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Polarisation, Populism and Hyperinflation/s]: Some Evidence from Latin America*

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Abstract

We test for the populist view of state capture in Latin America between 1970 and 2003. The empirical results—based on the relatively novel panel time-series data and analysis—confirm the prediction that recently-elected governments coming into power after periods of political dictatorship, and which are faced with high economic inequality and demand for redistribution, end up pursuing unfunded populist */re/*distributive policies. These policies, in turn, lead to bursts of hyperinflation and therefore macroeconomic instability in the region. All in all, we suggest that the implementation of democracy as such requires not only the ‘right political context’—or a constrained executive—to work well, but it also must come with certain economic institutions, (e.g. central bank independence and a credible and responsible fiscal authority), institutions which would raise the costs of pursuing populist policies in the first place.

Keywords: Polarisation, populism, hyperinflation, Latin America.

JEL Classification: E31, E65, N16, O23, O54.

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1 Introduction and Motivation

Latin America has been known for its high economic inequality, and also for a particular propensity to flirt between political dictatorships and more democratic institutions. For instance, in the 1980s, after a spell of dictatorships, a number of Latin American countries re-democratised, (e.g. Argentina, Bolivia, Brazil and Peru, to mention a few). However, immediately after this process of political liberalisation, or a reduction in political polarisation, had taken place, high inflation and even bursts of hyperinflation also happened in those countries. Macroeconomic stabilisation took some time to take root. In fact, stabilisation came only after a considerable ten-year delay in the 1990s.

Given that, this paper uses data from Brazil, Argentina, Peru and Bolivia from 1970 to 2003, and the sample captures periods of high political polarisation, re-democratisation, high inflation, hyperinflation, and then finally macroeconomic stabilisation. We therefore test for the *populist view* of state capture in Latin America, which predicts that in countries with high economic inequality that re-democratise, the coalition coming into power will try to *[re]*distribute income from the rich to the poor. However, this is usually done through higher and unfunded public deficits, which in turn generate higher inflation, and this is known to be detrimental to the welfare of the poor¹.

The empirical results suggest that political polarisation presents a negative and significant impact on inflation, which indicates that the reduction in polarisation seen in the 1980s was, in fact, detrimental to macroeconomic stability. Therefore, the evidence allows us to speculate that the recently-elected governments in those countries pursued populist, or the so-called *[re]*distributive, policies that eventually led to poor macroeconomic performance in the role of very high rates of inflation and even hyperinflation.

The contribution of this paper to the literature is that, firstly, we focus on those Latin American countries which presented hyperinflationary bursts right after re-democratisation, which further disaggregates the data

¹For instance, Bittencourt (2009) investigates the case of the Brazilian hyperinflation of the 1980s and 1990s, and he suggests that the high rates of inflation seen at the time were regressive on inequality. Moreover, Easterly and Fischer (2001) suggest that the poor from 38 countries consider inflation to be a more pressing problem than the rich, which illustrates that the poor are the ones suffering more with higher inflation.

and therefore pinpoints more accurately the impact of reduced political polarisation on inflation. Secondly, we construct a political index based on principal components analysis, which extracts the common factors of different political variables, and that gives a proxy for political polarisation with more explanatory power. Thirdly, we make use of the relatively novel panel time-series analysis that deals with interesting empirical issues such as non-stationarity, heterogeneity bias in dynamic panels and between-country dependence, issues not covered by the previous studies, and which is therefore believed to improve on previous estimates.

The remainder of this paper is as follows: the next Subsection briefly reviews and inserts this paper within the previous literature. Section 2 describes the data and the empirical strategy used, and then reports and discusses the results. Section 3 concludes; it summarises the work, and suggests some policy implications and also future work.

1.1 Related Literature

Paldam (1987) presents some early evidence, which does not take into account the hyperinflationary bursts of the 1990s, that suggests that civilian governments tend to generate higher inflation than military ones in Latin America; and Sachs (1989), and Dornbusch and Edwards (1990) descriptively highlight the issue of recently-elected governments pursuing populist policies in Latin America.

Alesina and Drazen (1991) suggest that in more polarised societies stabilisations are delayed, (i.e. stabilisations come only after some ‘political consolidation’ takes place, or after an agreement on which group pays for the stabilisation is reached). This is important for the Latin American case because, roughly speaking, stabilisation came only after a ten-year delay following the implementation of democracy. Alternatively, Cukierman et al. (1992) suggest that more homogeneous societies rely less on seigniorage, and Veiga (2000) provides evidence that in more fragmented, or societies with a large number of political parties in congress, stabilisations are delayed. Moreover, Beetsma and Van der Ploeg (1996) argue that in excessively unequal societies, and Latin America fits the bill again, the government tries to please the medium voter, or the poor in this case, via redistribution².

²In addition, Al-Marhubi (1997), suggests that higher inequality is positively associated with higher inflation rates in a cross-section of countries.

Desai, et al. (2003) suggest that it all depends on how unequal a country is, (i.e. democratisation taking place in unequal countries lead to populist policies and hence high inflation, which is the case in some Latin American countries). Furthermore, Desai et al. (2005), suggest that inequality affects inflation, but conditional on the political structure³.

Acemoglu, Johnson, Robinson and Thaicharoen (2003) suggest that distortionary macroeconomic policies that retard economic growth, (e.g. in terms of high inflation), are symptoms of ‘weak institutions’, or not properly constrained executives. Furthermore, Acemoglu, Johnson and Querubín (2008) suggest that policy reforms are only successful when the ‘political context’ is right, (e.g. Zimbabwe implemented central bank independence in 1995, however it has been plagued with hyperinflation since 1999 when the constraints on the executive were severely curtailed). Finally, Dutt and Mitra (2008) suggest that excessive inequality leads to political instability, which in turn leads to policy volatility, and therefore lower investment and growth.

All in all, the literature suggests that the implementation of democracy in developing countries should be accompanied not only by the ‘right political context’, or well-constrained executives, but also by the right economic institutions, (e.g. sound fiscal and monetary policies conducted by a responsible and independent treasury and central bank respectively). All the same, the ‘right political context’ and the right economic institutions should move together in this context, so that the costs of delayed stabilisations could be somehow avoided. This seems to be the case in Latin America, (i.e. a re-democratisation process without much political maturity, or ‘political consolidation’, and also without the necessary economic institutions in place, resulted in a long spell of macroeconomic instability in the region, with all its costs)⁴.

2 Data, Empirical Strategy, and Results

The data set used covers the period between 1970 and 2003, and four Latin American countries, namely Brazil, Argentina, Peru and Bolivia, (i.e. $T =$

³Also, Aisen and Veiga (2006) suggest that political instability, exemplified by the number of government crisis, leads to higher inflation, in particular in developing countries.

⁴Alternatively, Crowe (2006) suggests that when democratisation takes place, the ‘elite bias’ is reduced and macroeconomic stabilisation takes place without much delay.

34 and $N = 4$). The data on inflation (*INFLAT*) come from the Bureaux of Census of the four countries. The political variables that we use come from the Polity IV data set, which is compiled and provided by the Centre for Global Policy, and they are: democracy (*DEMOC*), which ranges from 0 (a less democratic country) to 10 (a more democratic one); constraints on the executive (*XCONST*), which ranges from 1 (a less constrained executive) to 7 (a more constrained one); and (*POLCOMP*), which ranges from 1 (less political competition) to 10 (more political competition).

With the above information we can then use principal components analysis to extract the common factors, or the linear combinations, of these three normalised Polity IV variables, so that we end up with a proxy for political polarisation (*POLITY*) with more explanatory power. This is potentially important because in this case we are able to reduce the dimensionality of a set of prospective political variables, and we end up with one variable, *POLITY*, that contains most of the information coming from different candidates for political polarisation.

The control variables used include the government's share of the real gross domestic product (*GOV*), the ratio of exports and imports over the real gross domestic product (*OPEN*) and the growth rate of the real gross domestic product (*GROWTH*), which are all provided by the Penn World Table (PWT) data set mark 6.2.

Table One presents the correlation matrix so that we can have an initial insight on the behaviour of the data; and what can be initially seen is that both measures of polarisation used, (i.e. *XCONST* and *POLITY*) present negative and statistically significant correlations with inflation. This tentatively suggests that when polarisation decreased, or when these countries re-democratised in the 1980s, macroeconomic performance deteriorated in terms of inflation rates.

The control *GOV* presents the expected positive correlation with inflation, (i.e. bigger governments tend to generate higher inflation), and *OPEN* and *GROWTH* present the expected negative signs against the inflation rates. This is because it is believed that more economically open societies and countries that grow faster tend to present a more stable macroeconomic environment.

Table 1: The Correlation Matrix: Brazil, Argentina, Peru and Bolivia, 1970-2003.

	INFLAT	GOV	XCONST	POLITY	OPEN	GROWTH
INFLAT	1					
GOV	.0932	1				
XCONST	-.2074*	.0773	1			
POLITY	-.1886*	.0404	.9851*	1		
OPEN	-.0722	-.2121*	-.2472*	-.2214*	1	
GROWTH	-.2657*	.0889	.2088*	.1656	.0053	1

Sources: Bureaux of Census, Centre for Global Policy, Penn World Table, and author's own calculations. * represent statistical significance at the 5% level.

In addition, and for the sake of clarity, we plot the Brazilian data, which somehow mirror the other countries in the sample, so that we can have a more in-depth initial view of the behaviour of the data at the time. The first panel of Figure One illustrates the behaviour of inflation and the share of government in the gross domestic product, and what can be seen is that both variables moved together at the time of the hyperinflationary bursts. In the second panel we put together inflation and *POLITY*, and it illustrates the fact that when Brazil re-democratised in 1985 the inflation rates increased considerably.

The third panel illustrates the sharp increase in *GOV* that took place after the re-democratisation of 1995. Finally, we plot the simple OLS regression line between inflation and *POLITY*, and the relationship is negative, which suggests again that when Brazil re-democratised in 1985, the inflation rates increased sharply.

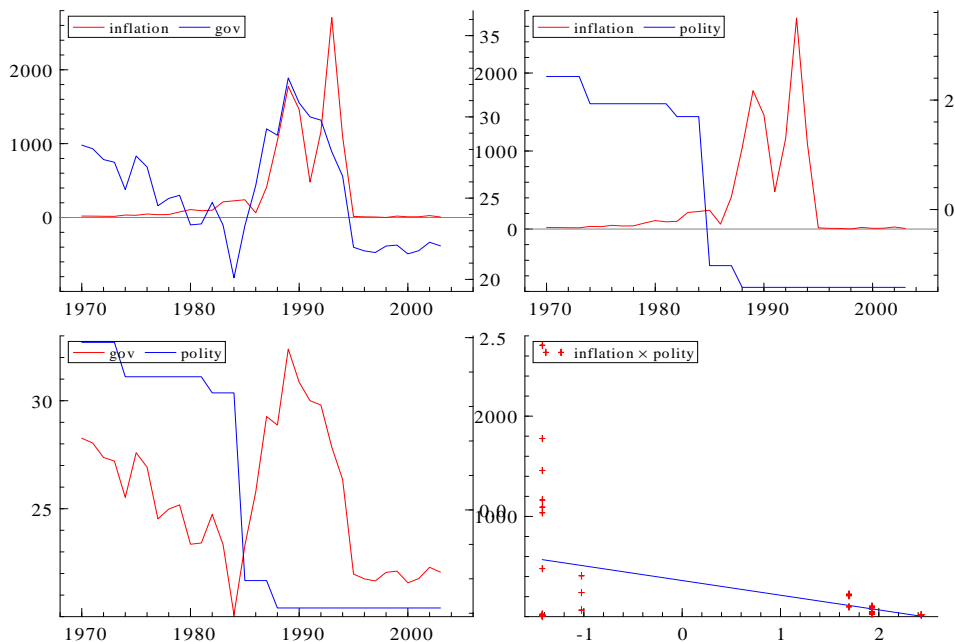


Figure 1: Inflation and Political Polarisation, Brazil 1970-2003. Sources: Brazilian Bureau of Census, Centre for Global Policy, Penn World Table, and author’s own calculations. *POLITY* is the measure of political polarisation, *INFLAT* is the inflation rates, and *GOV* is the government’s share of the real gross domestic product.

Therefore, this initial inspection of the data, with all its caveats, suggests that the process of political liberalisation taking place in the 1980s was followed by very high rates of inflation in the region. Moreover, stabilisation was clearly delayed in the Brazilian case, (i.e. it came only in 1994, or ten years after the first civilian President came into office, with the implementation of the Real Plan).

Moving forward, since we have a $T > N$ data set, the empirical strategy used is based on panel time-series analysis. Firstly, for non-stationarity in the country time-series we use the Im, Pesaran and Shin [IPS (2003)] test, which allows for heterogeneous parameters and serial correlation. The IPS test consists of an augmented Dickey-Fuller regression for each country of each variable, which are then averaged. The moments of the mean and variance of the average \bar{t} are -1.43 and .62 respectively⁵.

⁵An alternative to IPS (2003) is the test by Levin, Lin and Chu (2002). However, this

Secondly, the issue of heterogeneity bias in dynamic $T > N$ panels—caused for under mistakenly assumed homogeneity of the slopes the composite disturbance term is serially correlated and the explanatory variables x_s are not independent of the lagged variable y_{t-1} —is dealt with by the Swamy’s (1970) Random Coefficients (RC) estimator, which gives consistent estimates of the expected values. The RC estimator assumes the existence of heterogeneous intercepts *and* slopes, and it consists of a weighted average of α_i and of the β_i s and the weight is a modified variance-covariance matrix of the heterogeneous parameters⁶. Moreover, the one-way Fixed Effects (FE) estimator also provides consistent estimates in dynamic models when $T \rightarrow \infty$, but only when the slopes are homogeneous⁷. All in all, these estimators account for the fact that some of these countries present different levels of economic development because of particular idiosyncrasies, (i.e. Brazil and Argentina are known to be relatively more developed than Peru and Bolivia).

We therefore estimate static and dynamic models with different pooled estimators, (i.e. the benchmark Pooled Ordinary Least Squares (POLS), Fixed Effects (FE) and Random Coefficients (RC)). The estimated heterogeneous dynamic equation is therefore as follows,

$$\begin{aligned} INFLAT_{it} = & \alpha_i + \beta_i POLITY_{it} + \gamma_i GOV_{it} + \delta_i OPEN_{it} & (1) \\ & + \epsilon_i GROWTH_{it} + \varepsilon_i INFLAT_{it-1} + v_{it}, \end{aligned}$$

in which $INFLAT$ are the inflation rates, $POLITY$ are the common factors of $DEMOC$, $XCONST$ and $POLCOMP$, GOV is the share of government in the gross domestic product, $OPEN$ is a measure of economic openness and $GROWTH$ are the growth rates of the gross domestic products.

In addition, we deal with between-country dependence, which is believed to happen through the disturbances being $E(u_{it}u_{jt}) \neq 0$. For that we make use of Zellner’s (1962) Seemingly Unrelated Regressions (SUR) estimator,

test assumes parameter *homogeneity*, and therefore does not consider a possible heterogeneity bias present in the data.

⁶The Mean Group estimator, proposed by Pesaran and Smith (1995), is also an alternative. However, this estimator is sensitive to outliers, a problem not faced by the RC estimator.

⁷In addition, GMM-type estimators are not an alternative under $T > N$ for the overfitting problem. See Bond (2002).

which presents greater efficiency, the greater the correlation amongst the disturbances. The SUR estimates different country time series, which are then weighted by the covariance matrix of the disturbances⁸. Moreover, this estimator provides rather insightful estimates because it disaggregates the analysis even further than the pooled analysis⁹. Equation Two illustrates the equation estimated for each country,

$$INFLAT_t = \alpha_t + \beta POLITY_t + \gamma GOV_t + \delta OPEN_t + \epsilon GROWTH_t + v_t. \quad (2)$$

In terms of results, firstly, in Table Two we report the IPS statistics and they suggest that we can reject the null hypothesis of unit roots and accept in favour of the alternative that at least *one* country of each variable is, in fact, stationary. This implies that no further data transformations are needed, and also that the variables are not cointegrated.

Table 2: Panel Unit-Root Tests

Variables	IPS Statistics
INFLAT	-3.06
GOV	-2.35
XCONST	-2.50
POLITY	-2.14
OPEN	-2.07
GROWTH	-2.95

The moments of the mean E and variance var of the average \bar{t} are respectively: -1.43 and .62. Source: Im, Pesaran and Shin (2003) and author's own calculations.

Secondly, in Table Three we report the static estimates of *XCONST* and *POLITY* on inflation using the POLS and FE estimators respectively. Columns One and Two make use of the *XCONST* variable and it presents a negative and statistically significant impact on inflation in both estimated

⁸An alternative to SUR is the Common Effects Estimator proposed by Pesaran (2006). However, N is assumed to be large and in our data set $N=4$. Furthermore, Kapoor, M., H. H. Kelejian, et al. (2007) propose an estimator that also works best under the $N \rightarrow \infty$ assumption.

⁹For a more thorough discussion about panel time-series analysis in general, see Smith and Fuertes (2008).

equations. The control variables present the expected signs and are all statistically significant, (i.e. *GOV* is positively associated with inflation, and *OPEN* and *GROWTH* are negatively associated with the inflation rates). The F test* suggests the presence of fixed effects, which indicates that the FE estimator is the most appropriate one in this static instance.

Columns Three and Four make use of the *POLITY* proxy for political polarisation, and this proxy also presents negative and statistically significant effects on inflation in both equations. The control variables follow the same pattern as before, (i.e. *GOV* has a positive impact on inflation, and *OPEN* and *GROWTH* present negative effects on the inflation rates). The F test* confirms the presence of fixed effects, which again makes the FE estimator the most appropriate to be used in this context.

Table 3: Static Estimates of XCONST and POLITY on Inflation, 1970-2003.

INFLAT	Static Models			
	POLS (1)	FE (2)	POLS (3)	FE (4)
GOV	.1136 (3.26)	.1236 (2.05)	.1115 (3.16)	.1199 (1.97)
XCONST	-1.5262 (-2.72)	-2.44 (-5.03)		
POLITY			-.1576 (-1.94)	-.3477 (-4.84)
OPEN	-.0886 (-7.50)	-.2373 (-9.46)	-.0859 (-7.21)	-.2449 (-9.45)
GROWTH	-.1560 (-5.42)	-.1060 (-4.28)	-.1631 (-5.64)	-.1096 (-4.42)
Constant	4.50 (4.98)	8.33 (5.02)	3.61 (4.35)	7.19 (4.48)
F test	28.96	50.44	27.32	49.36
F test*		19.88		20.74
R ²	.46	.39	.44	.37

T-ratios in parentheses. Number of observations: $NT = 136$. The basic estimated equation is $INFLAT_{it} = \alpha + \beta POLITY_{it} + \gamma GOV_{it} + \delta OPEN_{it} + \epsilon GROWTH_{it} + v_{it}$, in which *INFLAT* is the inflation rates, *POLITY* is the political polarisation proxy, *GOV* is the government's share in the real GDP, *OPEN* is a measure of economic openness, and *GROWTH* is the growth rates of the real GDP. POLS is the Pooled Ordinary Least Squares and FE is the Fixed Effects estimators.

Thirdly, in Table Four we report the dynamic estimates of *XCONST* and *POLITY* on inflation using the FE and RC estimators respectively. In Columns One and Two we use the variable *XCONST*, and it presents negative and statistically significant effects on inflation. The control *GOV*

presents the expected positive sign, however it is not entirely significant this time. The other two controls, (i.e. *OPEN* and *GROWTH*), present the expected negative effects on inflation, and are statistically significant. Although the F test* suggests the presence of fixed effects, the Likelihood Ratio (LR) test suggests heterogeneity of intercepts *and* slopes, which indicates that the RC estimator is the one delivering the best estimates in this dynamic case.

In Columns Three and Four we make use of the *POLITY* proxy for political polarisation, and it presents negative and statistically significant effects on inflation in both equations. As before, the control *GOV* presents the expected positive sign, however it is not statistically significant. *OPEN* and *GROWTH* present the expected negative effects on inflation, and are, just as before, statistically significant. The F test* indicates the presence of fixed effects, nevertheless, the LR test again suggests the presence of heterogeneous intercepts *and* slopes, which makes the RC estimator the best alternative in this context.

In addition, it is worth mentioning that in all these dynamic equations, *GOV* loses statistical significance, which further highlights the importance of political polarisation as the *main* determinant of inflation in the region at the time.

Table 4: Dynamic Estimates of XCONST and POLITY on Inflation, 1970-2003.

INFLAT	Dynamic Models			
	FE (1)	RC (2)	FE (3)	RC (4)
GOV	.0709 (1.60)	.0085 (.09)	.0698 (1.57)	.0152 (.17)
XCONST	-.7473 (-1.95)	-1.04 (-2.16)		
POLITY			-.0960 (-1.71)	-.1426 (-1.93)
OPEN	-.1159 (-5.47)	-.1130 (-4.03)	-.1159 (-5.29)	-.1146 (-3.88)
GROWTH	-.0819 (-4.44)	-.0829 (-3.29)	-.0835 (-4.53)	-.0845 (-3.40)
INFLAT ₍₋₁₎	.5846 (10.82)	.5613 (6.11)	.5905 (10.92)	.5630 (6.21)
Constant	3.36 (2.63)	4.41 (1.94)	2.93 (2.41)	3.72 (1.66)
F test	101.28		100.37	
F test*	8.39		7.97	
Wald test		211.28		209.73
LR test		46.21		46.48
R ²	.68		.68	

T-ratios in parentheses. Number of observations: $NT = 136$. The basic estimated equation is $INFLAT_{it} = \alpha_i + \beta POLITY_{it} + \gamma GOV_{it} + \delta OPEN_{it} + \epsilon GROWTH_{it} + \varepsilon INFLAT_{it-1} + v_{it}$, in which $INFLAT$ is the inflation rates, $POLITY$ is the political polarisation proxy, GOV is the government's share in the real GDP, $OPEN$ is a measure of economic openness, and $GROWTH$ is the growth rates of the real GDP. FE is the Fixed Effects and RC the Random Coefficients estimators.

Finally, when we disaggregate the analysis further and make use of the SUR estimator that takes into account any between-country dependence present in the data, the story the data are telling does not change much. In the first panel of Table Five the $XCONST$ variable presents negative signs and most of the estimates are statistically significant. Brazil is the country with the largest estimate of all, and Argentina, perhaps for being the least unequal country in the sample, does not present entirely significant estimates. Furthermore, the control variables present the expected signs, (i.e. GOV keeps its positive impact on inflation, and $OPEN$ and $GROWTH$ their negative effects, and most of the estimates are also statistically significant). The Lagrange Multiplier (LM) test of independence suggests that we can not accept the null hypothesis of between-countries [*in*]dependence.

When we use $POLITY$ as the proxy for political polarisation in the second panel of Table Five, all estimates present the by now expected neg-

ative effects on inflation, and most of the estimates are also statistically significant, with Argentina being the only exception again. Moreover, most controls present the expected signs as above and are statistically significant. The LM test indicates that we can not accept the null of between-countries independence, which also justifies the use of the SUR estimator in this instance.

Table 5: SUR Estimates of XCONST and POLITY on Inflation, 1970-2003

SUR				
INFLAT	BRAZIL	ARGENTINA	PERU	BOLIVIA
GOV	.1367 (1.74)	1.12 (3.72)	-.1970 (-1.68)	.2443 (1.42)
XCONST	-4.11 (-3.65)	-1.16 (-1.22)	-2.52 (-3.72)	-2.19 (-2.38)
OPEN	-.2401 (-4.33)	-.3997 (-8.42)	-.2609 (-7.38)	-.1383 (-2.06)
GROWTH	-.0626 (-1.26)	-.0842 (-2.20)	-.1039 (-3.85)	-.0723 (-.66)
LM test	2.97			
GOV	.1435 (1.85)	1.16 (3.87)	-.1899 (-1.63)	.2632 (1.52)
POLITY	-.5583 (-3.69)	-.1522 (-1.09)	-.3457 (-3.84)	-.3709 (-2.42)
OPEN	-.2367 (-4.36)	-.4080 (-8.22)	-.2740 (-7.76)	-.1368 (-2.06)
GROWTH	-.0701 (-1.42)	-.0861 (-2.25)	-.1018 (-3.80)	-.0751 (-.70)
LM test	2.94			

T-ratios in parentheses. Number of observations: $NT = 136$. The basic estimated equation is $INFLAT_t = \alpha_t + \beta POLITY_t + \gamma GOV_t + \delta OPEN_t + \epsilon GROWTH_t + v_t$, in which $INFLAT$ is the inflation rates, $POLITY$ is the political polarisation proxy, GOV is the government's share in the real GDP, $OPEN$ is a measure of economic openness, and $GROWTH$ is the growth rates of the real GDP. SUR is the Seemingly Unrelated Regressions estimator.

All in all, the estimates reported above indicate that the process of re-democratisation of the Latin American countries in this sample was followed by high rates of inflation, and even bursts of hyperinflation. Loosely speaking, the reduction in political polarisation, or the introduction of more democratic institutions, seen at the time was somewhat detrimental to macro-economic stability, at least in terms of inflation rates. Alternatively, it can be said that unequal and repressed societies that implement more democratic institutions must make sure that the executive is well constrained, and also introduce sound economic institutions such as a responsible fiscal

authority and an independent central bank, so that hyperinflations do not occur and stabilisations, when needed, are not delayed.

3 Concluding Remarks

We investigated in this paper the role of more democratic institutions on inflation in a panel of Latin American countries that re-democratised in the 1980s. The results, based on the relatively novel panel time-series analysis, suggest that those countries suffered from high rates of inflation and even bursts of hyperinflation right after they re-democratised. Moreover, macro-economic stabilisations came only after a long and protracted delay. All in all, the *populist view* of state capture, which predicts that newly-elected coalitions coming into power in repressed societies end up generating higher deficits and, in turn, higher inflation, is accepted by the data and analysis conducted here.

The current relevance of carrying out a historical study on the Latin American hyperinflationary experience is that, as we speak, an emerging country like Zimbabwe is suffering from hyperinflation. On the one hand, it can be speculated that the Zimbabwean hyperinflation which started only in 1999, coincides with the fact that the constraints on the governing party were relaxed, and at the same time a new and more representative opposition party was created. On the other hand, the present analysis can also be related to the South African case, a repressed society indeed, but with a rather strong constitution which constraints the executive, and without much political competition or opposition to the governing party since the democratisation of 1994. In this respect the South African government, which has never bowed to populist demands for *[re]*distribution coming from a weak opposition, has been quite efficient in managing the economy.

Furthermore, the quality of the evidence presented is, to a certain extent, boosted not only because we focus on those rather unequal countries which re-democratised and suffered from hyperinflation in Latin America, but also because we use a novel proxy for political polarisation based on principal components analysis, which is believed to be a step forward since it has more explanatory power. Moreover, we make use of the novel panel time-series analysis, which deals with important empirical issues not covered by the previous studies such as heterogeneity bias in dynamic panels and between-

country dependence. It is therefore believed that the analysis conducted here represents a step forward in terms of achieving better and more insightful estimates.

Regarding future work, on the one hand, the inclusion of inequality would be a welcome development to this analysis, however data on inequality from Peru and Bolivia are very fragmented, which somehow precludes a study on the impact of political polarisation *and* inequality on inflation. More realistically, the use of an alternative proxy for ‘political consolidation’, (e.g. the number of political parties in congress since re-democratisation) would be a feasible alternative to Polity IV variables.

On the other hand, this sort of analysis would be applicable to the Zimbabwean case, (i.e. the impact of the reduction on the constraints on the executive and the hyperinflationary episode that followed since 1999 should be further analysed). Moreover, the current South African context is of some interest, since a new political party with some opposition power has been recently created, and which can demand from the government some sort of *[re]*distribution.

To conclude, the Latin American hyperinflationary experience is insightful because it exemplifies an interesting pattern, (i.e. repressed societies that re-democratise and which still do not have the ‘right political context’ or efficient constraints on the executive, nor the right economic institutions such as an independent central bank conducting sound monetary policy and a credible fiscal authority in place, will end up doing more harm than good in terms of macroeconomic *[in]*stability, which affects mainly the welfare of the poor). Moreover, those Latin American countries took, roughly speaking, ten years to stabilise, which is also an example of a delayed stabilisation. Macroeconomic stabilisation came only when those countries matured their political constraints on their executives, and also when they introduced central bank independence, inflation targeting and fiscal responsibility laws in the 1990s¹⁰.

All in all, political liberalisation should be accompanied by some sort of ‘political consolidation’ and also by the implementation of the right economic

¹⁰For instance, Singh (2006), Singh and Cerisola (2006) and Santiso (2006) highlight the importance of the much improved macroeconomic performance in Latin America recently to produce better economic outcomes from the 1990s onwards. Nevertheless, Carstens and Jácome (2005) report that Brazil still has one of the least independent central banks in Latin America.

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