The role of short-run inflation targets and forecasts in disinflation

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Globally, the majority of countries using inflation targets have done so when inflation was neither low nor stable. In low-inflation economies, the adoption of inflation targets has typically been associated with more comfortable institutional arrangements. In contrast, central banks in emerging economies have found that—notwithstanding the contribution of inflation targets towards the attainment of price stability—they have provided a relatively less comfortable nominal anchor.

In this paper we suggest reasons why the use of inflation targets may be more complicated during disinflation. The central bank may have to tread gingerly towards achieving its long-run inflation target, since:

a) the current inflation rate may be markedly different from the long-run target;
b) the output costs of moving to the long-run inflation target within one or two years are expected to be large; and
c) the short-run behaviour is driven by many large and uncertain developments.

Our simple theoretical model encompasses these features. It differs from previous work insofar as the central bank cares not just about deviations of inflation from the long-run target of price stability, but also about deviations from a short-term path, which itself may be revised in the future. The results suggest that the short-run target path may be akin to a state-contingent forecast, and that annual changes to the short-run target may be predicted given information about the anchor (the long-run target) and full knowledge about shocks hitting the economy.

We use (and publish) a new and unique cross-country dataset of targets and outcomes during the 1990s to assess how the role and contribution of inflation targets is affected by their use during disinflation. Our panel estimates support theoretical predictions that annual changes to the target are endogenous to outcomes for inflation. We estimate an equation relating the annual change in the short-run inflation target to the deviation of inflation from the long-run target, and also to the miss from the short-run target in the most recent year. Across a very broad range of countries the results suggest that policy-makers may be characterised as revising their short-run targets according to a simple forecasting rule: they tend to revise their targets down in proportion to excess of inflation above the long-run 'target' of price stability; they also revise short-run targets up or down almost in line with the miss from last year's short-run target. They may be using such a rule for revising targets in conjunction with the more familiar policy rule for revising interest rates. So models of disinflationary policies may need to take into account both of these rules.

We draw a number of policy conclusions, the first of which stems directly from our analysis:

1. *In designing roles for the legislature and the central bank in the monetary framework it is necessary to take into account the likelihood that, during disinflation, the process of setting or revising the inflation target may at times be inseparable from that of setting policy instruments*. So in contrast to low inflation countries such as the United Kingdom—where it has been possible to devise an effective monetary framework in which the government sets the target and has not changed it since it delegated the Bank of England instrument independence to meet the target—during disinflation it is more complicated to design a monetary strategy that attempts to utilise distinctions between the roles of setting interest rates and those of setting the short-run target.

We draw other policy implications by considering our results in conjunction with other work:

2. *Short-run targets (or forecasts) may contribute towards building credibility even if they are more akin to state-contingent forecasts than policy rules*. Although our simple theoretical model and empirical results do not demonstrate any benefits from using inflation targets, the expanding literature on central bank transparency suggests that forecast publication may enhance credibility and lead to lower inflation.

3. *Short-term money and inflation targets need not necessarily be seen as alternatives during disinflation*. When targets are viewed as being more akin to state-contingent forecasts than rules, the case for viewing inflation and money targets as alternatives is undermined. Publishing forecasts for more than one variable—provided they are mutually consistent—may increase transparency, since publishing a forecast for more than one variable may inform the public better about the central bank's opinion regarding the nature of recent shocks to the economy.

4. *There do not necessarily exist any prerequisites for the introduction of inflation targets*. The results discussed here lead us to argue that there may exist potential marginal benefits from increasing transparency through the introduction of inflation targets (or state-contingent inflation forecasts) even if other aspects of framework reform commonly associated with inflation targeting are not yet fully in place. We cite evidence that suggests that the transparency channel for reducing inflation may be stronger in high-inflation economies, where credibility is likely to be lower.

Financial pressure and balance sheet adjustment by UK firms

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The simple arithmetic of compound interest means that high levels of indebtedness in company balance sheets can lead to an unstable spiral where high debt levels feed into high interest costs, poor cash flow, higher borrowing and so to even higher levels of debt. Without corrective action or good fortune this process leads inevitably to default and company failure. In practice, the vast majority of companies are able to keep their levels of indebtedness under control. This paper investigates the means by which this is achieved.

In principle, there are a number of means of reducing indebtedness. These include cutting costs generally by improving productivity, reducing dividend payments, paring back capital investment programmes, selling assets and issuing new equity. There is substantial anecdotal evidence that all of these methods have been used to some extent recently by heavily indebted companies. Using large scale individual company-level data, this paper looks systematically at the extent to which indebtedness and the burden of servicing debt affect a number of these aspects of corporate behaviour. More specifically, we examine how these financial pressures affect UK companies' dividend payments, their propensity to raise new equity finance and their capital investment decisions.

Company dividends are shown to respond to a number of influences, including cash flows and investment. Importantly, they are negatively influenced by the level of indebtedness of the company, highlighting their use as an adjustment mechanism to maintain gearing on a sustainable path. Moreover, we find large persistence effects in levels of dividends, suggesting that companies are slow to adjust their balance sheets through this channel. Thus, in response to a financial shock, companies will use other means in the short term to adjust their balance sheets, in addition to adjustment through the level of dividend distributed to shareholders.

Another key aspect of companies' financial policies is their decision to raise new equity. Our analysis shows that companies do not generally pay a dividend and issue new equity in the same year, or at least not on an ongoing basis. Furthermore, companies with low levels of cash flow, high levels of debt and, in particular, high levels of investment, are more likely to issue equity. The inverse relationship between a firm's propensity to issue new equity and its cash flow is especially noteworthy. This is consistent with the notion that companies are generally averse to issuing new equity: those companies that have large amounts of cash flow and are able to finance their investment programmes with internal funds are significantly less likely to use new equity finance.

This analysis of balance sheet adjustment through dividends and new share issues is relevant to a large literature that has developed examining how investment and its financing may be affected by financial constraints. This literature has focused mainly on the use of external debt finance which, if available only at a cost premium over internal funds, implies that companies forego investment opportunities following a shock to cash flow. Our analysis suggests that equity finance can play an important role in protecting investment from cash-flow shocks, but that companies may typically be disinclined to employ such finance if they have other, particularly internal, funds available to them.

Our analysis also shows that capital investment responds negatively to debt in company balance sheets, as well as the level of borrowing costs. But in this context, our results produce an interesting contrast between the financial and real aspects of corporate behaviour we consider. Whereas dividends and new shares respond to the stock of debt issued by the firm, investment appears to be more closely related to the flow cost of servicing debt. It therefore appears that dividends and new share issues respond to longer-term balance sheet pressures, whereas investment reacts to more immediate pressures. These results extend the existing literature on how financial pressure affects individual firms.