COMPETITION POLICY INFLUENCING MACROECONOMIC DEVELOPMENT

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Abstract

Measuring the overall economic effects of competition policy is a matter of particular importance. The quantification of the competition policy impact on the economy as a whole bases on macroeconomic models to assess the direct and indirect effect of competition policy on GDP growth and other macroeconomic performances.

In addition to calculating consumer benefit, information on the impact of competition policy on macroeconomic variables, such as GDP growth and productivity, is also essential for the debate on competition and liberalization. Although there is a consensus in the literature that rivalry provides welfare gains, it is less clear from an empirical perspective that competition policy favors competitiveness, which in turn contributes to economic growth. The paper presents an analysis of studies on how the application of competition policy influences macroeconomic development.

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1. Introduction

In order to analyze the macroeconomic impact of the competition policy, there should be distinguished the difference between the competition policy's impact and competition and identified the main reasons the competition has a positive impact on the economic growth.

The economic theory that explains why competition contributes to productivity and growth is widely known and accepted. However, to ensure fair conditions of competition, public authorities may be required to intervene, which explains why most countries have adopted competition law and set up a competition authority to enforce it. A comprehensive analysis of the impact of competition policy must examine the impact of competition authorities' decisions to combat anti-competitive practices on competition and assess the effects of increased competition on macroeconomic performance.

Competition policy, in the narrow sense, is the competition law that covers the prohibition of the cartel, the abuse of a dominant position, and the control of economic concentration [EC, 2015]. In a broader sense, the competition policy promoted by the competition authority seeks to protect competition against anti-competitive practices or any other actions that may affect the free exercise of competition; to control economic concentrations with possible anti-competitive impact; adjusting public policies if they have an anti-competitive impact; and promoting a competitive culture [Dinu, 2017].

2. The efficiency and the impact of the competition policy

The effectiveness and impact of competition policy depend on several factors, including the human and budgetary resources available for its implementation, competition laws and institutions, and the quality and number of interventions made by competition authorities.

It is expected that competition policy interventions will have a direct positive effect on conditions of competition, for example by removing a cartel or abuse of a dominant position that has affected competition and led to higher consumer prices. However, other economic

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policies, such as trade liberalization and better regulation, also promote competition. Thus, it is not easy to delimit the impact of competition policy from other policies that affect competition and economic growth.

Moreover, competition policy interventions not only have direct positive effects on competition but also have an indirect benefit through their effects of discouraging anti-competitive conduct. For example, the imposition of heavy fines in cartel cases is expected to discourage other companies from concluding such illegal agreements. Analyzes of the macroeconomic impact of competition policy focus on the direct effects of public interventions and ignore the deterrent effects that are more difficult to measure while ignoring these effects underestimates the total impact of competition policy.

The increase in the level of competition resulting from the application of competition policy affects macroeconomic performance in three ways, allocative, productive, and dynamic efficiency.

First, the competition will lead to an improvement in the allocation efficiency of enterprises through the entry of new firms and the exit of the least efficient firms from the market. An increase in the number of competitors or the threat of entry of new competitors reduces the market power of operators and leads them to set prices closer to marginal costs. As a result, growth values tend to decline as the allocation of both inputs (labor and capital) and the output becomes more efficient, i.e. limited resources are allocated to the production of goods and services that best meet the consumer needs. Greater competition can also lead to increased allocated efficiency, as less productive companies leave the market, and when they leave the market, the share is taken over by the most productive companies.

Second, the competition will improve the productive efficiency of enterprises. Productive efficiency is the ability of any firm to allocate internal resources in a way that makes it possible to reduce or eliminate the underutilization of factors of production. Productive efficiency results from the introduction of better production methods within the company, including organizational changes, as managers and workers have greater incentives to reduce losses and increase performance. Incentives for improving production efficiency result from the benefits of greater efficiency in terms of market share and profits being higher in competitive markets, where demand elasticity is high, but because the probability of bankruptcy is higher in a more competitive environment.

Third, the competition will increase the dynamic efficiency of businesses, pushing them to innovate. Increased competition can act as a stimulus for businesses to develop product and process innovations and therefore accelerate the development of modern technology. However, the link between competition and innovation is a very complicated one. There are studies that confirm an inverted U-shaped relationship between competition and innovation, thus too little or too much competition reduces innovation [Aghion, 2005]. In addition, the technological gap and the type of industry will influence this relationship: the positive impact of competition on innovation is greater in more technologically developed countries and in industries with less differentiated products.

3. Competition policy's impact on the macroeconomics' competition and performance

It is necessary to distinguish between two categories of studies:

1. Studies analyzing the impact of competition policy on the degree of competition;
2. Studies analyzing the impact of competition policy on economic performance at the national or sectoral level.

The difficulty of researchers is determined by the fact that economic growth at the national or sectoral level is influenced by many factors. It is very difficult to distinguish the effects of competition policy interventions from other pro-competitive state measures.

1. competition policy's impact on the competition

There are several studies analyzing the link between the power of competition policy and the perceived intensity of local competition, measured by the World Economic Forum survey, which concludes that the power of competition policy (perceived by business representatives or measured by the quality of laws and institutions competition) has a positive impact on the perceived intensity of competition. Other variables, such as the size of the economy, its openness, and GDP per capita, have a positive impact on the perception of competition, suggesting that having rich, large, and open markets are as important for competition as the competition laws.

Krakowski's study analyzes the link between the two indicators of the World Economic Forum survey, the one that measures the perceived effectiveness of competition policy and the one that measures the perceived intensity of competition [Krakowski, 2005]. He points out that the perceived intensity of local competition is positively affected by the perceived effectiveness of competition policy. The size of the economy also has a significant impact on the perceived intensity of competition.

Hylton and Deng analyze whether the power of competition laws has an impact on the perceived intensity of competition. The power of competition law is measured by the "Application Index", which reflects the characteristics of competition law. Two other input indicators of the quality of competition regimes are considered: the "age of competition law" as representative of a competitive culture and the budget of the competition authority in relation to GDP. Two variables are used to assess the intensity of competition: the first is the World Economic Forum survey on the perceived intensity of local competition, and the second is the purchasing power exchange rate as evidence of the effect of competition on prices [Hylton, 2007].

Sama's research examines the impact of the power of de jure and de facto competition laws on the perceived intensity of local competition, as measured by the World Economic Forum survey, confirming the result of Hylton and Deng, that the power of institutional features of competition laws (de jure and de facto) has a positive impact on competition [Sama, 2013].

2. Competition policy's impact on the macroeconomics' performance

Several studies are trying to assess whether countries achieve faster economic growth depending on the existence and application of competition law. A distinction is made between studies that analyze the impact of competition policy on economic growth, productivity and GDP growth (GDP per capita) or other intermediate growth factors, such as investment or foreign direct investment (FDI).

Kee and Hoekman's study analyzes the impact of competition policy on the capitalization of the industry and on the number of companies. For competition law to be a priority, it must make a greater contribution to the development of competition than other policy options [Kee, 2003]. The analysis suggests that the establishment of trade barriers and government regulations that restrict internal competition by preventing companies from entering and leaving will generate a higher rate of return than the adoption of competition law. The results suggest that the direct effect of competition law on the profit margin is not significant, even if the analysis is limited to the sub-sample of more concentrated industries. However, we find that competition laws have an effect on entry by domestic firms, which may indirectly affect the level of competition in the industry. In the short term, with a fixed number of firms in the industry, the effect of the adoption of competition laws on the profit margin is ambiguous. On the one hand, the adoption of competition laws should increase competition between domestic firms and reduce margins, but on the other hand, competition laws can increase profit margins if competition encourages firms to innovate, creating new products priced above marginal costs. In the long term, an increase in competition that reduces barriers to entry should lead to an increase in the number of companies. Empirical results show that import competition and the number of companies are important determinants of the profit margin.

A similar study was conducted by McCloughan, using the GCR ranking as an indicator of the power of competition policy. Unlike the previous study, McCloughan finds that countries where competition policy is considered more effective are characterized by a lower profit margin [McCloughan, 2007]. Other variables, such as market growth, have a positive effect on the profit margin, which seems irrational, as market growth should stimulate the arrival of new competitors. There is also little evidence to suggest that import penetration is associated with lower profit margins. Moreover, a more disaggregated analysis carried out at the sector level identifies a number of markets in which there is no apparent relationship between the quality of competition policy and the profit margin, such as the chemicals sector and tobacco. This is a counter-intuitive result, as these sectors are highly concentrated and therefore competition policy should have a greater impact on these sectors.

Other studies examine the effect of competition policy on productivity. Borrell and Tolosa rely largely on the subjective indicator of the World Economic Forum survey to assess the perceived impact of the effectiveness of cross-border competition policy on productivity. They believe that the application of competition law has a strong positive impact on Total Factor Productivity (TFP) [Borrel, 2004]. An important contribution of this paper is to show that it is important to consider competition policy as an endogenous policy. Thus, effective enforcement of competition policy can increase productivity, but countries that are more productive are also more likely to enforce competition law. Specifically, the impact of competition on productivity is up to 18%. The paper also shows that countries with an effective antitrust policy open their economies more strongly, while open economies have a less effective moderate antitrust policy.

In the transnational study conducted by Professor Ma Tay-Cheng, a sample of 101 countries is used to analyze the impact of competition policy on productivity growth [Ma Tay-Cheng, 2011]. Unlike the previous study, he concludes that there is no statistically significant impact of the quality of competition law (measured by the Hylton and Deng application index) on productivity growth. However, it finds a positive relationship between the effective application of competition law (measured by a term of interaction between the indicator of the power of competition policy and an index of government efficiency) and the increase in productivity in rich countries. He concludes that the existence of competition laws is a prerequisite for tough competition, but an institutional support framework is essential for effective law enforcement.

The study coordinated by Buccirossi adopted a three-dimensional approach (an industry, a country, and a period) to determine the impact of the power of competition policy (measured by a composite index of its deterrent properties) on competition (measured by profit margins) and TFP [Buccirossi, 2011]. Data from 22 industries in 12 OECD member countries for the period 1995-2005 were used. Empirical results show that competition policy has a significant positive effect on TFP growth. For example, improving competition policy in the UK is responsible for up to 20% of TFP growth in 2002. Disaggregated indices can measure the effects of institutional characteristics (such as independence, quality of law, sanctions), competition law enforcement characteristics (resources CA and the number of cases) and to distinguish the impact of anti-competitive practices. Their conclusion is that institutional characteristics and the limitation of anti-competitive practices seem to have the strongest impact on productivity growth. The study also shows that there are complementarities between competition policy and the quality of the legal system.

In his 2006 paper, Voigt used the indicator he built on the de facto and de jure characteristics of competition law and institutional policy to analyze the effects of competition policy on TFP [Voight, 2006]. As a result, the index measuring the strength of competition policy is found to have a positive effect on TFP, but this result is not rugged, as the effect disappears when indicators representing the quality of institutions are introduced. In the subsequent study, the focus was on developing countries, and the result was quite similar: the control of standard economic variables as well as institutional variables, the effect of competition policy on TFP is not particularly strong [Voight, 2009].

Another group of studies examines the impact of competition policy on growth or other growth factors, such as investment or foreign direct investment (FDI). Thus, Aiginger finds a very high correlation (0,6) between two composite indicators: a composite indicator of competition power and a composite indicator of macroeconomic performance [Aiginer, 2008]. He also introduces the composite index of the power of competition into an equation linking GDP growth to innovation (R&D ratio) and investment (share of physical investment in GDP) and notes a strong positive effect of his index on macroeconomic performance.

Clougherty uses the annual budget of competition authorities as a measure of a country's commitment to ensuring the implementation of competition policy with sufficient resources and finds a positive relationship between this variable and economic growth. For example, the strongest commitment of the United Kingdom in terms of resources for the implementation of competition policy compared to France should allow the United Kingdom to grow by 0,14 pp higher than in France (all other constants) [Clougherty, 2010].

In his study to measure the impact of competition law, Petersen shows that competition law has a long-term positive effect (after 10 years) on economic development (measured by GDP per capita) and economic growth. Yet he failed to find any significant effect on democracy [Petersen, 2013]. As the effects of competition law take place after 10 years, he concludes that institutions need time to start operating efficiently and have a noticeable effect on the economy.

The research conducted by Gutmann and Voigt (2014) estimates the effects of competition policy on the growth rate of GDP per capita, the growth rate of TFP, investment, and foreign direct investment. The authors confirm previous results that competition policy has no effect on increasing TFP [Gutmann, 2014]. However, the result shows a very substantial effect of the competition policy on investment and GDP growth per capita. They also find that there is no effect on FDI and this result is different from that found by Dalkir, which shows that the attractiveness of a country as measured by FDI inputs is positively influenced by the perceived effectiveness of competition policy [Dalkir, 2015].

Conclusion

In conclusion, most of the studies described show a positive impact of competition policy on economic growth, mainly due to a positive effect on productivity. Other studies show positive effects of competition laws on other intermediate variables, such as the number of enterprises, margins, investments, and foreign direct investment. Therefore, regardless of the object of influence, the impact of competition policy is significant. For example, it is found that an improvement in competition policy can lead to one-fifth of productivity growth in the UK. However, we can consider the results of shared studies, as other studies do not find a significant impact of competition policy on productivity. Therefore, research analyzing the impact of competition policy should be further developed.

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