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## Research Statement

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## 1 Research

Inflation expectations are a tenet for monetary policy, which in turn has implications for economic growth through various channels such as credit and savings. Building on the assumption of deviations from rational expectations, my research focuses on the interaction of inflation expectations with monetary policy (section 2) and their formation (section 3). Specifically, answering questions regarding the response of expectations to policy changes and strategic interaction amongst agents while forming these beliefs.

My research contributes to the literature on expectation formation, monetary policy, and information effects. With the aim of continuing my focus on these fields, current research draws on insights from their intersection by combining methodological approaches, including economic theory, and empirical analysis of observational data using modern econometric methods.

## 2 Inflation Expectations and Monetary Policy

The first strand of current research aims to disentangle the effects of monetary policy on inflation expectations. This intersection is developed in two parts. First, my job market paper documents empirical facts on the effect of the adoption of Inflation Targeting (IT) on inflation expectations. Second, joint work with [Luis Rojas](#) builds a model to rationalise the policy framework Latin American economies used to disinflate in the early 90s. The section below details the findings of the two papers.

### 2.1 Targeting Inflation Expectations? (Job Market Paper)

In my **job market paper**, I uncover the effects of the introduction of IT on short-run inflation expectations. The paper uses panel data of 32 countries to address whether IT led to a change in the priors of expectations after its introduction. The paper develops on two fronts. First, it measures the impact of IT on adoption of the policy. Second, it considers the role of anticipation (announcement) on these expectations. The use of modern econometric event study methods allows the paper to present facts regarding inflation expectations.

In line with previous literature ([Mankiw et al. \(2003\)](#), [Eusepi and Preston \(2011\)](#), [Coibion and Gorodnichenko \(2015\)](#)), the paper documents that the Rational Expectation Hypothesis (REH) is not supported in the survey of professional forecasters. This is the case before and after IT. The main result of the paper is the absence of a direct impact of the policy on inflation expectations. Moreover, single mandate economies

witness a reduction in forecast errors six months after the policy is implemented however this is a result of a reduction in inflation. Finally, accounting for the announcement of the policy does not change the result. There continues to be no significant change in expectations following the announcement.

One of the criticisms of this finding could be that central banks have different levels of credibility when introducing IT. This makes it likely that agents would be unlikely to adjust expectations when central banks have not been credible in the past. The paper uses data from [Dincer and Eichengreen \(2013\)](#) on central bank independence and transparency as a proxy for credibility and finds that the central result does not change despite controlling for credibility. In addition, one of the objective of the policy is the reduction of volatility of expectations. Measured in accordance with the definition provided by [Gürkaynak et al. \(2010\)](#), the paper finds no evidence in favour of this objective.

The findings above suggest that IT as a policy does not impact inflation through the channel of inflation expectations. Moreover, it suggests that previous inflation and expectations have more relevance for the future path of the inflation compared to the information contained in the policy.

## 2.2 (Dis)Inflation Targeting

In a related paper, [Luis Rojas](#) and I study the policy of intermediate targets adopted by South American economies prior to the adoption of IT to disinflate and reduce the output cost of a change in monetary policy. The paper builds on the model by [Barro and Gordon \(1983\)](#) by using Bayesian learning and introducing a new, independent institution (central bank) to ascertain if the new policy was cheap talk or aided the process of disinflation.

The paper hypothesises that announcing intermediate targets reduces the cost of disinflation by building the credibility of the central bank. Intermediate targets allow for faster learning by agents about monetary policy through reduced inflation surprises which leads to the central bank building credibility, ex-post. Prior to the existence of an independent central bank and targets, the agents are familiar with what is commonly referred to as the Inflation Bias. However, the introduction of the new institution and policy objectives means the agents need to learn about a new policy environment. Moreover, if there is credibility in the institution with respect to the new policy, agents are consistently surprised and therefore, forced to adjust expectations.

Apart from the mechanism, the model has two key predictions. First, high inflation volatility implies a higher disinflation cost and lower credibility of the central bank. This is driven by the difficulty for the agents to distinguish between introduction of the policy and objective of the central bank and exogenous variation of inflation. Second, higher the volatility of inflation, the more patient the government must be to introduce the reform. This is due to the central bank trying to reach optimal inflation (zero inflation) in every period from high levels of inflation. The second prediction is in line with what many of the countries did when introducing IT ([Hammond et al. \(2012\)](#)).

### 3 Inflation Expectations and Information

The previous research develops on the basis of an exogenous process for expectations based on the information available in the economy. However, it does not reference how the information is selected and weighted to form these expectations. As part of my dissertation, the second strand of research I work on is the weighting of information and strategic interaction between agents in co-authored work with *Gabriela Stockler*.

#### 3.1 Networked Inflation Expectations: A Closer Look at Professional Forecasters (Work in Progress)

Disagreement among professional forecasters is a commonly documented (*Andrade et al. (2016)*) feature of inflation expectations. Yet, the mechanism behind this disagreement is unexplored in the literature. This paper attempts to address this question from the perspective on an information channel. The key hypothesis being that private information and the interaction between the forecasters drives disagreement.

The paper argues that professional forecasters are strategic in information sharing by the means of a network. This strategic interaction then impacts their forecasts which are further used by policy makers. Preliminary findings suggest that with complete information sharing and symmetric weighting, professional forecasters predict inflation accurately and the expectations are close to realised inflation.

### 4 Future Research

Taken together, the findings from current research leads to several open questions, which I plan to develop on, in future research. First, the plan is to develop a model which can uncover the mechanism of expectation formation in the presence of a policy change by distinguishing between long and short run expectations. Second, the aim is to introduce this mechanism to a model of heterogeneous agents such there can be a new measure for optimal monetary policy. In addition, disentangle which expectations matter for monetary policy. Finally, the paper on (Dis)Inflation Targeting would build a framework which can produce an optimal speed of adjustment and optimal target for economies using IT to control inflation.

On the other hand, the paper on networked forecasts aims to undertake an empirical exercise to uncover the network of the professional forecasters. The objective is to use data from banks to uncover information such as common shareholders which could allow for private information and therefore network effects. Moreover, to use surveys on inflation perception, central bank credibility, and forecasts on other variables to ascertain the fundamentals used when forming inflation expectations. The plan is to be able to reconcile the empirical literature on disagreement with the model of information sharing and beliefs.

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