



# **A HISTORICAL ANALYSIS OF CENTRAL BANK INDEPENDENCE IN LATIN AMERICA: THE COLOMBIAN EXPERIENCE, 1923- 2008**

**ADOLFO MEISEL**

**JUAN D. BARÓN**

**CENTRO DE ESTUDIOS ECONÓMICOS REGIONALES – CEER**

**BANCO DE LA REPÚBLICA – COLOMBIA**

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# OUTLINE

- I. Introduction and motivation
- II. Central bank independence and inflation:  
the case of Colombia, 1923-2008
- III. Inflation and CBI in the 1990s
- IV. Conclusions



# I. INTRODUCTION AND MOTIVATION

- ❑ Several studies have looked at the relationship between independence and levels of inflation (Bade and Parkin, 1985; Alesina , 1988; Grilli et al ., 1991, Crowe and Meade, 2008).
- ❑ There are, however, only a few studies analysing the relationship in Latin America (Jácome and Vásquez, 2008). Otero and Ramirez, 2006).
- ❑ These studies use a relatively short period and are based on cross-country comparisons, and more recently on panel data.
- ❑ In this paper we use the experience of the Central Bank of Colombia and the different reforms that affected its degree of independence to shed light on whether a more independent central bank yields better outcomes in terms of inflation.



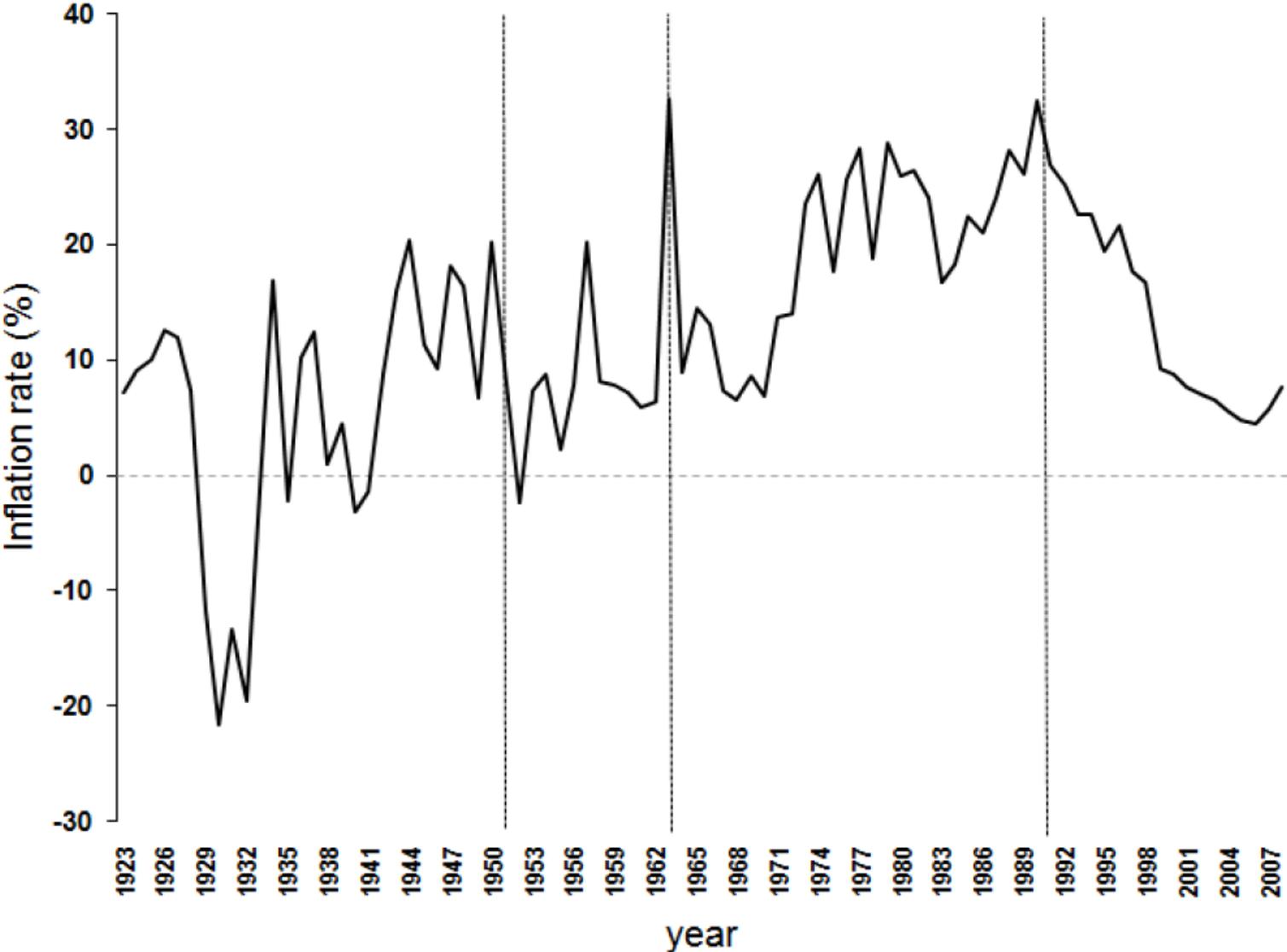
# I. INTRODUCTION AND MOTIVATION

## The central bank in Colombia

- ❑ The central bank of Colombia, Banco de la República, was created in 1923. It is the second oldest central bank in South America, after the Peruvian central bank (created in 1922).
- ❑ Since 1923, the bank has experienced several reforms that have changed its nature and its degree of autonomy.
- ❑ Its nature has varied from private to stated-owned, and its main objective has changed from price stability to economic development, to the management of monetary, exchange rate, and credit policies.
- ❑ The question is: How did inflation behave under this different conditions?



**Figure 1.** Inflation Rate in Colombia (1923-2008)



## II. CB INDEPENDENCE AND INFLATION: THE CASE OF COLOMBIA, 1923-2008

**Table 1.** Main Subperiods in the Institutional History of the Colombian Central Bank  
(1923 to present)

<b>Period</b>	<b>Name of the central bank</b>	<b>Nature</b>	<b>Main objective</b>	<b>Commitment to price stability?</b>
1923-1951	Banco de la República	Private and autonomous	Price stability	Yes
1952-1963	Banco de la República	Private and autonomous	Price stability and "rapid economic development"	No
1964-1991	Junta Monetaria	State-owned with no autonomy	Management of monetary, exchange rate and credit policies	No
1992-present	Banco de la República	State-owned and autonomous	Price stability	Yes



## II. CB INDEPENDENCE AND INFLATION: THE CASE OF COLOMBIA, 1923-2008

Figure 2. Institutional Determinants of Inflation

		Central bank's objective	
		orthodox	unorthodox
Central bank's type	Independent	① Minimum inflation	③ Intermediate to high inflation
	Dependent	② Intermediate to low inflation	④ Maximum inflation

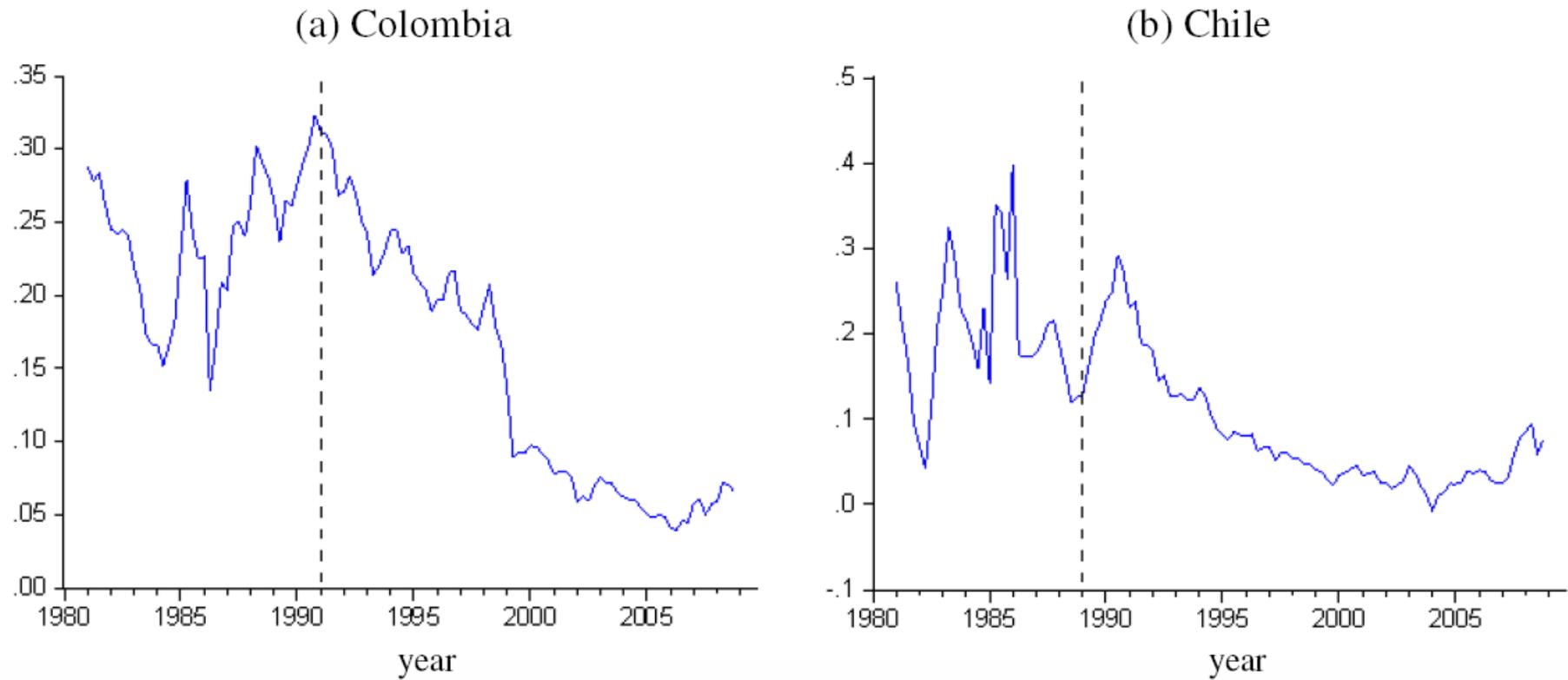


## III. INFLATION AND CBI IN THE 1990s

- ❑ The last major reform of the Colombian central bank occurred in 1991 with the promulgation of a new Constitution.
- ❑ Between 1963 and 1991 the bank lacked a serious commitment with price stability. This changed drastically after 1991.
- ❑ We use quarterly data for the period 1980 to 2008 to test for statistical evidence of a structural break in the time series of inflation. If that is the case, this evidence is consistent with the hypothesis that independence matters.
- ❑ We use three simple test: (i) CUSUM test, (ii) CUSUM of squares (in the paper), and (iii) we look at the residuals of our fitted model. For comparison we also present results for Chile.



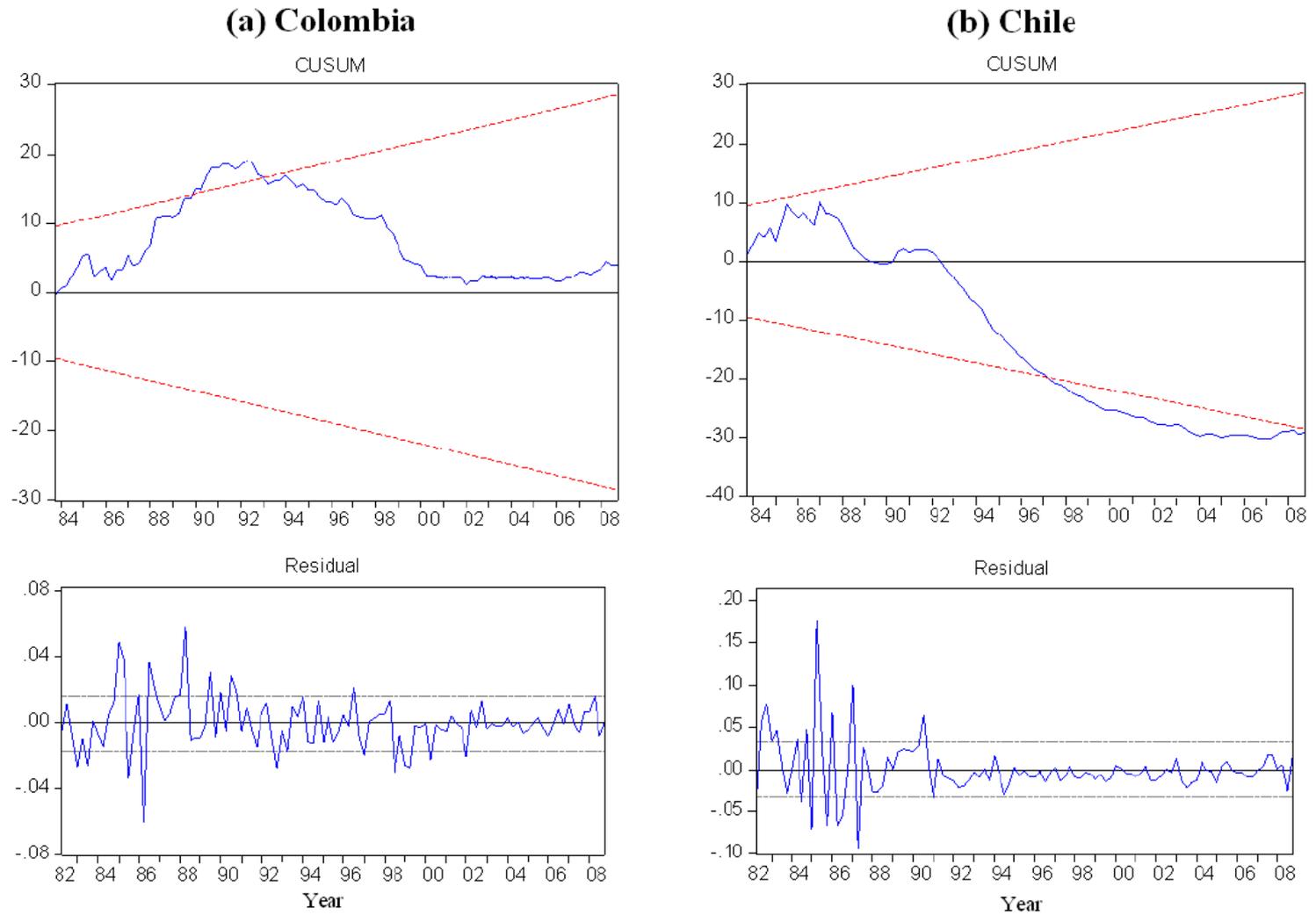
**Figure A1. Inflation Rates in Colombia and Chile, 1981-2008.**



Source: Banco de la República and International Financial Statistics (IFS), International Monetary Fund (IMF).



**Figure 4.** Tests of Structural Break in the Inflation Series, Colombia and Chile, 1980-2008



Notes: To obtain information for this figure we estimate univariate AR(5) models for the quarterly series of inflation for the period 1980-2008. The first row presents the CUSUM test, the second the CUSUM of squares test, and the third plot the residuals of the model. The reform to the central bank in Colombia and Chile was in 1991 and 1989, respectively. Dashed lines represent boundaries for the tests at 5% level. We cannot reject the null hypothesis of no break-point at 1992q1 for Colombia using a Chow test ( $F$ ,  $p$ -vale=0.2879). The test for Chile, however, rejects the null hypothesis of no break-point at 1990q1 ( $F$ ,  $p$ -vale=0.0004).

## IV. RESULTS AND CONCLUSIONS

**Table 2.** Some Monetary Indicators for the Main Subperiods in the History of the Colombian Central Bank

<b>Period</b>	<b>Inflation rate (mean)</b>	<b>Coeff. on Trend<sup>(a)</sup></b>	<b>Standard deviation around linear trend<sup>(b)</sup></b>	<b>Was inflation higher than in the previous period?</b>
1923-1951	5.6	0.49 (.23)	10.4	
1952-1963	9.3	1.29 (.67)	7.6	Yes
1964-1991	19.8	0.71 (.12)	5.0	Yes
1992-2008	12.5	-1.37 (.15)	2.9	No

Notes:

(a) This figure is the coefficient on a linear trend that comes from a OLS regression of inflation on a constant and a linear trend. The numbers in parentheses are standard errors.

(b) This is the standard deviation of the residuals from an OLS regression of inflation on a constant and a linear trend.



## IV. RESULTS AND CONCLUSIONS

**Figure 3.** Institutional Determinants of Inflation and the Colombian Experience (1923-2008)

		Central bank's objective	
		orthodox	unorthodox
Central bank's type	Independent	1923-1951 (5.6)  1992-2008 (12.5)	1952-1963 (9.3)
	Dependent	—	1964-1991 (19.8)

Note: The numbers in parentheses refer to the average inflation rate during the period.



## IV. RESULTS AND CONCLUSIONS

- ✓ In terms of inflation, the best results are achieved when the central bank is independent and follows autonomous objectives (Colombia, 1992-2008).
  - ✓ Under these conditions inflation and its variability are lower.
- ✓ The worst results occur when the central bank lacks independence and is un-orthodox (Colombia, 1964-1991).



**THE END**

