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# Kieler Arbeitspapiere Kiel Working Papers

Working Paper No. 103

On the Structuralist View of Inflation in Some Latin American Countries: A Reassessment

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#### Working Paper No. 103

#### On the Structuralist View of Inflation in Some Latin American Countries: A Reassessment

Bernhard Fischer / Thomas Mayer

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#### 1. Introduction

Comparing inflation rates internationally, one finds a number of Latin American countries in the lead. Therefore, when investigating inflation in LDCs, it has become common practice to refer to these countries as prime examples. Mainly two theories have been put forward to explain Latin American inflation: the monetarist and structuralist hypotheses. While in the monetarist theory aggregate excess demand resulting from an excess supply of money is regarded as the only cause of inflation, the structuralist theory ascribes inflation also to the composition of demand for products and services accompanied by inflexibilities in the productive structure.

The purpose of this paper is to give further empirical evidence for the structuralist view of inflation in six selected Latin American countries: Bolivia, Brazil, Chile, Colombia, Ecuador and Peru. They have all been highly prone to inflation in the past. First, we outline the theoretical background of our investigation. Subsequently, empirical tests of the hypotheses are provided. Finally, we draw some conclusions from our study and relate the findings to the discussion of the harmful effects of export instability in LDCs.

<sup>\*</sup> This paper reports research undertaken in the "Sonderforschungsbereich 86" (Hamburg-Kiel) "Teilprojekt A1" (Wachstum und Beschäftigung in Entwicklungsländern) with financial support provided by the "Deutsche Forschungsgemeinschaft".

#### 2. Theoretical Underpinnings

In advancing a structuralist theory of inflation in Latin American countries two basic causes of inflation are stressed: (1) the rigidity of food supply, and (2) the inadequacy and instability of the purchasing power of exports.<sup>1</sup> Concerning the first factor it is argued, that under the conditions of a dual economy food supply is inelastic and hence prices are very flexible in response to changing demand, while in the industrial sector prices are said to move only upwards and to be rigid downwards. During the process of industrialization there is a shift of resources from the agricultural to the industrial sector. With a stagnant agricultural sector growth in the industrial sector will increase the demand for agricultural products while reducing the supply in agriculture. Because of the rigidity of supply and the inadequacy of the purchasing power of exports, which prevents sufficient food imports,<sup>2</sup> increasing demand for agricultural products induces higher prices. Yet these price increases are not matched by price declines in the industrial sector in response to excess supply. Hence, overall inflation is induced that must be ratified by monetary authorities in order to maintain employment. Recently a modified hypothesis

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<sup>&</sup>lt;sup>1</sup> For a comprehensive formulation of the structuralist theory of inflation see O. Sunkel, "La inflación chilena: un enfoque heterodoxo", EL Trimestre Económico, Vol. XXV, No. 4, October-December, 1958;

English translation: "Inflation in Chile: An Unorthodox Approach", International Economic Papers, No. 10, 1960, p. 107 sqq.

<sup>&</sup>lt;sup>2</sup> Although it may be argued that food is imported with priority (see K.-O. Junginger-Dittel and H. Reisen, Import Instability and LDCs' Response: The Destabilization of the Inflow of Capital and Intermediate Goods, Weltwirtschaftliches Archiv, 115, 1979, 4, pp. 653 sqq.), it is unlikely that imports are adequate to prevent increasing prices.

of structural inflation due to rigidity of supply in the agricultural sector was put forward which elaborates the ratchet effect in the industrial sector, assuming that prices may adjust symmetrically but with different rapidity in both sectors.<sup>1</sup> If food prices react more quickly than other prices, a price increase for food due to excess demand cannot be matched by a price decline for another product due to excess supply in the same period. **Instead, a temporary** rise of the general price level occurs which becomes permanent if the money supply accommodates this general price increase. If this is not the case, the general price level may decline in the next period in response to the excess supply of a non-food product.

Regarding the second factor, there are short-term and long-term aspects of export-determined inflationary pressures. The investigation of inflationary impacts of long-term balance of payments deficits due to insufficient export performance and the implications of import-substitution policies have been examined in great detail in the past.<sup>2</sup> Recently, interest in the inflationary impact of short-term export fluctuations was strengthened due to the increasing instability of primary commodity markets.

<sup>&</sup>lt;sup>1</sup> Susan M. Wachter, Latin American Inflation. Lexington/ Mass., 1976.

<sup>&</sup>lt;sup>2</sup> See, for example, D. Seers, "A Theory of Inflation and Growth in Underdeveloped Economies Based on the Experience of Latin America", Oxford Economic Papers, Vol. 14 (1960), p. 173 sqq.; J.B. Donges, Über das Inflationsproblem in Entwicklungsländern unter besonderer Berücksichtigung von Argentinien, Brasilien, Chile und Mexiko. Köln, Berlin, Bonn, München, 1970; S. Cochrane, "Structural Inflation and the Two-Gap Model of Economic Development", Oxford Economic Papers, Vol. 24 (1972), No. 3, p. 385 sqq.

Consider a country exporting only a few raw materials with inelastic export supply and export prices (in domestic currency) which are more flexible than domestic prices in response to demand changes.<sup>1</sup> Fluctuating export prices have direct and indirect impacts on the general price level. An excess demand for exports induces direct price increases for export products because of the inelasticity of supply. If export prices are not only more flexible but react also more quickly than domestic prices, the price rise for exports leads to at least a temporary increase of the general price level.<sup>2</sup> The temporary price increase is turned into a permanent one when money supply is expanded subject to higher prices.

Additionally, there are indirect effects of export fluctuations on inflation. Excess demand for exports not only increases prices for export products but also leads to higher incomes from export production and hence higher national income, especially if export multipliers are above unity. If these increased incomes induce an increased demand which is neither met by increased domestic production nor imports, inflation will be the result. In principle, an excess supply of exports, which leads to a reduction of incomes from export production and via the multiplier of national income, has contrary effects on inflation. However, there might be at least two reasons why such a deflationary effect does not occur in the longer

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<sup>&#</sup>x27;This implies an infinitely elastic demand for exports and an exchange rate adjustment which lags behind the shifts of demand, an assumption not unrealistic for LDCs.

<sup>&</sup>lt;sup>2</sup> Analogously, an excess supply of exports leads to a decline of the general price level.

run. First, a reduction of export earnings could induce an expansionary monetary policy in order to avoid recessional effects on national income caused by a decrease in exports. Secondly, tariffs could be levied or devaluations imposed in order to restore a balance of payments equilibrium (or a predetermined deficit), and thus deflationary effects caused by a decrease in exports could be reduced. Accordingly, a new upswing of exports would start on a higher level of the general price index, so that export instability would imply not only fluctuating but also positive inflation rates in the long run.

To sum up, the structuralist view of inflation suggests that if food prices or export prices react more rapidly than prices in the rest of the economy then the inflation rate will be affected not only by the excess supply of money, but also by the change of relative prices reflecting sectoral excess demand.<sup>1</sup>

Inflation, generated by an excess supply of money, can be described using Harberger's<sup>2</sup> model of inflation. Referring to his analysis we specify the following estimation equation:<sup>3</sup>

<sup>3</sup> Signs in brackets indicate the predicted signs.

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For a more formal presentation of the argument see Wachter (1976), p. 24 sqq.

<sup>&</sup>lt;sup>2</sup> See Arnold Harberger, "The Dynamics of Inflation in Chile". In: Carl Christ (ed.), Measurement in Economics: Studies in Mathematical Economics and Econometrics, in memory of Yehuda Grunfeld. Stanford, 1963, pp. 219-250.

(1) GCP = 
$$\alpha_0$$
 +  $\alpha_1$ GGDP +  $\alpha_2$ DGCP +  $\alpha_3$ GM  
(-) (+) (+)

where GCP equals the percentage change of consumer prices; equals the percentage change of real Gross Domestic GGDP Product: DGCP equals the first differences of the percentage changes of consumer prices; and GM equals the percentage change of money supply. Inflation is - as conventionally - measured by consumer price changes. Although. according to the above considerations a price index of all domestically produced and imported products should be used, the consumer price index can be accepted as a proxy. However, as in most developing countries prices are subject to government intervention some stochastic elements may be incorporated in this measure. DGCP is introduced as a proxy for expected inflation reflecting the costs to hold Money is used in the narrow as well as in the money. broader definition, i.e. M1 and M2, respectively. In equation (1), which represents a monetary view of inflation, the influence of money on prices is considered by a current and two lagged variables (GLM and GLLM ).<sup>1</sup>

We can use the changes in the relative food price (RFP) and the relative export price  $(REP)^2$  as proxies for the quantity of excess demand in the agricultural and foreign sector, respectively, and add it, expressed in growth rates, to equation (1)

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<sup>&</sup>lt;sup>1</sup> Focussing on annual data we assume the adjustment process to be accomplished within two years.

<sup>&</sup>lt;sup>2</sup> Both relative prices are defined as the ratio of food prices or export prices to consumer prices.

(2)	GCP	=	β <sub>0</sub>	+	$\beta_1 GGDP$	+	β <sub>2</sub> DGCP	+	β <sub>3</sub> GM	+	$\beta_4 GRFP$
					(-)		(+)		(+)		(+)
(3)	GCP	=	Υo	+	γ <sub>1</sub> GGDP	+	γ <sub>2</sub> DGCP	+	γ <sub>3</sub> GM	÷	γ <sub>4</sub> GREP
				,	(-)		(+)		(+)		(+)

In the structuralist view, represented by equations (2) and (3) a passive money supply is a necessary condition for the long-run inflation rate to be affected by excess demand in the agricultural or foreign sector.<sup>1</sup> Then in our analysis, a statistically significant influence of the structuralist variables in the estimation equations can be interpreted as evidence that money supply reacts passively. On the other hand, where we do not find the influence of the structuralist variables to be valid, strong support to the assumption of active money cannot be given. However, such an exogenous money supply is essential for a pure monetarist interpretation of equation (1). Thus, where only monetary elements are found to induce inflation, necessary but not sufficient conditions for a pure monetarist view are fulfilled.<sup>2</sup>

Hence we specify the hypotheses as follows:

H1 : Inflation is only explained by monetary factors

H2 : Inflation is explained both by monetary factors and structuralist elements, whereby H2a refers to structural bottlenecks in agriculture and H2b to those in the foreign sector.

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<sup>&</sup>lt;sup>1</sup> It is unlikely that the velocity of money circulation can increase without limitation.

<sup>&</sup>lt;sup>2</sup> The proof of an exogenous money supply would involve a clear-cut test of causality between money and prices. However, this is beyond the scope of the paper.

We do not falsify H1 if equation (1) is valid, i.e. the structuralist variables are statistically insignificant in equations (2) and (3). But we reject H1 and do not falsify H2 if the structuralist variables are significant and prices for food or exports react more rapidly than consumer prices.

#### 3. Empirical Results

An indirect test of the assumption that food and export prices react more rapidly to excess demand than other prices is performed by examining the fluctuations of food, export prices and other prices. If prices adjust more quickly in the agricultural and export sector than elsewhere in the economy, agricultural and export prices should vary more than other prices. To measure these flexibilities, loglinear trends were fitted to annual price series data taken from IMF and UN statistics.<sup>1</sup> As indicated by the standard error of equation,<sup>2</sup> instability of food and export prices is greater than that of consumer prices except in the case of Brazil (Table 2 in the Appendix). Therefore, the necessary conditions for the structuralist hypotheses are likely to be fulfilled for most countries.

In the next step we determined the lag structure for money in the narrow and broad definition by estimating equation (1) using stepwise regressions. Accepting the

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<sup>&#</sup>x27; IMF, International Financial Statistics (various issues) and UN, Statistical Yearbook (various issues).

<sup>&</sup>lt;sup>2</sup> We are conscious of the shortcomings of this approach. For a more detailed discussion of the problems measuring the instability of time-series see the recent discussion in the Oxford Bulletin of Economics and Statistics, 1978/79.

obtained lag structure, equations (2) and (3) were fitted to the data. From a statistical point of view results are conclusive<sup>1</sup> and not found to be sensitive to the use of either M1 or M2 (see Tables 3-8 in the Appendix). The implications of the regression results for our hypothesis are shown in Table 1.

A monetary view of inflation proved to be superior to the structuralist hypothesis only in the case of Ecuador. For Bolivia, Chile, Colombia and Peru structuralist elements were found to be more relevant in the explanation of the inflation process. While the export-induced inflation hypothesis cannot be falsified for Peru we reject it for the other countries. On the other hand, inflationary pressures from agricultural bottlenecks are strongly supported for Bolivia, Chile and Colombia. An ambiguous pattern of results was obtained for Brazil. In this case, the structuralist view can be rejected but there is also not much evidence for a monetary explanation.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See  $\overline{R}^2$ , F-test and Durbin-Watson test. Multicollinearity did not appear as a problem. Nearly all variables have the expected sign.

<sup>&</sup>lt;sup>2</sup> The poor results for Brazil reflect a general problem which may be inherent to our specification of the model. According to Jeffrey Nugent and Constantine Glezakos the estimation should be performed more sophisticatedly ("A Model of Inflation and Expectations in Latin America", Journal of Development Economics, (1979), No. 6, pp. 431-446). For the purpose of our investigation, however, a more simplified version seemed to be acceptable.

Hypothesis	Monetary View	Structura	list View							
Country	H1	H2a	Н2Ъ							
Bolivia	_	+	-							
Brazil	0	_	-							
Chile	-	+	-							
Colombia	-	+	-							
Ecuador	+	-	-							
		-	+							
<ul> <li>+ hypothesis is not rejected</li> <li>- hypothesis is rejected</li> <li>0 undetermined</li> </ul>										

Table 1 - Evidence for Monetary and Structuralist Hypotheses from Regression Results

Sources: Tables 2 to 8 (see Appendix).

#### 4. Conclusions

Our analysis does not give support for a single explanation of inflation in the Latin American countries under investigation. However, empirical evidence for the structuralist view was found in most cases,<sup>1</sup> whereby basic inflationary pressures from the agricultural sector seem to dominate those of the foreign sector in an inter-country The differentiated pattern of results may be comparison. subject to several factors. First, inflationary impulses from bottlenecks in the agricultural sector are dependent on the food supply elasticity. In the case of a developed agricultural sector we would expect a flexible supply response to an increasing demand for food and hence no basic This would also hold if the import inflationary pressure. capacity is adequate to allow imports of food for domestic consumption. Secondly, an excess demand for exports does not induce price increases if exchange rates are flexible. In that case there are no major spill-overs from varying prices on world markets to the domestic prices. This is also true if the contribution of the export sector is negligible or export supply elastic in response to changing demand. Finally, as already mentioned, the strength of monetary control is a crucial factor for structural elements to become important in the inflationary process.

The results may also be seen in the wider context of the discussion concerning harmful effects of export instability on growth in LDCs, where it is argued that fluctuating exports induce inflation which affects growth negatively.

<sup>&#</sup>x27;Yet the use of annual data may have prevented us from capturing all short-term effects.

According to our inquiry, at least for one country of the sample, Peru, the influence of export fluctuations was found to be valid. We are aware, however, that only direct effects of export instability on inflation were regarded explicitly. As indirect effects are mixed with other factors it is difficult to identify them empirically. Although, in all countries the existence of these effects cannot be excluded, it can be argued that strong support should be given to the argument only if both effects are found to be operative.

			$\overline{R}^2$	F-test	Standard Error
Bolivia	log CP = -157.968	+ 0.082 T (10.691)	0.870	114.301	0.169
1958-1975	$\log FP = -158.804$	+ 0.083 T (8.345)	0.801	69.638	0.218
	log EP = −203.187	+ 0.105 T (7.225)	0.751	52.195	0.320
	log CP = -474.711	+ 0.243 <sup>***</sup> (16.378)	0.954	268.224	0.224
	log FP = -400.426	+ 0.205 <sup>***</sup> (11.096)	0.904	123.123	0.279
	log EP = -527.611	+ 0.270 <sup>***</sup> (19.599)	0.967	384.101	0.207
Chile 1963-1976	$\log CP = -1160.829$	+ 0.589 <sup>**</sup> (7.379)	0.804	54.452	1.205
	log FP = -1296.421	+ 0.658 T (6.770)	0.775	45.833	1.466
	log EP = -1162.922	+ 0.590 T (6.068)	0.734	36.822	1.467
Ecuador 1965-1976	log CP = −169.278	+ 0.088 T (11.528)	0.923	132.887	0.091
	log FP = -209.565	+ 0.108 T (10.568)	0.910	111.688	0.122
	log EP = -249.003	+ 0.128 T (5.900)	0.755	34.811	0.260
Colombia 1958-1976	$\log CP = -228.924$	+ 0.118 T (26.983)	0.976	728.109	0.105
	log FP = -242.583	+ 0.125 T (20.674)	0.960	427.420	0.144
	log EP = -284.363	+ 0.146 T (13.276)	0.907	176.248	0.263
Peru 1958-1976	log CP = -189.734	+ 0.098 <sup>**</sup> (27.775)	0.977	771.435	0.085
	log FP = -139.302	+ 0.073 T (11.445)	0.878	130.997	0.152
	log EP = −289.927	+ 0.149 <sup>***</sup> (13.912)	0.915	193.547	0.256
t-statistics *** & sign	are in brackets if icant at $\alpha = 0.01$		<b></b>	,,,,,	L

Table <sup>2</sup> - Trend of Consumer, Food and Export Prices

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Source: IMF, International Financial Statistics (various issues); UN, Statistical Yearbook (various issues).

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	Constant	GGDP	DGCP	GM1	GLMI	GLLMI	GM2	GLM2	GLLM2	GRFP	GREP	$\overline{R}^2$	F-test	Durbin- Watson Test
Monetary View (H1) 1955-1975	-0.100 -0.167	n.s. -0.322 (-0.333) n.s. 0.180 (0.212)	0.262 (2.017) .549 (4.149)	0.601 (2.031)	0.734 (2.821)		0.4 <sup>7</sup> 3 (1.989)	0.754 (3.394)	0.181 (2.928)			0.676	9.870 13.982	1.259 1.139
												1		
Structuralist Views														
H2a 1958-1975	-0.038 -0.102	n.s. -0.711 (-0.706) n.s. -1.151 (-1.225)	0.264 (1.807) .405 (2.595)	0.376 (1.519)	0.632 (3.021)		0.411 (1.491)	0.641 (2.897)	n.s. 0.343 (1.158)	1.706 (3.038) 1.316 (2.291)		0.855 0.876	17.529 17.472	1.426 1.320
Н2Ь 1955—1975	-0.090 -0.175	n.s. -0.331 (-0.333) n.s. 0.221 (0.249)	0.268 (2.000) 0.579 (3.800)	0.517 (1.503)	0.743 (2.768)		** 0.489 (1.967)	*** 0.762 (3.305)	0.197 (2.689)		n.s. 0.076 (0.530) n.s. -0.055 (-0.449)	0.657 0.778	7.515	1.305
t-statistics are in brac *** ≜ significant at ** ≜ significant at	kets α = 0.01 α = 0.05			. <u></u>										

\* ≜ significant at α = 0.10 n.s. ≜ not significant

	Constant	GGDP	DGCP	GMI	GLM1	GLLM1	GM2	GLM2	GLLM2	GRFP	GREP	₹ <sup>2</sup>	F-test	Durbin- Watson Test
Monetary View (H1) 1963-1977	0.470 0.363	-2.436 (-4.396) -2.472 (-4.452)	0.328 (1.773) 0.391 (1.938)	n.s. -0.103 (-0.417)	n.s. 0.166 (1.119)		n.s. 0.086 (0.263)	n.s. 0.269 (0.263)				0.664 0.654	6.441 6.203	1.766 1.918
Structuralist Views														
H2a 1963–1976	0.439 0.382	-2.092 (-3.144) -2.188 (-3.198)	n.s. 0.282 (1.404) 0.345 (1.521)	n.s. -0.136 (-0.513)	n.s. 0.178 (1.084)		n.s. -0.026 (0.063)	n.s. 0.246 (1.137)		n.s. 0.006 (0.032) n.s. 0.012 (0.055)		0.542 0.496	3.364 2.971	1.728 1.860
H2b 1963-1977	0.483 0.331	-2.492 (-3.339) -2.343 (-2.983)	n.s. 0.311 (1.266) 0.435 (1.567)	n.s. -0.120 (-0.401)	n.s. 0.157 (0.897)		n.s. 0.124 (0.322)	n.s. 0.293 (1.274)			n.s. 0.038 (0.126) n.s. -0.076 (-0.253)	0.609 0.601	4.431 4.312	1.809

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#### Table 4 - Regression Results for Competing Hypotheses of Inflation in Brazil

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	Constant	GGDP	DGCP	GM1	GLMI	GLLMI	GM2	GLM2	GLLM2	GRFP	GREP	₹ <sup>2</sup>	F-test	Durbin- Watson Test
Monetary View (H1) 1963-1977	-0.170 -0.195	* -6.313 (-1.876) -3.626 (-2.213)	*** 0.621 (3.163) 0.185 (1.753)	n.s. -0.150 (-0.335)	*** 1.512 (4.138)		0.358 (2.728)	0.839 (8.731)				0.928	36.404 105.395	1.768 1.861
Structuralist Views														
H2a 1963-1976	-0.239 -0.248	n.s. -3.570 (-1.354) n.s. -0.459 (-0.351)	0.471 (1.838) *** 0.814 (4.184)	n.s. 0.451 (0.981)	n.s. -0.544 (-0.665)	1.467 (2.543)	n.s. 0.107 (0.812)	n.s. -0.103 (-0.335)	1.123 (4.334)	0.324 (2.543) 0.270 (2.517)		0.987 0.995	52.195 349.228	2.407 2.105
н2ъ 1963–1977	-0.192 -0.197	-5.673 (-1.597) -3.556 (-2.022)	0.568 (2.350) n.s. 0.166 (1.335)	n.s. -0.065 (-0.126)	1.427 (3.271)		0.374 (2.561)	0.821 (7.220)			n.s. 0.188 (0.430) n.s. 0.097 (0.379)	0.918 0.971	25.770 74.031	1.863 1.914

#### Table 5 - Regression Results for Competing Hypotheses of Inflation in Chile

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	Constant	GGDP	DGCP	GM1	GLM1	GLLM1	GM2	GLM2	GLLM2	GRFP	GREP	$\overline{R}^2$	F-test	Durbin- Watson Test
Monetary View (H)) 1955-1977	-0.205 -0.087	n.s. 0.065 (0.095) n.s. 0.303 (0.421)	0. 380 (3.960) 0. 386 (3.760)	0.552 (3.855)	0.349 (2.361)	0.860 (4.520)	n.s. 0.161 (1.268)	0.329 (2.437)	0.589 (4.713)			0.793	15.596 15.913	1.434
Structuralist Views														
H2a 1958–1976	-0.001 0.058	-1.864 (-3.718) -1.520 (-3.480)	0.176 (2.524) 0.189 (2.849)	0.243 (1.909)	0.372 (3.657)	0.564 (4.450)	n.s. 0.065 (0.844)	0.296 (3.999)	0.401 (4.961)	1.425 (5.390) 1.253 (5.879)		0.935 0.954	37.157 52.399	2.328
Н2Ъ 1955–1977	-0.216 -0.087	n.s. -0.208 (-0.279) n.s. 0.238 (0.297)	*** 0.270 (3.817) *** 0.385 (3.599)	*** 0.669 (3.541)	0.368 (2.458)	*** 0.875 (4.570)	0.176 (1.187)	** 0.332 (2.362)	*** 0.592 (4.552)		n.s. -0.059 (-0.954) n.s. -0.012 (-0.217)	0.792 0.782	13.065	1.584

#### Table 6 - Regression Results for Competing Hypotheses of Inflation in Colombia

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	Constant	GGDP	DGCP	GM1	GLM1	GLLM1	GM2	GLM2	GLLM2	GRFP	GREP	$\overline{R}^2$	F-test	Durbin- Watson Test
Monetary View (H1) 1955-1977	-0.024 -0.032	(n.s. 0.002 (0.032) 0.125 (1.447)	*** 0.464 (3.522) ** 0.437 (2.609)	*** 0.135 (3.241)	*** 0.260 (8.030)	0.158 (3.727)	0.108 (1.761)	0.272 (6.246)	0.195 (3.100)			0.927 0.883	49.495 29.606	1.118
Structuralist Views	/													
H2a 1965–1976	-0.062 -0.111	n.s. 0.086 (1.028) n.s. 0.152 (0.697)	0.490 (3.901) 0.593 (1.527)	0.127 (2.617)	0.301 (11.302)	** 0.230 (5.409)	n.s. 0.133 (0.761)	0.398 (4.482)	0.34 <sup>*</sup> (2.187)	n.s. 0.087 (0.646) n.s. -0.071 (-0.200)		0.984 0.898	82.115 12.686	1.695 0.830
Н2Ъ 1955–1977	-0.024 -0.030	n.s. 0.002 (0.022) 0.118 (1.352)	0.464 (3.522) ** 0.402 (2.332)	0.135 (3.241)	0,260 (8,030)	0.158 (3.727)	n.s. 0.087 (1.313)	*** 0.276 (6.270)	0.197 (3.111)		n.s. 0.000 (0.000) n.s. 0.021 (0.911)	0.922 0.881	38.300 24.527	1.119

#### Table 7 - Regression Results for Competing Hypotheses of Inflation in Ecuador

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	Constant	GGDP	DGCP	GM1	GLM1	GLLM1	GM2	GLM2	GLLM2	GRFP	GREP	$\overline{R}^2$	F-test	Durbin- Watson Test
Monetary View (HI) 1955-1977	0.130 0.094	-0.100 (-1.806) -0.116 (-2.216)	0.673 (1.816) n.s. 0.489 (1.319)	n.s. 0.142 (0.815)	n.s. 0.534 (0.362)		0.35 <sup>*</sup> (1.466)	n.s. 0.126 (0.592)				0.377	3.870 4.850	1.040 1.176
Structuralist Views														
H2a 1958-1976	0.127 0.060	-0.646 (-1.047) n.s. -0.356 (-0.504)	0.962 (2.933) 0.784 (2.032)	-0.067 (-0.399)	-0.024 (-0.167)		n.s. 0.030 (0.110)	n.s. 0.011 (0.055)	n.s. 0.312 (1.334)	-0.287 (-1.123) n.s. -0.126 (-0.446)		0.395 1.438	2.959 2.949	1.214 1.184
Н2Ъ 1955–1977	0.102	-0.920 (-1.974) ** -1.041 (-2.473)	n.s. 0.395 (1.210) n.s. 0.219 (0.709)	n.s. 0.088 (0.602)	n.s. 0.152 (1.185)		n.s. 0.240 (1.218)	0.307 (1.710)			0.163 (2.734) *** 0.167 (3.071)	0.565 0.646	5.928 7.947	1.306 1.513

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#### Table 8 - Regression Results for Competing Hypotheses of Inflation in Peru

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