INFER
INTERNATIONAL NETWORK FOR ECONOMIC RESEARCH

INFER BRIEF SERIES No. 5 | 2021

INTERNATIONAL NETWORK FOR ECONOMIC RESEARCH

A good luck or good policy? A recent macroeconomic history of New Zealand

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Great Moderation was a global phenomenon marked by stable economic growth and inflation. However, how much monetary policy contributed to its success remained as a popular debate in the literature. Answering this question became more important after global financial crisis - and the recent COVID-19 pandemic- since global conditions became relatively more important than past even under same policy stance. I examined the recent macroeconomic history of New Zealand through the lens of a regime switching structural vector autoregression model to understand the contributions of domestic monetary policy and global conditions to its macroeconomic stabilization. I also show that the small open economy structure is especially important to facilitate the identification of structural shocks that spillover from globe.

The Great Inflation where took place between the late 1960s and late 1980s, was marked by unstable economic growth and high inflation. After fifteen years of the Great Inflation, the Great Moderation followed, which was characterized by stable growth and low inflation, globally. This was interrupted by the Great Recession which began in the U.S.. The financial crisis in the U.S. spilled over to the world, and this increased economic volatility on a global scale. While most of the countries were successful in achieving low inflation levels starting from the early 1990s, the reasoning and mechanism behind this success remained a popular debate among scholars. The macroeconomic stabilization, especially the reduction in inflation, has been widely examined. Some studies argued that overall progress is due to good policy, which can be modelled as a structural change in policy equations, while others sought convincing evidence in favour of good luck, i.e., variance in shocks to the economy. This topic is also related to another strand of the literature by

focusing on inflation targeting, rather than monetary policy in general. The studies focus on the questions of whether inflation targeting improves inflation performance and credibility. There is a vast number of studies on inflation targeting and monetary policy, including, but not limited to, the works of Bernanke et al. (1999), Neumann and Hagen (2002) or Mishkin and Schmidt-Hebbel (2001). They studied the collective progress of inflation targeting countries and concluded that adopting inflation targeting improves inflation performance. At the same time, Cecchetti and Ehrmann (2002) stated that non-inflation targeting countries also improved their inflation performance over the last three decades, which favours the reduction in shock variances argument.

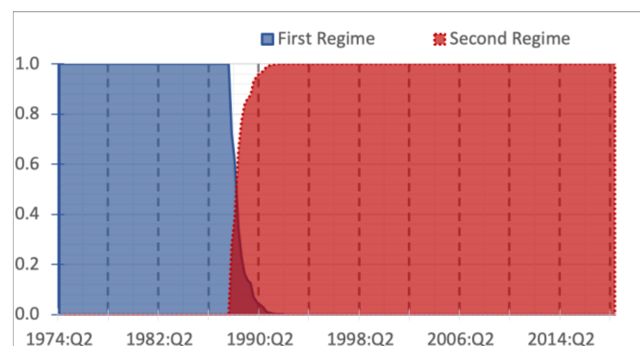
This brief, based on Akbal (2021), aims to contribute to the aforementioned literature by examining the first country that adopted inflation targeting monetary policy officially, New Zealand. By taking advantage of the small open economy structure of New Zealand, this study achieves the identification of domestic policy and global shock variances which is difficult for large open economies whose domestic policy changes can affect the global macroeconomic conditions. Hence, New Zealand could have benefited from either policy changes or reduction in global shocks or both, which is a required precondition for the present analysis.

The literature has contested over relative contributions of shock variances and good policy to the success during the Great Moderation. While Clarida et al. (2000) highlights the role of good policy, Sims and Zha (2006), in their study of U.S. monetary policy, argues that the Great Moderation was also characterized by the reduction in shock variances. Given that the U.S. is a large country whose policy can affect the rest of the world, it is not clear to what extent the shock variance reduction was exogenous. On the other hand, New Zealand, due to being a small open economy, can circumvent this issue. Indeed, the literature has examined this question beyond the U.S.. Bernanke et al. (1999) in a cross-country analysis including advanced and emerging economies, showed that both the realization and expectation of inflation decreased by a considerable amount regardless of whether countries are inflation targeters or not.

By allowing domestic policy response coefficients, domestic shock variances and global shock variances can regime shift independently, I studied timing and magnitude of changes in New Zealand monetary policy and global shocks.

Figure 1 shows the regime probabilities for different monetary policy coefficients. The monetary policy equation starts to change in mid-1989, and the new regime dominates after the 1990s.

Figure 1: Monetary policy response to inflation

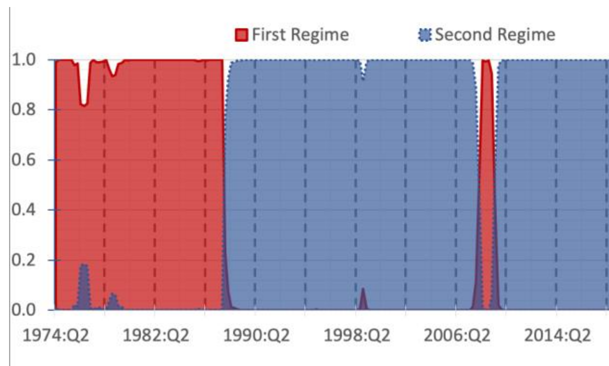


The second regime is relatively more aggressive to the changes in inflation compared to the first regime. Moreover, the regime switch's timing coincides with the timing of the adoption of inflation targeting in New Zealand, implying that the second regime represents the inflation-targeting monetary policy. To sum up, adopting formal inflation targeting policy, New Zealand switched to a relatively more aggressive monetary policy.

Figure 2 provides probabilities for the global shock variances. The first regime indicates increased volatility in global shocks, and the

second regime is the reduced volatility in the global shocks regime. While the Great Moderation reveals a low variance in the global shocks regime, the Great Financial Contractions is a high volatility regime in global shocks.

Figure 2: Global shock variances to New Zealand



Combining the regime probabilities for two independent Markov chains in the same structural model, the estimation results and smoothed transition probabilities highlight two main findings for the domestic block's shock variances. First, the decline in the global shock variances preceded the decline in the domestic shock variances, suggesting that New Zealand's success during the Great Moderation cannot be attributed to inflation targeting alone. However, this does not invalidate the contribution of inflation targeting because the change in monetary policy coefficients also preceded the decline in the domestic shock variances, which are closer in terms of their timing. The evidence suggests that both reduction in global shock variances and adopting inflation-targeting monetary policy could have been important for macroeconomic stabilization during the Great Moderation because no single regime change evidence dominates. Second, note that commitment to inflation targeting was not affected by the Great Financial Contraction of 2008. As far as the New Zealand evidence is concerned, this was an episode in which the global shock variances increased first, and the domestic shock variances followed.

The finding here corroborates that of Fernandez-Villaverde et al. (2010) for the U.S. They claim that, although the same policy stance holds, an increment in global shock variance can lead domestic conditions into a more volatile state.

Therefore, the Global Financial Contraction influenced New Zealand's macroeconomic dynamics through a global increase in variances and then followed by a regime switch in the domestic shock variances. Whereas domestic shock variances had various regimes in the pre-inflation targeting period, global shocks were only in high variance regime during this period. This period shows that a less aggressive policy with a high global shock variance led to a period of higher inflation.

Combining these pieces of evidence, the study concludes that macroeconomic stabilization was driven by both good policy and supportive global conditions. These results also demonstrate the usefulness of regime switching empirical models for policy analysis, in particular, their abilities to deliver economic assessments in a unified framework.

Policy Implications

Both the Great Financial Recession and the recent COVID-19 pandemic emphasized the importance of global conditions on domestic policymaking once again. The main findings of this study shows that for the pioneer country in inflation targeting monetary policy, New Zealand, this was the case for last decades as well. The success on macroeconomic stabilization requires proper policy acts and supportive global conditions. The policymaker should therefore adopt policy tightness/agressiveness depending on the global shock spillover and literature should focus more on spilover effects on the policy side.

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