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The long-run impact of New Zealand's structural reform on local communities

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ABSTRACT

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New Zealand underwent a period of comprehensive market-oriented economic reforms from 1984 to 1993. In this paper, we use data from the 1986, 1991, 1996 and 2001 New Zealand census to examine the long-run impact that these reforms had on local communities. We analyse the adjustment process in 140 local labour market areas by creating three measures of the impact of structural reform on local communities and examining the persistence of these shocks over time. We find that communities which experienced smaller employment shocks have higher employment rates and a more skilled workforce in the medium and long-term. Population shocks also have positive, sizeable and persistent effect on future population size. Overall, the initial impacts of the reforms undertaken in New Zealand on local communities appear to still endure more than a decade later. *Journal of Comparative Economics* **38** (4) (2010) 432–448. Motu Economic and Public Policy Research, Wellington, New Zealand; University of Waikato, Hamilton, New Zealand; IZA, Bonn, Germany; Victoria University of Wellington, New Zealand; Royal Holloway, University of London, UK; Centre for Research and Analysis of Migration (CReAM), London, UK.

1. Introduction

The 1980s marked a decade of structural adjustment around the world. Many developing countries, spurred by unsustainable fiscal deficits, currency crises, and external pressure from the World Bank and the IMF, gradually abandoned interventionist and protectionist policies. Several developed countries, such as the UK and Sweden, also instituted reforms in recognition that excessive regulation of domestic industries was a cause of sluggish growth. In New Zealand, interventionist policies instituted in the 1930s grew steadily into the 1970s and turned the country into one of the most regulated economies in the OECD. By 1984, the country was facing unsustainable fiscal and current account deficits, inflation of over 12% per annum, foreign debt at 46% of GDP and a foreign exchange crisis. Widespread recognition of the need for change led the government to initiate comprehensive market-oriented reforms in 1984. In less than a decade, the economy was opened to foreign capital and international trade, government assistance to industry was dramatically reduced, agricultural subsi-

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dies were abolished, state-owned enterprises were privatised, the employer–employee bargaining process was decentralised and the social welfare system changed from universal provision to a tightly targeted system.

In this paper, we use data from the 1986, 1991, 1996 and 2001 New Zealand census to examine the medium and long-run impact that the structural reforms in New Zealand had on local communities. We analyse the adjustment process in 140 local labour market areas, across which there was large variation in the initial impact of the reforms. We do this by creating three measures of the impact that reform had on local communities (which we refer to as the reform 'shock' in the remainder of the paper) – an employment-based measure, a population measure and a housing price measure – and by examining the persistence of these changes over time. First, we examine how the initial characteristics of each community related to the magnitude of the shock experienced. Next, we undertake a regression analysis which estimates the impact of initial economic conditions and demographic characteristics in 1986 on outcomes in each community in 1991, 1996 and 2001. Then, we examine the impact of the employment, population and housing price shocks experienced in each community between 1986 and 1991 on outcomes in 1996 and 2001, controlling for initial economic and demographic characteristics.

Ours is the first paper to examine the long-run effects of structural adjustment in New Zealand at a community level. Previous work, such as Choy et al. (2002), Karagedikli et al. (2000) and Grimes et al. (2007) has examined adjustment at the regional level, which in New Zealand is a spatial aggregation at which statistics are produced, but has limited real world relevance. At this broader level of aggregation there is likely to be less variation in the magnitude of economic shocks experienced as each region contains multiple local labour market areas with potentially differing economic structures.

On the other hand, Chapple (2000) examined labour-market adjustment in 1080 urban areas, which is arguably too disaggregated since many of these urban areas are part of the same local labour market. Furthermore, these papers each examined the more general relationship over time between changes in different measures of economic performance. Hence, they relied on restrictions in their econometric model to identify the relationship between economic shocks and different measures of economic performance. Our paper, by focusing on arguably exogenous or conditionally exogenous spatial variation in economic shocks, does not need to make assumptions about the possible pathways through which these shocks impact the economy to identify any of the relationships of interest.

The literature on spatial adjustment to economic factors is vast, spurred largely by regional declines in the US and Europe in the 1970s and 1980s (see Heim, 1997; Hall, 1970; Krugman, 1991). There is broad consensus that adjustment to demand shocks in the US is achieved mainly through labour-supply responses, while the relative inflexibility of labour markets in Europe and the greater barriers to trade and entry have forced these countries to adjust through increases in regional unemployment. For example, Blanchard et al. (1992) examine how states in the US adjusted to employment shocks over a 40-year period. They find that these shocks had a permanent effect on future employment; when states experienced deviation from trend in growth due to shocks, they did return to their former growth rates but on a permanently different path of employment. In contrast, relative unemployment rates did not exhibit any trend and unemployment shocks have not had any permanent effects. Similarly, Topel (1986) examines labour-market dynamics across census regions in the US over the period 1977–1979 and finds that transitory demand shocks in a region increase local relative wages, but that expectations of future demand reduce current wages because they attract migration inflows.

Decressin and Fatas (1995) find that economy-wide shocks lead to permanent increases in unemployment in European labour markets while regional shocks are less persistent. Spilimbergo and Kwon (2005) compare the magnitude and persistence of regional income shocks in Russia with estimates for the US and Europe. They find that internal migration is far lower in Russia in response to shocks compared to the US but higher than in Europe. They attribute this fact to underdeveloped housing markets and labour market rigidities. They also find that shocks are much less persistent in Russia and the effects disappear after 4 years. A reading of the international literature on regional shocks therefore indicates that different mechanisms allow for adjustment to shocks in different countries. Moreover, the degree of persistence in the response to shocks varies substantially across countries.

Most papers cited above have relied on the vector autoregressive (VAR) technique to estimate the magnitude and persistence of regional shocks. This methodology involves examining the covariation in a parsimonious set of regional economic variables over time, and predicting the time paths for these variables. In contrast, the microeconometric approach used in this paper allows us to control for a rich set of community-level characteristics that capture the heterogeneity in community fortunes before the structural reforms were introduced. Because of the relatively focused nature of the structural reform in New Zealand, we believe that our empirical approach provides a cleaner identification of the both the short-run and longer-run impact of the reform process in New Zealand than a VAR modeling approach, although it would be less suitable for examining the impact of more generic economic shocks on outcomes. Unfortunately, one drawback in using a different modeling approach is that it makes it difficult to directly compare our findings to those in previous papers on the regional persistence of economic shocks in both New Zealand and in other countries. However, we do make some tentative comparisons to the previous findings in our conclusion.

Our results indicate that the initial characteristics of communities in New Zealand are very important in explaining future outcomes, with areas that had relatively sound economic profiles in 1986 having relatively better outcomes in the short, medium and long-term. However, even after controlling for differences in these initial conditions, we find that the structural reforms had large, persistent effects on medium and long-term outcomes in local communities. For example, communities that experienced smaller employment shocks had higher employment rates and more skilled workforces in 1996 and 2001. Population shocks also have positive, sizeable and persistent effect on future population size. Overall, the initial impacts of the reforms on local communities appear to still endure more than a decade later.