Selected Issues on Current International Economics and Macroeconomics

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Edited by

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TABLE OF CONTENTS

Preface vii

Patent Counts, Labour Productivity and Economic Growth
Zeynep Karaca 1

Determinants of Growth
Kübra Karakuş and Nazlı Tekman 13

[illegible] of Regional Human [illegible] The [illegible] Model: 2011 and 2018 Comparison for Turkey
E[illegible]gi Baday [illegible], Yeşim Dindaroğlu and Metin Berber 23

Macroeconomic Effects of Openness
Ş[illegible]duman Yıldız 42

The Taylor Rule and Turkey's Experience
Murat Akdağ and Gürkan Bozma 50

The Relationship between Consumption and Saving
İlyas Kaysı İmamoğlu and Murat Akça 61

Valuation of Crowdfunding
[illegible] .... [illegible]1

The [illegible]
[illegible] .... [illegible]9

[illegible]
Esra Dursun 88

An [illegible] of [illegible] Phillips Curve [illegible] Turkey by [illegible] Bounds Tests and Time Varying Causality
Mustafa Kırca 98

PREFACE

The debates on economics, as old as the history of humanity, undergo transformation according to changing and developing conditions. The developments of the Industrial Revolution and its aftermath, especially in the 19th century, brought a different dimension to the discussions of economics. While economic production and income levels reached dimensions that they had never been able [illegible] reach before, the distribution of this production and income was seriously impaired. This situation caused economic discussions to focus on these issues.

By the end of the 20th century, discussions were concentrated around the phenomena of liberalization and globalization, including cross-border mobility of production factors. The improvement of economic relations [illegible] of [illegible] effects of globalization, have had a major impact on firms and the financial market. This interaction between economics and finance has enabled the [illegible] of [illegible] studies have enabled the emergence of new theories, with mutual solutions to economic problems. In today's world, branches of social science [illegible] as economics, finance, and accounting, have become an integral whole, and have enabled the expansion of theories and assumptions.

[illegible] this book, we have addressed the various issues and concepts that we think are influential in the formation and development of the economy. The topics that are discussed were selected either from basic, or from recently developed, approaches. We hope this book will meet the needs of those concerned.

The aim of this collection [illegible] provide a readable, non-technical [illegible] a [illegible] and macroeconomic issues, trends, and data.

The Editors

PATENT COUNTS, LABOUR PRODUCTIVITY AND ECONOMIC GROWTH

ZEYNEP KARACA

Introduction

According to the generally accepted view, efficiency is a concept that measures the rate of outputs to inputs. If the same amount of input (land, [illegible] The [illegible] and easiest efficiency measure is labour productivity. The increase in [illegible] of [illegible] because more input is used [illegible] production, all the additional output [illegible] needed [illegible]. [illegible] of [illegible], [illegible] higher real wages is to work longer hours. On the other hand, with [illegible] growth, [illegible] of outputs [illegible] inputs [illegible] and [illegible] of production find that they are compensated at higher real rates, as the prices for goods and services rise less [illegible] than nominal wages and profits. The increased prosperity generated by increased productivity not only leads to higher living standards, but also mediates social conflict. When productivity increases, some people consume less, and others consume more. A community with high living standards makes the wealthy members more willing to share with the less fortunate. If the pie is not growing, people start [illegible] protect what they have, and show less interest in the poorer members of society (Munnell 1990, 4-5).

Productivity is a measure of performance comparing the quantity of goods and services produced with the quantity of inputs used to produce them. Output is the total amount of goods and services produced by an industry to be sold to consumers or businesses. Input is the workers, capital, energy, and materials, which are used to produce goods and services. Labour productivity [illegible] the relationship between the amount of output and the amount of labour used to produce this output (Industry Productivity Measures 2017, Bureau of Labour Statistics).

[illegible]

Labour Productivity

[illegible]

productivity of all production factors at the same time (Stocker et al. 2015, 11).

Labour productivity is defined as real economic output per working hour. The increase in labour productivity depends on three factors. These are: investments and savings in physical capital; new technology; and human capital. As an economy's labour productivity increases, [illegible] goods and services are produced by working in the same proportion. This increase in output [illegible] goods [illegible] reasonable prices. There are a number of ways in which governments and [illegible] 18 [illegible] / [illegible]

- [illegible] Th [illegible] by the government and the [illegible] to [illegible] efficiency by lowering the cost of doing business.
- Tax and Welfare Reforms: Applying them increases the income of people who work more efficiently.
- Quality of Education: Providing employees with opportunities to increase their skills, and providing training at a reasonable cost, helps increase the efficiency of the company.
- Business Investment: Raising the company's capital stock by throwing out old and less efficient machines also increases labour productivity.
- Deregulating Markets: Increasing competition to enter the market can lead to greater productivity.

Productivity is an important determinant of living standards. It measures how the economy uses resources.

Higher productivity can lead to:

- Lower Unit Costs: These cost savings result in consumers reaching lower prices, encouraging demand, increasing output, and increasing employment.
- Improved Competitiveness and Trade Performance: Productivity growth and lower unit costs are important for companies to compete in global markets.
- Higher Profits: Productivity is an important source of support for long-term growth of businesses and for companies to reinvest.
- Higher Wages: Firms can pay higher wages when employees are more productive.

How to Measure Labour Productivity?

$$\frac{Q_t}{Q_0} \div \frac{L_t}{L_0}$$

[illegible]

Patent Counts, Labour Productivity, and Economic Growth, in Turkey

[illegible]

Conclusion

It can be said that, with the increase in productivity, the gross domestic [illegible] input [illegible] So, [illegible] of living, and economic development. Undoubtedly, despite the fact that [illegible], [illegible], [illegible] human power [illegible], [illegible] productivity aspect today is labour productivity. Productivity is achieving [illegible] production unit has obtained more and better products from the composition of materials, energy, machinery, manpower and management resources used in that unit than in previous periods productivity [illegible] increased. According to this definition, productivity is a measure of the output/input correlations of all the changes in the output mix, [illegible] the methods applied [illegible] the current production process, in the input quantities, and production capacity. Productivity is a coefficient obtained by proportioning the production factors (inputs) used to realize this production, with the products and services (output) produced at the end of a certain period. The productivity dimension is much more evident, in the sense that productivity gains are driven by managers, employees, and even national interests. Productivity increases mean better quality, more production at lower cost, and more revenue and profit at the business level. The results of productiviy are felt at country level when managers and employees share the balance of cost reductions, due to productivity gains [illegible] a balanced way, as profit and wages increase and customers benefit from fixed or lower prices. The result is the improvement in people's living standards, declining inflation, and declining unemployment.

The ability of a country to attract foreign capital, create new jobs, and increase the level of prosperity and growth, depends on the level of productivity. Innovation increases the productivity of labour and capital. And productivity [illegible] the key to growth. Sustained productivity growth [illegible] central to increasing living standards and reducing the fiscal pressure from growing debt and deficit Innovation is the key [illegible] productivity, Government-supported enterprise, and the continued dynamism of the modern economy through the ideas boom. Long-term increases in living standards and wellbeing depend on sustained growth [illegible] productivity. This, in turn, depends on investment, including in innovation and new technologies, and the allocation of resources. The number of patents is an alternative measure of knowledge, R&D intensity, and innovation.

References

[illegible] *Journal of Business and Management Sciences* [illegible]

[illegible] *KOF Working Paper* [illegible]

[illegible] *Social and Behavioral Sciences.* [illegible]

[illegible] *IPTS Working Paper on Corporate R&D and Innovation* [illegible]

[illegible]ć [illegible] ć [illegible] *Econviews* [illegible]

[illegible]

[illegible] *Research, Innovation, and Productivity: An Econometric Analysis at the Firm Level* [illegible]

Cui, Jingbo & [illegible], Xiaogang. (2016). Innovation and Firm Productivity: Evidence from the US Patent Data. *Agricultural & Applied Economics Association Annual Meeting*, Boston, Massachusetts, July 31-August.

Durmaz, A. & Pabuçcu, H. (2018). The Effect of Government Educational Expenditure on Labor Productivity in Turkish Manufacturing Sector. *Zb. rad. Ekon. fak. Rij.*, 36(2), 129-146.

Hall, Bronwyn H. (2011). *Innovation and Productivity*. NBER Working [illegible]7178.

Industry Productivity Measures. (08.08.2017). Bureau of Labor Statistics. [illegible]

Kurt, Serdar & Kurt, Ünzüle. (2015). Innovation and Labour Productivity [illegible] *Social and Behavioral Sciences*. 195, 1295-1302.

Labor Productivity. (19.06.2018). https://www.investopedia.com/terms/l/labor-productivity.asp.

Martin, Ludivine & Nguyen-Thi, Thuc Uyen. (2015). The Relationship Between Innovation and Productivity Based on R&D and [illegible] Use. *Revue Économique*. Vol.66, 1105- 1130.

Munnell, Alicia H. (1990). Why Has Productivity Growth Declines? Productivity and Public Investment. *New England Economic Review*. 3-22.

Myronenko, Yana. (2012). *Productivity-Measurement and Improvement*. [Unpublished Master of Science Thesis], Department of Real Estate and Construction Management, Stockholm.

Preenen, Paul TY & Vergeer, Robert & Kraan, Karolus & Dhondt, Steven. (2017). Labour Productivity and Innovation Performance: The Importance of Internal Labour Flexibility Practices. *Economic and Industrial Democracy*. Vol.38 (2), 271-293.

Productivity and Economic Growth. (19.06.2018). https://www.tutor2u.net/economics/reference/productivity-and-economic-growth

Sprague, Shawn. (2014). What Can Labor Productivity Tell Us About The U.S. Economy?. *Beyond The Numbers Bureau of Labor Statistics*. Vol.3. No.12. 1-9.

Stocker, Andrea & Gerold, Stefanie & Hinterberger, Friedrich & Berwald, Anton & Soleille, Sèbastien & Morgan, Valerie Anne & Elisavet Zoupanidou. (2015). *The Interaction of Resource And Labour Productivity*. Sustainable Europe Research Institute (SERI) bi[illegible] by Deloitte.

Journal of Diagnostic Medical Sonography

Introduction

Determinants of Economic Growth

The differences [illegible] the long-term growth rates of countries are ascertained by [illegible] of [illegible]. [illegible], [illegible] include all investments made [illegible] land, physical equipment, and human [illegible]

Capital accumulation: [illegible] of [illegible] of [illegible] values a society produces to capital assets, without consuming all of them [illegible] & [illegible] 2006 [illegible], a [illegible] of [illegible] obtained in a certain period is saved. The high rate of savings alone is not adequate for economic growth. These savings need to be transformed into productive investments. Put another way, capital accumulation stands for a rise in physical capital accumulation, through integrating machines and equipment [illegible] the production process or the establishment of new production institutions with new investments. New investments lead to an increase in production capacity and production levels [illegible] the economy (Ağayev and Yamak 2009).

Population growth: An increase has been noted in the demand [illegible] labour, due to population growth. The rise in the demand for labour enhances economic growth. On the one hand, population growth leads to an expansion of the domestic market, and, on the other hand, allows for a surge in the quantity of skilled labour. An inadequate labour force affects the production process adversely. The labour force is of great value in the advancement of technology and knowledge, and in the transfer of technology and knowledge to the production process. The quality of the labour force plays an important role in the efficient utilization of the available capital stock, and in the level and form of new investments. Therefore, along with capital accumulation and technology, the labour force constitutes one of the three main sources of growth and development ([illegible] & Cihan 2005). In the literature, the relation of the population to economic growth is addressed in terms of human capital. Human capital is a well-trained and skilled human resource. The two most important sources of growth are human capital and physical capital. Better educated, more cultured individuals raise labour productivity during the production process (Han & Kaya 2006).

Technological advancement: An increase in capital accumulation and new investments is needed to achieve economic growth. The increase in production can be realized by extending the production capacity of the economy, as well as by increasing the production efficiency, or productivity [illegible]ğ[illegible]09[illegible]

The Historical Development of the Economic Growth Theory

Keynesian Growth Model

ğ

α

α

Neoclassic Growth and the Solow Model

The Endogenous Growth Model

advancement emerged coincidentally [illegible] the first approach (Türker 2009). The source of internal growth varies according to different economists.

The internal growth model is classified in two ways. These are spillover models, by Arrow (1962), Romer (1986), and Lucas (1988), and R&D models by Romer (1987,1990) and Grosman and Helpman (1990, 1991). The spillover models, pioneered by the first model economists, stated that technology [illegible] economy was determined by special research activities and [illegible] a [illegible] of hum[illegible] [illegible] research of the firms. Technology, taken externally in the Solow model, is [illegible] 1 ş [illegible] 2008 [illegible] innovations are internal, and human capital is an external factor. The [illegible] of [illegible] one source of [illegible]. As the [illegible] of growth, Lucas expressed human capital, Romer the knowledge generation, Barro, public policy, and Grossman and Helpmann, the R&D model [illegible]erber 2006).

Conclusion

Growth is one of the most significant concepts indicating the macroeconomic structure of countries. Growth presents information on the extent to which the needs of the individual are met, and the welfare level. It has been debated extensively for years what has to be done in order to increase the welfare level of countries, and what needs to be done in order to achieve stable growth in the long term. Examining the views put forward about economic growth, it has turned out that growth does not depend on a single source. There are multiple sources that affect growth. Modern growth theories emerged in the 20th century, and investigated the underlying reasons for the growth of countries. In the literature the sources of growth are given as capital accumulation and population growth; accordingly, labour increase and technological advancement, which encompass all investments made in the soil, physical equipment, and humans. According to economists, capital accumulation, employment growth, and technological advancement, are accepted [illegible] prerequisites for growth and development.

This study concentrates on growth models from the past to the present day. In these models, the source of growth varies according to each approach. These approaches incorporate the determinants of growth. According to the mercantilists, the main determinant of growth [illegible] precious metals, while the physiocrats admit that the agricultural sector is the [illegible] growth, while Keynesians stress that application of demand-side policies

References

Büyüme Teorileri,

Journal of Ataturk University Economics and Administrative Sciences

Gelir ve Büyüme Teorisi

Economic Growth

İktisadi Düşünceler Tarihi

Journal of Ordu University Social Research,

Rate of Growth and Employment, Econometrica,

Kalkınma Ekonomisi Teori ve Politika

Economic Journal

Büyüme ve Gelişme Ekonomisi

Türkiye Ekonomisinde Son Yıllarda Yaşanan Yüksek Oranlı Büyüme Rakamlarının İç Piyasa Üzerindeki Etkileri

Journal of Ankara University SBF

İktisadi Düşünce ve Politik İktisadın Evrimi

İktisadi Büyüme ve Kalkınma,

Cumhuriyet University Journal of Economics and Administrative Sciences,

[illegible] *İktisat Bilimine Giriş*. İ[illegible]

[illegible] İ[illegible] *İktisadi Büyüme Teorileri*. [illegible]

[illegible] *Siyasal İktisadın ve Vergilendirmenin İlkeleri*. [illegible] İ[illegible] İş [illegible]

[illegible] *Türkiye'nin Muasır Medeniyete Ulaşma Çabası*. İ[illegible]

[illegible] *İktisat Biliminin Temelleri*. İ[illegible]

[illegible] İ[illegible] *The Economic Journal,* [illegible]

[illegible] *The Quarterly Journal of Economics,* [illegible]

[illegible] *İktisadi Düşünceler Tarihi*. [illegible]

[illegible] *Journal of Dumlupınar University Social Sciences*. [illegible]

[illegible] İ[illegible] İ[illegible]

[illegible] *İktisadi Büyüme ve Büyüme Modelleri*. [illegible]

[illegible]

[illegible] *Journal of Hazine*. [illegible]