



Inflation expectations of the inattentive general public[☆]



Monique Reid^{*}

Department of Economics, University of Stellenbosch, Private Bag X1, Matieland, 7602, South Africa

ARTICLE INFO

Article history:

Accepted 10 December 2014

Available online 20 January 2015

Keywords:

Sticky information

Inflation expectation

Inattentive general public

Central bank communication

ABSTRACT

Academic literature on central bank communication has tended to treat a central bank's audience as a single group, represented by the financial markets. However, recognising that a central bank's audience is heterogeneous is advantageous for both modelling purposes and effective central bank communication. This paper focuses on the general public, for whom gathering and processing information are costly. The general public makes rational decisions that limit the time and resources they allocate to the task. As a result, aggregate inflation expectations of the public can be described as 'sticky' in that the spread of information about inflation through the economy is not instantaneous. Following Carroll (2003, 2006), epidemiological models are adopted to model the inflation expectations of the general public in South Africa and to estimate the speed at which they update their inflation expectations (information stickiness). Agent based models are then used to verify these estimates of information stickiness.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

Central banks recognise that they are engaged in a strategic interaction with the citizens of their countries (their audiences) and that the inflation expectations of these citizens represent a channel through which monetary policy can achieve its policy objective of low and stable inflation. Therefore, communication is widely recognised as crucial to the implementation of monetary policy, as it is used to build credibility, manage citizens' inflation expectations and improve coordination between the actions of the central bank and the citizens.

In monetary policy analyses, the audience of central banks' has almost always been treated as a single group, and empirical research has focused solely on the interaction of a central bank with the financial markets. This lack of attention devoted to understanding the non-financial market segments of a central bank's audience need not suggest that researchers believe these groups behave very similarly to the financial markets, or that the impact of these groups' behaviour is negligible and not worth studying. Instead, it reflects challenges such as the lack of relevant, high-frequency asset prices available to capture and model the views of the general public.

In practice, a central bank's audience comprises heterogeneous groups, and both the policy and communication of the central bank should be designed with this in mind. Although it is impractical to attempt to incorporate the full range of heterogeneity within a single

economic model, it does seem beneficial to identify broad characteristics that are likely to affect the way the central bank's communication is received and interpreted, and to tailor communication to broad groups of the central bank's audience divided along these lines. Blinder and Wyplosz (2004) divide the central bank's audience into the broad public and its political representatives on one side, and the financial markets on the other. Cukierman (2005) argues that the general public will rationally choose to be inattentive to short-term fluctuations in the inflation rate if the central bank has credibility, as the cost to them of searching for and processing information about monetary policy outweighs the potential benefits.

This paper studies the process by which the inattentive general public form their inflation expectations in South Africa. Firstly, a better understanding of the process by which the inattentive general public, who are responsible for the majority of the price setting behaviour, form their expectations will improve the South African Reserve Bank's (SARB's) ability to communicate effectively with them and to influence their inflation expectations. Successful communication is essential both to enhance the effectiveness of monetary policy and to build public support for the institutional framework within which monetary policy is implemented.

Secondly, an improved understanding of the microfoundations of aggregate inflation expectations will enable better-quality modelling of the South African Phillips curve, the benefits of which are unquestionable. The "inexorable and mysterious trade-off between inflation and unemployment" (Mankiw, 2001: 45) is fundamental to our understanding of monetary policy. It is impossible to explain the business cycle without it, and there is broad consensus that there is a trade-off between inflation and unemployment in the short run, but not in the long run, so any reasonable model of the economy should strive to capture these features.

[☆] The author gratefully acknowledges financial support for this project from the Economic Research Southern Africa. An earlier version of this paper is available as Economic Research Southern Africa working paper number 278.

^{*} Tel.: +27 218084753; fax: +27 21 8084637.

E-mail address: mreid@sun.ac.za.

2. The inattentive general public

Blinder et al. (2008) review the literature on central bank communication and suggest some areas where further research is required. They highlight the need to research the role of the general public as a separate audience with whom a central bank is communicating.

“Finally, virtually all the research to date has focused on central bank communication with the financial markets. It may be time to pay some attention to communication with the general public. Admittedly, studying communication with the general public will pose new challenges to researchers – not least because the financial market prices will be less relevant. But the issues are at least as important. In the end, it is the general public that gives the central bank its legitimacy, and hence their independence.” (Blinder et al., 2008: 47)

2.1. Rational inattention

Proponents of behavioural economics have long contested the use of the standard utility maximising agent model adopted by mainstream economics. In essence, behavioural economists criticise mainstream economists for ignoring the limits to economic man's knowledge and computational ability. However, the debate surrounding the validity of rational expectations and its implications has not been settled yet.

In reality monetary economists require a pragmatic approach to making policy recommendations while the theoretical debate continues. Regardless of one's ideological view, it is difficult to deny that sensible monetary policy must account for the formation of expectations,¹ and it is, by definition, not possible to model ‘irrational expectations’. Rational expectations models do not fully explain the complexity of individual decisions, but the assumption does provide a way to incorporate expectations into the model when decisions are made in a dynamic setting. A compromise such as using the standard rational models, modified or extended to account for the limitations of human ability that behavioural economics has highlighted, seems like a reasonable way to address the pressing questions asked by applied macroeconomic research.

Behavioural economists have identified numerous deviations from the standard model, which Della Vigna (2007) divides into three broad groups: non-standard preferences, non-standard beliefs, and non-standard decision-making. The concept of rational inattention falls into the third group – non-standard decision-making. Rationally inattentive agents recognise that gathering and processing information is costly, so they make rational decisions to limit the amount of time and money they allocate to the task (Della Vigna, 2007; Birchler and Büttler, 2007).

Monetary models are continually being extended to improve their explanation of monetary policy's impact on the economy. In this paper, the behavioural economics concept of rational inattention is used to modify the standard models, with the objective of modelling the actual data more accurately. The aim is to improve our description of the process by which inflation expectations are formed, in order to overcome some of the troubling weaknesses of current macroeconomics models, which will be explored in Section 3.

At this point, it is important to distinguish the connotations of the term ‘rational inattention’ as used by the behavioural economists from that used in the monetary literature. In the behavioural economics literature, rational inattention refers to a deviation from the standard rational expectations model, and it acknowledges that due to the costs involved in accessing and processing information, it is rational for economic agents to limit the time and resources devoted to the task.

¹ There is broad consensus that monetary policy affects the economy with long and variable lags, so monetary policy must be forward-looking.

In the monetary literature, two new forms of incomplete information have been developed to introduce rigidity into the monetary models. Sims (2005, 2010) has adopted ideas from engineering communications theory to model his suggestion that people have limited capacity to process and transmit information. In his models, economic agents have partial information (they receive noisy information), and he calls this ‘rational inattention’. Although Sims' rational inattention is intuitively appealing, the technical challenge of incorporating it into macroeconomic and financial models is substantial. Sims himself describes its progress as ‘modest’ (Sims, 2010: 38), although he remains positive about its future potential.

In contrast, Reis (2004) adopted the term ‘inattentiveness’ to describe his modelling of economic agents who have delayed information because they have many competing needs that they devote their time and resources to, and who optimally choose to update their information only sporadically. This form of incomplete information was used by Mankiw and Reis (2002, 2003, 2006, 2007) in their ‘sticky information Phillips curve’ (SIPC) models, which were developed as an alternative to sticky price models. Far more progress has been made in incorporating ‘inattentiveness’ into macroeconomic models than Sims's ‘rational inattention’. Following the earlier argument that policy decisions cannot wait for perfect theory or models, and given the applied nature of this study, Mankiw and Reis's ‘inattentiveness’ will be adopted in this paper.

Mankiw and Reis (2002, 2003) claim that sticky information is more consistent than rational expectations with mainstream views about the actual dynamics of the macroeconomic variable inflation and unemployment. The idea of inattentiveness also has intuitive appeal in the South African context. Ehlers and Steinbauch (2010) investigated the expectation formation processes of different economic groups in South Africa. They found that none of the three groups employed fully rational nor fully adaptive behaviour. Rather, the different groups appeared to adopt different combinations of rational and adaptive behaviour, which Ehlers and Steinbauch (2010: abstract) describe as ‘non-homogenous learning’. The characteristics of South Africa's inattentive general public are explored further in Section 2.2 before the theory is formalised in Section 3. This paper focuses on using inattentiveness as an alternative explanation for the non-homogenous formation of inflation expectations by different groups in the South African economy, in an attempt to address the concerns raised by Mankiw (discussed in Section 3).

2.2. The inattentive general public

A comparison of the inflation expectations of the financial markets with those of the general public, presented in Section 4.1 and represented visually in Fig. 1 in that section, shows that the inflation expectations of these two groups converged under stable economic conditions and were particularly highly correlated between 2005 and mid-2008. It can be argued that under these conditions the inattentive public considers the costs of actively searching for and processing information greater than the benefits, as Cukierman (2005) suggested. However, the economic and political contexts within which monetary policy is implemented in South Africa (and indeed worldwide) have become more volatile in recent years, and the inflation expectations of the two groups diverged after mid-2008. It is even less appropriate now to focus exclusively on the financial market's perceptions of the central bank's communications.

If the case for inflation targeting (and prudent monetary policy in general) is going to be made successfully, and monetary policy is going to be effective in a climate of increased public awareness, policy makers need to understand the inattentive general public. It would be useful to explore how this audience assimilates information about monetary policy and how the SARB can improve its communication with them.

This issue should be viewed within the context of a wider and older concern, which Arthur Burns in 1979 dubbed ‘the anguish of central

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات