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WHY HAVE SO MANY DISINFLATIONS SUCCEEDED?

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Abstract

Why is that the achievements of some disinflations from low and moderate peaks are long-lived, whereas in others the gains in the inflationary front dissipate quickly? Based on an index of the sustainability of disinflations proposed in the paper, various competing explanations of what determines sustainability are tested. Three factors, potentially at the top of the list of many researchers, are shown to be insignificant: oil shocks, fiscal policy and inflation targeting. Nevertheless, other important features such as the exchange rate regime, achieving a low inflation rate during the disinflation and food price shocks are shown to be important variables driving the sustainability records.

Keywords: Disinflation, Monetary Policy, Supply Shocks, Inflation Targeting, Exchange Rate Regime. **JEL Classifications**: E31, E32, E52, E58, F41

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¿POR QUÉ HA HABIDO TANTAS DESINFLACIONES EXITOSAS?

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Noviembre 29, 2005

Resumen

¿Por qué los logros en algunas desinflaciones son duraderos mientras que en otras los triunfos en el frente inflacionario se disipan con rapidez? En este artículo construimos un índice de sostenibilidad de las desinflaciones y estimamos qué factores lo determinan. Encontramos que el régimen de tasa cambio, lograr una inflación baja y choques a los precios mundiales de alimentos, son determinantes significativos de la sostenibilidad de las desinflaciones. Otros factores como la política fiscal, los esquemas de inflación objetivo y los precios del petróleo, resultan menos importantes.

Palabras claves: Desinflación, Política Monetaria, Inflación Objetivo, Régimen de Tasa de Cambio. **Clasificación JEL:** E31, E32, E52, E58, F41.

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"[...] the work of policy is not done: sustaining reasonable price stability presents its own challenges" [IMF, October 1999, p 125]

1 Introduction

One remarkable macroeconomic feature of the 1990s is the low inflation achieved both by developed and developing countries. Indeed, during the second half of the decade, G7 nations exhibited median inflation rates below the 3% mark, while Latin-America –notorious for its inflation during the 70s and 80s– achieved median inflation rates in the single digit range. Figure 1 illustrates the evolution of the median inflation rates in both groups of countries since 1972.

As we document in the paper, the higher inflation rates observed by developed and developing countries during the 70s and 80s are not explained by a lack of disinflationary attempts, but rather by their more modest success in keeping in place the gains of those disinflations (the precise definitions of disinflation and moderate peaks are given in section 2). Based on the terminology proposed in this paper, disinflations of the 70s and 80s were less *sustainable* than those of the 90s. Why are the achievements of some disinflations sustained, whereas in other cases gains on the inflationary front are rapidly lost? That is the question addressed in this paper.

Similar questions to our's have been asked in the literature on stabilization, i.e. the branch dealing with disinflations from high inflation peaks (e.g., Hamann and Prati, 2002; Calvo and Vegh, 1999). Nevertheless, after the worldwide disinflation of the 1990s, it has become apparent that disinflations from very high inflation rates no longer constitute the norm, not even in Latin America and the Caribbean (LAC). Most policymakers will face, in the present and the near future, questions related to disinflations from moderate or low inflation rates and sustaining reasonable price stability. Unfortunately, very little is known about the sustainability of such disinflations, a gap our paper

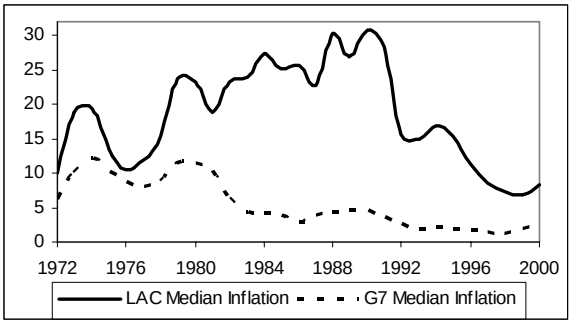

Figure 1: Median inflation rates.

begins to fill.[1]

Our study is unique in that it tackles the analysis of the sustainability of disinflations from a novel perspective. We build a sustainability index based on the behavior of CPI inflation following the end of a period of disinflation. Then, we estimate the index using the sample of 56 disinflations of LAC and G7 countries identified in Hofstetter (2004a,b). It will be shown that G7 countries have better sustainability records than LAC ones, but that the gap between the two has been shrinking. Moreover, both have experienced a notable improvement in the sustainability of disinflations during the 90s.

After exploiting the cross-episode variation in the index to investigate the main stylized facts, we take steps to understand what determined the success or failure of these episodes. There are several possible determinants underlying the cross-episode variation in the sustainability of disinflations. Another contribution of this paper is an assessment of the empirical relevance of those determinants.

An obvious candidate for explaining the sustainability of disinflations is supply shocks. It would seem natural, for example, to blame the low sustainablity of disinflations during the 70s on rising oil prices. Alternatively, world food prices could also have an impact on the sustainability of dis-

[1] There is some scattered country-specific evidence exploiting the time-series dimension of the data. For instance, Shapiro (1994) concludes that most disinflations in the US have had only temporary effects on the inflation rate –to use the terminology of our paper, they were mostly unsustainable. To our knowledge, there are no studies investigating the sustainability of disinflations across countries as we do here.

inflations. Indeed, Boschen and Weiss (2003) find that world food prices are a significant predictor of inflation starts in OECD nations. Interestingly, consistent with Boschen and Weiss' findings, we show that world food inflation plays a larger role in the determination of sustainability than oil prices. In fact, the significance of oil shocks turns out to be weak.

We also take advantage of the great array of exchange rate regimes across the different disinflationary episodes. The role of the exchange rate regime and its impact on macroeconomic variables has recently received a lot of attention, pushed by the development of new ways for measuring this institutional variable (e.g., Reinhart and Rogoff, 2004; Levy-Yeyati and Sturzenegger, 2003; Dubas, Lee and Mark, 2005). Our paper further contributes to the understanding of exchange rate regimes by analyzing whether or not they play a role in determining the sustainability of disinflations. We find that an increase in exchange rate flexibility reduces the sustainability of disinflations.

We also explore the role of the inflationary characteristics that precede each episode and the importance of the inflation trough achieved during the disinflation. We find a pattern worthy of note and with important implications for policymakers: Disinflations that bring inflation down to low rates (5% or less) are more likely to succeed in keeping those gains in place.

The role of openness in determining inflation has also received attention from economists, particularly after Romer's (1993) famous paper. More recently, authors like Rogoff (2003) and Razin (2004) have advanced the idea that globalization played an important role in the recent worldwide disinflation. We contribute to the debate, providing evidence of the importance of openness to the success of disinflations. Interestingly, the variable turns out to be irrelevant.

Since the early 90s, an increasing number of developed and developing countries have adopted inflation targeting (IT) regimes to conduct monetary policy. A large literature, both theoretical and empirical, has studied inflation targeting regimes. We contribute to the IT literature by testing if

such a regime helps sustain disinflations. Our results suggest that inflation targeting does not play any significant role in determining sustainablity. We also find that fiscal policy is irrelevant.

We also control for several factors proposed in the political economy literature. We test if partisan variables (that is, the orientation of the party in power) and political institutions and conditions (the stability of the political regime, the degree of democracy, etc.) affect sustainability. The coefficients on political economy variables that we explore exhibit the sign predicted by theory but they are mostly insignificant.

Finally, we consider whether US inflation affects the sustainablity of disinflations abroad. Boschen and Weiss (2003) find strong evidence that US inflation plays an important role in triggering inflation abroad. In related literature (e.g., Lane, 2001; Canova, 2005), the results indicate that US monetary shocks have important consequences abroad. In line with those papers, we find that a higher US inflation reduces the sustainability of disinflations abroad. Even though the effect goes in the expected direction, the statistical significance of the coefficient is not robust under some alternative specifications.

In what follows, section 2 proposes a measure of sustainability and describes the main stylized facts. In section 3, the estimation techniques are described and the main empirical findings are reported. Section 4 concludes by discussing policymaking implications and proposes some future avenues of research.

2 Sustainability: Measurement and Stylized Facts

2.1 Measurement

Throughout this paper, we refer to the "sustainability of disinflations." Before proceeding any further then, it is necessary to specify what is meant by sustainability and by disinflation.

Disinflations: We will borrow the set of disinflations identified in Hofstetter (2004a, b). Here we highlight the main characteristics of the methodology used to identify disinflations from low and moderate trend inflation rates.[2]

A disinflation starts at the inflation peak (labeled period 0), ends at the trough (period T), and requires that: (i) the peak be 30% or less; (ii) the inflation rate must drop by at least 1.5% points between peak and trough; (iii) the inflation should fall 1/4 or more from its initial level (that is, if the peak is 16% we require inflation to drop to at least 12%); (iv) a historical records revision corroborates that economic policy was indeed disinflationary. Hofstetter (2004a, b) applied this rule to LAC and G7 nations for the period 1973-2000, and identified 56 episodes. This is the sample of disinflations used throughout this paper to track sustainability after period T. Table A1 in the appendix lists the episodes and their characteristics.

Sustainability: In measuring sustainability, one should track the evolution of inflation after the trough and take into account the fall in inflation that occurs during the disinflation. To see this, note that a disinflation that brings inflation down from 20 to 5% is very different from one that brings it down from 8 to 5%. If in both cases inflation in year $T+1$ rises to 8%, disinflation in the latter case may be considered as having been totally unsuccessful while in the the former case, it can still claim partial victory over price increases. Taking into account these elements, we define sustainability in

[2] Trend inflation corresponds to an eight-quarter moving average of the quarterly CPI inflation rate, as in Ball (1994).

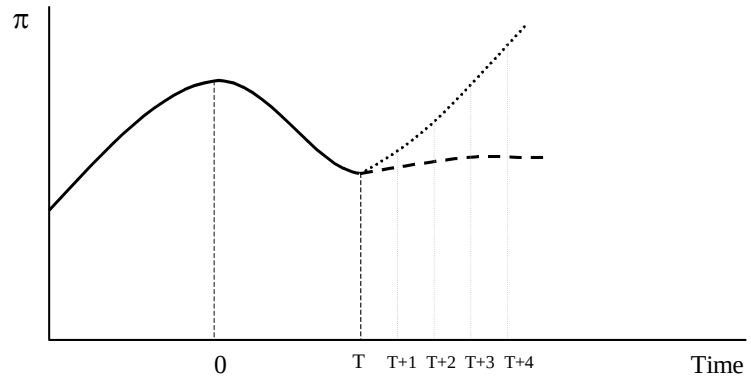

Figure 2: Sustainability and disinflations.

period $T+i$, as:

$$S_{T+i} = \frac{\pi_0 - \pi_{T+i}}{\pi_0 - \pi_T} \tag{1}$$

where π_j is the inflation rate for period j. In (1), the numerator is the gap between the peak and inflation at $T+i$, while the denominator corresponds to the size of the original disinflation. Larger values of the index correspond to better sustainability records –i.e., the dashed path in figure 2 yields to a smaller S_{T+i} than the dotted trajectory for any $T+i$.

The sustainability measure that we use throughout the paper is the average of S_{T+i} over the periods $T+M$ through $T+N$ for $N > M$, i.e.,

$$S = \frac{\left[\sum_{i=M}^{N} S_{T+i}\right]}{N-M+1} = \frac{\pi_0 - \left[\sum_{i=M}^{N} \pi_{T+i}\right] /(N-M+1)}{\pi_0 - \pi_T} \tag{2}$$

This expression has several properties. (i) If the average inflation following period T is equal to π_T, then $S = 1$. This would represent a case of perfect sustainability. (ii) If the average inflation following period T is equal to π_0 –i.e., disinflation is, on average, exactly reversed– then $S = 0$. This corresponds to a very low sustainability. In a sense then, S *represents the proportion of the original*

fall in the inflation rate that is sustained after T. (iii) S is not constrained between 0 and 1. Indeed, if after T there are years of very high inflation, S could fall below 0. Conversely, if after T+1 the average inflation keeps falling, S could jump above 1.

To determine S for each episode, N and M have to be given specific values. In the baseline specification, the inflation rate is tracked for four years following the trough, i.e., $M = 1$ and $N = 4$. This way, S starts tracking sustainability immediately following the disinflation, and follows it for a period of time roughly equivalent to the length of an average disinflation (Hofstetter, 2004a, shows that disinflations last 3.5 years on average). In the final part of section 3, we test the robustness of our findings by estimating a sustainability index where $M = 2$ and $N = 4$.

2.2 Stylized Facts

Table 1 reports the average value for S, separating G7 from LAC countries, and also separating the 90s from the preceding decades.[3] More disaggregated results can be found in Table A1 in the appendix. Three important stylized facts stand out:

(i) G7 countries have a better sustainability record than LAC countries: roughly three quarters of the fall in the inflation rate in G7 nations was sustained whereas in the LAC countries, less than half of the fall in inflation was sustained.

(ii) In both the LAC and G7 countries, the respective record for the 90s is substantially better than that for earlier decades. The change is more dramatic in the LAC countries. The average value for S in the 70s and 80s is 0.22, whereas that for the 90s reaches 0.82.

(iii) The LAC countries are catching-up: during the earlier decades, an average regional gap of 40 points existed, whereas during the 90s the gap fell to 16 points.

[3] A very large outlier (Mexico 1978-79) has been dropped: S_{T+3} and S_{T+4} (for that episode) coincide with the inflamous debt crisis where CPI inflation jumped above 100%. See Table A1 in the appendix for details.

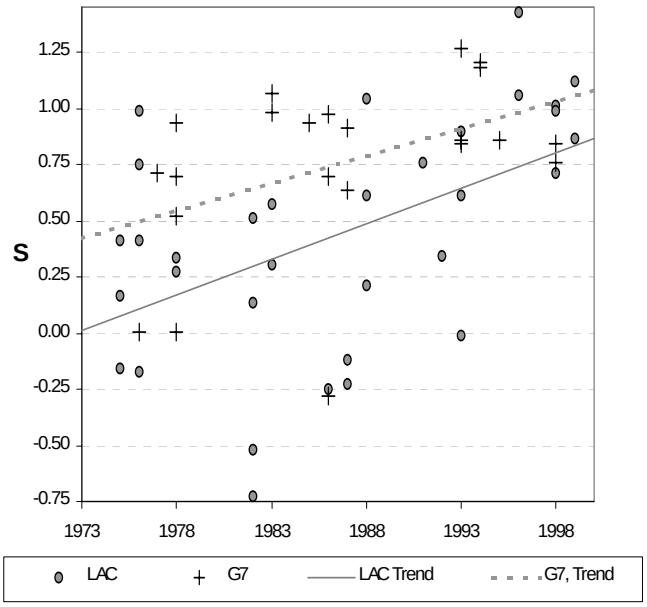

Figure 3: Evolution of S over time.

Figures 3 and 4 illustrate those stylized facts further. Figure 3 plots S against the calendar year in which the trough occurred. The chart includes trend lines for each region, obtained by regressing S on the year of the trough. In figure 3, it is evident that sustainability records have improved over time in both regions, as indicated by the positive slopes of the trend lines. That G7 countries have higher S averages is supported by the fact that the trend line for the G7 countries is above that for the LAC countries. Finally it is also clear that the gap between the two has been shrinking inasmuch as both trend lines move closer over time. Lastly, figure 4 plots the average inflation rate across episodes splitting the sample by groups and by decades. All the stylized facts described above can again be identified in this representation of the data.

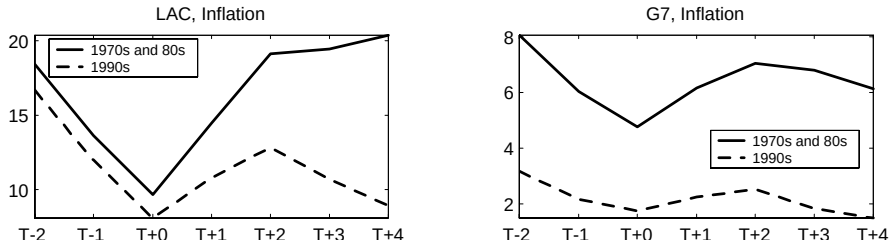

Figure 4: Average inflation across episodes.

3 What Determines S?

In this section, the potential groups of determinants of S are identified (and tested) using several hypotheses documented by economic theory and empirical findings of other papers in the literature. To facilitate interpretation, we have grouped the independent variables into 6 different categories: supply shocks, exchange rate regime, inflation and openness, policy variables, political economy variables and US inflation. In each case, we justify the presence of the variable, detail how it is measured and discuss the results. Where needed, the appendix provides additional details on how the variables are measured and the sources of the data.

We use a variety of specifications to assess the robustness of the statistical associations between the groups of determinants and the sustainability of disinflations. All the regressions pool together the G7 and LAC data. To allow for different means, most models are estimated with a constant and a 'regional' specific constant. Where appropriate, the independent variables are also interacted with 'regional' dummies in order to evaluate if some of the explanatory variables have different coefficients across groups.[4]

[4]The sample of disinflations includes two episodes ending in 1999. Consequently, $T+4$ corresponds to 2003. Since data for that year for all the variables are not yet available yet, those episodes are excluded from the estimations.

3.1 Supply shocks

The impact of supply shocks on the inflation rate has inspired a prolific literature, particularly following the infamous oil shocks of the 70s. For instance, authors like Blinder (1982) put a large weight on the impact of commodity price increases to explain the US inflationary burst of the late 70s. In a similar vein, Boschen and Weiss (2003) find evidence suggesting that world food inflation plays a role in explaining inflationary episodes in OECD nations. Others, like Shapiro (1994) and De Long (1997), argue that the inflationary episode in the US in the late 70s was not caused by the second oil shock of the decade. The fact that supply shocks are a potentially important determinant of inflation suggests that they might also be relevant factors when it comes to analyzing the sustainability of disinflations.

Figure 5 depicts the average evolution of world food and oil prices across episodes. Prices have been normalized to 100 for period T (the trough of the disinflations). The data has been split between "sustainable" and "unsustainable" episodes, with $S = 0.5$ marking the dividing line between the two –i.e. where $S < 0.5$, we classify the episode in the unsustainable category; where $S > 0.5$, the episode is classified in the sustainable one.

In both country groups, world food prices continuously fall through period T. In the LAC countries, they continue to fall after T during sustainable episodes, but begin to increase during unsustainable ones. In the corresponding episodes for the G7 countries, food prices increase after period T in both instances, though rise notably more during the unsustainable episodes. All these trends go in the expected direction if we assume a role for supply shocks in determining S.

With respect to oil prices, in the LAC countries following period T, both sustainable and unsustainable episodes demonstrate an upward and almost overlapping trend. This suggests that oil shocks (before controlling for other variables) are not a key factor in determining the sustainability

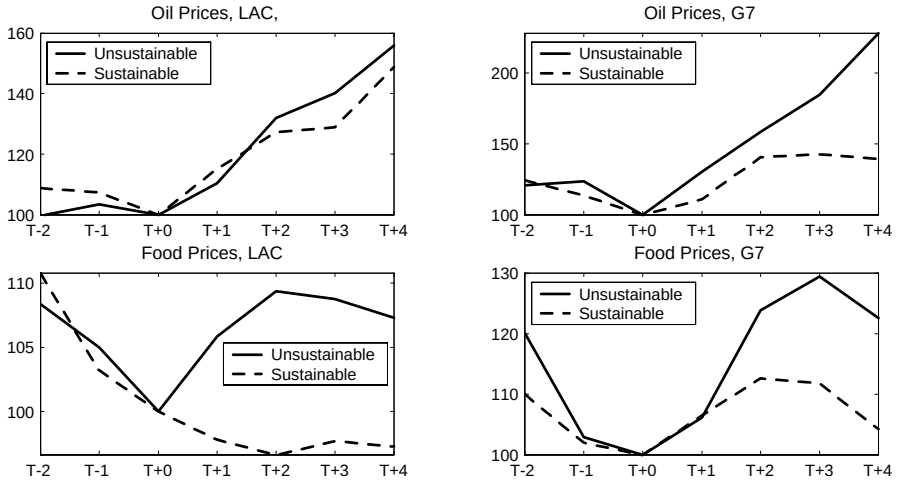

Figure 5: Average oil and world food prices across episodes. Period T+0 corresponds to the trough of the disinflations. Prices in period T+0 are normalized to 100.

of disinflations in the LAC countries. As for the G7 chart, it shows that oil prices rise more during unsustainable episodes, signaling perhaps that higher oil inflation can be associated with less sustainable disinflations in those countries.[5]

In Table 2, the role of the different groups of explanatory variables in determining S, is tested. Under column (1), we report the baseline results with all the groups of explanatory variables included. Columns (2) through (7) present the results when dropping one group at the time, while column (8) evaluates the robustness when the G7 dummy is dropped.

Oil and food shocks are measured as the average price changes for periods $T+1$ through $T+4$ vis a vis period T (see appendix for details). Since the plot suggests that oil shocks are more important in G7 nations, we allow for a different slope coefficient for that variable.

Table 2 shows that higher average world food inflation is associated with poorer sustainability records, which is consistent with the plots. The coefficient is statistically significant and large: a 5% increase in world food prices causes a reduction in the sustainability index of 0.35. Oil inflation is

[5]Interestingly, in both LAC and G7 countries, oil prices rise sharply precisely after period T, notwithstanding whether they end up being sustainable or not. This suggests that oil shocks might be an important factor triggering in the end of the disinflation.

not statistically significant in the baseline scenario, a fact that remains true for 6 of the 7 alternative specifications. To some readers, these results may appear surprising. Nevertheless, they are consistent with the results of Boschen and Weiss (2003), who concluded that whereas world food prices are significant predictors of inflation starts in OECD nations, oil shocks are not.

3.2 Exchange Rate Regime

Exchange rate regimes and their role in determining inflation outcomes across countries has also been a highly debated topic among economists. Until recently, the conventional wisdom seemed to be that fixed exchange rate regimes are associated with lower and less variable inflation rates (e.g., Gosh *et al.,* 1995). Indeed, those countries that with the advent of floating exchange rate regimes (following the fall of the Bretton Woods System) were unwilling to fight the inflationary consequences of supply shocks, ended up in many cases with persistent inflation rates (IMF, 1999). More recently, a new wave of research has been launched, sparked by the database created by Reinhart and Rogoff (2004), who developed exchange rate regime indices based on *de facto* characteristics.[6] Reinhart and Rogoff (RR) suggest that once exchange rate arrangements are 'properly' measured, floating regimes are no longer associated with bad average inflation outcomes.

In our context, the question is whether the exchange rate regime has any influence on the sustainability of disinflations. We use RR's series to define two explanatory variables summarizing the behavior of the regime. On the one hand, we test the relevance of the regime in period T, on the other, if changes in the regime during the episode also affect sustainability. Larger numbers represent more flexible regimes in the first variable, or switching to more flexible ones in the second (see the appendix for details).

The results in Table 2 indicate that both coefficients are negative and statistically significant.

[6] See also Levy-Yeyati and Sturzenegger (2003) and Dubas, Lee and Mark (2005).

The interpretation is that countries with more flexible exchange rate regimes in period T and those that switched to more flexible arrangements thereafter, are associated with poorer sustainability records. The results are more in line with those of Gosh *et al.* (1995) than with what is implied by RR. Moreover, our findings constitute another reason underlying the fear of floating exhibited by many nations (Calvo and Reinhart, 2002).

3.3 Past Inflation and Openness

Past Inflation: Previous studies (e.g., Fischer *et al.*, 2002) have shown that the instability of inflation grows with the inflation rate. A corollary of that finding would be that disinflations that bring price increases down to low rates have a better chance of achieving stable inflation rates – i.e., a sustainable disinflation. To further underline the plausibility of that claim, Table 3 reports the percentage of disinflations that exhibit sustainability indexes above 0.7 at different levels of π_T (inflation at the trough). The results in Table 3 are quite emphatic: the likelihood of achieving high sustainablity ($S > 0.7$) doubles if the inflation trough is low (5% or less).[7] Above that rate, the trough seems to become irrelevant.

We test this idea more formally in our regressions by including a dummy variable equal to 1 if the trough is less than 5%. If the hypothesis discussed above is right, we would expect a positive and significant sign for the dummy. As Table 2 shows, we obtain the expected sign, but high statistical significance is only achieved once the G7 dummy is dropped. The high collinearity between the two variables is to blame –only 2 out of 31 episodes in LAC have troughs below 5%; for the G7 countries, only 4 out of 22 episodes exhibit troughs above 5%. Future research with a greater number of LAC episodes with low troughs will help us to disentangle whether it is the low troughs (the interpretation we favor) or the fact of being a G7 nation (or both) that lead to better sustainability outcomes. For

[7] Results are robust to the level of S or the grouping of episodes according to the trough.

now, in our sample, the two theories are observationally equivalent.

Finally, we test if inflation history plays a role in determining S. We illustrate the rationale for including this determinant with the following example: Country A, after 10 straight years of having a 15% inflation rate, disinflates bringing the rate down to 3%. Alternatively, country B has 10 straight years of 3% inflation, followed by an inflation shock which brings the rate up to 15%. The country then disinflates back to 3%. *A priori*, one would predict country B to have a better sustainability record following the disinflation. Why? In country B, the inflation burst would be seen as an unusual event, whereas in A disinflation would be looked at as a surprising outcome. In that sense, the same exact policies could lead to a sustainable disinflation in B but not in A, assuming that agents in each case take some time to adjust their expectations, as for instance in Carroll (2003).

We define inflation history as the level of inflation at the peak of the original disinflation, divided by the average inflation during the ten preceding years. A number above 1 indicates that the peak was "unusually" high –i.e., that those countries are used to lower rates. Under this definition, we would expect a positive sign on the coefficient. In Table 2, the coefficients for inflation history are positive but insignificant. The good news, especially for LAC nations, is that the sustainablity of disinflation does not seem to be affected by inflation history.

Openness: The role of openness in determining inflation has also received attention from economists, particularly in the wake of Romer's (1993) famous paper. More recently, authors like Rogoff (2003) and Razin (2004) have advanced the idea that globalization played an important role in the recent worldwide disinflation. We contribute to the debate, providing evidence of the importance of openness in determining the sustainability of disinflation. We measure openness as the average change in the import to GDP ratio between periods $T+1$ through $T+4$ and periods $T-3$ through T. The coefficients in Table 2, contrary to the ideas stressed above, are insignificant. Notwithstanding

whether openness affects inflation through international competition (the globalization argument) or through an inflation bias channel (Romer's argument), our results suggest that sustainability is not affected by openness.

3.4 Inflation targeting and Fiscal Policy

Since the early 90s, an increasing number of developed and developing nations have adopted inflation targeting regimes. The proponents of this monetary policy framework claim that it reduces the variability of inflation, solves the time inconsistency problem and bounds inflation expectations, thus leading to lower inflation rates (Bernanke *et al.*, 1999). Here, we contribute to the understanding of inflation targeting (IT) by testing if it allows for a better sustainability of disinflations.

We measure IT using a dummy variable that takes the value of 1 if the country followed an IT rule during a certain year (see the appendix for details). In Table 2, the coefficient for the inflation targeting dummy is positive and mostly significant, indicating that inflation targeters achieve better sustainability records. The results should, however, be taken with caution –the robustness tests performed below suggest that although the sign of the coefficient remains positive, the statistical significance is not robust. In the end, our conclusion will be that there is no clear evidence that IT significantly increases sustainability. On the bright side, we find that it does not do any harm either. This inconclusive result is consistent with other findings in the empirical literature. For instance, Ball and Sheridan (2003) show that in OECD nations, IT does not improve (nor harm) economic performance, inclusive of its impact on inflation.

The second dimension of economic policy that we explore has to do with fiscal policy. In the stabilization literature, larger fiscal deficits increase the probability that stabilizations will fail (Hamann and Prati, 2002). One of the reasons why fiscal variables are relevant is that their effects on inflation

can be magnified if the Central Bank chooses to accommodate fiscal expansions. A couple of different channels are possible: (i) Central Banks could monetize part of the deficit, a strategy relevant in LAC in the 70s and 80s, or (ii) Central Banks could avoid implementing contractionary polices where large fiscal deficits exist (Friedman, 1994).

In our sample, we test if the initial fiscal conditions, represented by the budget deficit as a percentage of GDP during period T, affect S.[8] As Table 2 shows, the coefficient has the expected sign but is insignificant. This result supports the evidence provided by Boschen and Weiss (2003), who find that fiscal related variables are not a good predictor of inflation starts in OECD countries. Contrasting this evidence with Hamann and Prati's results suggests that fiscal responsibility becomes crucial in sustaining disinflations starting from high inflation rates, but is less important when inflation is low or moderate.

3.5 Political Economy Hypotheses

Partisan Factors: There is a large literature concerning the impact of the political orientation of the party in power on different economic aggregates (e.g. Alesina, 1988; Alesina and Roubini, 1997). One branch of that literature explores how political orientation affects the inflation rate. The idea, in simple terms, is that left-wing oriented parties, when faced with a (short-run) unemployment inflation trade-off, prefer a point on the Phillips curve associated with higher inflation and lower unemployment rates.

In our context, such theories predict that left (right) oriented parties will deliver worse (better) sustainability outcomes. To test that, we define dummy variables 'right' and 'left', taking the value of 1 if the orientation of the government is so classified. Coefficients should be interpreted as indicating

[8] Testing the role of fiscal deficits for periods T+1 through T+4 is not possible: fiscal variables could react to the success or failure of the disinflation –i.e., endogeneity becomes an issue.

deviations from 'center' oriented parties (see the appendix for details and the sources of the data). Interestingly, the coefficients in Table 2 show that if political orientation is classified as left (right), then the sustainability record tends to be worse (better). Nevertheless, none of the effects are statistically significant. The fact that the coefficients are not significant but have the expected sign, is consistent with the findings of Boschen and Weiss (2003), who encounter similar results when studying inflation starts in OECD nations.

An important caveat should be mentioned. In principle, a *direct* manipulation of monetary policy by the government is only feasible if the Central Bank is not independent. To test partisan hypotheses, it would be optimal to study the orientation of the party in power in interaction with the degree of independence of the Central Bank. Unfortunately, there are no long cross-country time series of CBI. On the bright side, even if Central Banks are independent, the government in power can still affect monetary policy *indirectly.* On the one hand, monetary policy can be set to accommodate fiscal shocks (Friedman, 1994). Alternatively, the government can influence monetary policy through its power to appoint or reappoint central bankers (Eslava, 2004; Waller, 1989).

Polity Factors: Hamann and Prati (2002) find that countries with long-lived political regimes are more likely to succeed in disinflating from high inflation rates. The G7 countries in our sample have long-lived and stable regimes. By contrast, many LAC countries, particularly during the 70s and 80s, suffered repeated political regime shifts. It is conceivable that the political unrest and the instability of institutions in LAC, partly explains the gap in S vis-a-vis G7 nations, and possibly part of the gap between the 90s and the preceding decades.

We test whether having a long-lived political regime –i.e., a proxy of political stability– accounts for some of the variability in S. We measure that effect using the Regime Durability variable in the *Polity IV* database, which reports the number of years since the most recent regime change or

the end of a transition period (see details in the appendix). Contrary to the high inflation scenarios evaluated by Hamann and Prati, we find that the variable duration is not an important determinant of S.

Finally, we also test if democracy plays a role in explaining sustainability. During the 70s and 80s, democratic regimes were an exception in LAC countries. Moreover, as we have documented, those years were characterized by poor sustainability records. During the 90s, however, LAC began catching-up with G7 countries in terms of S. During this time, most LAC countries also enjoyed democratic regimes. The question then is whether there is any causality link between the two trends. To test this, we use the average polity index during the episode. The index, ranges from 10 (strongly democratic) to -10 (strongly autocratic), as explained in the appendix. As Table 2 shows, higher polity values are indeed associated with larger S values; the coefficient, however, is only significant once, at the 10 percent level.

3.6 Does the US Export Its Inflation?

The importance of the US economy in driving the business cycle of the rest of the world has also received a lot of attention from economists. Boschen and Weiss (2003) find strong evidence suggesting that US inflation plays an important role in triggering inflation abroad. Canova (2005) finds that US monetary shocks produce significant fluctuations in Latin America. By contrast, he shows that US real demand and supply shocks generate insignificant fluctuations in the typical Latin American economy. Given such evidence, it is natural to study the impact of US inflation on the sustainability of disinflations abroad. To test the role of US inflation, we re-run the regressions carried out in Table 2, adding a variable representing the average lagged US inflation, and dropping the variables that were insignificant in *all* estimations in Table 2. Episodes from the US are excluded.

The results, reported in Table 4, show that US inflation has the expected sign. The size of the average coefficient implies that a 2 percent increase in US inflation decreases S by 0.08. The coefficient is significant in 3 out of the 6 specifications. The results in terms of their statistical significance are inconclusive. The best characterization is that there is weak evidence suggesting that US inflation influences the sustainablity of disinflations abroad.

3.7 The 90s

In section 2, we highlighted the notable improvement in S when comparing post 89 experiences to what happened during the 70s and 80s. We noted that the 'decade' gap in G7 nations reaches a value of 0.35, whereas that for LAC countries has a value of 0.6. Here we want to check if the gaps between the 90s and the preceding decades are statistically significant after controlling for all the other relevant factors found in Table 2.

With those goals in mind, we ran a regression with the significant variables used in Table 2 together with regional dummies (one for the LAC countries and one for G7 countries) interacted with a dummy for the post-1989 episodes. If these interacted regional dummies are insignificant, then it should be the case that the improvement in sustainability can be explained by a different behavior in the right-hand side variables.

The results presented in Table 5 show that –while the G7 interacted dummy is insignificant– our set of determinants is unable to explain most of the decade gap in the LAC countries. An important avenue for future research thus remains open. One potentially fruitful area which might be explored, concerns central bank independence. There are currently no CBI indices that cover our whole sample. However, this variable looks promising in accounting for part of the gap, considering that during the late 80s and early 90s, most LAC countries made important moves towards CBI.

3.8 Robustness

Tables 4 and 5 (which evaluate the role of US inflation and the 90s gap) provide a first source of robustness tests. With the exception of the IT dummy, the results in Table 4 do not differ in any important way from those found in Table 2. The significance of IT collapses once we take into account the potential role of US inflation. The same conclusion applies to Table 5. The latter is not surprising since the IT dummy is highly collinear with a time dummy for the 90s. Once one controls for the '90s effect' the significance of IT collapses, even though the positive sign on the coefficient is retained.

To further explore the robustness of the results, we modify the definition of S. We try a specification where $M = 2$ and $N = 4$, and call it $S3$ (inasmuch as it tracks inflation for 3 years). Table 6 reports the results when the estimation strategy used in Table 2 is replicated with the new definition of sustainability. Throughout the different specifications, both the size of the coefficients and the structure of the significant variables are very similar to those in Table 2.

Finally, we check the robustness of US inflation using $S3$ as the dependent variable. The results are reported in Table 7. US inflation appears as a significant determinant in two out of six specifications and IT in only one case. Table 7 thus corroborates the weak significance of those variables as explanations of the sustainability of disinflations.

4 Conclusions

The 1970s marked the beginning of an inflationary era that would plague most of the world, albeit with varying intensity and duration. Despite numerous attempts to disinflate during the 70s and 80s, the ground gained in many of those disinflations was rapidly lost. Conversely, the most recent round of disinflations has had a more permanent effect on inflation, both in LAC and developed nations.

The evidence presented in this paper formally corroborates that disinflations in the 90s were more sustainable than those during the two preceding decades. What are the factors that contribute to making gains from a disinflation sustainable?

Our results indicate that policymakers should track carefully the evolution of world food prices, a variable out of the control of local policymakers, but with important consequences as far as the chances of stabilizing inflation after a disinflationary episode. Moreover, Central Banks should aim for a low inflation rate since achieving an inflation rate of 5% or less also increases the chances of stabilizing inflation. We also find evidence that suggests that less flexibility in the exchange rate regime also favors the sustainability of disinflations. This constitutes another reason underlying the fear of floating exhibited by many nations (Calvo and Reinhart, 2002).

Inflation targeting, the US inflation, and the degree of democracy also affect sustainablity (in the expected direction), though the statistical significance of those variables is not robust for several specifications. The history of recent inflation, fiscal policy and oil shocks are shown to be less important in determining the sustainability of disinflations. The results concerning the relevancy of recent inflation history are part of the good news for LAC nations: bad past behavior on the inflationary front does not necessarily condemn them to poor sustainability outcomes in the future. The fiscal policy results suggest that this variable has not been determinant in disinflations starting from low and moderate peaks. Nevertheless, Hamann and Prati (2002) find that fiscal policy matters in the success of disinflations from high inflation peaks. The relevance of fiscal policy seems to depend on whether we study stabilizations starting from high inflation rates or disinflations starting from low and moderate peaks. Finally, the insignificance of oil shocks is consistent with the findings of Boschen and Weiss (2003), who show that oil inflation does not play a role in starting inflation in OECD nations.

The task of understanding the determinants of sustainable disinflations has only begun. As stated in the paper, the determinants used in our analysis explain a small part of the improvement in the sustainability record of LAC countries during the 90s. We suggest that one of the missing links might be that related to the independence of Central Banks –a typical component of the structural reforms introduced by many LAC countries in the past decade. Should indices of CBI (long time series) become available, research could be aimed at testing their impact on the sustainability of disinflations. Another missing link is the role of (increasing?) competition. Of course, exploring this would require the use of microeconomic data, a task beyond the goals of our paper and one harder to implement in a cross-country setting. Nevertheless, it is certainly a factor worth exploring in the future.

A Appendix

Variables: Data Sources

Food Prices: Food commodity prices in current dollars. Data comes from the IFS (IMF).

Oil Prices: Price of the West Texas crude oil. Data comes from the Federal Reserve Economic Data, FRED.

Regime: Data from Reinhart and Rogoff (2002). RR's regime goes from 1 to 14, where 1 is the most fixed version (no separate legal tender) and 14 corresponds to a freely floating (separate) regime. Since the classification is monthly, we calculate the annual averages, weighted according to the number of months in each regime. The regime for period T takes the value assigned in RR for the respective country in period T. Changes in the regime during the episode is the ratio of the average regime index during the episode with respect to the value for period T.

Inflation Targeting: To determine which countries adopted inflation targeting (and when), we

follow Mishkin and Schmidt-Hebbel (2001).

Fiscal Deficits: Data comes from the IFS (IMF) complemented with data from the WDI from the World Bank and OECD Economic Outlook. Data for Jamaica was kindly provided by Edward Ghartey.

Political Orientation: Data comes from Thorsten Beck, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh, 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions." 15:1, 165-176 (September), World Bank Economic Review. The dummy variables 'right' and 'left' take the value of 1 if the orientation of the government is classified as such. The database classifies the orientation of the party in power as left, right or center. Where countries do not have a democratic system of government, no classification is assigned to the orientation. To avoid interpreting center-oriented governments and autocracies as equivalent regimes in our estimations, we have included a dummy for the latter (the results for the dummy are not shown). So the omitted dummy is 'Center'. 'Left' and 'right' coefficients should be interpreted as deviations from center.

Polity Factors: Data comes from the Polity IV (Polity IV, Project Integrated Network for Societal Conflict Research (INSCR), Program, Center for International Development and Conflict Management (CIDCM), University of Maryland, College Park, www.cidcm.umd.edu/inscr/polity).

Regime Durability: *The number of years since the most recent regime change (defined by a three-point change in the POLITY score over a period of three years or less) or the end of transition period defined by the lack of stable political institutions (denoted by a standardized authority score).* [POLITY IV PROJECT, Political Regime Characteristics and Transitions, 1800-2002, Dataset Users Manual, Monty G. Marshall, Center for International Development and Conflict Management, University of Maryland, College Park, and Keith Jaggers, Colorado State University.]

Polity2**:** Combined Polity Score: The POLITY score is computed by subtracting the AUTOC score from the DEMOC score; the resulting unified polity scale ranges from +10 (strongly democratic) to -10(strongly autocratic). Corrections to modify the combined annual POLITY score by applying a simple fix to convert instances of standardized authority scores to conventional polity scores, as suggested in the user's manual, have been used. See also the Polity IV user's manual for details on AUTOC (Institutionalized Autocracy) and DEMOC (Institutionalized Democracy) –i.e., the components used to build the Polity variable.

Country	Original Disinflation				Sustainability				
	Initial Year	Final Year	Inflation Trough	Drop in Inflation	S_{T+1}	S_{T+2}	S_{T+3}	S_{T+4}	S
Bolivia	1990	1993	7.6	11.7	0.87	0.70	0.94	1.09	0.90
Bolivia	1995	1999	3.1	8.1	0.97	1.23	1.15		1.12
Canada	1981	1985	3.87	7.67	0.95	0.95	0.93	0.89	0.93
Canada	1990	1993	0.88	4.43	0.89	0.73	0.85	0.90	0.85
Chile	1985	1988	14.5	9.6	0.60	0.19	0.58	1.08	0.61
Colombia	1976	1978	18.1	7.1	0.30	0.04	0.22	0.54	0.27
Colombia	1980	1983	17.2	7.7	0.73	0.59	0.81	0.16	0.57
Colombia	1990	1996	17.6	9.4	0.79	1.21	1.82	1.90	1.43
Costa Rica	1991	1993	10.1	14.7	0.59	0.36	0.61	0.87	0.61
Costa Rica	1995	1998	10.1	9.4	0.99	0.88	1.04	1.15	1.01
Dominican Rep	1974	1978	3.7	9.6	0.12	-0.10	0.57	0.74	0.33
Dominican Rep	1980	1982	6.2	8.1	0.51	-1.89	-1.32	0.63	-0.52
Dominican Rep	1984	1986	9.2	20.4	0.41	-0.31	-0.34	-0.77	-0.25
Ecuador	1974	1976	10.2	9.2	0.74	0.83	0.84	0.57	0.75
El Salvador	1974	1976	8.9	8.4	0.75	0.56	0.17	0.17	0.41
El Salvador	1980	1982	10.8	5.1	0.75	0.05	-1.48	-2.24	-0.73
El Salvador	1986	1988	16.1	11.2	0.69	0.72	1.55	1.21	1.04
El Salvador	1989	1991	9.9	9.6	0.60	0.39	1.00	1.05	0.76
El Salvador	1993	1999	0.8	14.9	0.83	0.84	0.93		0.87
France	1974	1977	9.12	3.17	1.10	1.00	0.52	0.24	0.71
France	1981	1986	2.86	9.8	0.99	0.98	0.95	0.96	0.97
France	1989	1994	1.66	1.7	0.80	1.01	1.42	1.58	1.20
Germany	1973	1978	3.09	3.94	0.63	0.33	0.39	0.70	0.52
Germany	1980	1986	-0.03	5.73	0.89	0.64	0.53	0.71	0.69
Germany	1992	1998	0.93	4.25	0.97	0.66	0.73	1.00	0.84
Guatemala	1974	1976	10.6	4.1	0.78	1.47	1.00	0.72	0.99
Guatemala	1986	1988	9.9	15.7	0.23	-0.55	0.21	0.94	0.21
Guatemala	1996	1998	5.4	4.6	0.95	0.68	0.56	0.65	0.71
Honduras	1973	1975	5.4	4.3	0.60	0.48	0.68	-1.11	0.16
Honduras	1979	1987	3.1	11.4	0.72	0.05	-1.07	-0.62	-0.23
Honduras	1990	1992	8.9	17.8	0.72	0.18	0.14	0.34	0.34
Italy	1974	1978	12.33	4.55	0.14	-0.54	-0.02	0.44	0.01
Italy	1980	1987	4.66	14.68	0.93	0.90	0.90	0.92	0.91
Italy	1990	1993	4.13	2.04	0.78	0.68	1.52	2.09	1.26
Italy	1995	1998	1.73	3.05	0.91	0.67	0.70	0.75	0.76
Jamaica	1974	1976	10	11.6	0.39	-0.63	-0.62	0.18	-0.17
Jamaica	1978	1982	7.8	21.2	0.58	0.19	0.41	0.85	0.51
Jamaica	1984	1987	6.9	18	0.80	0.50	-0.09	-1.69	-0.12
Jamaica	1994	1998	7	19.2	1.00	0.97	1.02	0.96	0.99
Japan	1974	1978	3.69	13.15	0.86	0.80	1.00	1.10	0.94
Japan	1980	1987	0.199	6.131	0.79	0.98	0.56	0.58	0.63
Japan	1990	1995	0.05	2.87	0.64	0.61	1.00	1.18	0.86
Mexico	1974	1975	13.7	5.4	-0.25	-0.65	0.45	-0.16	-0.16
Mexico	1977	1978	16.7	5.9	0.44	-0.31	-1.64	-6.60	-2.03
Mexico	1990	1993	8.2	14.6	0.27	-0.54	-0.16	0.39	-0.01
Paraguay	1973	1975	5	14.6	0.79	0.77	0.39	-0.31	0.41
Paraguay	1979	1982	8.2	15.9	0.65	0.29	-0.29	-0.11	0.14
Paraguay	1993	1996	8.8	10.1	1.00	1.11	1.10	1.03	1.06
UK	1974	1978	8.84	9.91	0.37	0.31	0.87	1.25	0.70
UK	1980	1983	4.39	11.28	0.86	0.97	1.08	1.02	0.98
UK	1984	1986	3.44	2.5	0.71	-0.05	-1.09	-0.68	-0.28
UK	1989	1993	1.91	6.75	0.84	0.87	0.92	0.80	0.86
USA	1974	1976	6.29	3.46	0.87	0.34	-0.66	-0.53	0.00
USA	1979	1983	3.78	8.25	0.98	1.14	1.13	1.00	1.06
USA	1989	1994	2.71	2.1	0.89	1.07	1.36	1.41	1.18
Venezuela	1980	1983	8	10.6	0.73	0.74	0.20	-0.46	0.30

Table A1. Characteristics of the episodes

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Tables

Average value of S		
	LAC	G7
Total	0.43	0.75
70s and 80s	0.22	0.63
90s	0.82	0.98

Table 1. Average sustainability.

Dependent Variable: S								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
constant	1.32 ***	1.24 ***	0.25	1.18 ***	1.34 ***	1.22 ***	1.43 ***	1.33 ***
	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
G7Dummy	0.41 *	0.16	0.51 **	0.56 ***	0.40	0.50 **	0.47 ***	
	(0.09)	(0.41)	(0.04)	(0.00)	(0.11)	(0.02)	(0.01)	
Supply Shocks								
Oil Inflation	0.010		0.019 **	0.013	0.010	0.009	0.010	0.005
	(0.26)		(0.05)	(0.12)	(0.24)	(0.24)	(0.23)	(0.46)
Oil Inflation*G7Dummy	-0.004		-0.024 *	-0.012	-0.004	-0.008	-0.004	0.011
	(0.77)		(0.09)	(0.26)	(0.74)	(0.49)	(0.71)	(0.17)
Food Inflation	-0.07 ***		-0.06 ***	-0.07 ***	-0.07 ***	-0.07 ***	-0.07 ***	-0.06 ***
	(0.00)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Regime								
Regime	-0.07 ***	-0.07 ***		-0.06 ***	-0.07 ***	-0.06 ***	-0.07 ***	-0.07 ***
	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Change in regime	-0.42 ***	-0.38 ***		-0.42 ***	-0.44 ***	-0.39 ***	-0.43 ***	-0.46 ***
	(0.00)	(0.00)		(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Inflation & openness								
Openness	-1.84	-1.65	-2.72		-1.49	-1.83	-2.20 *	-1.46
	(0.18)	(0.30)	(0.11)		(0.29)	(0.17)	(0.08)	(0.31)
Dummy Inflation < 5%	0.21	0.21	0.09		0.23	0.17	0.21 *	0.39 ***
	(0.15)	(0.18)	(0.53)		(0.14)	(0.20)	(0.09)	(0.00)
Inflation history	0.035	0.011	0.004		0.028	0.021	0.041	0.028
	(0.29)	(0.71)	(0.91)		(0.41)	(0.41)	(0.21)	(0.39)
Economic Policy								
Inflation Targeting	0.35 **	0.37	0.36 **	0.31 *		0.35 **	0.32 **	0.35 ***
	(0.04)	(0.11)	(0.05)	(0.06)		(0.03)	(0.04)	(0.05)
Initial Budget Deficit	0.66	1.61	1.45	0.44		0.99	0.25	0.20
	(0.68)	(0.36)	(0.34)	(0.79)		(0.55)	(0.87)	(0.89)
Partisan Factors								
Right	0.08	0.06	0.07	0.12	0.10		0.09	0.06
	(0.65)	(0.72)	(0.72)	(0.46)	(0.58)		(0.61)	(0.70)
Left	-0.14	-0.25	-0.10	-0.09	-0.12		-0.11	-0.23
	(0.42)	(0.19)	(0.64)	(0.63)	(0.53)		(0.54)	(0.14)
Polity factors								
Duration	0.000	0.001	-0.002	-0.001	0.000	-0.001		0.001
	(0.93)	(0.48)	(0.38)	(0.59)	(0.93)	(0.53)		(0.37)
Polity2	0.02	0.03	0.03 *	0.03	0.01	0.03 *		0.03
	(0.38)	(0.15)	(0.26)	(0.15)	(0.53)	(0.06)		(0.21)
R^2	0.55	0.39	0.43	0.52	0.53	0.53	0.54	0.53
R^2 adj	0.35	0.18	0.22	0.36	0.36	0.37	0.38	0.33

Note: Robust errors. t-prob. in parentheses. ***significant at 1%, **significant at 5%, *significant at 10%,

Table 2. Determinants of sustainability.

Inflation Trough	Number of observations	% with S > 0.7
below 5%	20	70%
5% to 10%	20	35%
10%+	13	38%

Table 3. Role of inflation troughs.

	Dependent Variable: S					
	(1)	(2)	(3)	(4)	(5)	(6)
constant	1.38 ***	1.51 ***	0.57 ***	1.40 ***	1.42 ***	1.36 ***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
G7Dummy	0.42 **	0.34 *	0.50 ***	0.58 ***	0.53 **	
	(0.03)	(0.07)	(0.01)	(0.00)	(0.00)	
Supply Shocks						
Oil Inflation	0.015 *		0.025 ***	0.016 *	0.017 *	0.007
	(0.10)		(0.01)	(0.08)	(0.04)	(0.36)
Oil Inflation*G7Dummy	-0.007		-0.021	-0.013	-0.008	0.007
	(0.53)		(0.11)	(0.22)	(0.42)	(0.44)
Food Inflation	-0.06 ***		-0.05 ***	-0.05 ***	-0.05 ***	-0.06 ***
	(0.00)		(0.01)	(0.00)	(0.00)	(0.00)
Regime						
Regime	-0.06 ***	-0.06 ***		-0.06 ***	-0.05 ***	-0.06 ***
	(0.01)	(0.01)		(0.00)	(0.01)	(0.01)
Change in Regime	-0.40 ***	-0.40 ***		-0.43 ***	-0.36 ***	-0.44 ***
	(0.01)	(0.00)		(0.00)	(0.01)	(0.00)
Inflation & openness						
Openness	-2.04	-2.08	-3.50 **		-2.42 *	-1.68
	(0.17)	(0.23)	(0.04)		(0.06)	(0.27)
Dummy Inflation < 5%	0.22	0.17	0.13		0.17	0.45 ***
	(0.14)	(0.30)	(0.38)		(0.18)	(0.00)
Others						
Inflation Targeting	0.18	0.17	0.14	0.14		0.25 *
	(0.18)	(0.31)	(0.33)	(0.31)		(0.07)
Polity2	0.01	0.01	0.002	0.016		0.026 **
	(0.22)	(0.34)	(0.91)	(0.13)		(0.02)
US Inflation						
Lagged US Inf.	-0.03	-0.05 ***	-0.04 *	-0.04	-0.04 ***	-0.02
	(0.13)	(0.00)	(0.08)	(0.13)	(0.01)	(0.32)
R^2	0.56	0.45	0.45	0.53	0.54	0.52
R^2 adj	0.43	0.34	0.32	0.42	0.44	0.39

Note: Robust errors. t-prob. in parentheses. ***significant at 1%, **significant at 5%, *significant at 10%,

Table 4. The role of US inflation

Dependent Variable: S

Variables	Coefficient	t-prob	signif
Constant	0.91	0.00	***
G7Dummy	0.61	0.00	***
Oil inflation	0.010	0.15	
Oil inflation*G7Dummy	0.007	0.45	
Food Inflation	-0.05	0.00	***
Regime	-0.05	0.01	***
Change in regime	-0.28	0.05	**
Openness	-3.10	0.02	**
Dummy Inflation < 5%	0.19	0.17	
Inflation targeting	0.14	0.28	
Polity2	0.0003	0.97	
Dummy90s*DummyG7	0.17	0.27	
Dummy90s*DummyLAC	0.47	0.00	***
R^2	0.59		
R^2 adj	0.47		

Note: Robust errors. ***significant at 1%, **significant at 5%, *significant at 10%,

Table 5. The 90s effect.

Dependent Variable: S3								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
constant	1.45 ***	1.40 ***	0.15	1.30 ***	1.48 ***	1.32 ***	1.57 ***	1.48 ***
	(0.00)	(0.00)	(0.69)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
G7Dummy	0.51	0.21	0.63 **	0.69 ***	0.51	0.62 **	0.56 **	
	(0.11)	(0.41)	(0.05)	(0.00)	(0.12)	(0.02)	(0.03)	
Supply Shocks								
Oil Inflation	0.016		0.028 **	0.020 *	0.017	0.016	0.016	0.011
	(0.14)		(0.03)	(0.07)	(0.15)	(0.12)	(0.11)	(0.24)
Oil Inflation*G7Dummy	-0.007		-0.032 *	-0.017	-0.008	-0.013	-0.007	0.011
	(0.69)		(0.08)	(0.24)	(0.65)	(0.42)	(0.60)	(0.25)
Food Inflation	-0.09 ***		-0.08 ***	-0.08 ***	-0.09 ***	-0.09 ***	-0.09 ***	-0.08 ***
	(0.00)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Regime								
Regime	-0.09 ***	-0.08 ***		-0.08 ***	-0.09 ***	-0.08 ***	-0.09 ***	-0.09 ***
	(0.00)	(0.00)		(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Change in regime	-0.51 ***	-0.46 ***		-0.50 ***	-0.52 ***	-0.46 ***	-0.51 ***	-0.57 ***
	(0.00)	(0.00)		(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Inflation & openness								
Openness	-1.98	-1.73	-3.00		-1.60	-1.93	-2.31 *	-1.50
	(0.27)	(0.41)	(0.17)		(0.39)	(0.28)	(0.16)	(0.43)
Dummy Inflation < 5%	0.25	0.25	0.09		0.26	0.20	0.25 *	0.48 ***
	(0.19)	(0.23)	(0.60)		(0.19)	(0.24)	(0.14)	(0.00)
Inflation history	0.038	0.013	-0.002		0.030	0.019	0.044	0.030
	(0.33)	(0.71)	(0.96)		(0.44)	(0.54)	(0.25)	(0.44)
Economic Policy								
Inflation Targeting	0.43 *	0.45	0.43 *	0.38 *		0.43 **	0.40 **	0.42 **
	(0.06)	(0.12)	(0.07)	(0.07)		(0.04)	(0.04)	(0.06)
Initial Budget Deficit	0.42	1.76	1.27	0.21		0.86	0.04	-0.15
	(0.83)	(0.42)	(0.50)	(0.92)		(0.67)	(0.98)	(0.94)
Partisan Factors								
Right	0.10	0.06	0.09	0.15	0.12		0.11	0.08
	(0.64)	(0.76)	(0.71)	(0.48)	(0.59)		(0.62)	(0.70)
Left	-0.17	-0.31	-0.12	-0.11	-0.14		-0.15	-0.28
	(0.44)	(0.19)	(0.65)	(0.64)	(0.54)		(0.54)	(0.15)
Polity factors								
Duration	-0.0001	0.0013	-0.0022	-0.0011	0.0002	-0.0014		0.0016
	(0.95)	(0.50)	(0.41)	(0.65)	(0.93)	(0.55)		(0.39)
Polity2	0.02	0.03	0.03	0.03	0.01	0.03 *		0.03
	(0.52)	(0.22)	(0.35)	(0.24)	(0.64)	(0.08)		(0.31)
R^2	0.51	0.35	0.40	0.49	0.50	0.49	0.51	0.45
R^2 adj	0.30	0.13	0.18	0.32	0.31	0.32	0.33	0.33

Note: Robust errors. t-prob. in parentheses. ***significant at 1%, **significant at 5%, *significant at 10%,

Table 6. Robustness analysis: $S3$

Dependent Variable: S3						
	(1)	(2)	(3)	(4)	(5)	(6)
constant	1.48 ***	1.66 ***	0.48 **	1.51 ***	1.53 ***	1.46 ***
	(0.00)	(0.00)	(0.05)	(0.00)	(0.00)	(0.00)
G7Dummy	0.51 **	0.39	0.59 **	0.72 ***	0.65 ***	
	(0.04)	(0.12)	(0.02)	(0.00)	(0.00)	
Supply Shocks						
Oil Inflation	0.020 *		0.033 ***	0.023 *	0.024 **	0.012
	(0.08)		(0.01)	(0.07)	(0.04)	(0.26)
Oil Inflation*G7Dummy	-0.011		-0.029 *	-0.020	-0.014	0.006
	(0.42)		(0.09)	(0.15)	(0.33)	(0.61)
Food Inflation	-0.07 ***		-0.06 ***	-0.07 ***	-0.07 ***	-0.07 ***
	(0.00)		(0.01)	(0.00)	(0.00)	(0.00)
Regime						
Regime	-0.07 ***	-0.07 ***		-0.07 ***	-0.06 ***	-0.07 ***
	(0.01)	(0.01)		(0.00)	(0.01)	(0.01)
Change in Regime	-0.48 ***	-0.48 ***		-0.50 ***	-0.43 **	-0.52 ***
	(0.01)	(0.00)		(0.00)	(0.02)	(0.00)
Inflation & openness						
Openness	-2.07	-2.12	-3.81 *		-2.54	-1.65
	(0.29)	(0.35)	(0.08)		(0.13)	(0.41)
Dummy Inflation < 5%	0.28	0.23	0.16		0.23	0.56 ***
	(0.13)	(0.28)	(0.36)		(0.18)	(0.00)
Others						
Inflation Targeting	0.24	0.23	0.18	0.19		0.33 *
	(0.19)	(0.30)	(0.34)	(0.29)		(0.08)
Polity2	0.02	0.01	0.00	0.02		0.03 **
	(0.23)	(0.34)	(0.90)	(0.14)		(0.03)
US Inflation						
Lagged US Inf.	-0.03	-0.06 ***	-0.05	-0.04	-0.05 ***	-0.02
	(0.24)	(0.01)	(0.14)	(0.21)	(0.04)	(0.47)
R^2	0.52	0.40	0.41	0.49	0.51	0.48
R^2 adj	0.39	0.28	0.28	0.38	0.40	0.35

Note: Robust errors. t-prob. in parentheses. ***significant at 1%, **significant at 5%, *significant at 10%,

Table 7. Robustness analysis (S3): Role of US Inflation