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# COMMENTARY

MONETARY POLICY

## Getting it Right When You Might Be Wrong: The Choice Between Price-Level and Inflation Targeting

Jean Boivin



### **In this issue...**

Canada's 2 percent inflation targeting program works pretty well – but could targeting the price level work even better, especially when inflation and the price level might not be perfectly observed?

## THE STUDY IN BRIEF

This *Commentary* argues that there are good reasons to believe that the Bank of Canada does not perfectly observe the “true” inflation rate and price level when implementing policy, perhaps as a result of observational errors or conceptual difficulties in defining these indicators.

The Consumer Price Index is, at best, an approximate measure of the true cost of living in Canada. The need to rely on imperfect information affects the relative merits of inflation targeting (IT) and price-level targeting (PLT).

Up to now, the literature has suggested that PLT might be inferior to IT when inflation is subject to observational errors. However, this view is valid only when the central bank is oblivious to the presence of observational errors. Furthermore, the costs of ignoring observational errors can be as important as those at stake in the choice between IT, which does not take into account past deviations from the target, and PLT, which does.

When the central bank acknowledges that inflation and the price level are not perfectly observed and attempts to make allowance for this fact, a PLT regime might be superior to an IT regime, provided that the general public understands how such a regime works and bases its own decisions on that understanding.

Accordingly, the fact that inflation and price-level measures are indeed subject to the presence of observational errors might, in fact, be an additional argument in favour of PLT.

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The views expressed here are his own, and not those of the Bank of Canada

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## When measured against historical and international experiences, inflation targeting (IT) in Canada is a remarkable success story.

There has been a considerable reduction in the level and volatility of inflation since the Bank of Canada adopted inflation targeting in 1991 (Figure 1). Since mid-1992, inflation – measured as the year-over-year change in the Consumer Price Index (CPI) – has remained stable and close to its target of 2 percent. In fact, inflation expectations appear well anchored at that level. Importantly, the successful stabilization of inflation has not come at the cost of more volatile economic activity. In fact, the Canadian experience shows that it is possible to stabilize inflation over the medium run while still maintaining sufficient flexibility to mitigate short-term fluctuations elsewhere in the economy.

Despite this success, it is at least a theoretical possibility that an alternative policy framework – namely price-level targeting (PLT) – could have led to even better economic outcomes. Research on the topic has resulted in a series of compelling theoretical arguments showing why PLT might be superior to IT. Some of these arguments suggest that PLT might be more effective in preventing and dealing with deflationary situations when the nominal overnight interest rate approaches zero. Clearly, contemplating the potential benefits of PLT is particularly relevant in the current environment.

Given that the current IT regime has been successful in many respects, at least historically, it is particularly important that the actual merits of any alternative be thoroughly and rigorously investigated. As the saying goes, “If it ain’t broken, why fix it?” In particular, we need to be convinced that the theoretical environment in which these results are derived is characterized by properties that would matter in practice.

*What if the inflation and the price level are not observed in practice?*

Comparisons of IT and PLT have paid little attention to the idea that the inflation and price level relevant for monetary policy might not be perfectly observed. In fact, a central bank should care about the true underlying changes in the public well-being that stem from overall changes in the cost of living. Because of the difficulties associated with translating the concept of cost of living into an operational definition, any price index might be merely a useful, but imperfect proxy of what the central bank should be stabilizing.

Existing arguments in the literature suggest that PLT might be inferior to IT when inflation is observed imperfectly, since transitory errors in inflation imply persistent errors in the price level. In that case, targeting an imperfect measure of the price level could result in the central bank responding to errors that would introduce additional and persistent fluctuations in the economy that would, in turn, reduce economic well-being.

In this *Commentary*, I argue that there are good reasons to believe that the central bank might be currently implementing policy based on an unrealistic price level, perhaps as a result of calculation errors or conceptual difficulties in defining this measure. However, I also argue that when the central bank acknowledges that inflation and the price level are not perfectly observed, PLT is likely to be superior to an IT regime. Thus, the presence of measurement errors might be an additional argument in favour of PLT. But ultimately, as for most of the arguments in favour of PLT, this conclusion relies on how the public forms its expectations. Before discussing the role of imperfect information, it is useful to describe more explicitly IT and PLT, their differences and the existing arguments concerning why one might be superior to the other.

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