

Extended abstract:

**On the Children of Inflation Stabilization:
Wealth Effects, Fertility Decisions and Child Health**

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High and persistent inflation has been one of the distinguishing macroeconomic characteristics of many Latin American countries since the end of World War II. Several attempts to curb the inflationary problem have been undertaken by policy maker in the region. More often than not, stabilization plans have had quick yet short-lived success. A large literature in international macroeconomics has developed trying to document the main empirical regularities and understand the key issues involved (For a careful review, see Calvo and Vegh, 1999). Despite the prominence of inflation of the economic issue in these countries, very little is known about its effects (or the effects of stabilization attempts) over decisions with very long-term consequences like fertility and investment in children's health.

In this article I draw evidence from microdata banks on the impact of contractionary and expansionary inflation stabilizations over fertility timing/spacing, and birth outcomes. I study three attempts to control chronic inflation in Brazil (1986, 1990 and 1994). Data from multiple sources are used, including Demographic Health Surveys, the 1996/1997 Brazilian Living Standards Measurement Survey, and the 1989 Brazilian Survey of Nutrition and Health.¹

The episodes studies here are particularly heterogeneous with respect to its impacts over economic activity. In particular, in the case of Brazil, the 1986 and 1990 stabilization attempts were based on different macroeconomic strategies with the first anchoring inflation expectations on exchange-rates and the second on the rate of money supply' expansion. Aggregate data seem to imply that the choice of nominal anchor is closely associated to consumption booms (exchange rate) or economic-activity recessions (money supply). In common these two interventions have the fact that they were successful for a short period of time. In that respect, the stabilization of 1994 represents a counterpoint to these earlier attempts.

¹ I am currently working on incorporating the analysis a hyperinflationary episode in 1984/1985 Bolivia.

In order to guide my empirical analysis I present a simple conceptual framework in which fertility and health investment decisions are incorporated in an intertemporal optimization mechanism. Children are treated as durables goods whose depreciation is function of non-durable consumption (e.g. dietary intakes). Each time a durable good is to be purchased (given birth to) a transaction costs need to be incurred on (similarly, one could also imagine a money-storage technology to be used at the purchase's time). This is the channel for inflation to affect decisions due to its impact on real money balances in the hands of families. I also include heterogeneity in the model by giving household different type of technologies, one that can be insulated from inflation (like indexed bank accounts) and the other that does not allow it.

From the model I derive optimal decision rules, (S,s)-type rule for consumption of durables and an Euler type equation for non-durable consumption, that organize the reading of my reduced-form empirical analysis. The model prediction suggests increase in consumption of durables (births) followed by a decrease as a result of wealth effects generated by increased real money balances. Wealth effects would also affect positively consumption of non-durables.

Preliminary findings focused on the 1986 stabilization. Figure 1, below shows the dramatic reduction in monthly inflation rates. This reduction was short-lived but brought with it a large increase in GDP, particularly in the non-tradables sector (see Figure 2). I find evidence of increased number of births concentrated in the early-middle section of 1987. Most of the effects come from women most likely to be exposed to inflation taxing on their money balances (poorer). I also find indications that spacing between births was reduced for those that were already mothers at the time of the stabilization. Finally, focusing on the short-time window around the change in inflation (where no change in fertility would have been possible), I find a small and significant increase in birth-weight. This finding is compatible with potential improvements in maternal diet brought by changes in the relative prices within the food group, in particular regarding cheaper protein and calcium sources. By tapping into the gains brought by stabilization I also shed light on hidden costs of chronic inflation in Latin America.



