13]			
Populist # LH	3.001			
	[2.02,3.98]			
P-value PopulistFH=PopulistLH ^a	0.0627			
P-value PopulistFH=NonPopulistFH ^a	0.00506			
P-value PopulistLH=NonPopulistLH ^a	0.358			
95% confidence intervals in brackets. Estimation method is Two-Way FE on the baseline model. ^a T-test on the equaliy of the parameters.				

TABLE 4: Predicted Marginal Effects GDP Growth

Consistent with the walking-stick hypothesis, the predicted growth rate for populists is high in the first half (FH) of time in office, here 4.2 percentage points, but declines ceteris paribus to predicted 3 percentage points in the last half (LH) of time in office. The t-test on the equality of predicted margins indicates a significant difference at the 10% level. For the non-populist president, the marginal effect on growth in the first half is 1.7 percentage points and increases in the last half to 2.1 percentage points. Figure 3 illustrates these developments of predicted GDP growth of populists and non-populist over time in office.



FIGURE 3: Predicted Marginal Effects GDP Growth

The developments in the marginal effects of populists and non-populists on growth are in line with our hypothesis that populists create walking sticks. The margins indicate that in the first half of time in office, populists have a ceteris paribus higher marginal growth rate. However, the average predicted marginal growth rate for populists falls over the time in office.

Inflation and Time In Office Baseline Estimates

We next turn to the effects of a populist president on inflation. In his work to test the populist view of inflation, Bittencourt (2012a, 2012b) includes five covariates: lag of inflation, the government share of consumption, openness (ratio of exports and imports to GDP), GDP growth rate, and liquid liabilities over GDP (M3). Since we assume that populists impose a certain policy bundle, we want to include those covariates that determine populism and inflation jointly, but that do not vary with the populist policy bundle. We, therefore, choose analog covariates for our regression on inflation: lag of inflation, Gini, election year, predecessor populist, Polity2, and assembly-elected President¹⁶.

Table 5 shows the regression results for our model on inflation. Our preferred two-way fixed effects estimation indicates that compared to non-populists, that populists qualitatively show a higher inflation rate in the first half, though it is not significant at any conventional confidence level. Consistent with our hypothesis, inflation increases significantly in the last half (LH) of time in office compared to non-populists. To check the absolute differences between the groups, we predict the marginal effects of the populist regime over time in office for our preferred two-way fixed effects model. The results are summarized in Table 6 and Figure 4.

¹⁶ Since the theory of Petro-Populism is based around GDP growth and we look at consumer prices, we exclude the Oilrents.

	(1)	(2)	(3)
	Country FE	Two-way FE	GMM
Populist	247	181.9	122.6
	[-163.42,657.50]	[-193.48,557.27]	[-125.69,370.92]
LH	-43.31	-115.7	-116.9**
	[-101.79,15.17]	[-261.12,29.79]	[-231.67,-2.15]
Populist # LH	437.4*	460.4**	426.1**
	[-78.14,952.89]	[13.76,907.05]	[64.69,787.57]
L.Inflation %	0.343***	0.323***	0.371***
	[0.11,0.58]	[0.10,0.54]	[0.18,0.57]
Gini	-10.93	-7.89	-2.51
	[-29.998.13]	[-20.414.63]	[-6.791.77]
Election Year	227.8**	194.0*	193.7**
	[6.764,48.93]	[-14.90,402.98]	[16.67,370.78]
Predecessor Populist	174.7	119.7	15.22
	[-180.67530.03]	[-184.76424.23]	[-114.58145.02]
Polity2	3.631	5.869	-1.417
	[-6.93,14.20]	[-10.76,22.50]	[-17.83,15.00]
Assembly Elected	50.11	-68.77	8.505
	[-80.16,180.39]	[-513.44,375.89]	[-250.26,267.27]
Adj. R^2	0.24	0.27	
AR(2)			0.92
P-value AR(2)			0.36
Hansen			0
P-Value Hansen			1
Observations	471	471	471

TABLE 5: Regression Results Inflation

95% confidence intervals in brackets. *** p<0.01, ** p<0.05, * p<0.1. The instruments used in the GMM estimation are lagged levels (three periods) of the dependent variable and the control variables (Oil, Gini, Election Year, Predecessor Populist, Polity2, and Assembly Elected President). a Serial Correlation is a test of the hypothesis that the error term in the error term is not serially correlated (AR(2)). P-values are shown in parenthesis. b The Hanse test is a test of the over-identifying restrictions where the null hypothesis is that the instruments are not correlated with the error term.

	(1)
	Two-way FE
No Populist	52.81
	[-84.45,190.08]
Populist	441
	[151.65,730.28]
FH	164.1
	[99.41,228.80]
LH	199
	[113.87,284.08]
No Populist # FH	104.6
	[-22.74,232.00]
No Populist # LH	-11.04
	[-194.74,172.66]
Populist # FH	286.5
	[14.06,559.00]
Populist # LH	631.3
	[203.23,1059.30]
P-value PopulistFH=PopulistLH ^a	0.0842
P-value PopulistFH=NonPopulistFH ^a	0.312
P-value PopulistLH=NonPopulistLH ^a	0.0341
95% confidence intervals in brackets. Estimation FE on the baseline model. ^a T-test on the equali	n method is Two-Way ty of the parameters.

TABLE 6: Predicted Marginal Effects Inflation

The predicted marginal effects of inflation over time in office shows that inflation increases to 631.3 percentage points in the last half of time in office for populists, from initially 286.5 percentage points. This increase is significant at the 10% level. Compared to non-populists, predicted inflation under populists is significantly higher in the last half of time office.

FIGURE 4: Predicted Marginal Effects Inflation



The baseline analysis shows modest support for our hypotheses. The difference of the GDP growth and inflation over time in office during a populist regime is significant at the 10% level. However, for both models, the confidence bands of the parameter estimates and predicted margins are large. Large confidence bands indicate heterogeneity among the populists and therefore in the economic consequences of populists as well. The heterogeneity of economic performance is exacerbated through some extreme values. This dynamic is most salient for our model on inflation, where some paths of inflation ended in hyperinflation episodes¹⁷. Hyperinflation episodes necessarily imply a high variance of inflation rates (as seen in the large standard deviations of inflation in Table 2). Therefore, large confidence bands are not surprising.

We now turn to robustness checks of our models.

Robustness Checks

Populist Identification

The first robustness check is to test the robustness of our method of defining and identifying populist presidents. Since the definition of populism is a contested subject and there are a variety of ways to measure populism, we want to make sure that our results are not sensitive to our specific approach in coding populists.

We compare our index to the recently created index of Latin American populists from Sáenz and Bjørnskov (2018).¹⁸ The indices are constructed by newspaper articles that refer to a president as a populist as share of all mentions of the president from English-speaking and Spanish-speaking newspaper articles¹⁹. Hence

 ¹⁷ All hyperinflation episode according to Hanke and Krus (2013) have occurred under populist governments:
 Argentina 1989-1990, Brazil 1989-1990, Bolivia 1984-1985, Chile 1973, Nicaragua 1986-1991, Peru 1988, Peru 1990
 ¹⁸ We thank Andrea Sáenz and Christian Bjørnskov for kindly sharing their data.

¹⁹ English speaking newspapers include: New York Times, Washington Post, Wall Street Journal, Los Angeles Times, London Times, Telegraph, Guardian, and the Observer.

the indices run from 0 to 1 where an increase in the index denotes higher confidence that a president exhibits populist characteristics.

We then run six new models excluding a different subset of presidents²⁰ to test the robustness of our identification method. Models (1) through (4) uses the Sáenz and Bjørnskov (2018) newspaper indices as a benchmark and exclude presidents where both indices show a salient discrepancy with our coding. In models (1) and (2) we exclude presidents where both indices are at least 0.1 but our populist dummy is equal to zero, or our populist dummy is equal to one, but both newspaper indices are at zero. In models (2) and (3) we exclude presidents where both indices are at least 0.05 but our populist dummy is equal to zero, or our populist dummy is equal to one, but both newspaper indices are at zero. We also run our models by excluding populist presidents that are also considered to be socialists since these two concepts emphasize different political and economic approaches (Drake 1991, p. 38). Table 7 reports the predicted marginal effects.

²⁰ Table A.3 in the appendix lists all presidents that have been excluded.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent	Growth	Inflation	Growth	Inflation	Growth	Inflation
No Populist	2.157	50.81	2.363	67.88	2.098	61.09
	[1.71,2.61]	[-106.51,208.13]	[1.77,2.96]	[-109.17,244.92]	[1.78,2.42]	[-40.87,163.04]
Populist	3.682	483.3	3.624	468.8	3.233	320.2
	[2.79,4.58]	[172.70,794.00]	[2.65,4.60]	[189.72,747.93]	[2.41,4.06]	[50.38,590.08]
FH	2.841	177.5	3.142	188.3	2.466	109.2
	[2.17,3.51]	[106.44,248.60]	[2.45,3.83]	[115.79,260.72]	[1.65,3.28]	[55.47,162.83]
LH	2.462	224.6	2.493	268.7	2.346	162.5
	[1.70,3.23]	[132.52,316.63]	[1.71,3.27]	[173.01,364.43]	[1.39,3.30]	[96.94,228.09]
No Populist # FH	2.073	107.4	2.411	121.9	1.889	104.1
	[1.03,3.12]	[-39.23,254.00]	[1.37,3.45]	[-65.70,309.45]	[0.67,3.11]	[8.30,199.89]
No Populist # LH	2.258	-17.97	2.305	2.884	2.348	9.952
	[0.89,3.63]	[-230.97,195.03]	[0.74,3.87]	[-211.95,217.72]	[1.20,3.50]	[-139.86,159.77]
Populist # FH	4.351	312.4	4.31	291.5	3.979	122.2
	[3.22,5.48]	[22.10,602.77]	[3.14,5.48]	[-15.29,598.31]	[3.00,4.96]	[-17.47,261.86]
Populist # LH	2.863	691.1	2.792	682.2	2.341	555.7
	[1.80,3.93]	[234.41,1147.88]	[1.61,3.97]	[281.78,1082.70]	[1.14,3.54]	[90.04,1021.37]
Sample: Exclude	Indices≥0.1	Indices ≥0.1	Indices≥0.05	Indices ≥0.05	Socialist	Socialist
Observations	427	421	374	368	446	440
PopulistFH=PopulistLH ^a	0.0268	0.0736	0.0289	0.0724	0.0281	0.0305
PopulistFH=NonPopulistFH ^a	0.0165	0.298	0.036	0.448	0.0303	0.857
PopulistLH=NonPopulistLH ^a	0.554	0.0331	0.674	0.0265	0.992	0.0709
			c , , c , ,			

TABLE 7: Predicted Marginal Effects – Excluding Populists

95% confidence intervals in brackets. All models are based on the two-way fixed effects estimation method. ^a P-Value of T-test on the equality of parameters. Model (1) and (2) exclude observations if the Populist Index of both English and Spanish newspapers by Sáenz and Bjørnskov (2018) are a) above 0.1 but populist dummy is equal to zero or b) the when both indices are zero, and our populist dummy is equal to one. Model (3) and (4) exclude observations if Populist Index of both English and Spanish newspapers by Sáenz and Bjørnskov (2018) are a) above 0.05 but populist dummy is equal to zero or b) when both indices are zero and our populist dummy, is equal to zero or b) when both indices are zero and our populist dummy, is equal to zero or b) when both indices are zero and our populist dummy, is equal to zero or b) when both indices are zero and our populist dummy, is equal to zero.

While the point predictors have shifted somewhat, the decline in GDP growth and the increase in consumer price inflation for populists are still visible. The change in GDP growth and inflation over populists' time in office remains significant at the 10% level throughout all models²¹.

Lastly, we follow Houle and Kenny (2016) by successively excluding one populist from our population to make sure that any single populist president, which we may have wrongly identified, does not drive our results. We, therefore, rerun 32 models of our baseline estimation method and predict the marginal effects. Figure 4 shows the histogram over the 32 marginal effects for populists by time in office and hence illustrates the sensitivity of our results concerning single populist presidents. The top two panels show the results for GDP growth, and the bottom panels show the results for Inflation.

²¹ Using our FH LH identification strategy, we use each newspaper indicies. The results can be found in table A.5. and figure A.1. in the appendix. Qualitatively parameter estimates are qualitatively similar for the English Newspaper Index: The higher the populist index the lower GDP growth and the higher consumer price inflation are in the second half. However, these results are not significant and confidence interval for each estimates overlap both estimates.



FIGURE 5: Histogram Predicted Marginal Effects GDP Growth and Inflation of Subset of Populists

Note: Distribution of predicted marginal effects, by successively excluding one populist from the sample. Summary statistics for marginal effect Populist FH Growth: Mean (289.7), Sd (36.4), Min (113), Max (328.8). Summary statistics for marginal effect Populist LH Growth: Mean (637.5), Sd (50.5), Min (451.8), Max (711). Summary statistics for marginal effect Populist FH Inflation: Mean (4.5), Sd (0.2), Min (3.9), Max (5). Summary statistics for marginal effect Populist LH Inflation: Mean (2.7), Sd (0.1), Min (2.3), Max (2.9).

The histograms marginal predicted effects show that the marginal effects vary over the populist president samples, indicating heterogeneity in populist presidents on GDP growth and Inflation. Since the predicted marginal effects of the first half and last half of populist presidents' times in office do not intersect and match our prediction, our qualitative result is not driven by a single populist president.

Recession Decomposition and Time Trends

We test the robustness of our baseline model concerning recessions and preexisting time trends. Populists may have been elected in times of poor economic performance. If that is the case, then this would introduce selection bias into our baseline results since populists would be chosen by the electorate to be in the office during a recession. A second possible issue would be if the increase in GDP growth or inflation is the result of a process or trend that started before the president came into office. In this section we address both these potentially confounding problems.

Table 8²² shows the estimated marginal predictors of our baseline models decomposed into presidents who came into office during a recession (or one year after a recession) and presidents who did not come into office during or following a recession. A recession is defined as two consecutive years of GDP growth under 1%.

	(1)	(2)	(3)	(4)
Dependent Variable	Growth	Growth	Inflation	Inflation
No Populist	0.448	2.608	-57.76	70.5
	[-1.79,2.69]	[2.20,3.02]	[-471.69,356.18]	[-157.61,298.60]
Populist	4.482	3.043	451.8	485.6
	[0.70,8.26]	[2.18,3.91]	[-203.82,1107.38]	[-26.34,997.58]
FH	2.169	2.731	77.61	209
	[0.23,4.11]	[2.00,3.46]	[-108.50,263.71]	[130.37,287.72]
LH	1.665	2.749	202.8	184.4
	[-0.91,4.24]	[2.01,3.49]	[-10.03,415.64]	[85.06,283.64]
No Populist # FH	0.347	2.259	4.585	133.7
	[-3.02,3.72]	[0.81,3.71]	[-343.62,352.79]	[-75.44,342.93]
No Populist # LH	0.579	3.032	-138.9	-5.567
	[-3.09,4.24]	[1.75,4.31]	[-726.50,448.70]	[-286.54,275.40]
Populist # FH	5.239	3.827	200.7	379.2
	[1.28,9.20]	[2.58,5.07]	[-84.06,485.38]	[-206.41,964.89]
Populist # LH	3.496	2.093	778.6	613.6
	[-1.00,7.99]	[0.79,3.40]	[-612.73,2170.00]	[134.78,1092.34]
Sample	Recession	No Recession	Recession	No Recression
Observations	145	332	145	326
P-value PopulistFH=PopulistLH ^a	0.323	0.0669	0.371	0.163
P-value PopulistFH=NonPopulistFH ^a	0.114	0.21	0.452	0.506
P-value PopulistLH=NonPopulistLH ^a	0.331	0.389	0.324	0.0917

TABLE 8: Predicted Marginal Effects – Recession Decomposition

95% confidence intervals in brackets. Estimation method is Two-Way FE on the baseline model. ^a T-test on the equality of the parameters. Samples are split up into presidents that came into office during a recession or the year following a recession (defined as two consecutive years of GDP per capita growth under 1%).

²² The corresponding regression table can be found in the appendix (Table A.6.).

The results show that for models (1), (2), and (3), GDP growth and inflation are no longer significantly different during the first half (FH) and last half (LH) of a populist's time in office although all the trends qualitatively match our hypotheses. GDP growth is estimated to decline and inflation to rise. It is interesting to note that the point estimates for GDP growth are higher for populist presidents who came into office during a recession compared to populist presidents that came into office not during a recession. However, the confidence bands completely overlap, which indicates no statistical significance. The results indicate that the hypothesis of declining GDP growth and increasing inflation are not robust over the samples. Although the point estimates are consistent with the walking hypothesis, the difference over the samples indicates that recessions do play a role and as a whole, our results are a little less trustworthy.²³

To analyze the time trends, we estimate models that predict GDP growth and inflation every year for three years before a president came into office to nine years after the president came into the office for populists and non-populists. The regression results of these models can be seen in appendix table A.8. The models are based on our two-way fixed effects baseline and include a control variable for the length of time a president spent in office²⁴. On average, populist presidents were in office for six years (standard deviation of 3 years), and non-populists were in office for four years (standard deviation of 1.4 years). Figure 6 plots the point estimates of the growth rates three years before and nine years after a populist or non-populist assumed office.

²³ The results indicate that populist presidents that came into office during a recessesion should be analyzed separately from populists that came into office not during a recession. Within our walking stick theory this is plausible because the populist policies will have different effects on the economy. In the context of Keynesian School of Thought, expansive fiscal policy and monetary policy (which are part of the populist policy bundle) are necessary during a recession.

²⁴ The models excludes presidents who were in office longer than 14 years and presidents that were only 1 year in office.



FIGURE 6: Point Estimates of GDP Growth and Inflation for –3 Years and +10 Years after Assuming Office

Note: Point estimates and 95% confidence intervals of GDP Growth Rate/Inflation Rate in Year X after Populist, Non-Populist assumed office. Estimation Method: Two-Way fixed effects with leads (3) and lags (10) including controls for the total years a president spent in office and excluding presidents whose terms were only one year or more than 15.

All four panels indicate that no time trend is salient before presidents took office. However, the point estimates show no clear trend over the time in office for either populists or non-populists. The point estimates for inflation and GDP growth are higher for populists after assuming office than for non-populists. However, the confidence bands indicate that these estimates are only significant in year four of the average president's time in office. Overall, we cannot see a walking stick for a populist.

This estimation method, however, requires that both the populists themselves are similar and also that the economic boom and bust occur at the same time for every populist after assuming office. Since our analysis includes a variety of populist policies bundles, it is not surprising that we cannot superimpose one specific trajectory onto all populist regimes and that the trajectories we observe are noisy. Furthermore, it is for this very reason that our baseline model aggregates the time in office into two periods, the first half and the second half.

Additional controls

Lastly, we want to check the robustness of our results by controlling for political events and political institutions. First, we control for military-political transitions by including a dummy for successful coups d'état with data from the Polity IV Project (2014). Years with a coup d'état are times of crises. Secondly, we control for the years in which multiple presidents or groups were in office for similar reasons. "Multiple

presidents in office" is defined by having more than two presidents in office in a given year or exactly two in the case of an acting or interim president. This indicator includes years in which several people held the presidential office simultaneously (such as a military junta or the Sandinista's in Nicaragua). The Multiple Presidents indicator is constructed from the World Statesmen Database (2019). We identified 35 such instances from which 15 observations fall under years allocated to non-populists and 20 under populists. Lastly, we control for the institutional quality by including the indicator of *de jure* central bank independence by Garriga (2016)²⁵. The existence of central bank independence is taken to mean higher quality institutions.

Table 9²⁶ shows our estimation results. Controlling for successful coups d'état and multiple presidents does not change our baseline results for both outcome variables. Model (5) includes the index of central bank independence. While inflation still increases under populist presidents during their time in office, this trend is no longer significant at any conventional significance level. Compared to our baseline result, the inflation in the first half of populist's time in office is higher (312% compared to 286.5%). The results display a sensitivity with respect to the inclusion of central bank independence. Nevertheless, the average inflation rate for populists over the whole time in office still high compared to non-populists (455.6% versus 49.75%). Hence, although we cannot find a significant difference between the inflation rates over populist's time in office, the central bank independence does not effectively²⁷ restrict the inflation rate as a whole for populists.

²⁵ Missing Data for Ecuador 1975-1991.

²⁶ The corresponding regression table can be found in the appendix (Table A.8)

²⁷ The summary statistics of CBI over populism and time in office, can be seen in table A.2. in the appendix. The table shows similar CBI for all samples. This indicates that the dejure CBI is similar, while the defacto is either different over samples or ineffective to restrict inflation (which is common in developing countries (Klomp and De Haan 2010)).

	(1)	(2)	(3)	(4)	(5)
Dependent	Growth	Inflation	Growth	Inflation	Inflation
No Populist	1.953	53.14	1.881	46.32	49.75
	[1.63,2.27]	[-83.65,189.94]	[1.54,2.22]	[-106.82,199.45]	[-87.63,187.13]
Populist	3.674	440.3	3.827	454.5	455.6
	[3.00,4.34]	[151.91,728.61]	[3.12,4.53]	[132.40,776.67]	[173.12,738.05]
FH	2.554	164	2.524	160.4	171.2
	[1.94,3.17]	[99.81,228.14]	[1.93,3.12]	[102.03,218.78]	[103.43,238.95]
LH	2.453	199.1	2.492	203.7	200.7
	[1.73,3.17]	[114.68,283.55]	[1.80,3.18]	[126.24,281.11]	[112.36,289.10]
No Populist # FH	1.755	104.7	1.662	95.24	101.2
	[0.75,2.76]	[-20.87,230.35]	[0.65,2.67]	[-46.43,236.91]	[-28.00,230.49]
No Populist # LH	2.199	-10.43	2.152	-13.97	-13.62
	[1.01,3.39]	[-194.78,173.92]	[1.00,3.30]	[-210.18,182.24]	[-200.58,173.35]
Populist # FH	4.229	285.9	4.33	294.5	312
	[3.33,5.13]	[13.08,558.74]	[3.43,5.23]	[-0.57,589.66]	[34.08,589.90]
Populist # LH	2.986	630.5	3.203	651.7	632.3
	[2.02,3.95]	[204.67,1056.24]	[2.18,4.23]	[193.18,1110.17]	[217.15,1047.36]
Additional Control	Coups	Coups	Mult. Pres.	Mult. Pres.	CBI
Observations	477	471	477	471	455
P-value PopulistFH=PopulistLH ^a	0.0597	0.0837	0.0821	0.072	0.109
P-value PopulistFH=NonPopulistFH ^a	0.00575	0.312	0.00426	0.32	0.251
P-value PopulistLH=NonPopulistLH ^a	0.37	0.034	0.242	0.0413	0.0302
95% confidence intervals in brackets. Es	timation meth	od is Two-Way FE or	n the baseline	model. ^a T-test on	the equality of the

TABLE 9: Estimated Marginal Effects – Political Events and Central Bank Independence

Conclusion

parameters.

Our baseline analysis shows that real GDP growth first increases, then decreases over populist presidents' time in office while non-populist do not follow this pattern. Moreover, we can observe the reverse for consumer price inflation. Both these findings are in line with our broader walking stick hypothesis. Our robustness checks follow these results qualitatively; however, some magnitudes and significant levels vary over different models. Overall, this amounts to compelling evidence that populists generate walking sticks, which is in line with the anecdotal evidence.

Our results are also surprising: while real GDP growth falls over the populist time in office, it does not turn negative in the end. Further, our estimate for the last half for populists is not significantly different from non-populists. Combined with a higher growth rate in the first half of time in office, our estimation shows that populists perform better regarding real GDP growth than non-populists do during their time in office. While this was not one of our predictions, it is generally in line with the notion that populists overstimulate the economy during their early periods in office. Our claim is exactly that they engage in a bundle of policies that stimulate without concern for intertemporal constraints.

Our results on the impact of the populist regime on inflation indicate that while populist presidents do not perform significantly different or better than non-populists in the last half of their time in office concerning growth, they do in terms of inflation and their better growth performance comes at the cost of high inflation. Combined with our theory, we find that the average populist president who ignores intertemporal constraints is confronted with extremely high inflation rates in the last half of his time in office. While populist presidents do tend to stimulate the economy and their presence is associated with high overall growth rates, these do not last. Overall, based on the patterns we observe in the data, especially in terms of inflation, populists leave their economies more unstable than non-populists.

References

Acemoglu, D., Naidu, S., Restrepo, P., & Robinson, J. A. (2014). "Democracy does cause growth", NBER Working Paper, 20004. Cambridge, MA: National Bureau of Economic Research

Aghion, P., Caroli E., & Garcia-Penalosa, C. (1999). "Inequality and economic growth: the perspective of the new growth theories", Journal of Economic Literature, 37.4: 1615-1660. American Economic Association

Aisen, A., & Veiga, F.J. (2008). "Political instability and inflation volatility", Public Choice, 135.3-4: 207-223. Springer US

Albanesi, S. (2007). "Inflation and inequality", Journal of Monetary Economics, 54.4: 1088-1114. Elsevier

Alesina, A., Favero, C. A., & Giavazzi, F. (2018). "What Do We Know about the Effects of Austerity?" NBER Working Paper, 24246. Cambridge, MA: National Bureau of Economic Research

Arellano, M., & Bond, S. (1991). "Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations", Review of Economic Studies, 58.2: 277. Wiley Blackwell

Bazdresch, C., & Levy, S. (1991). "Populism and Economic Policy in Mexico, 1970-1982", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 223-262. University of Chicago Press

Bittencourt, M. (2012a). "Democracy, populism and hyperinflation: some evidence from Latin America", Economics of Governance, 13.4: 311-332.

Bittencourt, M. (2012b). "Inflation and economic growth in Latin America: Some panel time-series evidence", Economic Modelling, 29.2: 333-340.

Cardoso, E., & Helwege, A. (1991). "Populism, Profligacy, and Redistribution", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 45-74. University of Chicago Press

Clinton, K., Kumhof, M., Laxton, D., & Mursula, S. (2011). "Deficit reduction: Short-term pain for long-term gain", European Economic Review, 55.1: 118-139.

De Castro, P. R., & Ronci, M. (1991). "Sixty Years of Populism in Brazil", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 151-173. University of Chicago Press

De Gregorio, J. (1992). "Economic growth in Latin America", Journal of Development Economics 39.1: 59-84

De la Torre, C. (1997). "Populism and Democracy: Political Discourses and Cultures in Contemporary Ecuador", Latin American Perspectives 24.3: 12-24.

De la Torre, C. (2007). "The Resurgence of Radical Populism in Latin America", Constellations 14.3: 384-397

Di Tella, G. (1991). "Comment: Description of a Populist Experience: Argentina, 1973-1976" in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 77-120. University of Chicago Press

Dornbusch, R., & Edwards, S. (1990). "Macroeconomic Populism", Journal of Development Economics, 32.2: 247–77.

Dornbusch, R., & Edwards, S. (1991). "The Macroeconomics of Populism", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 7-13. University of Chicago Press

Dovis, A., Golosov, M., & Shourideh, A. (2016). "Political economy of sovereign debt: A theory of cycles of populism and austerity", NBER Working Paper, 21948. Cambridge, MA: National Bureau of Economic Research

Doyle, D. (2011). "The legitimacy of political institutions: Explaining contemporary populism in Latin America", Comparative Political Studies, 44.11: 1447-1473.

Drake, P. W. (1991). "Comment: The Political Economy of Latin American populism", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 15-43. University of Chicago Press

Feenstra, R. C., Inklaar, R., & Timmer, M. P. (2015). "The next generation of the Penn World Table", American Economic Review, 105.10: 3150-82.

Fernandez, R. B. (1991). "What Have Populists Learned from Hyperinflation?", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 121-149. University of Chicago Press

Frankel, J. A., & Romer, D. H. (1999). "Does trade cause growth?", American Economic Review, 89.3: 379-399.

Funke, M., Schularick, M., & Trebesch, C. (2016). "Going to extremes: Politics after financial crises, 1870–2014", European Economic Review, 88: 227-260.

Garriga, A. C. (2016). "Central bank independence in the world: A new data set", International Interactions, 42.5: 849-868.

Grier, K., & Maynard, N. (2016). "The economic consequences of Hugo Chavez: A synthetic control analysis", Journal of Economic Behavior & Organization, 125: 1-21.

Guiso, L., Herrera, H., Morelli, M., & Sonno, T. (2017). "Demand and Supply of Populism", EIEF Working Papers Series, 1703. Einaudi Institute for Economics and Finance (EIEF)

Hanke, S. H., & Krus, N. (2013). "World Hyperinflations", in: R. Parker, & R. Whaples (eds.), The Handbook of Major Events in Economic History. London: Routledge Publishing

Hanratty, D. M. (ed.) (1991). "Ecuador: A Country Study", Washington: GPO for the Library of Congress

Hawkins, K. A., Aguilar, R., Jenne, E. K., Kocijan, B., Kaltwasser, C. R., & Silva, B. C. (2019). "Global Populism Database: Populism Dataset for Leaders 1.0", populism.byu.edu

Houle, C., & Kenny, P. D. (2016). "The political and economic consequences of populist rule in Latin America", Government and Opposition: 1-32.

Hyde, S. D., & Marinov, N. (2012). "Which Elections Can Be Lost?", Political Analysis, 20.2: 191-201.

Im, K. S., Pesaran, M. H., & Shin, Y. (2003). "Testing for unit roots in heterogeneous panels", Journal of Econometrics, 115.1: 53-74.

Inglehart, R. F., & Norris, P. (2016). "Trump. Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash", Harvard Kennedy School Research Working Paper, 16-026.

Judis, J. B. (2016). "The Populist Explosion: How the Great Recession Transformed American and European Politics", Columbia Global Reports

Judson, R. A., & Owen, A. L. (1999). "Estimating dynamic panel data models: a guide for macroeconomist", Economics Letters, 65.1: 9-15.

Kaufman, R. R., & Stallings, B. (1991). "The Political Economy of Latin American Populism", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 15-43. University of Chicago Press

Kazin, M. (1995). "The Populist Persuasion: An American History", Revised Edition. Cornell Paperbacks, Cornell University Press

Klomp, J., & De Haan, J. (2010). Central bank independence and inflation revisited. Public Choice, 144.(3-4): 445-457.

Lago, R. (1991). "The Illusion of Pursuing Redistribution through Macropolicy: Peru's Heterodox Experience, 1985-1990", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 263-330. University of Chicago Press

Matsen, E., Natvik, G. J., & Torvik, R. (2016). "Petro populism", Journal of Development Economics, 118: 1-12.

Milanovic, B. (2014). "All the Ginis (ATG) database", http://econ.worldbank.org/projects/inequality

Morales, J. A., & Sachs, J. D. (1989). "Bolivia's Economic Crisis", Developing Country Debt and the World Economy, 57-80. University of Chicago Press

Mudde, C., & Kaltwasser, C. R. (2017). "Populism: A Very Short Introduction", Oxford University Press

Müller, J. W. (2016). "What Is Populism?", University of Pennsylvania Press

Nickell, S. J. (1981). "Biases in Dynamic Models with Fixed Effects", Econometrica: Journal of Econometric Society, 49.6: 1417-1426.

Ostry, J. D., Berg. A., & Kothari, S. (2018). "Growth-equity trade-offs in structural reforms", https://voxeu.org/article/growth-equity-trade-offs-structural-reforms, 19 February 2018

Marshall, M. G., Gurr, T. R., & Jaggers, K. (2014). "Political Regime Characteristics and Transitions, 1800-2013", Polity IV Project, 14-16. Center for Systemic Peace

Rode, M., & Revuelta, J. (2015). "The wild bunch! An empirical note on populism and economic institutions", Economics of Governance, 16.1: 73-96.

Rodrik, D. (2018). "Populism and the Economics of Globalization", Journal of International Business Policy: 1-22

Roodman, D. (2009). "How to do xtabond2: An introduction to difference and system GMM in Stata" The Stata Journal, 9.1: 86-136.

Sachs, J. D. (1989). "Social Conflict and Populist Policies in Latin America"

Sáenz de Viteri Vázquez, Andrea and Bjørnskov, Christian, Populism and Constitutional Reform in Latin America and the Caribbean (November 24, 2018). Available at SSRN: https://ssrn.com/abstract=3290019 or http://dx.doi.org/10.2139/ssrn.3290019

Savastano, M. A. (1991). "Comment: The Illusion of Pursuing Redistribution through Macropolicy: Peru's Heterodox Experience, 1985-1990" in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 263-330. University of Chicago Press

Shi, M., & Svensson, J. (2006). "Political budget cycles: Do they differ across countries and why?", Journal of Public Economics, 90.8-9: 1367-1389.

Stankov, P. (2018). "The Political Economy of Populism: An Empirical Investigation", Comparative Economic Studies: 1-24.

Sturzenegger, F. A. (1991). "Description of a populist experience: Argentina, 1973-1976", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 77-120. University of Chicago Press

Teitel, S. (1991). "Comment: The socialist-populist Chilean experience, 1970-1973", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 175-221. University of Chicago Press

Urrutia, M. (1991). "On the absence of economic populism in Colombia", in: R. Dornbusch, & S. Edwards (eds.), The Macroeconomics of Populism in Latin America, 369-391. University of Chicago Press

Weyland, K. (2001). "Clarifying a contested concept: Populism in the study of Latin American politics", Comparative Politics, 1-22.

Williamson, J. (1993). "The Political Economy of Policy Reform", Institute of International Economics, Washington D.C.

World Development Indicators. Washington, D.C. The World Bank.

World Statesmen Database (2019)

Appendix

TABLE A.1: Summary of Radial Populists

Country	President	Years In	Years Out	Sources
Argentina	Juan Domingo Perón Sosa	1973	1976	Sachs 1989; Federico A. Sturzenegger
				1991; Simon Teitel 1991; Robert R.
				Kaufman and Barbara Stallings 1991;
				Paul W. Drake 1991; Eliana Cardoso
				and Ann Helwege 1991; Weyland 2001;
				Brazdresch and Levy 1991
Argentina	Raúl Ricardo Alfonsín	1983	1989	Robert R. Kaufman and Barbara
	Foulkes			Stallings 1991; Eliana Cardoso and Ann
				Helwege 1991; Roque B. Fernandez
				1991; Jose De Gregorio 1991
Argentina	Carlos Saúl Menem Akil	1989	1999	Paul W. Drake 1991; William R. Cline
				1991; Guido Di Tella 1991; Robert R.
				Kaufman and Barbara Stallings 1991;
				Fernandez 1991; Weyland 2001, Houle
				and Kenny 2018
Argentina	Néstor Carlos Kirchner	2003	2007	Doyle 2011; Houle and Kenny 2018
	Ostoić			
Argentina	Cristina Fernández de	2007	2015	Houle and Kenny 2018
	Kirchner			
Bolivia	Hernán Síles Zuazo	1982	1985	Sachs 1989
Bolivia	Jaime Paz Zamora	1989	1993	Paul W. Drake 1991; Guido Di Tella
				1991
Bolivia	Evo Morales	2006		Doyle 2011; Houle and Kenny 2018; De
				la Torre 2007; Hawkins et al. 2019
Brazil	José Sarney	1985	1990	Robert R. Kaufman and Barbara
				Stallings 1991; Paul W. Drake 1991;
				Eliana Cardoso and Ann Helwege 1991;
				Weyland 2001; Sachs 1989; Drake
				1991; de Castro and Ronci 1991
Brazil	Fernando Affonso Collor de	1989	1992	Guido Di Tella 1991; Robert R. Kaufman
	Mello			and Barbara Stallings 1991; Weyland
				2001; Eliana Cardoso and Ann Helwege
D ''			2010	1991; Houle and Kenny 2018
Brazil	Luiz Inácio Lula da Silva	2003	2010	Kaufman and Stalling 1991
Chile	Patricio Aylwin Azócar	1990	1994	Robert R. Kaufman and Barbara
				Stallings1991; Guido Di Tella 1991
Colombia	Belisario Antonio Betancur	1982	1986	Kaufmann and Stallings 1991; Urrutia
	Cuartas			1991
Colombia	Alvaro Uribe Vélez	2002	2010	Doyle 2011; Houle and Kenny 2018
Ecuador	Rodrigo Borja Cevallos	1988	1992	Kaufman and Stallings 1991; Comment:
				Paul W. Drake 1991

Ecuador	Abdalá Jaime Bucaram Ortiz	1996	1997	Weyland 2001; De la Torre 1997
Ecuador	Lucio Edwin Gutiérrez Borbua	2003	2005	Doyle 2011, Hawkins et al. 2019
Ecuador	Rafael Correa Delgado	2007	2017	De la Torre 2010; Doyle 2011; Houle and Kenny 2018
Guatemala	Otto Pérez Molina	2012	2015	Doyle 2011
Mexico	Luis Echeverría	1970	1976	Carlos Bazdresch and Santiago Levy 1991; Kaufman and Stallingss 1991; Weyland 2001; D&E 1991
Mexico	Lopez Portillo	1977	1982	Carlos Bazdresch and Santiago Levy 1991; Sachs 1989
Nicaragua	Sandinistas	1979	1985	Sachs 1989; Ocampo 1991; Cardoso and Helwege 1991; Larrain and Melle 1991; Helwege 1991
Nicaragua	José Daniel Ortega Saavedra	1985	1990	Sachs 1989; Ocampo 1991; Cardoso and Helwege 1991; Larrain and Melle 1991; Helwege 1992; Hawkins et al 2019
Paraguay	Fernando Armindo Lugo Méndez	2008	2012	Doyle 2011; Houle and Kenny 2018
Peru	Fernando Belaúnde Terry	1979	1985	Kaufman and Stallings 1991; Ricardo Logo 1991; Savastano
Peru	Alan Gabriel Ludwig García Pérez	1985	1990	Sachs 1989; Weyland 2001; Drake 1991; Cardoso and Helwege 1991 Bazdresch and Levy 1991; Lago1991 Iguiniz-Echeverria 1991
Peru	Alberto Kenya Fujimori	1990	2000	Weyalnd 2001; Doyle 2011; Houle and Kenny 2018; Kaufman and Stalling 1991
Peru	Alejandro Celestino Toledo Manrique	2001	2006	Houle and Kenny 2018
Peru	Alan Gabriel Ludwig García Pérez	2006	2011	Doyle 2011; Houle and Kenny 2018
Peru	Ollanta Moisés Humala Tasso	2011	2016	Doyle 2011
Venezuela	Carlos Andrés Pérez Rodríguez	1974	1978	Paul W. Drake 1991; Kaufman and Stallings 1991; Weyland 2001
Venezuela	Carlos Andrés Pérez Rodríguez	1989	1993	Paul W. Drake 1991; Kaufman and Stallings 1991; By extension: Weyland 2001
Venezuela	Rafael Caldera Rodríguez	1993	1999	Houle and Kenny 2018; Weyland (2001)
Venezuela	Hugo Rafael Chávez Frías	1999	2002	Doyle 2011; Houle and Kenny 2018 Hawkins et al. 2019
Venezuela	Hugo Rafael Chávez Frías	2002	2013	Doyle 2011; Houle and Kenny 2019 Hawkins et al. 2019

Variable	Sample	Median	Mean	SD	Min	Max	Count
Gini	All	38.5	38.4	2.8	31.4	46.2	477
	No Populist: First Half	39	38.7	2.7	31.4	46.2	174
	No Populist: Last Half	38.4	38.1	2.7	31.4	46.2	149
	Populist: First Half	38.4	38.4	2.9	31.4	46.2	90
	Populist: Last Half	38	38.2	2.9	31.4	46.2	64
Oilrents	All	1.2	3	4.6	0	27	481
	No Populist: First Half	0.6	2.2	3.7	0	27	174
	No Populist: Last Half	0.7	2	3.3	0	17.2	149
	Populist: First Half	2.2	4.9	6.2	0	25.7	93
	Populist: Last Half	2.1	4.4	5.6	0	26.7	65
Polity2	All	8	4.8	5.7	-9	10	481
	No Populist: First Half	8	4.6	6.1	-9	10	174
	No Populist: Last Half	8	3.9	6.6	-9	10	149
	Populist: First Half	7	6.3	3.5	-5	9	93
	Populist: Last Half	7	5.1	4.7	-9	9	65
CBI	All	0.6	0.6	0.2	0.1	0.9	465
	No Populist: First Half	0.6	0.5	0.2	0.1	0.9	167
	No Populist: Last Half	0.6	0.5	0.2	0.1	0.9	143
	Populist: First Half	0.7	0.6	0.2	0.1	0.9	91
	Populist: Last Half	0.6	0.6	0.2	0.3	0.9	64

TABLE A.2: Summary Statistics for Covariables

Source: Penn World Table 9.0, World Bank Indicators

TABLE A.3: Excluded Presidents for Table 7

President	English Index	Spanish Index	Populist Dummy	Socialist
Ángel Víctor Paz Estenssoro	0.059	0.091	0	0
Belisario Antonio Betancur Cuartas	0	0	1	0
Daniel Ortega/Government Junta of National Reconstruction (Nicaragua 1980- 1985)	0.07	0.107	1	1
Dilma Vana Rousseff	0.117	0.101	0	0
Eduardo Alberto Duhalde Maldonado	0.185	0.068	0	0
Felipe de Jesús Calderón Hinojosa	0.083	0.107	0	0
Fernando de la Rúa Bruno	0.145	0.057	0	0
Fernando Henrique Silva Cardoso	0.057	0.065	0	0
Hugo Banzer Suárez	0.108	0.143	0	0
Hugo Banzer Suárez	0.108	0.143	0	0
Hugo Chavez	0.62	0.743	1	1
Jaime Ramón Lusinchi	0.084	0.115	0	0
Jaime Roldós Aguilera	0.139	0.231	0	0
Jorge Jamil Mahuad Witt	0.143	0.113	0	0
Juan Carlos María Wasmosy Monti	0.08	0.12	0	0
Juan Evo Morales	0.16	0.273	1	1
Julio María Sanguinetti Coirolo	0.05	0.099	0	0
León Esteban Febres-Cordero Ribadeneyra	0.138	0.143	0	0
Luis Alfredo Palacio González	0.136	0.129	0	0
Luiz Inácio Lula da Silva	0.158	0.056	0	0
Óscar Nicanor Duarte Frutos	0.194	0.175	0	0
Ricardo Froilán Lagos Escobar	0.214	0.333	0	0
Sixto Alfonso Durán Ballén Cordovez	0.207	0.429	0	0
Valentín Demetrio Paniagua Corazao	0.093	0.139	0	0
Verónica Michelle Bachelet Jeria	0.086	0.076	0	0

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent	Growth	Inflation	Growth	Inflation	Growth	Inflation
Populist	2.277**	205	1.899**	169.6	2.089**	18.1
	[0.50,4.06]	[-205.45,615.55]	[0.15,3.65]	[-302.07,641.34]	[0.24,3.94]	[-195.43,231.63]
LH	0.185	-125.4	-0.106	-119	0.458	-94.14
	[-2.06,2.43]	[-299.65,48.93]	[-2.44,2.23]	[-307.60,69.62]	[-1.85,2.76]	[-233.84,45.56]
Populist # LH	-1.673	504.1**	-1.413	509.7*	-2.096*	527.7**
	[-4.55,1.20]	[13.72,994.42]	[-4.24,1.42]	[-19.15,1038.59]	[-4.63,0.44]	[74.51,980.80]
L.GDP growth						
%	0.153**		0.13		0.301***	
	[0.01,0.30]		[-0.03,0.29]		[0.16,0.44]	
L.Inflation %		0.317***		0.492***		0.250**
		[0.10,0.54]		[0.29,0.69]		[0.06,0.44]
Gini	-0.688***	-26.76	-0.670***	-38.57	-0.905***	-27
	[-1.01,-0.37]	[-74.14,20.63]	[-1.00,-0.34]	[-99.25,22.11]	[-1.35,-0.46]	[-62.76,8.76]
Election Year	1.049	217.6*	0.823	216.2**	0.66	178.4*
	[-0.69,2.79]	[-5.50,440.74]	[-1.21,2.86]	[2.05,430.29]	[-0.86,2.18]	[-32.55,389.39]
Predecessor						
Populist	0.367	149.9	0.363	187.5	0.0699	-16.23
	[-0.92,1.65]	[-230.33,530.14]	[-1.31,2.03]	[-322.89,697.84]	[-0.86,1.00]	[-165.77,133.30]
Polity2	0.0578	7.102	0.0753	11.79	0.0712	10.94
	[-0.10,0.21]	[-10.64,24.84]	[-0.09,0.24]	[-13.01,36.60]	[-0.02,0.17]	[-6.22,28.11]
Assembly						
Elected	0.459	-74.94	-0.499	38.55	0.481	-192.8
	[-1.26,2.18]	[-622.16,472.29]	[-2.70,1.70]	[-537.59,614.70]	[-1.01,1.97]	[-647.32,261.71]
Sample:						
Exclude	Indices≥0.1	Indices ≥0.1	Indices≥0.05	Indices ≥0.05	Socialist	Socialist
Adj. R^2	0.3	0.24	0.28	0.3	0.35	0.18
Observations	427	421	374	368	446	440
Country FE	YES	YES	YES	YES	YES	YES
Year FF	YES	YES	YES	VES	VES	YES

TABLE A.4: Regression Results GDP Growth by Populist Type

95% confidence intervals in brackets. * p<0.10, ** p<0.05, *** p<0.01. 95% confidence intervals in brackets. All models are based on the two-way fixed effects estimation method. Model (1) and (2) exclude observations if Populist Index of both english and spanish newspapers are a) above 0.1 but populist dummy is equal to zero or b) the when both indicies are zero and our populist dummy is equal to one. Model (3) and (4) exclude observations if Populist Index of both english and spanish newspapers are a) above 0.05 but populist dummy is equal to zero or b) the when both indicies are zero and our populist dummy is equal to one.

	(1)	(2)	(3)	(4)			
Dependent	Growth	Inflation	Growth	Inflation			
English Index	7.696**	-160.9					
0	[0.30,15.09]	[-1329.57,1007.77]					
Spanish Index		[]]	3.93	106			
			[-2.17,10.03]	[-853.38,1065.37]			
LH	-0.0251	-17.51	-0.17	2.716			
	[-1.45,1.40]	[-246.33,211.32]	[-1.48,1.14]	[-207.62,213.05]			
LH # English Index	-1.804	461.8					
-	[-11.45,7.84]	[-1063.98,1987.53]					
LH # Spanish Index			0.343	281.2			
			[-7.71,8.39]	[-979.80,1542.12]			
L.GDP growth %	0.167***		0.176***				
	[0.08,0.26]		[0.08,0.27]				
L.Inflation %		0.338***		0.338***			
		[0.24,0.43]		[0.24,0.43]			
Gini	-0.752***	-9.172	-0.752***	-13.54			
	[-1.28,-0.23]	[-92.30,73.96]	[-1.28,-0.22]	[-97.32,70.25]			
Election Year	1.136	199.7*	1.118	201.4*			
	[-0.23,2.50]	[-18.36,417.70]	[-0.26,2.50]	[-18.17,420.91]			
Predecessor Populist	-0.249	79.72	-0.278	67.02			
	[-1.63,1.13]	[-143.68,303.12]	[-1.68,1.12]	[-158.61,292.64]			
Polity2	0.0745	2.83	0.0733	3.84			
	[-0.06,0.21]	[-18.64,24.30]	[-0.06,0.21]	[-17.86,25.54]			
Assembly Elected	0.21	-140.8	0.258	-136.2			
	[-3.43,3.85]	[-896.08,614.44]	[-3.39,3.91]	[-891.70,619.31]			
Adj. R^2	0.31	0.21	0.31	0.21			
Observations	470	464	470	464			
Country FE	YES	YES	YES	YES			
Year FE	YES	YES	YES	YES			
95% confidence intervals in brackets. * p<0.10, ** p<0.05, *** p<0.01.							

TABLE A.5: Regression Table Using the Newspaper Index



FIGURE A.1: Predicted Margins - Using the Newspaper Index

	(1)	(2)	(3)	(4)
Dependent	Growth	Growth	Inflation	Inflation
Populist	4.892	1.568	196.1	245.5
	[-1.39,11.17]	[-1.01,4.15]	[-357.60,749.75]	[-534.43,1025.43]
LH	0.231	0.773	-143.5	-139.3
	[-5.20,5.66]	[-1.86,3.41]	[-581.97,295.00]	[-315.57,36.96]
Populist # LH	-1.975	-2.506	721.5	373.6**
	[-5.67,1.72]	[-6.73,1.71]	[-952.63,2395.55]	[22.48,724.79]
L.GDP growth %	-0.0291	0.252***		
	[-0.30,0.24]	[0.15,0.35]		
L.Inflation %			0.272	0.319**
			[-0.39,0.93]	[0.06,0.58]
Gini	1.459	-0.825***	-192.2	10.36
	[-0.42,3.34]	[-1.24,-0.41]	[-569.15,184.84]	[-39.88,60.60]
Election Year	1.459	0.861	457.3	179.1*
	[-3.74,6.66]	[-0.98,2.70]	[-602.56,1517.12]	[-36.48,394.61]
Predecessor Populist	-1.216	0.571	-1.346	97.71
	[-6.01,3.58]	[-0.84,1.98]	[-264.35,261.66]	[-257.81,453.22]
Polity2	-0.228	0.0571	19.56	-16.91
	[-0.54,0.09]	[-0.11,0.22]	[-41.47,80.60]	[-43.67,9.86]
Assembly Elected	0	0.737	0	-20.07
	[0.00,0.00]	[-1.25,2.73]	[0.00,0.00]	[-362.01,321.87]
Sample	Recession	No Recession	Recession	No Recession
Adj. R^2	0.26	0.32	0.08	0.36
Observations	145	332	145	326
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
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TABLE A.6: Regression Results Recession Decomposition

95% confidence intervals in brackets, * p<0.10, ** p<0.05, *** p<0.01 Estimation Method: Two-Way Fixed Effects. Samples are split up into presidents that came into office during a recession (defined as two consecutive years of gdp per capita growth under 1%).

	(4)	(2)	(2)	()				
Dependent	(1) Crowth	(Z)	(3) Crowth	(4) Inflation				
Sampla	Bopulist	Dopulist	No Dopulist	No Dopulist				
Veer 1 in Office 2 Veers								
Year 1 In Office -3 Years								
Veer 1 in Office 2 Veers	[-1.88,2.41]	[-740.72,173.08]	[-2.98,0.31]	[-1/1.10,5/3.4/]				
fear 1 monice -2 fears	-2.049 ⁻							
Veer 1 in Office 1 Veers	[-4.36,0.26]	[-912.04,559.70]	[-1.51,1.00]	[-2/7.42,-17.02]				
Year 1 In Office -1 Years	-1.853	-89.39	-0.798	55.0 [256 01 422 21]				
Veer 1 in Office	[-0.49,2.76]		[-3.03,2.04] 1 F22*	[-550.01,425.21]				
Year 1 In Onice			-1.532					
Veer 1 in Office . Veer 1e	[-0.20,3.52]	[-2/3.24,180.94]	[-3.32,0.26]	[-309.08,94.95]				
Year 1 In Onice +Year 15								
Veer 1 in Office 12 Veers	[-1.00,3.33]		[-2.87,0.60]	[-320.48,122.52]				
Year 1 In Office +2 Years		905.2	0.043					
Veer 1 in Office 12 Veers	[-3.97,2.55]	[-161.17,1971.63]	[-0.97,2.26]	[-281.97,52.95]				
Year 1 In Office +3 Years				-24.14				
Veen 1 in Office 14 Veen	[-2.55,4.30]	[-07.20,180.01]	[-1.44,1.57]	[-481.31,433.02]				
Year 1 in Office +4 Years		382.0*** [42.C2.721.C2]	-1.429					
Veen 1 in Office 15 Veen	[0.34,4.50]	[43.02,721.53]	[-3.37,0.51]	[-393.80,013.09]				
Year 1 in Office +5 Years			-0.284	-40.41				
Veen 1 in Office 16 Veen	[-1.15,3.31]	[-180.05,429.88]	[-1.07,0.51]	[-491.30,410.53]				
Year 1 in Office +6 Years			-1.402***	41.04				
Veer 1 in Office 17 Veers	[-3.54,4.22]	[-115.05,272.85]	[-2.39,-0.41]	[-417.35,499.43]				
Year 1 in Office +7 Years	-0.4/8	-110.2	-1.096**	-230.9*				
Veen 1 in Office 10 Veen	[-2./4,1./8]	[-548.95,328.01]	[-2.10,-0.10]	[-493.55,31./5]				
Year 1 In Office +8 Years	-1.003	/04.1	-0.0959	-2/1.9*				
Veen 1 in Office 10 Veen	[-5.13,3.13]	[-266.30,16/4.60]	[-1.60,1.41]	[-5/8./4,34.91]				
Year 1 in Office +9 Years	0.676		-0.0872	-240.7*				
	[-1.88,3.24]	[-207.25,679.75]	[-1.92,1.74]	[-51/.21,35.//]				
Year 1 in Office +10 Years	1.433							
	[-1.99,4.86]	[-427.23,659.48]	[-0.60,1.55]	[-509.55,68.98]				
L.GDP growth %	0.158*		0.168*					
	[-0.02,0.34]	0 227***	[-0.02,0.35]	0 225**				
L.Inflation %		0.327***		0.325**				
Cini	0.100	[U.12,U.53]	0 1 4 0 * *	[0.07,0.58]				
Gini	0.100	7.075***	0.140**	5.900				
Floation Voor	[-0.06,0.27]	[0.32,15.03]	[0.02,0.26]					
Election rear			0.297					
Due de sesser De sullet	[-0.42,2.44]	[-/5./8,/13./2]	[-1.38,1.97]	[/0.20,482.86]				
Predecessor Populist	-0.497		-0.495					
Delite 2	[-2.26,1.26]	[-2/3./2,265.61]	[-1.99,1.00]	[-138.28,392.68]				
Polityz	0.169***	-12.39	0.187***	-8.909				
Assessed by Electronic	[0.04,0.30]	[-39.40,14.63]	[0.06,0.32]	[-35.12,17.31]				
Assembly Elected	1.231*		0.494	42.84				
	[-0.03,2.50]	[-535.04,/39./9]	[-0.91,1.90]	[-567.59,653.28]				
Length of Time in Office	0.416	-56.43*	0.416	-4/.64*				
	[-0.20,1.03]	[-121.05,8.20]	[-0.10,0.93]	[-102.01,6.73]				
Adj. K^Z	0.42	0.3	0.42	0.25				
Observations	431	425	431	425				
95% confidence intervals in brackets. * p<0.10, ** p<0.05, *** p<0.01								

TABLE A.7: Regression Table Growth and Inflation Rate

	(1)	(2)	(3)	(4)	(5)
Dependent	Growth	Inflation	Growth	Inflation	Inflation
Populist	2.474***	181.2	2.668***	199.3	210.7
	[0.87,4.08]	[-193.18,555.53]	[1.01,4.32]	[-219.39,618.01]	[-170.34,591.83]
LH	0.444	-115.2	0.49	-109.2	-114.9
	[-1.65,2.54]	[-260.47,30.14]	[-1.56,2.54]	[-249.64,31.23]	[-270.81,41.08]
Populist # LH	-1.687	459.7**	-1.618	466.3**	435.1*
	[-4.51,1.13]	[12.69,906.73]	[-4.44,1.20]	[10.25,922.42]	[-18.93,889.19]
L.GDP growth %	0.176**		0.167**		
	[0.03,0.32]		[0.02,0.31]		
L.Inflation %		0.323***		0.321***	0.318***
		[0.10,0.54]		[0.11,0.54]	[0.10,0.53]
Gini	0.147***	-4.012	0.276***	9.848	-0.681
	[0.05,0.25]	[-17.04,9.02]	[0.17,0.38]	[-11.90,31.59]	[-13.02,11.66]
Election Year	1.187	197.6*	1.121	192.3*	194.7*
	[-0.41,2.79]	[-22.62,417.87]	[-0.45,2.69]	[-26.74,411.25]	[-13.62,402.97]
Predecessor Populist	0.106	117.5	-0.0793	97.58	116.3
	[-1.19,1.40]	[-190.55,425.59]	[-1.42,1.27]	[-169.29,364.45]	[-194.66,427.35]
Polity2	0.0423	5.318	0.0307	3.668	5.665
	[-0.07,0.15]	[-10.27,20.91]	[-0.10,0.16]	[-13.95,21.28]	[-12.55,23.88]
Assembly Elected	0.356	-73.25	0.239	-78.83	-55.54
	[-0.95,1.66]	[-525.93,379.43]	[-1.08,1.56]	[-522.65,365.00]	[-513.60,402.52]
Coups	-1.531	-87.37			
	[-5.06,2.00]	[-380.42,205.67]			
Multiple Presidents			-2.331**	-240.3	
			[-4.54,-0.12]	[-779.10,298.59]	
CBI Garriga (weighted)					-375.8
					[-1058.55,307.00]
Adj. R^2	0.4	0.27	0.41	0.27	0.27
Observations	477	471	477	471	455
Country FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

TABLE A.8: Regression Table Political Events and CBI

95% confidence intervals in brackets. * p<0.10, ** p<0.05, *** p<0.01.

<u> </u>	(4)	(2)	(2)
	(1)	(2)	(3)
Dependet	Growth	Inflation	Inflation
No Populist	2.086	15.72	43.53
	[1.77,2.41]	[13.76,17.68]	[-67.77,154.82]
Populist	3.121	15.42	265.2
	[2.42,3.82]	[10.53,20.31]	[23.46,506.88]
FH	2.373	16.18	122.4
	[1.89,2.85]	[14.93,17.42]	[82.57,162.27]
LH	2.444	14.98	103.6
	[1.86,3.03]	[13.52,16.45]	[54.70,152.56]
No Populist # FH	1.955	16.36	74.78
	[1.15,2.76]	[14.07,18.65]	[-15.51,165.08]
No Populist # LH	2.247	14.96	4.797
	[1.63,2.86]	[11.91,18.01]	[-151.87,161.46]
Populist # FH	3.311	15.74	224.5
	[2.28,4.34]	[11.79,19.69]	[-23.94,473.02]
Populist # LH	2.887	15.04	315.5
	[1.67,4.11]	[8.41,21.67]	[55.53 <i>,</i> 575.50]
Sample: Exclude	Outliers	Outliers	Hyperinflation
Observations	448	396	459
P-value PopulistFH=PopulistLH ^a	0.607	0.729	0.225
P-value PopulistFH=NonPopulistFH ^a	0.0896	0.818	0.342
P-value PopulistLH=NonPopulistLH ^a	0.317	0.985	0.122

TABLE A.9: Predicted Margins Excluding Outliers

95% confidence intervals in brackets. Estimation method is Two-Way FE on the baseline model. ^a T-test on the equality of the parameters.

	(1)	(2)	(3)	(4)			
Dependent Variable	Growth	Inflation	Growth	Inflation			
No Populist	1.947	52.81	1.947	52.81			
	[1.63,2.26]	[-84.45,190.08]	[1.63,2.26]	[-84.45,190.08]			
Populist	3.687	441	3.687	441			
	[3.03,4.35]	[151.65,730.28]	[3.03,4.35]	[151.65,730.28]			
FH	2.556	164.1	2.556	164.1			
	[1.93,3.18]	[99.41,228.80]	[1.93,3.18]	[99.41,228.80]			
LH	2.45	199	2.45	199			
	[1.72,3.18]	[113.87,284.08]	[1.72,3.18]	[113.87,284.08]			
No Populist # FH	1.753	104.6	1.753	104.6			
	[0.75,2.76]	[-22.74,232.00]	[0.75,2.76]	[-22.74,232.00]			
No Populist # LH	2.188	-11.04	2.188	-11.04			
	[0.98,3.39]	[-194.74,172.66]	[0.98,3.39]	[-194.74,172.66]			
Populist # FH	4.241	286.5	4.241	286.5			
	[3.35,5.13]	[14.06,559.00]	[3.35,5.13]	[14.06,559.00]			
Populist # LH	3.001	631.3	3.001	631.3			
	[2.02,3.98]	[203.23,1059.30]	[2.02,3.98]	[203.23,1059.30]			
Observations	477	471	477	471			
Covariable Added	Decades	Decades	US GDP Growth	US GDP Growth			
P-value PopulistFH=PopulistLH ^a	0.0627	0.0842	0.0627	0.0842			
P-value PopulistFH=NonPopulistFH ^a	0.00506	0.312	0.00506	0.312			
P-value PopulistLH=NonPopulistLH ^a	P-value PopulistLH=NonPopulistLH ^a 0.358 0.0341 0.358 0.0341						
95% confidence intervals in brackets. Estimation method is Two-Way FE on the baseline model. ^a T-test on the equality of the parameters.							

TABLE A.10: Predicted Margins Including Decade Dummies and US GDP Growth