An Empirical Examination of Competition Policy Performance

A.E. Rodriguez[*]

Abstract

Competition policy advocates recommend competition laws as an institutional mechanism aimed at disciplining supracompetitive prices resulting from private sector anticompetitive practices and from government restraints and non-tariff barriers. Competition policy programs have been adopted by over 100 nations so far; a large number of the countries that have adopted competition policy programs have done so over the last fifteen years, especially newly liberalized, transition economies. Many of these competition programs were welcomed out of concern that the salutary benefits of increased free trade and liberalization would bypass non-tradeables.

This study uses fixed effects estimation on a panel data set to examine the effects of competition laws on the relative price of non-tradeables using a sample of 70 countries over the 1999-2004 period. One would expect to see a negative impact on the price of non-tradeables in nations that have adopted competition programs. In fact, the empirical evidence reveals a positive impact of competition laws on the prices of non-tradeables. Practical and econometric limitations of the study preclude us from attributing all the observed impact to the competition policy programs. Importantly, a subsequent error-in-variables, bias-correcting bootstrap procedure negates the initial determination of statistical significance; as a result, I find no evidence of competition policy benefits.

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I. Introduction

Over the last two decades, competition policy initiatives – proscribing anticompetitive practices - have become a regular component of privatization and deregulation projects. As of 2004, nearly 100 countries around the world had instituted active competition policy programs (Fox, Sullivan and Peritz 2004), approximately half of those in the last 10 years. Competition policy programs are regularly found within the portfolio of "favored" institutions, alongside bank oversight agencies, utility regulatory commissions, judicial reforms programs, anti-corruption organisms and others deemed vital to the success of market transitions in liberalizing and reforming economies (WTO 1998; Aron 2000).

Do transition economies benefit from competition policy? After all, many argue that the best remedy for anticompetitive practices is free and unfettered trade. As a general principle, the undoing of tariff barriers will result in foreign challenges that will create domestic competition. Specifically, free traders contend that a reduction of entry barriers increases the volume of trade, devolves into price competition, ultimately enhancing consumer welfare as prices fall (Harrison 1994, Hoekman, Kee & Olarreaga 2001, Levinsohn 1996); in fact this belief in the salutary powers of free trade is a mainstay of classical, orthodox, economics. Active enforcement of antitrust laws policy – especially the full array of vertical and horizontal proscriptions, is considered unnecessary in a nation open to trade (Rodriguez and Williams 1994; Rodriguez and Coate 1995).

Free-trade skeptics argue that the benefits of increased international commerce are largely limited to the tradeables sector and certainly do not

impact the price of non-tradables (Boza 2003; Gal 2001, 2004). Only proactive challenges to anticompetitive behavior can curtail market power abuses in the non-tradeables sector; market power abuses and anticompetitive practices that would surely arise as formerly state-run monopolies and parastatals in transition and developing economies are transferred to private hands but not subject to the disciplining effect of imports and free trade.

This paper examines the effectiveness of competition policy in disciplining anticompetitive prices; specifically, it examines the effect of competition policy programs on the prices of non-tradeables. To the extent that competition policy is effective, one should notice a decline on the price of non-tradeables, all else equal. The effect on prices should be evident because practically all recent competition policy programs embrace goals of economic efficiency and the maximization of consumer welfare as their primary objectives, although many programs incorporate other considerations as well.

Succinctly, results indicate that the presence of competition policy programs does not appear to have the expected impact on the price of non-tradeables, once we correct for error-in-variables bias in the competition policy variable; put differently, the presence of a competition law in a nation does not appear to explain any portion of the decline in the relative prices of non-tradeables. This result does not support the argument of competition policy advocates.

However, the results should be interpreted cautiously; many unavoidable sources of bias are present in the analysis, specifically

affecting the competition policy variable. On the other hand, even if one could attribute significance to the competition policy variable, there are other factors that account for the decline in the price of non-tradeables; collectively they account for a considerably proportion of the observed decline. In other words, the data is consistent with the conclusion that the decline in the relative prices of non-tradebles would have come about without the presence of a competition law.

The methodology, analysis and results are all provided in this paper and presented as follows: the next section is a literature review section that recounts previous efforts at examining the performance of competition policy programs. Section III explains why the presence of competition policy may affect the prices of both tradeables and non-tradeables. A testable model and empirical estimates are in Section IV. A discussion of the results obtained is in Section V. Section VI provides concluding comments. Data sources and treatment can be found in an Appendix to this paper.

II. How Have Competition Policy Programs Fared? A Review of the Literature

Competition agency performance in the United States has been closely scrutinized often (Crandall & Winston 2003; DeLorme, Frame & Kamerschen, 1996, 1997; McChesney & Shughart 1994). Little has been done in other nations, especially transition and developing countries (Preston 1993) and only a handful of attempts examine the *comparative* performance of competition regimes, perhaps because of data limitations (Dutz and Vagliasindi 1999, Rodriguez and DeNardis 2006).

Direct comparisons between the various existing performance studies are difficult. Some of the studies opt for the traditional performance assessment of measuring outputs versus inputs, - resources allocated to the agency compared to the number of cases investigated or the number of mergers reviewed over a particular time-period. Other studies examine indirect outcomes such as whether price-cost margins have declined or whether profitability has decreased as a result of the implementation of competition laws. Neither approach directly links a competition agency's activities to its intended direct objective: an impact on anticompetitive behavior and associated anticompetitive prices.

This study fills a gap in the literature; it examines outcomes – the impact on the price of nontradeables and it does so comparatively. However, despite the methodological differences between our work and prior examinations of output and performance, prior efforts offer valuable commentary and guidance.

Serbrisky (2004) published the findings of a World Bank assessment of 48 competition agencies in transition and emerging countries in Africa, Asia, Europe and Latin America. Sebrisky's recommendation based on an implicit assessment of asymmetric performance, suggests that agency performance would improve if the shortcomings in endowments could be remedied; the assessment, however, is entirely heuristic and does not consider the impact of exogenous variables or the effectiveness of the agency.

The OECD has an ongoing "peer-review" program whereby member country agencies come under scrutiny by officials (or their proxies) from

other member countries.[1] So far, although assessments include selected non-member countries such as South Africa, few developing country agencies have been appraised. The examined agency's performance is not explicitly benchmarked against agency performance in other countries and no attempt is made to devise or contrast the result to some independent metric such as prices, efficiency or price-cost margins. Further, the OECD studies do not attempt to determine how the scrutinized agencies perform vis-a-vis its stated policy objectives.

Dutz and Vagliasindi (1999) find a robust positive relationship between more effective competition policy implementation and intensity of competition captured by what they refer to as "economy wide enterprise mobility." Specifically, the authors note that their results clearly imply that factors related to institutional effectiveness are critical in ensuring that competition policy has its intended economy-wide impact. This study does not contain a statistical parsing of the precise influence of antitrust policy from the broader array of policies consonant with a broad liberalization program; this is a limitation of the study, one that diminishes the generality of its conclusions but one that is consistent with Dutz and Vagliasindi. Importantly, this study encompasses 70 nations over a period of 6 years whereas Dutz & Vagliasindi were limited to 18 countries.

Kee and Hoekman (2003) investigate the impact of competition law on industry markups over time and across a large number of countries. Conventional industrial organization economic theory suggests that competition will reduce the gap between price and marginal cost in the

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1 All reports are publicly available at www.OECD.org

presence of supracompetitive pricing. They find both domestic and foreign competition to be major sources of market discipline in concentrated markets, but that the direct effect of competition law is insignificant. Competition policy may be a policy choice in countries impaired by anticompetitive practices indicating a simultaneity between price cost markups and competition policy. Once the authors account for the possible endogeneity they find competition laws have an indirect effect on markups by promoting a larger number of domestic firms. However, it is not clear why the mere *presence* of antitrust laws encourages entry. Because entry barriers may not be a result of proscribed anticompetitive practices but rather as result of state-sanctioned non-tariff barriers it is not readily apparent how competition agencies are capable of challenging the practices. Thus, we suspect that Kee and Hoekman may be capturing association rather than causation.

Fingleton, Fox, Neven, and Seabright (1996) examine the competition regimes in the four Visegrad countries of Central Europe: the Czech Republic, Hungary, Slovakia, and Poland. In a chapter titled "The Performance of the Institutions," the authors conclude that "the performance of the institutions is mixed." Among the concerns: competition agencies may not be doing enough to establish clear and understandable guidelines and interpretations of the law; the effectiveness of the agencies may be limited by lack of political will and operational timidity. Because of the likely error-in-variables bias, it is unclear whether our results confirm their result; but they are not inconsistent.

III. The Impact of Competition Policy Law Enforcement & Advocacy on the Price of Non-Tradeables

Competition laws proscribe firm behavior that is considered contrary to economic efficiency and leads to reductions in consumer welfare. The presence of cartels, monopolies and dominant firms in many economies prior to the reforms practically ensures that prices are at supracompetitive levels.

Competition refers to a situation in which firms or sellers independently strive for buyers for their products and services to achieve a particular business objective. Levels or rates of growth of profits, sales, or market share are commonly contested business objectives; achieving all of these objectives turns on satisfying consumers. As firms vie for customers, competitive rivalry typically results; competition turns in terms of price, quantity, quality, service, or combinations of these and other factors that customers may value. In so doing, competition forces firms to become efficient and to offer a greater choice of products and services at lower prices.

Firms have incentives to acquire market power; put differently, to obtain discretionary control over prices and other related factors determining business transactions. Such market power may be gained by legitimate value-enhancing competition of by limiting competition by erecting barriers to commerce, entering into collusive arrangements to restrict prices and output, and engaging in other anticompetitive business practices. The latter are generally viewed as market distortions that result in an inefficient allocation of resources and adversely affect industry performance and economic welfare; consumers pay higher prices.

Competition laws foster and maintain competition by prohibiting both private and state-owned firms from engaging in anti-competitive practices. Anticompetitive practices are less likely to survive in the tradeables sector as competition from imports and direct entry foster price discipline and encourage competition; the non-tradeables sector is less likely to be directly impacted by trade. Effective prosecution by the competition agency would curtail anticompetitive behavior and result in a decline in prices; the decline in prices is a result of an inability to sustain the erstwhile cartel or collusive practice (Bosch and Eckard 1991). Clearly, if the law enforcement activities of competition agencies are to have any effect on prices, these are more likely to be observed in the nontradeables sector of the economy.

Law enforcement is not the only route to price discipline brought about by the competition agency. A competition agency is also able to proffer criticism on existing or proposed government-sponsored trade barriers or efficiency reducing policies (Majoras 2005). These government-scrutinizing activities entail an agency's competition advocacy function. Competition advocacy is, for the most part, not a law enforcement activity, although some competition laws grant the agency the authority to formally challenge the government practice or action.

The agency's advocacy efforts are used proactively to nudge and encourage procompetitive deregulation efforts (Cooper, Pautler and Zywicki 2004). By accurately identifying the demand and supply for protectionism, the agency can appraise the costs of those providing and soliciting preferential treatment. Consumers capitalize directly from these advocacy efforts by the competition agency because they reduce the

equilibrium levels of protectionism, reducing costs, removing distortions in the economy, actions that may favorably impact the price of nontradeables.

Last, as with all law enforcement agencies, the polity benefits from deterrence resulting from credible interventions of the competition agency. It is unlikely that any firm would want to be the target of a costly, time consuming and compromising public investigation by the competition agency, one that could jeopardize a firm's reputation in the marketplace. Not surprisingly, news coverage from existing investigations by the competition agency may persuade firms to abandon anticompetitive practices or dissuade them from cartelizing. Thus, in response to firm's apprehension at the prospects of drawing the attention of the novel competition agency, one may observe prices declining as anticompetitive practices are rescinded or altered in favor of competition.

IV. The Empirical Model and Results

Non-tradeables are not entirely immune from the competitive impact of increasing trade. Balassa and Samulson independently suggested that productivity differences between the tradeables and nontradeables sectors can account for the lower relative prices of nontradeables in poor countries.

The Balassa-Samuelson model argues that changes in the relative price of non-tradeables are determined by changes in relative productivities in the traded and nontraded sectors in the country. The

greater the productivity differentials in the production of tradeable goods between countries, the greater will be the difference in the prices of nontradables.

Importantly, the bulk of productivity improvements are likely to be concentrated in the tradeables sector; so will a country's economic growth. Thus, there exists a positive relationship between a country's income and the relative price of nontradeables (Bahmani-Oskooee & Niroomand 1996, Heston, Nuxoll & Summers 1994, Pattichis & Kanaan 2004). Accordingly, the relative price of non-tradeables will vary as a result of variations in income, absent a competition agency.

Proponents of competition policy argue that effective competition policy is necessary to eliminate supracompetitive pricing in non-tradeables. Symeonidis (2002) examines the impact of anti-cartel policy on firm's profits as a result of the introduction in the United Kingdom of the Restrictive Trade Practices Act and finds that the resulting increase in the intensity of price competition leads to a fall in margins.

Controlling for the effects of productivity, it is possible to establish empirically whether competition policy programs have exerted their intended effects on the prices of non-tradeables.   The hypothesis is rejected if the coefficient associated with the variable representing the presence of a competition program is found to be not statistically significantly different from zero; a failure to reject the hypothesis implies that competition policy has no impact on the price of non-tradeables.

The relative price of non-tradeables is defined as the ratio of the price of non-tradeables to the price of tradeables. Following Pattichis &

Kanaan (2004), Deloach (1997, 2001), and Mihaljek & Klau (2004) we approximate the relative price of non-tradeables as the difference between the logarithm of the consumer price index and the logarithm of the wholesale price index.

Define the logarithms of CPI and WPI as follows:

$$CPI \equiv \alpha P_i^N + (1-\alpha)P_i^N \qquad\qquad (1)$$

$$WPI \equiv \beta P_i^N + (1-\beta)P_i^N \qquad\qquad (2)$$

Where α is the relative share of the prices of nontradeables in the CPI and β is the corresponding share in the WPI. Subtracting (2) from (1) we get the relative price of non-tradeables (RPt):

$$RP_i \equiv P_i^N - P_i^T = (1/(\alpha-\beta))\ (CPI_i - WPI_i) \qquad\qquad (3)$$

If the relative share of nontradeable prices in the CPI is higher than it is in the WPI ($\alpha > \beta$) an increase in the ($CPI_i - WPI_i$) can be interpreted as an increase in the relative price of non-tradeables.

The algebraic derivation above leads us to formulate an empirical model to examine whether a competition policy program has any effect on the relative price of non-tradeables (RP_i) controlling both for real gross domestic product (RY_i) and possible country and time effects.

We propose to estimate the following general linear functional form:

RELATIVE PRICE OF NON-TRADEABLES $_i$ = α_i

$\qquad$ + v_t + β_1REAL INCOME PER CAPITA$_{it}$ + β_2COMPETITION LAW$_{it}$

$\qquad\qquad$ + β_3Y00 + β_4Y01 + β_5Y02 + β_6Y03 + β_7Y04 + e_{it}

i indexes countries in the sample whereas t indexes time periods.

The relative price of non-tradeables is the dependant variable; it is the ratio of the consumer price index to the producer price index. Real gross domestic product serves as a proxy for a nation's productivity. Competition Law is a binary variable set to 1 if the country had a competition law during a particular year and 0 otherwise. Our data covers the year 1999-2004.

The study examines a panel data set of 206 countries at the outset, but some of the data is not available for all countries for all years. Thus, our panel data set are unbalanced and the number of observations actually used depends on the availability of explanatory variables for a particular country and year.

The objective of the econometric analysis was to look at how the price of non-tradeables varies from one nation to the next or over time as the various nations implemented a competition policy regime controlling for productivity. Controls notwithstanding, heterogeneity across nations could account for observed differences in the relative ratio of the price of non-tradeables, all else equal. There are many plausible sources of heterogeneity across nations in the context of competition policy programs. First, some of the recently adopted laws do not contain merger review provisions whereas others do; this suggests that even comparable efforts will have varying impact on prices.

Second, recent work in the finance literature and comparatively few in the international competition policy literature attribute variation in the effectiveness of institutions to a nation's legal tradition. Rodriguez (2006),

for example, finds a difference in agency performance between common-law nations and those of other legal traditions.

Third, although practically all nations embrace economic efficiency and the preservation of consumer welfare as the stated goal of antitrust, many laws have additional – and often contradictory - specific objectives embedded in them. A wide variety of alternative objectives can be found including black empowerment and promotion of small businesses.

The fixed effects model (FE) is ordinary least squares on time-demeaned data that captures country-specific effect, α_i, that do not change over time. In this way, heterogeneity derived from the factors listed above as well as unobserved heterogeneity was removed. By including country fixed effects, comparisons of non-tradeables prices across nations are effectively removed from the sample; the estimated effect of the competition law on the price of non-tradeables comes solely from pricing variation within countries over time. Put simply, with a fixed effects model the heterogeneity across countries is simply due to parametric shifts of the regression function.

The model also includes individual year dummy variables -- with base year 1999 -- to account for aggregate or secular declines in the relative price of nontradeables.

Results

Table 1 presents the result of the model. Note that the coefficient on the competition law variable is negative, as expected, and statistically significant. The estimates of the coefficient of the competition law variable

reveal a decline of a statistically significant at the 5 percent level of the relative price of non-tradeables { - 0.049 = [exp(-0.0509) – 1]}.

Independent Variables	Fixed Effects
Constant	-3.501 (-6.13)
Ln (GDP per Capita)	0.4267 (6.30)
Competition Law	-0.0509 (-2.12)
Year 2000	-0.0460 (-4.49)
Year 2001	-0.0403 (-3.79)
Year 2002	-0.0469 (-4.27)
Year 2003	-0.0659 (-5.56)
Year 2004	-0.0909 (-6.22)

Because we are controlling for the impact of a competition law, the drop in the relative prices is separate from the impact due to changes in

productivity – the Balassa-Samuelson effect. The coefficients on the year dummies of the fixed effects model implies that the decline in the relative prices of non-tradeables average approximately 6 percent per year holding fixed the effects of both productivity changes and a competition law.

The coefficients on the year dummies represent drops in the relative prices of non-tradeables for reasons that are not captured in the explanatory variables. Given that the year dummies are individually quite significant, it is not surprising that as a group the year dummies are jointly significant: a joint test of significance returns an $F(5,355) = 8.97$ and a p-value = 0.00.

Analysis of Results

Although we find statistically significant support for the impact of a competition law consistent with other studies (Bosch and Eckard 1991; Symeonides 2002), one remains skeptical that these results can be attributable in their entirety to the actions of the competition agency.

First, many of the new agencies are small; the activity of the competition agency is not capable of affecting any meaningful portion of national output and aggregate prices, even if one were to generously attribute considerable impact to the enforcement and deterrence effect, - despite the fact that empirical studies have shown that the deterrence effect of antitrust may be short-lived (Thomson and Kaserman. 2001) and have little spillover impact beyond the immediate target market (Block and Feinstein. 1986). Thus, it is possible that any impact on the variability or levels of prices derived from agency activity is largely muted or impossible to detect.

Second, the variable that represents the effects of a competition law implicitly assumes no variation in either competition agency performance or political will, or both. Political will refers to the willingness of an administration to rely on the competition agency as the preferred instrument to address competition concerns. A polity may prefer other trade instruments or even historical behind-the-scenes negotiations or pressure. Political will or agency performance may not be constant over time and thus may remain a source of unobserved heterogeneity. Importantly, an examination of antitrust agency performance scores obtained from various Global Competitiveness Reports suggests that there is only modest within variation in competition policy performance over time.

Third, despite embracing liberalization and market reform programs, many developing economies retain price controls on basic products possibly to prevent dramatic changes to prices and thus ensure the political support of the poorer sectors of the population. Price controls remove the ability of prices to act as price signals. This rigidity reduces the variance in the denominator of our dependent variable and tends to drift downwards as the price of non-tradeables increases due to increases in trade. This drift creates a favorable bias that is ideally picked up as a secular trend by the year variables in the model. But it is unlikely that year variables pick up all the effect because the price control policies were implemented alongside the implementation of the other pro-market changes, including the competition law.

Fourth, practically all of the competition laws in place explicitly proffer the preservation of economic efficiency as their fundamental objective. But in their administration, agencies are often more responsive

to more immediate political and economic considerations.

Correction for Bias in the Competition Law Variable

Fixed-effects models tend to exaggerate "errors-in-variables" bias – the difficulty in detecting statistically the influence of an explanatory variable when that variable is measured with error. The measurement error at issue could be technical: recording the wrong implementation date of the competition law; or conceptual: e.g. because the variable controlling for the presence of a competition law is a binary one, it implicitly attributes identical impact if in the same year to law passed at different months in that year. Indeed, the fixed effects may be controlling for omitted variable bias while exacerbating error-in-variables bias.

Efron's (1979) bootstrapping procedure provides a mechanism to address the concern raised by possible error-in-variables problem. The general idea of the bootstrap procedure is to appraise the variability of parameter estimates by resampling the original small sample data.

The key to obtaining reasonable estimates of standard errors is to make sure that the resampled data are generated from regression residuals in a manner that is consistent with the stochastic structure of the original model. In this way, standard errors are generated using the model's own assumptions and the Monte Carlo distribution of observed errors are used to approximate the distribution of the unobservable true model.

Once corrected for possible autocorrelation and heteroskedasticity, the fixed effects model residuals are independently and identically

distributed. Second, re-sampled data are obtained by randomly drawing residuals with replacement. Drawing data in this way preserves the original stochastic structure among residuals. Third, re-sampled data are obtained by recursively solving the model. Fourth, new model coefficient estimates are obtained from each re-sampled set and stored. Fifth, steps two through four are repeated one thousand times. Sixth, standard errors and bias are computed using Efron's (1982) formulas.

Results of the z-scores obtained from the bootstrapped standard errors obtained are displayed below alongside the t-scores from the fixed effects model.

Independent Variables	Fixed Effects	Bootstrap Corrected Fixed Effects
Constant	-3.516 (-6.13)	-3.516 (-3.55)
Ln (GDP per Capita)	0.4285 (6.3)	0.4285 (3.65)
Competition Law	**-0.049** **(-2.12)**	**-0.0493** **(-1.35)**
Year 2000	-0.0462 (-4.49)	-0.0462 (-3.84)
Year 2001	-0.0405 (-3.79)	-0.0405 (-3.50)
Year 2002	-0.0472 (-4.27)	-0.0472 (-3.47)
Year 2003	-0.0655 (-5.56)	-0.0655 (-3.73)
Year 2004	-0.0914	-0.0914

	(-6.22)	(-3.55)
Number of Groups	70	70
Number of Observations	382	382
note: t-stats in parenthesis for fixed effects model; z-stats in parenthesis for Bootstraped model.		

A bootstrap procedure confirms the possible bias. The bootstrap results noticeably increase the variability of the competition policy variable reducing its statistical significance, thereby indicating that there is no impact on the price of non-tradeables attributable to the presence of a competition law.

VI. Conclusions

The objective of the research set forth in this paper was to take a closer look at competition policy programs; specifically, to determine whether competition policy programs had any impact on the price of non-tradeables. Non-tradeables were considered the most sensitive to the effects of a competition policy enforcement program.

A finding of no impact could either invite a more careful approach to implementing competition policy or a reconsideration of the benefits to a transition economy.

The variable that accounts for the presence of a competition law is negative and statistically significant at the 95 percent level suggesting that

competition policy accounts for an average decline of 5 percent in the relative price of non-tradeables limiting the Balassa-Samuelson effect that holds that increased productivity in a country increases the price of its non-tradeables relative to the price of its tradeables.

But the competition law variable, as specified here, appears to reflect not only the presence of a competition policy initiative but the general impact of deregulatory and privatization programs typically associated with competition policy programs. The competition law variable is a composite of the various competition law elements found in a nation, which may include sectoral proscriptions as well as trade related obligations in addition to a designated competition authority charged with law enforcement. The competition law variable is a binary variable that becomes a "one" in the year the competition variable is adopted but remains a zero otherwise. In many instances there is a delay between the adoption of the law and the commencement of active enforcement activities. These factors – both individually and jointly - confound the measurement of the competition law variable and impute bias; the results of the fixed effects regression do not provide a proper estimate of the variables statistical significance. A bootstrap of the standard errors confirms the possible bias and provides results suggesting that there is no impact on the price of non-tradeables attributable to the presence of a competition law.

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Data Appendix

Sources of Data, Description and Treatment of Variables

Data on Consumer Price Indices (CPI) and Wholesale Price Indices (WPI or PPI) are from the International Monetary Fund's International Financial Statistics database; respectfully, codes 64 and 63A. The relative price of nontradeables is defined as the (CPI/WPI) ratio. All variables are in natural logs prior to the econometric analysis.

The gross domestic product (GDP) at constant 1990 prices (in USD) is from the World Bank's World Development Indicators Database. The GDP was expressed in per capita terms once it was divided by the population (code 99z). All variables are in natural logs prior to the econometric analysis.

Data on the Effectiveness of Antitrust Policy are from the 1999 through 2004 issues of the Global Competitiveness Report published by the World Economic Forum; the variable encompasses 102 nations in the 2004 Report.