

Introduction to the concept of competitiveness

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Abstract

Economic competitiveness is an important and widely discussed, but at the same time vaguely defined topic with varying views adopted by different parties. This article presents different views on competitiveness by academics and government agencies as well as international research institutes. Regardless of their views, competitiveness is generally agreed to be closely related to productivity, which in turn is a key component of an economy's well-being. The evolution of this concept over time also reminds us that it is ever-changing, and it remains difficult to conclude with a concrete definition.

競爭力概念的簡介

摘要

競爭力是一個重要而廣泛討論的話題，與此同時卻含糊不清，各方均採用不同的解說。本文介紹學者，政府機構以及國際研究機構對競爭力的不同看法。不論他們的觀點如何，競爭力通常都被認為與生產力密切相關，而生產力普遍被認為對一個經濟體的表現至關重要。競爭力概念的演變也提醒我們它會不斷變化，我們難以得出一個確實的定義。

<p>The views and analysis expressed in this article are those of the author and do not necessarily represent the views of the Office of the Government Economist.</p>

I. INTRODUCTION

1. In recent years, “competitiveness” has become a buzzword frequently reported by the media around the world, especially when newly-published ranking reports benchmark economies against each other. An “uncompetitive” economy is certainly not desirable, but it remains unclear what constitutes competitiveness. This article provides an introductory discussion of academic economists’ views of the concept, followed by an overview of government agencies’ and international research institutes’ interpretations.

II. ACADEMIC ECONOMISTS’ VIEWS OF COMPETITIVENESS

II.1 Distinguishing firm-level and economic competitiveness

2. Competitiveness, in economic terms, refers to the ability to efficiently produce and deliver products and services as compared to others. Using this concept to describe firms is fairly straightforward as a firm could be pit against its competitors by comparing market shares or profitability. By expanding their market shares and earning more profits, competitive firms create more shareholder value than firms which are less competitive.

3. As the discussion on competitiveness became prevalent on the international level in the 1980s, it became popular to extend the concept of firm competitiveness directly to national economies. “Market share” at the economy level referred to export volumes and trade balances, with prices and costs measured through exchange rates and unit labour costs. This implied that economies “compete with each other for shares in the global export market”¹.

4. Unfortunately, using exchange rates and unit labour costs to measure the prices and costs of national production did not lead to clear conclusions because a rise or fall in either measure could be accompanied by both strong and weak economic performance. For example, an economy with cheaper currency would benefit from larger export volumes, but it would also have to contend with lower purchasing power for imports. Similarly, trade surpluses do not necessarily translate to national strength in exports, as they could also signify weak domestic demand. The complexity of economies’ structures spurred heated debates on whether a suitable method of gauging the competitiveness of an economy even existed at all, most notably between Paul Krugman and Michael Porter.

¹ Yap, J.T. 2004. “A note on the competitiveness debate.” Philippine Institute for Development Studies (PIDS) Discussion Paper Series No. 2004-39.

II.2 The views of Paul Krugman² and Michael Porter

5. Because of the deficiencies in the above analogy, Paul Krugman believed that, though firm competitiveness was a valid concept, it was inappropriate to use the term “competitiveness” at the economy level. In this view, discussing the competitiveness of economies was a “dangerous obsession”³, partly because it is problematic to define the competitiveness of an economy. Firms could be measured as more “competitive” based on certain criteria such as market share and profitability and could outperform others to expel weaker players from the market. However, economies in general would not collapse as underperforming firms do, nor do they compete in a zero-sum game. To the contrary, an economy with higher productivity would create positive spill-overs for other economies, such as providing higher quality and lower priced products.

6. To bolster the concept of “national competitiveness”, Michael Porter introduced the idea of “competitive advantage” and stipulated that if an economy created a business-friendly environment to support firms to compete efficiently and fairly in local and global markets, these conditions together would make up the economy’s competitiveness. Porter summarised this idea with the “Diamond Model”⁴, which asserted that there were four interlinking conditions which determined an economy’s competitive advantage, as listed below.

- a) **Factor conditions:** education and labour skills, innovation capability, and infrastructure underlie the capacity and potential of an economy’s production. Education and labour skills serve as a backbone to provide the necessary human capital for efficient production. Innovation capability brings jumps to existing production methods to propel productivity growth and higher innovation capability could further support the creation of new industries. Moreover, infrastructure—public sector investments in areas such as transportation, communications and utilities—is essential to the smooth and efficient running of the economy as a whole.
- b) **Demand conditions:** the depth of the domestic market demand supports the business market and creates opportunities for firms to grow. Increasingly sophisticated demand conditions from local customers also provide incentives

² Krugman, P.R. 1996. “Making sense of the competitiveness debate.” *Oxford Review of Economic Policy* 12(3), pp. 17-25.

³ Krugman, P.R. 1994. “Competitiveness: a dangerous obsession.” *Foreign Affairs* 73(2), pp. 28-44.

⁴ Porter, M.E. 1990. “The Competitive Advantage of Nations.” *Harvard Business Review* 68(2), pp. 73-93.

for firms to innovate and improve in quality, in order to meet the demand, as well as to tackle both local and foreign competitors.

- c) **Related and supporting industries:** the presence of supplier and related industries creates a platform beneficial to the development of industries as a whole. To begin, firms within these industries are able to source materials from each other and divide labour more efficiently. This clustering also enables alliances and partnerships which would help create additional value for customers and push local industry to be more competitive.
- d) **Firm strategy, structure and rivalry:** the rules and regulations that shape or facilitate the creation and operation of businesses greatly affect the performance of the business market, as well as firms' ability to compete against foreign competitors. Most of all, the presence of healthy domestic rivalry is instrumental as it enables firms to constantly evolve and develop their own strengths and capabilities.

Ultimately, Porter believed that the meaning of competitiveness for an economy is productivity: an economy depended on its firms' capacity to achieve high levels of productivity for continuous improvement and to reach a high standard of living.

7. We see that there are slight differences between the two academics' theories. Krugman insisted that the concept of competitiveness was not to be used to the economy level, as this presents a false image where economies rival against each other as firms do. To him, the interaction between economies through international trading was a dynamic playing field where only each economy's specific industries would be affected, instead of putting individual economies as a whole in rivalry to one another. In comparison, Porter supported the idea that economies have their own competitive advantage and compete against each other. Nonetheless, both Krugman and Porter stated that productivity is the driving force behind an economy's well-being and sustained development.

III. INTERPRETATION OF COMPETITIVENESS BY GOVERNMENT AGENCIES AND INTERNATIONAL RESEARCH INSTITUTES

III.1 Productivity drivers observed by government agencies

8. The previous section explored the debate between Krugman and Porter to give a glimpse of the views on competitiveness in the academic world. Undoubtedly, the topic is complex and lacks a unified interpretation. With that being said, the

consensus observed among academics is that an economy with high levels of productivity is preferred. This idea is also seen among some competitiveness studies conducted by government agencies around the world.

9. Publications from major advanced economies such as the United States (US) and the United Kingdom (UK) are useful references in this respect. For instance, the US Department of Commerce states in its study that “the concepts of productivity and competitiveness often go hand in hand”⁵ and uses these terms interchangeably. Similarly, the UK’s Department for Business Innovation and Skills also explains, while attempting to benchmark the UK’s competitiveness to other economies, that “sustained improvement in [the] UK’s competitiveness will require among other things further improvement in long-term productivity”⁶, as in the long run, higher levels of productivity growth are essential to sustain economic growth.

10. More recently, Ireland’s National Competitiveness Council also emphasised productivity’s role as the key determinant of high and rising living standards, saying that “firms’ ability to compete at high levels of productivity is deemed essential to support job creation and high incomes”⁷. The importance of productivity was reaffirmed by the European Commission (EC) in their 2018 report, showing that the consensus on competitiveness largely remains unaltered. The EC’s stance on competitiveness could be summarised with the statement “the core determinant of competitiveness at all levels (enterprise, industry, regional, country or EU) is productivity”⁸.

11. Although these studies all suggest the importance of improving and sustaining high levels of productivity, differences in available endowments and unique economic structures have led them to focus on varying mixes of productivity drivers. The government agencies’ missions and objectives might also influence which key productivity drivers are highlighted. In fact, the major areas presented across the four competitiveness studies can largely be linked back to Porter’s Diamond Model (*Table 1*).

⁵ US Department of Commerce. 2012. *The competitiveness and innovative capacity of the United States*, p. 2 - 3.

⁶ UK Department for Business Innovation and Skills. 2012. “Benchmarking UK Competitiveness in the Global Economy.” BIS Economics Paper No. 19.

⁷ Irish National Competitiveness Council. 2016. *Review of Competitiveness Frameworks*.

⁸ European Commission. “Competitiveness proofing.” n.d. Retrieved from http://ec.europa.eu/growth/about-us/competitiveness-proofing_en.

Table 1: Key productivity drivers in selected competitiveness studies

<u>Factor conditions</u>	<u>Demand conditions</u>	<u>Related and supporting industries</u>	<u>Firm strategy, structure and rivalry</u>
<i>The competitiveness and innovative capacity of the United States – US Department of Commerce</i>			
<ul style="list-style-type: none"> ● Education and skills ● Infrastructure ● Innovation 		<ul style="list-style-type: none"> ● Clustering ● Economic openness 	<ul style="list-style-type: none"> ● Legal rights ● Taxation (corporate tax)
<i>Benchmarking UK competitiveness in the global economy – UK Department for Business Innovation and Skills</i>			
<ul style="list-style-type: none"> ● Financial market ● Infrastructure ● Innovation ● Labour market ● Skills 	<ul style="list-style-type: none"> ● Macroeconomic environment 	<ul style="list-style-type: none"> ● Economic openness 	<ul style="list-style-type: none"> ● Institutional and political environment
<i>Review of competitiveness framework – Ireland National Competitiveness Council</i>			
<ul style="list-style-type: none"> ● Financial market ● Infrastructure ● Skills 	<ul style="list-style-type: none"> ● Macroeconomic environment ● Size of economy 	<ul style="list-style-type: none"> ● Clustering 	<ul style="list-style-type: none"> ● Rules and regulation ● Social capital (e.g. cultural values, attitudes and trust)
<i>Competitiveness proofing – European Commission</i>			
<ul style="list-style-type: none"> ● Capital ● Innovation ● Labour and skills 		<ul style="list-style-type: none"> ● Economic openness 	<ul style="list-style-type: none"> ● Cost of doing business ● Rules and regulation

III.2 Insights from international research institutes

12. The above ideas are echoed in competitiveness studies conducted by international research institutes. Among the various competitiveness reports available nowadays, the International Institute for Management Development (IMD) World Competitiveness Yearbook and the World Economic Forum (WEF) Global Competitiveness Report are widely regarded as two of the most well-known publications on competitiveness, having a long publication history and being widely used and cited⁹. Both institutes use a wide portfolio of quantitative indicators to reflect and capture an economy’s productivity drivers and arrive at an assessment.

⁹ Berikou, N. 2007. “A Comparative Analysis of World Competitiveness Records and a Cost Projection resulting from the Lack of Competitiveness in the Greek Economy.” In 3rd Hellenic Observatory PhD Symposium, Hellenic Observatory, European Institute, London School of Economics and Political Science, pp. 2, 5.

They then consolidate their respective views and findings into competitiveness ranking reports in order to rank economies on a consistent basis.

13. On a conceptual level, the two ranking reports do not deviate far from each other. IMD states in its report that competitiveness “evaluates the extent to which a country fosters an environment where enterprises can achieve sustainable growth, generate jobs and, ultimately, increase welfare”, while WEF presents competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country”.

14. A closer look can however reveal the slight differences in their frameworks in terms of choosing different indicators. For instance, IMD, which considers a broader set of indicators than WEF, additionally includes indicators related to the tax regime, trade and investment performance, government budget balance, unemployment and labour productivity¹⁰. For areas that are considered by both IMD and WEF, their interpretation of competitiveness yields different outcomes as well. In particular, WEF puts more emphasis on indicators related to “ICT adoption”, “skills” and “innovation capability”. This is because WEF believes the provision and quality of human capital would dictate an economy’s future growth potential (*Table 2*).

Table 2: Frameworks of IMD World Competitiveness Yearbook and WEF Global Competitiveness Report

<u>Factor conditions</u>	<u>Demand conditions</u>	<u>Related and supporting industries</u>	<u>Firm strategy, structure and rivalry</u>
<i>IMD World Competitiveness Yearbook</i>			
<ul style="list-style-type: none"> ● Basic infrastructure ● Education ● Financial market¹¹ ● Health and environment ● Labour market and efficiency¹² ● Scientific infrastructure ● Technological infrastructure 	<ul style="list-style-type: none"> ● Domestic economy ● Employment ● Prices ● Public finance ● Tax policy (consumption and personal tax) 	<ul style="list-style-type: none"> ● International trade ● International investment 	<ul style="list-style-type: none"> ● Attitudes and values ● Business legislation ● Institutional framework ● Management practices ● Societal framework ● Tax policy (corporate tax)

¹⁰ While both IMD and WEF include an assessment area on “labour market”, the former analyses the quality and quantity of labour and the latter focuses on the ease of hiring and firing labour.

¹¹ The assessment of financial market is represented by “finance” in IMD’s framework.

¹² The efficiency part is represented by “productivity and efficiency” in IMD’s framework.

**Table 2 (cont'd): Frameworks of IMD World Competitiveness Yearbook
and WEF Global Competitiveness Report**

<u>Factor conditions</u>	<u>Demand conditions</u>	<u>Related and supporting industries</u>	<u>Firm strategy, structure and rivalry</u>
<i>WEF Global Competitiveness Report</i>			
<ul style="list-style-type: none"> ● Health ● Skills ● Infrastructure ● ICT adoption ● Labour market ● Financial system ● Innovation capability 	<ul style="list-style-type: none"> ● Macroeconomic stability ● Market size 	<ul style="list-style-type: none"> ● Product market 	<ul style="list-style-type: none"> ● Institutions ● Business dynamism

IV. CONCLUDING REMARKS

15. It is apparent that different parties have their own take on what the competitiveness of an economy truly means. However, it seems generally agreed that an economy's ability to compete at high levels of productivity is essential to support economic growth and high living standards. Seeking the means to achieve and sustain high levels of productivity, through understanding the determinants of productivity and devising policies that promote them, would therefore be more meaningful than dwelling on the true definition of an economy's competitiveness. Nonetheless, it should be kept in mind that the task of boosting productivity is complex with an indefinite set of considerations that evolve over time.