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Competition Policy and the Economic Crisis. European Union Case Study

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Abstract

Competition enforcement agencies and competition policy itself face particular challenges arising from the crisis. In the last decades we have witnessed the continuous enhancement of the competition policy role, but analyzing competition policy effectiveness appears even more important now, because of the impact that competition policy effectiveness has on economic development and, in the current economic climate, on the economic recovery process. The purpose of our research is to study the effectiveness of competition policy during crisis and its role as a tool to revive the economy using data at European Union level.

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Keywords: competition policy, European Union, policy effectiveness, economic crisis

1. Introduction

"When the financial crisis hit, there was a widespread sense that markets and morals had somehow become detached" said Michael J. Sandel, American political philosopher and professor at Harvard University. The last few years, since the crisis began, have been a very challenging time for policy makers around the world as decisions were hard to make given the difficult circumstances and the changes within a highly politically pressured environment. Even though the economic crisis started in 2007 for reasons pertaining to the financial sector, its effects have currently spread into the real economy. Competition enforcement agencies and competition policy itself face particular challenges arising from the crisis.

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In an article in 2009, Philip Lowe, Director-General of the Competition DG at the time, spoke about the pressure around European competition policy. He mentioned that, besides the competition rules on State aid, Commission's merger and antitrust policies have also come under pressure, as the crisis has spread into and deepened in the real economy (Lowe, 2009, p. 4).

2. Competition Policy Effectiveness During Crisis

The topic regarding competition policy in times of crisis can be approached in different ways. On the one hand, we can talk about competition policy in terms of changes incurred as a result of political pressure and difficult circumstances that are also felt at this level. On the other hand, competition policy can be regarded as a tool to revive the economy. We will talk about the latter aspect in the next section of the paper.

Regarding the first point, responses to the global financial crisis took various forms of government intervention including, inter alia (UNCTAD, 2010, p. 3):

a. State bailouts of firms (largely but not limited to institutions in the financial sector);

b. The provision of cash injections into financial systems to keep credit flowing, usually in exchange for large equity stakes in the beneficiary;

c. The encouragement of mergers in the financial sector resulting in the creation of "mega banks";

d. Requiring competition authorities to apply "light touch" enforcement of competition rules in order to clear otherwise questionable mergers and alliances.

Apart from this pressure directly exerted on competition policy, it is also influenced indirectly through macroeconomic factors affected in their turn by the crisis.

We have discussed this topic in a previous study (Moşteanu; Romano; Drăgoi, 2012) where we have identified several significant macroeconomic factors with impact on the effectiveness of the competition policy within the European Union, factors that can be grouped in two categories:

- Factors with positive influence: economic dimension, market size, market division, intensity of local competition, ethical behavior of firms, strength of auditing and reporting standards, efficiency of legal framework in settling disputes, protection of minority shareholders' interests and public trust of politicians.
- Factors with negative influence: corruption level and diversion of public funds.

The crisis has also left its mark on the competition authorities themselves, in financial terms as well as in terms of procedures. An important issue regarding the procedures is the current price volatility which raises the question as to what competition policy should be based on when applying anticompetitive rules. If prices do not reflect fundamentals, then they may not be adequate measures to judge the level of competition in the markets (OECD, 2009a, p. 18). In our quantitative analysis on the effectiveness of competition policy we will use a restrictive meaning, i.e. antitrust policy. The choice is motivated in other studies as well, mainly by data availability and more accurate results. It has been shown that WEF Indicator regarding the effectiveness of antitrust policy (the name has been changed starting with 2009-2010 Global Competitiveness Report from effectiveness of antitrust policy to effectiveness of anti-monopoly policy) is the most comprehensive indicator available in terms of sampled countries and covered period of time. Among scientists this is considered a useful measure for comparisons between countries (Nicholson, 2004, p. 5-12). The indicator takes values between 1 (lowest - competition policy is lax and ineffective in promoting competition) and 7 (highest value - competition policy effectively promotes competition). For this reason, we will use it in our paper as value for the effectiveness of competition policy.

So if we follow the evolution of competition policy effectiveness in terms of this measure of perceived effectiveness, we observe a continuous decrease at European Union level from 2008 to present.

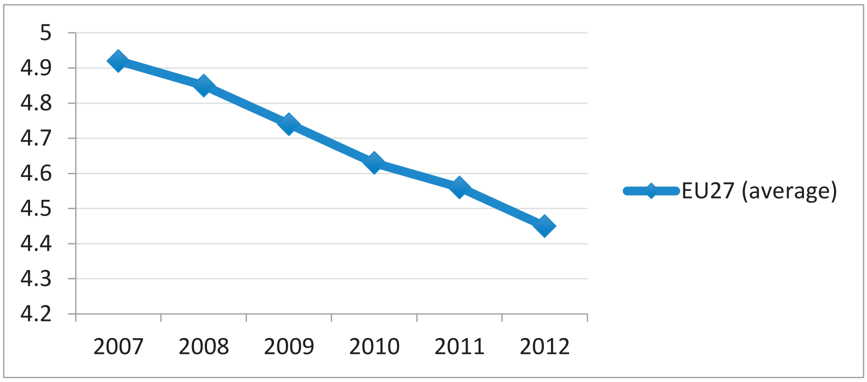

Figure 1. Competition Policy Effectiveness within European Union, Data source: World Economic Forum

3. Competition Policy as a Tool to Revive the Economy

We assume, from the beginning, positive effects of an effectively designed and especially effectively applied competition policy. In fact, this is its role, an important one in ensuring normal functioning of market economies.

Competition policy effectiveness is positively associated with long-term growth (Dutz; Hayri, 1999). The authors studied the influence transmission mechanisms of competition policy effectiveness on economic growth, analyzing the impact of various competition policy measures. They performed a cross-sectional analysis in order to capture the effects of the economy. The analysis consists of three stages. In the first stage, they construct a simplified model of growth using core variables agreed in the literature. In the second phase, the authors study the partial correlations between variables characterizing competition and the unexplained growth from growth models. Finally, in the third stage, they tested the robustness of these correlations.

Dutz and Vagliasindi started assessing the effectiveness the implementation of competition policy as explanatory factor of growth, from its three main dimensions: law enforcement, competition advocacy and institutional effectiveness and identified positive and significant correlations between effective competition policy implementation and expansion of efficient private companies (Dutz; Vagliasind, 2000). Based on this result, the authors consider that through competition policy effectiveness governments can influence the business environment in which firms operate, encouraging mobility and efficient allocation of resources. This study, realized in collaboration with the European Bank for Reconstruction and Development is, by far, the most categorical thematic analysis for transition countries from Central and Eastern Europe. There are 18 countries that share relatively similar geographical, historical and cultural features. This last aspect increases the value of comparisons between regimes.

Voigt studied the content and the implications the competition law enforcement has on total productivity factor (Voight, 2005). He introduces four objective competition policy indicators which he considers relevant for explaining the economic effects: a) the nature of competition law (which objectives and implementation tools are expressly stated); b) the extent to which the development of competition law is based on economic or legal approach c) the formal independence of the competition agencies that are to implement the competition laws; d) the factual independence of the competition agencies. These four indicators are used to estimate the effects of competition policy on economic growth. By applying an econometric model based on OLS regression, the author finds that on the 57 sample countries he has analyzed, these features explain the international differences in the dynamics of the total productivity factor. Several other studies have been focused on analyzing the role of competition intensity in promoting innovation: Aghion and Howitt (1992), Rey (1997), Aghion (2005) etc.

For instance, Aghion analyzes the relation between competition and innovation using panel data (Aghion, 2005). The database is significant, i.e. 354 annual observations on 17 industries in the United Kingdom, covering the 1973-1994 period. The study is extremely interesting and strongly grounded at both theoretical and empirical levels. The author finds strong evidence of an inverted-U relationship. He developed a model in which competition policy discourages "lazy" companies to innovate and encourages the competitive ones.

Competition policy role has increased significantly in recent decades and, as a result, the studies regarding its effective enforcement have increased in number developing a wide literature around this topic. We will further empirically analyze the impact competition policy effectiveness has on economic development at European Union level. We will use GDP per capita as proxy variable for economic development.

The United Nations Department of Economic and Social Affairs, Division for Sustainable Development identifies GDP per capita in USD as the main indicator characterizing the level of economic development/macroeconomic performance. This aspect and the fact that many international institutions (including the World Bank) as well as numerous studies and articles advocate for this indicator to be used in this meaning have led us to use it in our study.

The data for GDP per capita in USD was transformed by deflating in order to reach constant prices. We have used data provided by the World Bank both for the nominal GDP as well as for the GDP deflator. In order to study the impact of competition policy effectiveness on economic development we will use panel data methodology. Panel data models consist of estimation of regression equations using both time series and cross sectional data simultaneously.

We have collected data from the last five years for the 27 European Union member states for the WEF indicator and GDP per capita, which is a total of 135 observations per variable. Taking into account that the WEF conducted the surveys for the annual report between January and June of the same year as the publication of the report, we will consider that the values represent the perception regarding competition policy as it was implemented during the previous year. If we plot the data in a scatter plot, assigning constant GDP per capita to the horizontal axis and WEF Competition Policy Indicator to the vertical axis, the results we obtain suggest a positive correlation between the variables being studied.

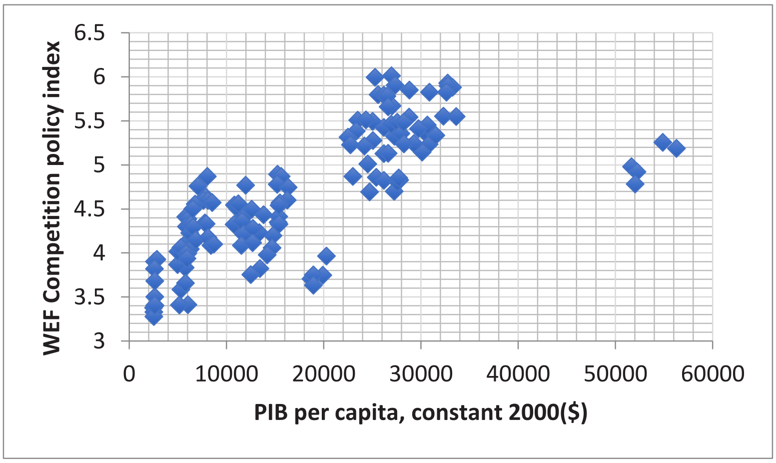

Figure 2: Competition Policy Effectiveness and Economic Development -European Union States- , Data source: World Economic Forum

Data was log-transformed before using it in order to provide homogeneity for our data series. This procedure is widely used in econometric analysis. We have also eliminated the outliers, in our case, the data for Luxembourg.

The general regression formula we are going to use to estimate parameters in EViews is:

$$\mathbf{L\_GDP\_CAPITA_{it} = a_0 + a_1 * L\_EF_{it} + \varepsilon_{it}} \quad (1)$$

where i is the section (country in our case); t is the year; L_GDP_CAPITA is the natural logarithm of GDP per capita, constant 2000 ($); L_EF is the natural logarithm of WEF indicator for competition policy effectiveness; ε_t is the residual variable.

We will use Least Squares Method (NLS and ARMA) for panel data in order to estimate the parameters.

We have obtained the results shown in Figure 3.

Dependent Variable: L_EF
Method: Panel Least Squares
Date: 08/22/13 Time: 16:59
Sample: 2007 2011
Periods included: 5
Cross-sections included: 26
Total panel (balanced) observations: 130

Variable	Coefficient	Std. Error	t-Statistic	Prob.
L_GDP_CAPITA	0.170670	0.010586	16.12184	0.0000
C	-0.095572	0.100580	-0.950202	0.3438

R-squared	0.670030	Mean dependent var	1.520887
Adjusted R-squared	0.667452	S.D. dependent var	0.157347
S.E. of regression	0.090738	Akaike info criterion	-1.946427
Sum squared resid	1.053862	Schwarz criterion	-1.902311
Log likelihood	128.5177	Hannan-Quinn criter.	-1.928501
F-statistic	259.9136	Durbin-Watson stat	0.203908
Prob(F-statistic)	0.000000		

Figure 3: Regression Results

Thus, the positive relationship between competition policy effectiveness and economic development is confirmed. The relationship between these two variables can be regarded as one of interdependence. In order to verify which direction of influence prevails, we can use Granger causality test. Those types of tests indicate which variables are useful for forecasting other variables, namely Y is said to be Granger-caused by X if X helps in the prediction of Y. The result obtained by running the test in EViews is illustrated in Figure 4.

Pairwise Granger Causality Tests
Date: 08/22/13 Time: 17:02
Sample: 2007 2011
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
L_GDP_CAPITA does not Granger Cause L_EF	78	1.75857	0.1795
L_EF does not Granger Cause L_GDP_CAPITA		2.84315	0.0647

Figure 4: Granger Causality Test Results

We can conclude (assuming a 6.47% error) that competition policy effectiveness influences economic development.

4. Conclusions

Competition policy is essential to rebuilding the economy. In times of crisis, there may be a temptation to relax competition rules to accommodate short term problems that businesses face. History shows that such relaxation actually prolongs and worsens the impact of the crisis and prevents healthy recovery (European Commission website, Competition policy and economic recovery Section, Overview).

Indeed, there are empirical studies showing that this recovery involving weakening of competition policy, have done nothing but prolong the crisis (see Cole and Ohanian (2004), Hayashi and Prescott (2002), Porter et al. (2000) and Porter and Sakakibara (2004)). A proper revival strategy must take into account competition policy, as a useful tool. Empirical analysis has led us to the conclusion that the competition policy effectiveness has a positive influence on the level of economic development, represented by proxy constant GDP per capita in USD. This link is particularly important during the recovery from crisis.

In the OECD Strategic Response to the Financial and Economic Crisis, it is stated that "competition policy considerations should play an important role not only in financial sector bailouts and restructuring but also in the subsequent recovery". In response to the pressure to loosen enforcement standards in order to favor economic recovery, competition policy makers must show that competition is part of the solution for benefiting consumers and fostering innovation, competitiveness and productivity.

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