



ELSEVIER

Mathematics and Computers in Simulation 59 (2002) 143–152



MATHEMATICS
AND
COMPUTERS
IN SIMULATION

www.elsevier.com/locate/matcom

Economic reform and productivity growth: the case of Australia and New Zealand

Rolf Färe^a, Shawna Grosskopf^a, Dimitri Margaritis^{b,*}

^a Department of Economics, Oregon State University, Corvallis, OR 97331-3612, USA

^b Department of Economics, University of Waikato, Private Bag 3105, Hamilton, New Zealand

Abstract

The purpose of this paper is to study relative developments in total factor productivity (TFP) growth between the Australian and New Zealand traded goods sectors during the 1975–1998 period. Particular attention is paid to the effect of the mid-1980s economic reforms on overall productivity and efficiency change (ECH). We use an approach that decomposes TFP growth into an ECH and a technical change component. This decomposition provides extra insight on assessing relative productivity developments. Our results indicate that the New Zealand primary sector exhibits a remarkable improvement in TFP growth during the post-reform period. This improvement in productivity is driven predominantly by efficiency rather than technical change. There are no significant productivity changes in the Australian primary sector, nor the manufacturing sectors of the two countries as a result of the reforms. In fact, the productivity gains in the New Zealand manufacturing recorded in the initial stage of the post-reform period appear to have been eroded in the 1990s. © 2002 IMACS. Published by Elsevier Science B.V. All rights reserved.

Keywords: Malmquist index; Total factor productivity; Economic reform

1. Introduction

Since the mid-1980s a wide range of radical economic policies have been adopted by successive governments in Australia and New Zealand with the primary objective of modernising their economies, enhancing competition and improving productivity. The magnitude and speed of these economic changes have varied between the two countries. New Zealand has carried out a far more comprehensive and speedier programme of economic reform compared to Australia. This in part reflects the increasing difficulties the New Zealand economy was facing at the time the reforms were first enacted.

In the period 1960–1984, the New Zealand economy had one of the lowest rates of real economic growth in the OECD. On the other hand, Australia managed to achieve a rate slightly above the OECD average. In the decade prior to 1984, the New Zealand economy's average per capita real growth rate

* Corresponding author. Tel.: +64-7-838-4454; fax: +64-7-838-4331.

E-mail address: dimitri@waikato.ac.nz (D. Margaritis).

was almost nil. The current account had reached record deficit levels, external public debt was rising rapidly without contributing to significant productive investment growth, unemployment was slowly but constantly rising and inflation was high for most of this period. Smith and Grimes [14] have attributed the economy's dismal growth rate to weak total factor productivity (TFP) performance over this period. This is consistent with international evidence showing that macroeconomic instability reduces growth by reducing investment and TFP growth [8,9]. TFP growth in the New Zealand business sector at 0.8% (1963–1973) and at –2% (1974–1979) was the lowest in the OECD [3].

In view of the pressing problems facing the New Zealand economy, it was apparent that firm, prompt and decisive action was necessary. The 1984 economic reform programme was based on a medium rather than short term objective of achieving external and internal macroeconomic stability and microeconomic efficiency. It represents, perhaps, the most radical and comprehensive liberal reform programme ever implemented in the OECD. The deregulation of the money market, the lifting of controls on capital movements, the floating of the exchange rate along with a reduction in border protection and the restructuring of the public sector were the main components of the reform programme [10].

The objective of the reforms was to create a modern market economy free of price distortions, bureaucratic management and to reduce the widespread government protectionism of the post World War II era. Tax incentives, subsidies and import controls had enabled manufacturers to secure the domestic market with inflated prices. The manufacturing sector was highly diversified with a wide range of small scale ventures operating at high cost. The agricultural sector was supported by an expensive system of subsidies which discouraged greater efficiency in the farming and the processing sectors. The state/public owned business enterprise environment was non-competitive with subsidised equity finance as well as exempt from taxes. Such regulatory factors severely distorted price signals which in turn distorted resource allocation within the economy. These factors also inhibited the economy's ability to adapt to changing circumstances. The economy, for example, maintained a reliance on protected primary industries despite a steady deterioration in New Zealand's terms of trade (TOT) and the difficulty in finding export markets. The inward orientation of the policy environment discouraged the private sector's ability to adapt to foreign knowledge and technological change and thus move closer to international best practice.

Australia like New Zealand started its reform programme with the deregulation of the financial sector around 1983 but unlike New Zealand it followed a more gradual approach to economic reform, generally consistent with the conventional liberalisation sequencing approach. For example, the phasing out of tariff protection given to its manufacturing industry did not start until 1988, fiscal and monetary policy has generally not been as tight as New Zealand's, and the pace of public sector reforms has progressed at a slower rate than New Zealand's.

The deregulation of the New Zealand labour market did not take place until after the main thrust of economic reforms were implemented. In the 1987, Labour Relations Act there were some legislation changes designed to strengthen the accountability of unions and remove unnecessary restrictions in the wage-fixing process. The passing of the Employment Contracts Act (ECA) of 1991 has radically changed the law with regards to industrial relations. The main thrust of the ECA has been to allow the negotiation of individual contracts between employers and employees providing considerable flexibility to the process of wage bargaining. A major change in labour relations took place in Australia in 1987 under a two-tier wage system in which work practice improvements to raise productivity became part of the wage determination process. The Australian like the New Zealand labour market has moved from a national to individual enterprise award system but remains more regulated than the New Zealand market. Australia has generally recorded better growth rates than New Zealand in the post-reform period (as it did in the pre-reform

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات