

THE TRADE-OFF BETWEEN INFLATION AND ECONOMIC ACTIVITY IN BRAZIL**Alexis Maka**

Senior Economist at Diretoria de Estudos e Políticas Macroeconômicas (Dimac)/Ipea.

Fernando de Holanda Barbosa

Professor at Fundação Getúlio Vargas (FGV)/EPGE.

The Phillips curve has been playing a central role in policymakers' understanding of the macroeconomy and the formulation of monetary policy. It is not surprising then that empirical challenges in estimating a Phillips curve relationship have been closely intertwined with challenges in conducting monetary policy. Much work has been done, both theoretically and empirically, since Phillips's seminal 1958 paper. Yet economists have not converged to a widely agreed specification that is satisfactory both from the theoretical and empirical standpoints.

This paper contrasts empirically four leading models of inflation dynamics – the Accelerationist Phillips Curve (APC), the New Keynesian Phillips curve (NKPC), the Hybrid Phillips curve (HPC), and the Sticky Information Phillips curve (SIPC). Our method of testing the Phillips curves is different from the approaches taken by previous studies of the inflation dynamics in Brazil because it is based on an alternative specification of this curve that encompasses the APC, NKPC, HPC and SIPC. This encompassing specification has the advantage of reducing part of the huge specification uncertainty surrounding the Phillips curve by making it possible to test each of these alternative specifications within a single framework. Furthermore, to draw inferences about the parameters we use methods that are robust to weak instruments. To the best of our knowledge, none of the studies that have employed the Generalized Method of Moments (GMM) to estimate the Phillips curve for Brazil have used identification-robust methods, making their results unreliable according to the weak instruments literature.

The evidence from using the GMM estimator suggests that the NKPC, HPC and SIPC are not consistent with data for Brazil after the Real Plan. Only the APC is consistent with these data. However, when we construct confidence regions that are robust to weak instruments, it is not possible to reject any of the Phillips

curve specifications, including the NKPC. This happens because the GMM confidence regions understate the sampling uncertainty, compared to regions that are robust to weak instruments.

SUMÁRIO EXECUTIVO