

ASSESSING COMPETITION POLICY PERFORMANCE METRICS: CONCERNS ABOUT CROSS-COUNTRY GENERALISABILITY

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Abstract

Recent interest in competition policy performance has typically relied on subjective performance metrics that have undergone little direct scrutiny by users. We examine the quality of the popular World Economic Forum's antitrust performance metric and assess whether it is immune from perception-bias. A bias-free metric is required to ensure cross-country consistency in its intended performance assessment.

We note various instances where the WEF's competition policy performance survey was completed but where there existed neither competition legislation nor an associated enforcement agency at the time. This seeming inconsistency is neither amenable to traditional econometric heterogeneity treatment nor instrumentable; importantly, it is likely to embed non-random error onto the WEF antitrust survey.

We test and discuss some possible explanations for the observed bias: we find that both halo effects and a nation's modest experience with market institutions may be responsible for the bias. Underscoring these results may be the fact that survey respondents may not share a common understanding of competition policy. We offer some discussion supporting this latter point.

The presence of these biases may invalidate the usefulness of cross-nationally valid rankings of competition policy performance. On the bright side, however, the results suggest that efforts aimed at enhancing stakeholders' understanding of the objectives and limitations of competition policy might in turn enhance competition policy's impact as well as perceptions of performance.

Keywords: International Competition Policy, Performance Index, World Economic Forum Survey

JEL Classification: C81, K21, L40, L44, F53

I. INTRODUCTION

"...the efficiency and stability of an economy requires that all consumers be part of the franchise, in reality and in perception, so that good economic policies, including privatizations and free markets when they make sense, receive broad support."

Daniel McFadden, American Economic Association Presidential Address (2006)

Are competition policy programs in developing economies accomplishing what they set out to do? Appraising the effectiveness of a policy is of fundamental importance if a nation is to formulate the most cost-effective policy instrument for disciplining anticompetitive behavior. Answering such a question requires an unbiased measure of the quality of competition policy performance in a cross-nationally valid way.

Existing examinations of competition policy performance have varied in their choice of performance metric: some have relied on traditional industrial organization structural measures and variables (Tavares de Araujo 1996; Hayri & Dutz 1999; Dutz & Vagliasindi 1999; Kee & Hoekman 2003; Rodriguez 2006), on qualitative assessments (Fingleton, Fox, Neven & Singleton 1996), on idiosyncratic surveys (Serbrisky 2004). Still other studies have relied on subjective, perceptions-based surveys of performance (Lee 2004; Krakowski 2005; Nicholson, Sokol & Stiegert 2006; Sokol & Stiegert 2007; Rodriguez & DeNardis 2007). This perceptions-based, competition policy survey measure also figures prominently as an original source in the World Bank's composite measures of governance database (Kaufmann, Kraay and Zoido-Lobaton 1999) and the WEF Competitiveness Rankings, databases that have been richly mined by researchers and practitioners.

The practice of using perceptions-based surveys either individually or as an input into a composite measure has raised a number of concerns including the basic validity of the surveys and their sensitivity to external biases (Rodrik 2004; Van De Walle 2005; Knack 2006; Thomas 2006; Arndt & Oman 2006; Kurtz & Schrank 2007a, 2007b; Kaufmann, Kray & Mastruzzi 2007a, 2007b, 2007c). In this paper, we examine whether the WEF's perceptions-based survey measure of performance reflects measurement error. Importantly, the issue that concerns us here is that respondents may interpret the identical survey question differently.

Our criticism of survey bias is different from that of the critics noted above. When it comes to appraising competition policy performance, we claim that the evidence we discuss below reveals that the bias evident in survey responses arises from a fundamental misunderstanding of the role, methodology and objectives of competition policy by survey respondents across countries. Put differently, survey respondents hold a heterogeneous understanding of competition policy.

Thus, the problem we flag remains even if one were to acknowledge one of the main points raised by the critics, that survey responses are biased because they largely reflect the view of business elites. It is possible that survey designers could attempt to address the allegations of impartiality by incorporating voices from ideologically distinct groups, such as citizen's associations, NGOs, or multilateral organizations (Kaufmann, Kray & Mastruzzi 2007a, 2007b, 2007c). However, to the extent the information asymmetry-misunderstanding the role of competition policy - persists across the dissimilar interest groups, the problem we examine remains.

We surmise that the confusion or misunderstanding over the role, objectives and limitations of competition policy leading to the observed asymmetry in appraising antitrust performance are a result of (at least) some combination of the following: (a) the novelty of antitrust policy and practice in many jurisdictions; (b) sparse experience with market mechanisms; (c) the presence of different competitive concerns in different

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countries which therefore conditions the views of the competition agency's performance held by the survey respondents; and (d) imprecise survey instruments.

As a result of this confusion, survey respondents conflate a misunderstanding of antitrust policy, varying policy preferences, institutional performance and operational outcomes with the survey metrics. In other words, the survey is unable to elicit a clear conceptual distinction between the respondent's understanding of a policy based on the maximization of consumer welfare, the performance of the agency in enforcing the law, and disappointment (or confusion) over the results of the enforcement agency investigations.

The issue is not the typical correlation across measurement errors in survey responses resolved by artfulness in selecting an appropriate econometric instrumental variable. Rather it is a problem based on concept formation that defies any possibility of finding a suitable instrument.

In this paper, we also attempt to examine the contextual difficulties leading to the perception problem. This bias can naturally emerge due to either unfamiliarity - misunderstanding of the objectives, tools and procedures of competition law enforcement by survey respondents in countries with little experience with market mechanisms and where competition policy is a novel instrument. If this is the case, published surveys undermine the soundness of either systematic cross-country or inter-temporal assessments of competition policy performance and may similarly affect the usefulness of governance indices that rely on the competition policy performance metric.

Our examination focuses primarily on developing economies where the survey problems typically emerge. This confusion is not surprising, modern competition policy is a relatively novel experience in many developing economies. However, the conclusion may be generalized popular misunderstanding of the role and administration of competition policy may not necessarily be unique to either developing economies or recent adopters of competition legislation (Aiginger, McCabe, Mueller & Weiss 2001).

On the bright side, the observed asymmetry over the role and objectives of antitrust policy highlight the need for heightened public relations/educational efforts in disseminating agency goals and objectives. Indeed, such a step is probably necessary to garner political and popular support for the competition policy program and thereby enhance its effectiveness.

Our paper is organized as follows. We provide some background on the difficulties encountered by perceptions-based performance metrics in the next section. In the third section, we then provide some empirical evidence to support our argument. Succinctly, published results reveal considerable variance in the cross-country surveys published by the World Economic Forum. We observe that this asymmetry worsens for poorer countries and for countries with less experience with both antitrust law and with market mechanisms suggesting possible conceptual differences in understanding competition policy, agency performance, possible disappointment in outcomes, or a combination of the three. Admittedly, such empirical results are also consistent with the fact that the survey results are properly gauging poorly performing competition policy programs where the observed variance can be attributed to measurement error. But we also examine an interesting feature of the competition policy survey: in many countries

survey respondents completed surveys appraising competition policy when the country had no competition law. The last section provides some concluding comments.

II. OPINIONS AS TO THE ROLE OF COMPETITION POLICY VARY ACROSS COUNTRIES

The World Economic Forum's Global Competitiveness Report surveys businessmen to rate the effectiveness of the antitrust policy in their particular country, asking them to rate "antimonopoly" policy from "1 = lax and not effective and promoting competition" to "7 = effectively promotes competition". According to the WEF, the survey is completed by businessmen, in its entirety. Specifically, in the 2005 round of the survey 14 percent of respondent firms were foreign-owned, 30 percent of all respondent firms had less than 50 employees, 43 percent of firms had fewer than 100 employees and 19 percent of firms surveyed had more than 1000 employees.

Asymmetry in Standard Deviation of the Survey Responses Suggests Respondents May be Interpreting the Question Differently

The World Economic Forum reports the average score from each country's survey responses as well as the standard deviation of the responses. According to the WEF, the standard deviation "gives an indication of how closely or widely the individual responses are spread around the mean country score." In other words, this provides information on the extent of agreement or disagreement on the question within the given country."

The relationship between the reported competition policy performance survey average and its standard deviation is shown in the figure below.

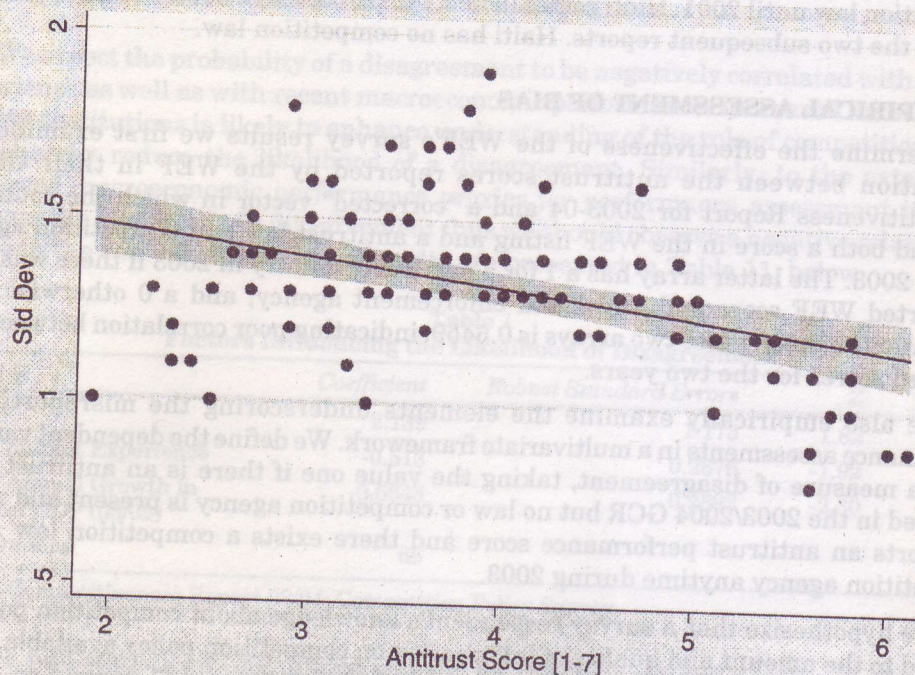
The relationship indicates an inverse relationship between antitrust performance and survey robustness. There are, of course, numerous plausible explanations for the observed asymmetry in the survey standard deviation. It could be the effect of an unobserved variable. For example, the variance in responses could be a result of the fact that there are fewer reporters dedicated to the coverage of economic issues in a particular nation, which would include lower awareness levels of antitrust issues. It could also be a reflection of the lack of specialized media diffusing antitrust interventions or accomplishments. It could be survey idiosyncracies such as lower response rates in those particular countries scoring poorly in antitrust performance.

The observed dispersion in the survey-response standard deviation across countries offers support for an alternative thesis. We believe that businessmen are interpreting the question differently across countries. We also find that for several countries, respondents answered the competition policy appraisal question although there was no formal competition policy legislation in place. We examine this evidence in the two following sections.

Competition Policy Performance Scores: Errors

We find many countries with a reported Global Competitiveness Report score for antitrust policy performance in the respective country surveys despite the fact that they did not yet have an antitrust law at the time of publication. Since the antitrust law

Figure 1: Competition Policy Performance Standard Deviation of Individual Country Survey v. Average Score



typically creates the antitrust policy enforcement agency which subsequently establishes the policy (its operational aspects), it is difficult to understand how it is possible to appraise competition policy performance unless those surveyed misunderstood the question, exhibit susceptibility to halo effects, or both.

Indonesia for example, appeared in the first GCR survey in 1996 with a score in the Effectiveness of Anti-Monopoly survey of 2.88 in 1996, 2.59 in 1999 and 3.3 in 2000, yet Indonesia did not adopt an antitrust law until 1999 but effective in 2000. The PKKU, the Indonesian Competition Authority was not up and running until 2001. Mozambique, makes its appearance in the 2003/04 GCR survey with a score of 2.3. It scored a 2.6 in the 04/05 survey, improved to a 3.3 in the 05/06 survey and declined to a 3.0 in the latest 06/07 survey. Mozambique does not yet have a competition law (as of the summer of 2007). Ethiopia appears on the 2003/04 survey for the first time with a score of 2.7 followed by a 2.9 in the 04/05 report, a 2.7 in the 05/06 and a 3 in the 06/07 report. Ethiopia formally had a competition law in April 2003 but was unable to establish, fund and commence operations of an agency until 2005. Ecuador scores a 3.18 in the 1999 survey, a 3.2 in the 2000 survey, a 2.5 in 2001/02 survey, a 2 in the 2002/03 survey, and a 2.5, 2.3, 2.3, 2.6, respectively in the following years. Ecuador does not yet have a competition law. The Ukraine makes its appearance in 2000 with a 3.3 and a 3.3 in 2001, although its antitrust law was not approved until January 2001. Trinidad & Tobago scores a 2.9 in 2002/03, a 2.8 in 03/04, a 3.0 in 04/05, a 3 in 05/06 and 3.1 in 06/07.

Trinidad & Tobago does not have a competition law. The Slovak Republic scores a 3.94 in 1999, a 4.2 in 2000 and a 3.8 in 01/02 despite the fact that they did not adopt a competition law until 2001. Haiti comes in at 2.4 in 02/03, 2.3 in 2003/04 and appears in none of the two subsequent reports. Haiti has no competition law.

III. EMPIRICAL ASSESSMENT OF BIAS

To determine the effectiveness of the WEF's survey results we first examine the correlation between the antitrust scores reported by the WEF in their Global Competitiveness Report for 2003-04 and a "corrected" vector in which the countries that had both a score in the WEF listing and an antitrust law and competition agency during 2003. The latter array has a 1 for a particular country in 2003 if there was both a reported WEF score and a law and enforcement agency, and a 0 otherwise. The correlation between these two arrays is 0.5459, indicating poor correlation between the reported scores for the two years.

We also empirically examine the elements underscoring the misreporting of performance assessments in a multivariate framework. We define the dependent variable to be a measure of disagreement, taking the value one if there is an antitrust score reported in the 2003/2004 GCR but no law or competition agency is present and zero if it reports an antitrust performance score and there exists a competition law and a competition agency anytime during 2003.

We hypothesize that a survey respondent's knowledge about competition policy is related to the amount and quality of information on competition policy available in the business environment. The amount and quality of information will depend on media coverage and understanding of the role an administrative agency has in a market economy. We have no data on the extent of media coverage of competition policy matters; we therefore use data on years of experience with a market economy as a proxy. We also examine the extent to which halo effects impact the likelihood of a survey respondent appraising a policy that does not officially exist. We use the logarithm of the change in nominal GDP per capita between 2002 and 2003 as the test variable.

Thus we propose the following model:

$$\begin{aligned}
 P(\text{Disagreement}) = & \alpha \\
 & + \beta(\text{Log of Market Experience}) \\
 & + \gamma(\text{Log of Annual Growth in Nominal GDP})
 \end{aligned}
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Where:

P(Disagreement): reflects the probability of disagreement in the survey response. Specifically a binary variable coded one if an antitrust performance score was returned but there was no competition policy or competition agency anytime during 2003.

Market Experience: represents the number of years of experience with a market economy. The variable is derived from the data on trade liberalization dates found in Appendix 2-B of Wacziarg & Welch (2003). Wacziarg & Welch identify the year in which uninterrupted openness began for a country. We calculate the market experience variable as of 2004; thus, a country which opened up in 1992 would have 12 years of experience with a market economy.

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coexisted with economic models that relied little on market mechanisms; as a result, competition policy was, for the most ignored and ineffective.

Modern competition policy codes recently adopted in developing and reforming economies are largely fashioned on the U.S. and European Union model. It is a model based on microeconomic efficiency considerations and enforced by an independent agency. Similarly, privatization legislation, e.g. telecomm, granted competition policy oversight to national regulatory authorities. In practice, however, these specific attributes of the regulations are typically sidelined for practical and budgetary reasons.

Nonetheless, even in instances where WEF survey respondents may have mentally or subconsciously been alluding to these other competition policy regimes when assessing competition policy performance, the exercise is a flawed one that is effectively comparing entirely different approaches to competition policy. In principle, a convergence may ensue following an increased understanding of modern antitrust practice.

Differing Views on Policy Goals

There is reasonable uniformity among the recently adopted competition laws that antitrust should protect competition, not competitors. Although there are instances of potentially contradictory standards most modern competition legislation holds consumer welfare as the fundamental standard for evaluating the effects of competition.

However, in many nations the presence of price instability derived from supply or demand shocks results in price peaks in products favored by the populace. The competition agency may be prodded into taking action by popular pressure even though the underlying cause may be neither concerted activity by competitors nor a unilateral anticompetitive practice. This political sensitivity is not a small country feature nor is it particular to developing economies. Indeed, the U.S. Federal Trade Commission has been itself embroiled in countless investigations solicited by congressmen or consumer groups alleging anticompetitive behavior in crude oil and derivative markets (for example); investigations that have been ultimately dismissed.

Differences in Economic Concern

The effectiveness of a perception-based survey intent on gauging competition agency performance necessarily implies that the interests of those businessmen responding to the surveys coincide with the objectives of the competition agency. Efforts at measurement that hinge on surveys of businessmen are thus likely to contain substantial biases: the interests of businessmen in developing economies are not consistent with the objectives of the competition agency.

First, in many developing economies, there is a belief that competition policy should stand as a bulwark against the encroachment of domestic market share by foreign firms allegedly practicing predatory pricing. To the dismay of that nation's domestic businessmen, a competition agency may take no action against foreign entry or imports to the extent a competition agency properly bases its assessments on the internationally accepted standard of maximizing consumer welfare. Thus, for example, an agency in an African nation may be called on by domestic food vendors to investigate the potential entry of a South African supermarket conglomerate. The complaints may allege predatory

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practices reflecting the more competitive pricing of the more efficient entrant. The investigation conducted by the competition agency may reveal no increased likelihood of supracompetitive pricing and the agency—conducting an investigation “by the book”—would table the matter. These same businessmen would subsequently award poor marks to the competition agency on a survey of competition policy performance.

Second, in other countries, in many countries, business groups resent the preferential treatment provided government owned quasi-private enterprises known as parastatals or the erstwhile privatized former government operating agencies. The symbiotic relationship between the parastatals and their governments impacts the performance of markets. In practical terms, the agency may be powerless against parastatals who, after all, share the interest of the state.

Institutional Performance

Antitrust practice, with its full array of vertical and horizontal proscriptions is not only imprecise and complex but it has a tendency to evolve over time. Moreover, investigations are typically lengthy matters involving arcane procedural matters driven by local legal traditions and practice.

There are exogenous factors as well, that influence perceived agency performance. Most antitrust laws provide recourse to local courts, whom, by definition, are unfamiliar with antitrust practice and thus prone to cast the matter in terms of procedural differences ensuring long delays in the matter. Unless a businessman survey respondent is intimately involved in an antitrust matter the determination of institutional competence can be a difficult one. As a result, many businessmen not privy to these operational difficulties tended to conclude that an agency was simply performing poorly because there was no visible antitrust activity in the sense that there was little or no coverage in business dailies.

Competition enforcement agencies are relatively small and tend to be rapidly overwhelmed in procedural matters resulting in relatively few cases being brought to completion warranting little discussion in the national media. This may possibly result in a popular perception based on the treatment of the matter by the national media rather than on a learned understanding of the underlying facts and jurisprudence. This may be particularly evident in nations where there is no private cause of action allowed by the domestic competition law creating an example of the availability heuristic (McFadden 2006) whereby survey respondents judge the relative performance of a given event based on the ease with which it comes to mind. The more visible the agency in the news media the more likely it will be to some, that it is discharging its functions well. Conversely, a relative lack of discussion in the media will result in the perception that the agency is dormant, earning it poor marks in any survey.

V. CONCLUDING COMMENTS

Are antitrust performance indicators measuring competition policy performance or are they simply reflecting the heterogeneous views of businesses? There appear to be fundamental differences between businessmen's understanding of competition policy performance across countries. We speculate that this may be due to the different

perception of the most immediate competitive "threats" affecting each country's business community coupled with a misunderstanding of the role of the competition agency.

This asymmetry introduces policy preferences into measures of competition policy effectiveness and thereby injects systematic bias into the reported metric in proportion to the extent that competition policy mirrors or diverges from the interests of the surveyed businessmen as reflected by a case's recency and media salience, or, in the case of halo effects, macroeconomic performance. This may vitiate the usefulness of the metric since the objective of assessing effectiveness is to determine whether the competition policy agency is capably discharging its mission to enforce the law.

Our analysis suggests that care should be taken to ensure that stakeholders hold realistic expectations of the proper role of antitrust policy. So far, the primary focus of donors and supporters has been to ensure the professionalism and capacity of the law enforcement effort. And although many agencies have actively sought to popularize their mission, they face considerable structural and institutional limitations.

We believe that the success of competition policy programs awaits a more general understanding by stakeholders of its realizable objectives and capabilities. Proper management of expectations can enhance an agency's effectiveness.

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