

## Chapter 59

# The Effects of Economic Structural Transformation on Employment:

### An Evaluation in the Context of Economic Complexity and Product Space Theory

**Muhlis Can**

*Hakkari University, Turkey*

**Buhari Doğan**

*Süleyman Demirel University, Turkey*

#### **ABSTRACT**

*Structural transformation concept emphasized by countless numbers of policy makers and scholars. Structural transformation affects not only countries' income levels but also a number of their economic parameters. Employment is one of the most significant of these parameters because the success of structural transformation is measured by the contributions of agriculture, manufacturing, and the service sector to growth and employment. In this chapter, the changing effects of economic complexity (as a major indicator of structural transformation) on employment, and the visual representation of this complexity, which is called product space, are studied using samples from South Korea and Japan. As a result of research, it is found out that increased complexity of a country's economy (increased intensity of the product space center) will lead to a decrease in the employment in agriculture and manufacturing, an increase in the employment in the services sector.*

## INTRODUCTION

In today's world, countries are competing with one another economically in ways that they have not before. While some compete through their cheap workforce, others keep up with the competition through their sophisticated product manufacturing capabilities. This competition is also reflected in the incomes of countries. The question is whether countries can outmatch the competition by more products in general or manufacturing more sophisticated products. According to Rodrik (2006), the number of products a country sells is not significant anymore. What is more important is what type of product the country sells. For example, both Singapore and Pakistan sell 133 different sorts of products to the world market. However, when compared in terms of per capita income, the case of each country is quite different. Singapore is 38 times richer than Pakistan (Hausmann et al., 2011, p. 22). If this is the case, what contributes to this striking difference? The answer to this question takes us to the "structural transformation" concept emphasized by countless numbers of policy makers and scholars.

The first studies on structural transformation were carried out by Prebisch (1950), Singer (1950), Lewis (1954), and Hirschman (1958). The mutual point underlined by all these studies is that countries which specialize in primary products and have a limited export basket might experience problems in terms of trade in the long run. Moreover, these studies suggest that countries should move from selling traditional products to more complex ones (Petrulia, Balland, & Morrison, 2015). Additionally, in their studies, Rostow (1959) and Kaldor (1967) emphasized that knowledge and skills, structural transformation, forward and backward linkage among sectors, and productivity growth are significant for countries that aim to grow over the long term. These studies also strongly underlined that structural transformation can significantly contribute to output and employment growth. Furthermore, structurally transformed countries have the capability to overcome macro-economic shocks more easily (De Bandt & Vigna, 2008). In general terms, structural transformation can be defined as changing the manufacturing structure of a country from one of agriculture to industry and then from industry to service.

Structural transformation affects not only countries' income levels but also a number of their economic parameters. Employment is one of the most significant of these parameters because the success of structural transformation is measured by the contributions of agriculture, manufacturing, and the service sector to growth and employment (Srinivasan, 2013, p. 54). Transformation generally formed out of the growth of a country results initially in the workforce moving from agriculture to the manufacturing industry and then to the service sector. Increased economic growth also leads to urban migration from rural areas (De Brauw, Muller, & Lee, 2014, p. 33). The most significant reason for migration is the higher life standards provided by larger cities (The United Nations Human Settlements Programme [UN-HABITAT], 2011, p. 13). Also, when compared with the agriculture sector, wages in the manufacturing and service sectors are higher.

In this chapter, the changing effects of economic complexity (as a major indicator of structural transformation) on employment, and the visual representation of this complexity, which is called product space, are studied using samples from South Korea and Japan. The underlying reason for selecting these two countries as samples is their achievement of structural transformation through conscious policies. The chapter begins with a discussion of economic complexity and product space theory. The effects of structural transformation on employment in agriculture, manufacturing, and the service sector in South Korea and Japan are then examined separately.

29 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/the-effects-of-economic-structural-transformation-on-employment/248826](http://www.igi-global.com/chapter/the-effects-of-economic-structural-transformation-on-employment/248826)

## Related Content

---

### Internet Financial Reporting in Local Governments: An Empirical Study in the MERCOSUR Countries

Fábio Rodrigues Magalhães, Carlos Santos and Augusta da Conceição Santos Ferreira (2020). *Tools, Strategies, and Practices for Modern and Accountable Public Sector Management* (pp. 169-195).

[www.irma-international.org/chapter/internet-financial-reporting-in-local-governments/242799](http://www.irma-international.org/chapter/internet-financial-reporting-in-local-governments/242799)

### Interest-Free Micro-Finance Without Any Religious Connotation: An Inclusive Global Model

Badr El Din A. Ibrahim (2020). *Handbook of Research on Theory and Practice of Global Islamic Finance* (pp. 196-215).

[www.irma-international.org/chapter/interest-free-micro-finance-without-any-religious-connotation/247201](http://www.irma-international.org/chapter/interest-free-micro-finance-without-any-religious-connotation/247201)

### Foreign Direct Investment, Financial Development and Economic Growth: The Case of Turkey

Kadir Y. Eryigit and Sibel Bali Eryigit (2015). *Handbook of Research on Strategic Developments and Regulatory Practice in Global Finance* (pp. 331-348).

[www.irma-international.org/chapter/foreign-direct-investment-financial-development-and-economic-growth/127800](http://www.irma-international.org/chapter/foreign-direct-investment-financial-development-and-economic-growth/127800)

### Applying Multiple Linear Regression and Neural Network to Predict Business Performance Using the Reliability of Accounting Information System

Ahmed H. Al-Dmour and Rand H. Al-Dmour (2018). *International Journal of Corporate Finance and Accounting* (pp. 12-26).

[www.irma-international.org/article/applying-multiple-linear-regression-and-neural-network-to-predict-business-performance-using-the-reliability-of-accounting-information-system/212735](http://www.irma-international.org/article/applying-multiple-linear-regression-and-neural-network-to-predict-business-performance-using-the-reliability-of-accounting-information-system/212735)

### Dividend Policy and Smoothing Behavior of the Southeast Asian Countries Including Japan

Faisal Khan (2020). *International Journal of Corporate Finance and Accounting* (pp. 62-82).

[www.irma-international.org/article/dividend-policy-and-smoothing-behavior-of-the-southeast-asian-countries-including-japan/258728](http://www.irma-international.org/article/dividend-policy-and-smoothing-behavior-of-the-southeast-asian-countries-including-japan/258728)