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Trade liberalization and productivity growth in Korean manufacturing industries: price protection, market power, and scale efficiency

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Abstract

This paper examines the dynamic impact of trade liberalization on productivity, market competition, and scale efficiency using a panel data of 36 Korean manufacturing industries over nine subperiods from 1966 to 1988. By accounting for both imperfect competition and non-constant returns, trade liberalization is shown to improve productivity performance, increase competition and promote scale efficiency. Quota protection (QR) had a more significant impact than price protection measures on market structure (as reflected in price-marginal cost markups and scale efficiency), vindicating a well-known theoretical proposition about non-equivalence of different trade policy (TP) instruments in imperfect competition. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

The growth experience of Korea and other East Asian countries, commonly referred to as ‘‘the East Asian Miracle’’, has been a subject of lively and often contentious debate in the social sciences. Especially now, as governments through-

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out Asia seek to cope with the after-effects of the economic crisis of 1997, there is a growing number of skeptics who challenge the sustainability of East Asian growth and even question whether the vaunted ‘‘miracle’’ of East Asia had not been just illusory. The recent ‘‘failures’’ of Asian economies, however, does not diminish the need to understand the source of the past ‘‘miracle’’. In fact, much of the answer to Asia’s recent economic failure is likely to be found in our clear understanding of the reason for the success in the past. Hence, the search for the taproot of Asia’s ‘‘miracle’’ is just as relevant today as it was before the crisis in understanding the process of sustained economic development.

The debate over East Asia’s seemingly miraculous economic development has mainly centered on two related issues: the relationship between trade policy (TP) and total factor productivity (TFP); and the relative importance of the latter in explaining the ‘‘Asian miracle’’. The key reason for the debate on the first issue is precisely that there is no clear and general presumption regarding the dynamic benefits of trade liberalization. For one thing, until recently there has been simply lack of rigorous theoretical models as to how trade and growth could be dynamically linked. The traditional arguments for export-led growth often included casual and anecdotal *stories* about how the rigors of international trade enhanced productivity growth by promoting innovation, cost cutting, and acquisition of new technology. Despite the intuitive appeal of these arguments, their analytical underpinnings were not always firm. [1] For example, export-led-growth advocates asserted that tariffs encourage entrepreneurial slack in import-competing industries because they raise these industries’ relative prices. But by the same logic, they must reduce slack in export-oriented industries. The net effect of trade protection on efficiency was therefore simply not clear.

The emergence of so-called ‘‘new’’ growth theories in the late 1980s did begin to provide a rigorous analytical framework within which trade can be dynamically linked with economic growth. However, the blessings of the new growth theory proved a mixed one. With the gain of analytical rigor, ‘‘the price’’ paid was to actually open up a wider set of analytical conjectures about the possible link between openness and growth. By slightly changing several key assumptions, such as the scope and extent of technology spillovers, the new growth theory could be used to support any set of possible outcomes between trade and economic growth. For example, if technological spillovers are national in scope, a country with a relative abundance of natural resources and unskilled labor could actually experience lower long-run growth if international specialization encouraged traditional activities and pulled resources away from more dynamic technology-intensive sectors. In contrast, if technological spillovers are international in scope, trade may actually have the opposite effect. This is a stark contrast to the strong unambigu-

[1] See Rodrik (1995b) for an overview and criticism of the export-led growth story.