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Central Bank Independence and Inflation: A Review Paper

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ABSTRACT: This study explores the effects on inflation in developing countries of legal central bank independence. Despite policy consensus suggesting that central bank independence is an effective tool for inflation control, there is still limited evidence, particularly for developing countries. Using a new dataset, a survey of 118 developing countries between 1980 and 2013 will examine the impact of central bank independence on inflation. We find that higher independence from central banks is correlated with lower rates of inflation. The more democratic a nation is, the greater this impact on inflation, but it is also present in non-democratic countries. According to various requirements and methodologies, our findings are solid. In addition, we find that all aspects of assessing central bank independence (targets, staff, strategy, and financial independence) contribute to curbing inflation. Our findings shed light on which types of reforms in developed countries may be more successful in combating inflation.

KEYWORDS: Central Banks, CBI, Independence, Inflation, Research, Merger, Growth, Development.

INTRODUCTION

Is the independence of central banks an efficient instrument to manage inflation in developing countries? The main monetary policy target of most central banks is market stability. The impetus behind this target is the commonly studied notion that inflation is counterproductive to the real economy above a certain level [1]. Developing countries are particularly vulnerable to high inflation's negative impact. Much research has therefore been dedicated to the discovery of policies and institutions that foster price stability [2].

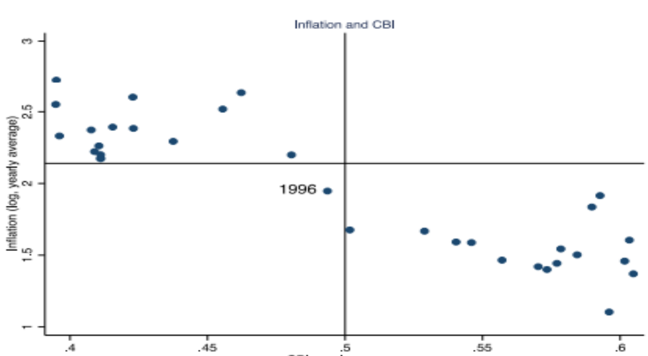

Figure 1: Illustrates the correlation between yearly averages of CBI and inflation [3]

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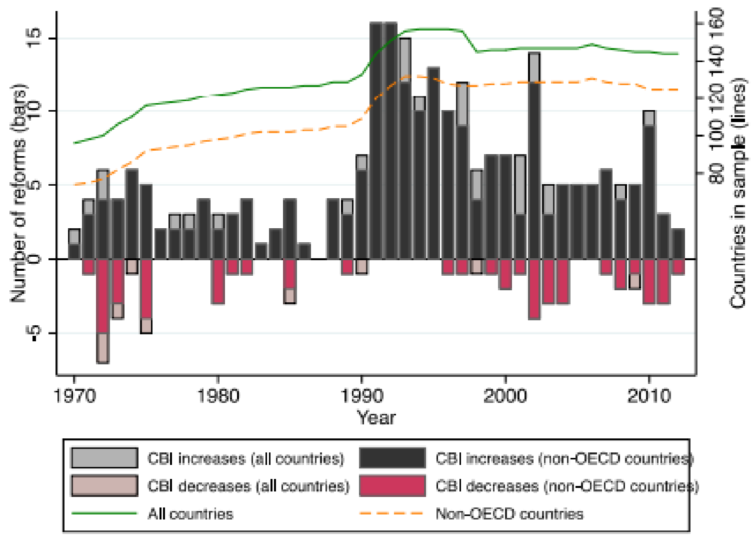

Figure 2: Illustrates reforms to CBI in OECD and non-OECD countries [1]

	(1)	(2)
CBI	−0.823**	−0.552
	(0.333)	(0.357)
Democracy	−0.002	0.021
	(0.007)	(0.014)
CBI*Democracy		−0.057*
		(0.033)
Capital account openness	−0.553***	−0.525***
	(0.110)	(0.111)
Peg	−0.304***	−0.302***
	(0.062)	(0.061)
Inflation$_{t-1}$	0.501***	0.497***
	(0.062)	(0.061)
GDP per capita$_{t-1}$	0.128	0.111
	(0.126)	(0.129)
Trade openness$_{t-1}$	−0.001	−0.001
	(0.001)	(0.001)
World inflation$_{t-1}$	−0.046***	−0.045***
	(0.015)	(0.015)
Political instability$_{t-1}$	0.019***	0.018**
	(0.007)	(0.007)
Effect of CBI		
at Polity2 = 1		−0.609*
		(0.345)
at Polity2 = 6		−0.895**
		(0.335)
at Polity2 = 10		−1.123***
		(0.383)
R^2	0.404	0.405
N. observations	2241	2241
N. of countries	108	108

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Figure 3: Effect of CBI on inflation, 1980–2013 [4]

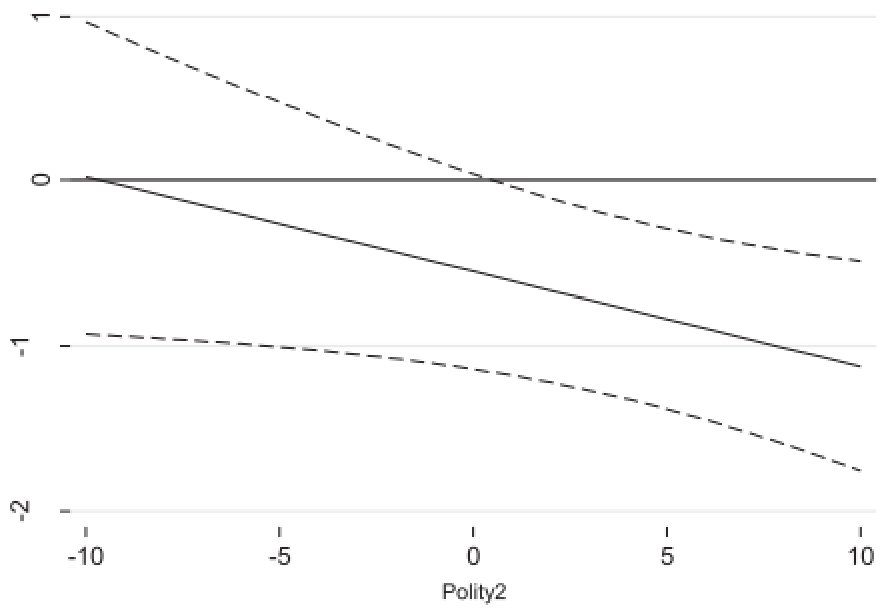

Figure 4: Illustrates the marginal effects of CBI on inflation [5]

DISCUSSION

Fixed exchange rate	Flexible exchange rate			
	Polity2 index			
	Autocracy	Anocracy	Democracy	Full democracy
	Polity2 = -7	*Polity2 = 0*	*Polity2 = 6*	*Polity2 = 10*
Low central bank independence				
CBI = 0.2	9.36 \ 12.6	9.96 \ 13.4	10.56 \ 14.2	10.96 \ 14.8
CBI = 0.3	9.26 \ 12.4	9.46 \ 12.7	9.66 \ 13.0	9.86 \ 13.2
Average central bank independence				
CBI = 0.5	8.96 \ 12.0	8.56 \ 11.5	8.16 \ 11.0	7.96 \ 10.7
High central bank independence				
CBI = 0.7	8.66 \ 11.7	7.56 \ 10.2	6.76 \ 9.1	6.26 \ 8.4
CBI = 0.8	8.56 \ 11.5	7.16 \ 9.7	6.26 \ 8.3	5.66 \ 7.5

Figure 5: Illustrates the predicted values of inflation rate [6]

The goal of this study is to investigate the effect of central banks' (CBI) independence on inflation in developing countries. We use a new legal CBI dataset encoded by Garriga (2016) and find evidence that lower inflation rates are associated with more independent central banks in developed countries [7]. The more democratic a nation is, the greater its effect on inflation, but in non-democratic nations it is also present. Our empirical research differs from previous work because it explicitly accounts for both political and monetary institutional weaknesses, and because alternative methods of estimation are used [8]. In particular, when we use instrumental variables and the GMM systems estimator (Arellano and Bover, 1995; Blundell and Bond, 1998) to take potential endogeneity problems directly into account, our findings are robust[9]. Our results are also consistent with different parameters, methodologies, and subsamples for the model[9]. Figure 1: Illustrates the correlation between yearly averages of CBI and inflation. Figure 2: Illustrates reforms to CBI in OECD and non-OECD countries. Figure 3: Effect of CBI on inflation, 1980–2013. Figure 4: Illustrates the marginal effects of CBI on inflation. Figure 5: Illustrates the predicted values of inflation rate.

CONCLUSION

The need to escape political pressure to follow expansionary policies that lead to inflation is one of the key reasons for granting central banks independence. Although the negative relationship between the CBI and inflation is well known for developed countries, there is sparse and partial evidence for developing countries. However, recent findings indicate that data collected from smaller and non-representative populations may be influenced by selection bias (Garriga, 2016). Our research builds on this empirical literature to analyse the efficacy of the legal CBI on a large panel of developing countries as an anti-inflationary weapon. The length of our study -118 developing countries between 1980 and 2013 - gives us confidence that the findings are not influenced by the collection of cases or periodization decisions. In various institutional settings, we have clear proof of the inflation curbing impact of the legal CBI. Although democratic constraints enhance the anti-inflationary effects of CBI, these effects are also robust and sizeable also in non-democratic countries. This opens the way for further research into the mechanisms that, even in countries with weak political constraints, make independent central banks effective.

REFERENCES

[1] Tuma, J. M., & Pratt, J. M. (1982). Clinical child psychology practice and training: A survey. \ldots of Clinical Child & Adolescent Psychology, 137(August 2012) *et al.*, “Action research and reflective practice : towards a holistic view Action Research and Reflective Practice : towards a holistic view,” *Educ. Action Res.*, 2006.

[2] G. Caprio and D. Vittas, “Financial history: Lessons of the past for reformers of the present,” in *Reforming Financial Systems*, 2010.

[3] A. M. Agoba, J. Abor, K. A. Osei, and J. Sa-Aadu, “Central bank independence and inflation in Africa: The role of financial systems and institutional quality,” *Cent. Bank Rev.*, 2017, doi: 10.1016/j.cbrev.2017.11.001.

[4] A. C. Garriga and C. M. Rodriguez, “More effective than we thought: Central bank independence and inflation in developing countries,” *Econ. Model.*, 2020, doi: 10.1016/j.econmod.2019.05.009.

[5] M. F. C. Bourdillon, “Working Children In Zimbabwe,” *Sociological Studies of Children and Youth*. 2005, doi: 10.1016/S1537-4661(04)10002-0.

[6] S. Kumar, A. Gupta, and A. Arya, *Triple Frequency S-Shaped Circularly Polarized Microstrip Antenna with Small Frequency-Ratio*. International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE)/ISSN(Online): 2320-9801, 2016.

[7] E. N. Kumar and E. S. Kumar, “A Simple and Robust EVH Algorithm for Modern Mobile Heterogeneous Networks- A MATLAB Approach,” 2013.

[8] J. M. Tuma *et al.*, “Recognizing Uncertainties in Evaluating Responses,” *Ecosyst. Hum. Well-being Policy Responses*, 2005.

[9] 37–41. http://doi.org/10.1037/a0022390 Tuma, J. M., & Pratt, J. M. (1982). Clinical child psychology practice and training: A survey. \ldots of Clinical Child & Adolescent Psychology, 137(August 2012) *et al.*, “Sleep disturbance in heavy marijuana users.,” *Sleep*, 2008.