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Inflación y FDI en la izquierda populista latinoamericana

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La inversión extranjera directa como factor económico en la inflación es una pregunta sin respuesta en la literatura. Basado en la teoría del populismo latinoamericano y usando datos de panel para el período 1999-2014, este estudio se centra en el contexto populista latinoamericano de tendencia izquierdista del siglo XXI para explicar la inflación de precios al consumidor. La izquierda populista se define aquí como aquellos gobiernos enraizados en la tradición de la democracia radical con un estándar de priorización social. Los hallazgos sugieren que los esfuerzos antiinflacionarios de la izquierda populista no sólo deberían enfocarse en balancear el déficit presupuestario recortando el gasto público, sino también en fomentar la inversión extranjera directa.

Palabras claves: *Latino América, populismo, inflación, FDI, izquierda*

Inflation and FDI in Latin America's populist left

The role of foreign direct investment (FDI) as an economic factor in inflation rates is an unanswered question in the literature. Drawing upon the theory of Latin American populism, and based on panel data for the period 1999-2014, this study focuses on the left-leaning Latin American populist context of the twenty-first century to explain consumer price inflation. The populist left is defined here as those governments that are grounded in the radical democracy tradition with a social prioritization standard. The findings suggest that anti-inflationary efforts of the populist left should not only focus on trimming budget deficit by cutting government spending, but also to encourage FDI.

Keywords: *Latin America, populism, inflation, FDI, left-wing*

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Introduction

Many studies have examined differing inflation rates among developed countries. Many key variables have entered the equation (e.g., budget deficits, lack of central bank independence, seigniorage, increasing debt, salary indexation, currency devaluation, institutional weaknesses, etc.). This paper focusses on one particular explanatory variable that has been studied superficially: foreign direct investment (FDI). The most widely tested relationship indicates that increasing FDI as a percentage of GDP restrains inflation (Feldstein, 1982) because business investment importantly determines output growth (Levine and Renelt, 1992) and contributes to aggregate supply (Byrne and Davis, 2004). The evidence so far covers mostly high- and middle-income countries. None of the studies to date have examined the Latin American populist context of the twenty-first century, which is particularly significant in light of the hard data generated during a period that experienced profound transformations and a "palpable sense of *déjà vu*" animated by the return of populism (Luna, Murillo and Schrank, 2014: p.3).

The following sections review the literature concerning the historical association between inflation and populism through FDI in Latin America. Then, the sample is divided into two subsamples: the populist left and the control subsample. After reviewing the theoretical inflation factors of populism in Latin America and describing the context, the data is defined and a series of statistical tests critically assess the practical implications of encouraging FDI as an inflationary control policy. The most significant findings include partial support of the main hypothesis and a reinforcement of more classical anti-inflationary theories. The conclusion offers policy implications and research opportunities.

1. Latin American populism and inflation theories

A populist ideology is universally defined "as one that perceives 'the people' as a homogenous entity in opposition to the elites, reducing politics to an unmediated and direct expression of the popular will" (Roxborough, 1984:14). The definition of populism has evolved from Laclau's (2005) objective to transform the pejorative meaning of populism to Arato's (2013) critique of identifying the people with their symbolic significance of unity and totality (Crespo 2017:22-23). For the specific Latin American context, populism is defined as a charismatic connection between voters and politicians, unmediated by any institutionalized political party and based on a powerful Manichaean discourse of "the people versus the elite" that encourages an anything-goes attitude among supporters (Hawkins, 2003, p.1137). Throughout history, left-leaning populism has been particularly strong in Latin America, where many charismatic leaders have emerged in different countries since the beginning of the last century. The list includes legendary leaders of the three largest economies in the region: Getulio Vargas in Brazil, Juan Perón in Argentina, and Lázaro Cárdenas in México.

Distinctive features of Latin American populism include the nationalization of natural resources, agrarian reform, convening a Constituent Assembly, systematic de-marketization, implementation of socialized properties (e.g., cooperatives and community councils), and restoration of several state functions. Sader (2008: 22) discussed key elements of this populism as "its regulatory capacity to defend national sovereignty over natural resources; its ability to carry out universally inclusive social policies, as the representative of the great working mass of society; its scope for creating new mechanisms of political participation and for redefining the links between the social and the political".

From a theoretical perspective, as a socio-political movement that positions the poor against the elite, the populist left in Latin America addresses and represents the well-being and interests of the repressed, including low-level workers and indigenous groups (Kaufman and Stallings, 1991; Haggard and Kaufman, 1991). As an economic movement, it embodies the struggle to reduce inequality and poverty (Kaufman and Stallings, 1991; Haggard and Kaufman, 1991)[2]. An example of these efforts to decrease inequalities is the Venezuela under the Chávez rule, in which "the Gini coefficient, which measures economic inequality on a scale of zero to 100 (the higher the number, the more unequal the nation), improved from 51 in 2002 to 39 in 2011. In approximately the same period, the United States inched in the opposite direction, reaching a score of 47 by the end of George W. Bush's presidency" (Lecuna, 2013: 28).

From a practical perspective, however, the harmful consequences of populism in Latin America clearly outweigh its beneficial effects. These consequences are commonly divided into four phases (Dornbusch and Edwards, 1991: 11-12). In the initial phase, real wages and demand increase, while inflation is artificially suppressed by strict price controls and by the prevention of shortages with subsidized imports. In the second phase, real wages start to fall, while strong domestic demand and subsidies on basic goods generate a foreign exchange constraint, which ignites inflation. In the third phase, inflation increases substantially, shortages become a real threat to stability, and the lack of fiscal discipline increases the deficit at an accelerated pace. In the final, deteriorating phase of populism, savings and investments dramatically decline, and capital flight catches up with soaring inflation.

Sachs (1989: 14-15) adds that in the fourth phase of the Latin American populist left, governments tend to implement extremely harsh controls to ration scarce foreign exchange, which leads to a significant black-market premium. This situation in turn tends to raise the domestic price of imported goods that are paid for primarily on the margin with black-market dollars. Short-term results include a stronger anti-export bias and further incentives for under-invoicing exports and smuggling. These

[2] Leaman (2004: 324) suggests that the concept of populism should settle on the political definition and exclude the specific economic policy content.

distortions eventually prompt an official devaluation and a brief reunification of the exchange rate for current account transactions. Ultimately, the economy witnesses an expansionary monetary policy under floating exchange rates, which further reinforces a sustained rise in inflation.

Classical economic theory also assumes an association between expansionary populist policies and high inflation and even describes Latin American populism as an approach that deemphasizes the risks of high inflation and deficit finance (Dornbusch and Edwards, 1991: 9). This view is also supported by Haggard (2003: 417-418), who suggests that developing countries with soaring inflation have been those featuring urban labor movements that have mobilized into populist parties. Monetarists also consider inflation to be a problem caused by the surplus supply of money and the excess demand for goods and services, which is typical in populist regimes.

Keynesians add that inflation is the consequence of three pressures in the economy (Samuelson and Solow, 1960): (1) demand-pull inflation that results from the increase in demand, such as extensive government spending; (2) cost-push inflation that results from the rise in production costs, such as higher minimum wages; (3) and built-in inflation that partly results from the vicious circle that is created by people's expectations concerning higher prices and by the inertia of high inflation in the recent past. In all three types of Keynesian pressure, inflation is likely to increase with populist policies.

2. Return of the populist left

As a direct consequence to the historical concentration of wealth and extreme poverty in Latin America, the period 1999-2014 witnessed the simultaneous return to political power of several left-leaning populist governments. Similar to the classical definition of populism, the Latin American Left is commonly defined as the "current of thought, politics, and policy that stresses social improvements over macroeconomic orthodoxy, egalitarian distribution of wealth over its creation, sovereignty over international cooperation, democracy (at least when in opposition, if not necessarily once in power) over governmental effectiveness" (Castañeda, 2006, p: 32). Bruhn (2015: 243) nicely summarizes the working definition of the Latin American Left as "that portion of the political spectrum that prioritizes equality and social justice."

The return of the Latin American Left in the region started in Venezuela with Hugo Chávez in 1999 and continued with his political successor, Nicolás Maduro in 2013. Chávez also won three subsequent Presidential elections in 2000, 2006, and 2012 and one recall referendum in 2004. Brazil followed with the Lula da Silva phenomenon in 2002 and 2006 and the election of ex-urban guerrilla Dilma Rousseff in 2010 and 2014. Argentina saw die-hard Peronists Néstor Kirchner elected in 2003 and his wife, Cristina Fernández, elected in 2007 and 2011. Bolivia elected indigenous

Evo Morales in 2005 and 2009. Morales also won a recall referendum in 2008 with 67% of the vote. Honduras saw Manuel Zelaya elected in 2005, before the 2009 coup d'état. Ecuador elected Rafael Correa in 2006, 2009 and 2013. In Uruguay, Tabaré Vázquez was elected in 2004 and repeated in 2014, while ex-guerrilla "Pepe" Mujica won in 2009. In Nicaragua, Daniel Ortega was elected in 2006 and 2012; in Paraguay, former Bishop Fernando Lugo won in 2008, before the 2012 *coup d'état*. El Salvador elected Mauricio Funes in 2009. Perú elected Ollanta Humala in 2011.

In clarification, not all left-leaning countries are populist (e.g., Pepe Mujica and Michelle Bachelet in Uruguay and Chile respectively), and not all populist governments are left-leaning by nature or design. For example, the governments of Carlos Menem in Argentina and Alberto Fujimori in Perú were right-wing populists. From a socio-political perspective, the Menem and Fujimori regimes of the 1990s resembled classical populism of the 1930s and 1940s. However, different from left-leaning populism that priori the model of import substitute industrialization and state interventionism, Fujimori's so-called "neopopulism" is characterized by the implementation of neoliberal economic policies (Ellner 2003: 139).

The populist left in Latin America is ideologically supported by the *Partido dos Trabalhadores* (PT) of Brazil. Notably, the Lula-Rousseffs succession of governments in Brazil resembles the Bolivarian ideology in Venezuela much more than that of the right-wing governments that have close ties with the U.S., such as Costa Rica, Panamá and Colombia (French, 2009). In fact, the close relationship between Brazil and Venezuela extends beyond trade, which has more than quadrupled to over $6.5 U.S. billion per year since Lula took over in 2003. Moreover, the PT repeatedly served as a vital guarantor of Chávez in the face of his enemies, just as Brazil has supported the socialist government of Evo Morales despite the abrupt nationalization of the Brazilian state-owned oil enterprise PETROBRAS in Bolivia (French, 2009: 358). More importantly, the supergiant Brazil not only backed Venezuela's controversial bid for a seat on the UN Security Council, but the two governments also worked together to create the Banco del Sur, which is expected to take over part of the national reserves (Cameron, 2009: 344). In addition to the significant ideological and economic influence in the region, Brazil is also the homeland of the Forum of São Paulo (FSP). The FSP was created in 1990 by the PT and serves as a forum for Latin America's left based on horizontality and pluralism among traditions, ideologies, and styles of leadership. The FSP is not defined by an opposition to capitalism but, rather, its opposition to domination by capital or any form of neoliberal imperialism (French, 2009).

Table 1 shows a political matrix divided in two axis: (1) that of radical democracy or liberal democracy, and (2) that of social prioritization or pragmatic decision-making. (Ellner, 2010, 2011) On the one side, radical democracy in the tradition of Jean-Jacques Rousseau uses a strong executive branch to emphasize quantity over quality (or majority rule) by increasing the social inclusion of and the direct participation of the popular sectors of society. Liberal democracy uses corporatist mechanisms to emphasize an institutionalized system of checks and balances designed to avoid abuse of power that boosts national production and remains tough on corruption. On the other side, social prioritization, or national social planning, encourages worker management schemes in state-owned enterprises (SOEs). In contrast, pragmatic decision-making targets production efficiency mainly by opening an economy to global competition through free trade agreements, such as the North America Free Trade Agreement (NAFTA).

Table 1.

Political Matrix

TRADITIONS \ STANDARDS	**Social Prioritization**	**Pragmatic Decision-Making**
Liberal Democracy	*Social Democracy* (e.g., "Pepe" Mujica in Uruguay / Bachelet in Chile)	*Washington Consensus* (e.g., Piñera in Chile / Uribe in Colombia)
Radical Democracy	*Populist Left* (e.g., Chávez / Maduro in Venezuela)	*Liberal Populism* (e.g., Fujimori in Perú / Bolsonaro in Brazil)

Source: *Own elaboration.*

In summary, the populist left is measured as those sovereign nations that favor the radical democracy tradition and social prioritization standards over liberal democracy and pragmatic decision-making. Conveniently, the populist left subsample includes current and former member Latin American countries of the regional trade agreement called the Bolivarian Alliance for the Peoples of Our America (ALBA), plus the Brazil governed by the Lula-Rousseff tandem and the Kirchner-Fernández Peronist phenomenon in Argentina. (ALBA encompasses Venezuela, Ecuador, Bolivia, Nicaragua, Cuba, Saint Vincent and the Grenadines, Antigua and Barbuda, Dominica and Honduras, before the 2009 coup d'état).

For the purpose of this study, the populist left subsample includes the Brazil governed by the Lula-Rousseff tandem, the Kirchner-Fernández Peronist phenomenon in Argentina, the Venezuela chavista/madurista self-proclaimed Bolivarian socialism, Evo in Bolivia, Ortega in Nicaragua, Rafael Correa in Ecuador, Zelaya in Honduras, and Lugo in Honduras. These countries were not chosen at random. The precise years are: Venezuela from 1999 to 2014; Brazil and Argentina from 2003 to 2014; Bolivia from 2006 to 2014; Ecuador and Nicaragua from 2007 to 2014; Honduras from 2006 to 2009; and Paraguay from 2008-2012.

Conversely, the control subsample consists of the following countries: Brazil and Argentina from 1999 to 2002; Bolivia from 1999 to 2005; Ecuador and Nicaragua from 1999 to 2006; Honduras from 1999 to 2005 and from 2010 to 2014; Paraguay from 1999 to 2007 and from 2013 to 2014; and Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, México, Panamá, Perú and Uruguay from 1999 to 2014. These periods are similar to Blake, Rule and Rummel (2015), but encompass a more comprehensive sample for testing purposes. Table 2 shows an ideological snapshot in mid-2015 of the current ruling governments in Latin America.

Table 2.
Governments by Ideology, first half 2015

Country	*Populist Left*	*Social Democracy*	*Representative Democracy*	*Washington Consensus*
Argentina	Cristina Kirchner (*Frente para la Victoria*)			
Bolivia	Evo Morales (*Movimiento al Socialismo*)			
Brazil	Dilma Rousseff (*Partido dos Trabalhadores*)			
Chile		Michelle Bachelet (*Partido Socialista*)		
Colombia			Juan M. Santos (*Partido Social de Unidad Nacional*)	
Costa Rica		Luis Guillermo Solís (*Partido Acción Ciudadana*)		
Cuba	Raúl Castro (*Partido Comunista de Cuba*)			
Dominican R.		Danilo Medina (*Partido de la Liberación Dominicana*)		
Ecuador	Rafael Correa (*Alianza PAIS*)			
El Salvador		Salvador S. Cerén (*Frente Farabundo Martí para la Liberación Nacional*)		

Guatemala			Otto Pérez Molina (*Partido Patriota*)
Honduras			Juan O. Hernández (*Partido Nacional de Honduras*)
México			Enrique Peña (*Partido Revolucionario Institucional*)
Nicaragua	Daniel Ortega (*Frente Sandinista de Liberación Nacional*)		
Panamá			Juan Carlos Varela (*Partido Panameñista*)
Paraguay			Horacio Cartes (*Colorado Party*)
Perú		Ollanta Humala (*Partido Nacionalista Peruano*)	
Uruguay		Tabaré Vázquez (*Frente Amplio*)	
Venezuela	Nicolás Maduro (*Partido Socialista Unido de Venezuela*)		

Source: *Prepared by the author based on the Latinobarómetro Report classifications.*
Notes: For consistency purposes with the Political Matrix shown in Table 1, the terms "populist left" and "Washington Consensus" are used in the extremes. (Political parties' affiliation in parenthesis.)

3. Definition of the data

a. Dependent Variable

The information for the dependent variable, the percent of change in the average consumer price inflation rates from 1999 to 2014, was obtained from the IMF World Economic Outlook (WEO) database, which contains select macroeconomic data from the statistical appendix of the WEO report. These data present the IMF staff's analysis and projections of economic developments at the global level in major country groups and in many individual countries.

b. Independent Variable

The main independent variable of interest, the ratio of net FDI to GDP from 1999 to 2014, is the net balance of foreign direct investment divided by GDP for the corresponding year. FDI is composed of inward foreign direct investment in the reporting economy minus outward foreign direct investment. GDP information is drawn from the IMF-WEO database. FDI covers all of the transactions of direct investors and direct investment enterprises, including both incorporated and unincorporated enterprises. All the transactions between non-financial direct investment enterprises and their parent companies and affiliates are included under direct investment. The source of information for net FDI is the United Nations Economic Commission for Latin America and the Caribbean databases and statistical publications (CEPALSTAT).

Following the economic theory of Latin American populism, the dependent and independent variables are expected to move in the opposite direction, which implies that increasing inflation rates is associated with decreasing rates of FDI as a percent of GDP (to alleviate potential endogeneity issues, FDI/GDP enters the regressions with a one-period lag). The effect is expected to be strongly significant in the populist subsample, as "FDI would raise technology transfer, productivity, international production, networks, know how access to eternal market and reduce unemployment" (Okefor, 2016: 26).

c. Macroeconomic Controls

This research used statistical testing of general government total expenditure and revenue, gross national savings, general government gross debt, unemployment rate, and GDP per capita (current US$ prices). All data were drawn from the IMF-WEO database for the period 1999-2014, and excluding unemployment rate and GDP per capita, were expressed as a percentage of GDP for the corresponding year. Government expenditure consisted of total expenses and the net acquisition of nonfinancial assets. Government revenue mainly consisted of taxes, social contributions, and grants receivable. Gross national savings is gross disposable income less final consumption expenditures after accounting for an adjustment in pension funds. Government gross debt consists of all liabilities that require payments of interest and/or principal by the debtor to the creditor at a date in the future. The unemployment rate was calculated as a percentage of the total labor force.

Savings, debt, and government spending were strongly expected to enter the regressions with significant effects. Savings and inflation should strongly move in the opposite direction. History has shown that during the collapsing fourth phase of Latin American populism, saving patterns have been practically non-existent because the rates of return on capital have usually been well below the soaring rates of inflation (Dornbusch and Edwards, 1991). Conversely, given that debt is an important source of financing the increasing government spending of expansionary populist policies (Fernández, 1991), debt and government spending are usually expected to move in the direction of inflation.

d. Institutional controls

The first institutional control tested here was the monetary freedom sub-index of economic freedom by the Wall Street Journal (WSJ) and the Heritage Foundation (HF). Monetary freedom includes an assessment of price controls as a significant factor distorting market activity, and suggests that non-microeconomic intervention is the ideal state for the free market. The monetary freedom assessment scores are scaled from 0 to 100, where 100 represents maximum monetary freedom.

As populist policies tend to encourage corruption (Lecuna, 2018), the second institutional control is measured with the Corruption Perception Index (CPI) by the anti-corruption NGO Transparency International (TI). Corruption is defined by TI as the abuse of entrusted power for private gain. The CPI relates to perceptions of the degree of corruption as seen by business people, academics and risk analysts, and ranges between 100 (highly clean) and 0 (highly corrupt). (For consistency in the institutional coefficients, the CPI enters the regressions with the "old" rage of 0-10 and one decimal). Monetary freedom and corruption are expected to enter the regression models with strong negative coefficients, which indicate that better scores are related to lower inflation rates.

The remaining institutional controls are derived from Worldwide Governance Indicators (WGI) from the World Bank for the period 1999-2014 (data for the years 1999 and 2001 are not available). The WGI is a research dataset that measures the quality of governance and produces scores range from approximately -2.5 to 2.5, with higher values corresponding to better governance. These variables are also expected to have strong negative coefficients and multicollinearity issues.

The third institutional control is rule of law, which is the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, property rights, the police, and the courts. Fourth is voice and accountability, which is the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Fifth is regulatory quality, which is the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Sixth is government effectiveness, which is the quality of public and civil services and the degree of their independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Seventh is political stability and the absence of violence/terrorism, which is the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. Table 3 shows descriptive statistics of all variables.

Table 3.

Summary Statistics for 18 Latin American Countries, 1999-2014

	Latin American sample			Populist sample			Non-populist sample		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Dependent variable									
Inflation rate	-0.01%	96.1%	7.4%	0.1%	62.2%	10.9%	0.0%	96.1%	6.1%
Independent variable									
FDI / GDP	-2.5%	14.9%	3.2%	-1.9%	9.9%	2.3%	-2.5%	14.9%	3.5%
Economic controls									
Expenditure/ GDP	13.1%	44.0%	25.2%	17.1%	44.0%	31.8%	13.1%	39.4%	22.8%
Revenue / GDP	11.1%	39.5%	23.3%	20.0%	39.5%	30.1%	11.1%	34.4%	20.8%
GDP per capita	$897	$16,421	$ 5,098	$1,197	$14,992	$5,712	$897	$16,421	$4,885
Savings / GDP	7.4%	41.3%	19.0%	13.9%	41.3%	23.1%	7.4%	29.4%	17.6%
Debt / GDP	3.9%	137.5%	42.1%	12.8%	116.5%	42.0%	3.9%	137.5%	42.1%
Unemployment	0.0%	22.5%	7.5%	3.2%	18.2%	7.8%	0.0%	22.5%	7.4%
Institutional Controls									
Monetary freedom	33	95	74	40	89	67	33	95	76
Corruption	1.60	7.50	3.57	1.90	4.30	2.81	1.60	7.50	3.85
Voice & accountability	-0.96	1.24	0.11	-0.96	0.53	-0.13	-0.66	1.24	0.21
Regulatory quality	-1.64	1.54	-0.07	-1.64	0.31	-0.66	-1.07	1.54	0.17
Political stability	-2.39	1.00	-0.35	-1.39	0.16	-0.53	-2.39	1.00	-0.28
Rule of law	-1.79	1.37	-0.49	-1.79	0.00	-0.89	-1.23	1.37	-0.33
Gov. effectiveness	-1.19	1.26	-0.24	-1.19	0.18	-0.57	-1.17	1.26	-0.11

Source: *Own elaboration.*

2. Statistical tests and results

As Table 4 reports, the main effect conforms to the underlying theory. The direction of the coefficient suggests that, in the Latin American populist subsample, a high average ratio of FDI to GDP is associated with lower inflation rates. In simple words, Latin America's populist left policies come together with many other factors which put potential foreign investors off. The result is significant at the 10% level (the null hypothesis that the true slope coefficient is zero was not rejected approximately 8 times in 100 occasions). The size of the coefficient implies that under the assumption that when all other factors affecting inflation are held constant, if FDI/GDP increases by one percentage point, ceteris paribus, the inflation rate decreases by an average of approximately one percentage point (the 95% confidence interval for the true value of FDI/GDP is -2.33 to 0.15). The test of goodness of fit of the model, as shown by the adjusted R-squared, indicates that almost two-thirds of the variations observed in the inflation variable were explained by variation in the independent variables (overall probability is 0.0006).

Conversely, the non-populist's sample overall goodness of fit is half, and the relatively weak and positive direction of the main independent variable suggests that increasing the ratio of FDI to GDP is somehow related to increasing inflation rates. One argument used to explain this phenomenon is that FDI streams in Latin America have not delivered the promised spillovers in terms of technological transfer and learning, and have not generated the theoretical forward and backward linkages to the host economy (Porzecanski and Gallagher, 2007).

In addition to FDI as a percentage of GDP, government expenditure and monetary freedom also report significant movements in the populist specification. The first issue is not surprising because high inflation in populist Latin America is usually the ultimate result of an oversized high spending public sector, and any program that does not attack this direct cause is certain to fail (Fernández 1991, 143). However, the unexpected positive coefficient of the monetary freedom (e.g., more central bank independence and fewer price controls) estimator suggests that with the influence of over variables held constant, an increase in the monetary freedom index of one point (which implies an improvement) leads to an average increase in inflation of approximately 0.007 percentage points. The effect is highly significant, for the *p*-value of obtaining a *t*-value for this coefficient is practically zero. This contradicts theory.

Table 4.

Regression Results for Inflation Rates, FE (panel data, 1999-2014)

	Latin American sample			Populist sample			Non-Populist sample		
	Coef.	P-value	VIF	Coef.	P-value	VIF	Coef.	P-value	VIF
Independent variable									
FDI / GDP	0.079	0.712	1.29	-1.067	0.079	3.75	0.021	0.935	1.37
Economic controls									
Expenditure / GDP	0.353	0.046	7.96	0.645	0.028	9.32	0.303	0.319	6.70
Revenue / GDP	-0.614	0.001	7.68	-0.870	0.005	12.88	-0.591	0.060	6.36
GDP per capita	-4.E-06	0.053	2.02	2.E-06	0.657	2.99	-5.E-06	0.075	2.59
Savings / GDP	0.285	0.032	2.10	-0.313	0.239	5.35	0.478	0.004	1.69
Debt / GDP	-0.016	0.551	2.25	0.023	0.685	3.83	0.005	0.914	3.41
Unemployment	-0.392	0.091	1.56	-0.337	0.524	3.82	-0.648	0.039	1.68
Institutional controls									
Monetary freedom	-2.E-05	0.968	1.79	0.007	0.000	3.57	-4.E-04	0.645	1.29
Corruption	-0.017	0.092	5.22	0.019	0.402	9.45	-0.038	0.002	5.77
Voice & accountability	-0.009	0.775	8.75	0.066	0.339	10.74	0.022	0.584	11.76
Regulatory quality	-0.041	0.063	5.20	-0.054	0.315	4.71	-0.034	0.322	4.89
Political stability	-0.049	0.009	4.11	-0.009	0.823	6.07	-0.077	0.002	4.72
Adjusted R-squared	20%			58%			29%		
Observartions	228			59			160		
Mean VIF			4.16			6.37			4.35

Source: *Own elaboration.*
Notes: *It is safe to use fixed effects instead of random effects because the P-value of the Hausman test is significant. Instead of stars and T-stats, P- and VIF-values are shown here. (Standard errors are corrected for heteroscedasticity).*

a. Statistical Limitations

The direction of causality (or endogeneity) between inflation and its determining factors present a significant limitation that is very difficult to solve. For the purpose of this study, all macroeconomic variables including the main independent variable (FDI/GDP) were lagged one period at the expense of dropping the number of observations. By doing so, it is possible to alleviate, but not eliminate, potential endogeneity issues. Institutional controls were not lagged because the variations from year to year between the indexes are relatively small.

However, causal inference is impossible without making untested assumptions, which basically implies that there can be "no causation without manipulation" (Holland, 1986: 959). Therefore, it is impossible to completely separate inflation from its determining factors because inflation is the ultimate result of extremely complex and continuously changing phenomena that simultaneously involves a variety of economic, political, cultural, and historical factors. For these reasons, the directions of causality used here are based on the theory and the context.

In addition to endogeneity issues, estimating an individual joint relationship between inflation and its determining factors is not free from a potentially high degree of multicollinearity among explanatory variables, namely from institutional factors. As an alternative to pairwise correlations among explanatory variables, which are frequently unreliable and misleading (Gujarati and Porter, 2010: 254–255), the reliable variance inflation factor (VIF) test was used as an indicator of collinearity. In all tests, "rule of law" and "government effectiveness" reported high VIF values of nearly 20. After dropping these variables, the average VIF values decreased to about 5VIF of 10 or greater is a cause of concern for collinearity. The VIF cut-off value of 10 was originally suggested by Marquaridt (1970: 610) and was later validated by Marquaridt (1987), O'Brien (2007), and Mason and Perreault (1991). Therefore, to alleviate multicollinearity issues, "rule of law" and "government effectiveness" were dropped in the specifications reported in Table 4.

Conclusions

The four phase theory of Latin American populism warns about the dangers of expansionary macroeconomic policies that often lead to high inflation. However, the relationship between FDI and inflation has received scant attention in the academic literature. The statistical evidence reported here indicates that, for the Latin American populist context of the twenty-first century, increasing the ratio of FDI to GDP is significantly associated with decreasing inflation rates. The effect is not significant in the control subsample, which further strengthens populism as a conditional setting.

Using panel data for the period 1999-2014, the Latin American populist subsample revealed that high inflation rates are associated with decreasing rates of FDI as a percentage of GDP (i.e., an increase of FDI is associated with a decrease in inflation rates). The control subsample, however, reported a non-significant positive sign. The combined interpretation of the findings imply that populist economies from the left-of-center capture most of the explaining power of FDI on inflation rates in Latin America. Not surprisingly, significant macroeconomic factors in inflation portray certain characteristics of the populist left in Latin America, which include increasing rates of government spending and decreasing rates of government revenue.

Ironically, populism itself holds the key to overcoming inflationary pressures because populism is opportunistic by nature. Weyland (2003: 1098) claims that populism and neoliberalism are compatible and even have some unexpected affinities. For the specific case of contemporary populism in Latin America, trimming government spending and encouraging FDI are two public policies that would significantly stop the accelerating pace of inflation. However, in times of decreasing commodity prices, a left-wing populist government will never cut public spending; but encouraging FDI is at least feasible from a public policy perspective.

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