



# STANDARDS OF PROOF BY COMPETITION AUTHORITIES IN SMALL MARKET ECONOMIES

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Marzo 2021



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## ABSTRACT

Standards of proof, particularly related to minimising the variance around the mean, may appropriately differ between small market economies and larger ones. Given resource differences, and different starting points of many small economies, it may be that variance of the true situation around the expectation in small economies would be higher than in larger ones. If this were not the case, small economies might not be able to address legitimate complaints, might not have sufficient throughput of cases and might find themselves not achieving their core objective of changing the business environment in the countries in which they operate from one that was permissive if anti-competitive activity to one that follow the law. Creating an environment in which companies choose to follow the law, out of their own self-interest, is crucial for the ultimate success of the competition law enterprise.

## I. INTRODUCTION

Competition authorities and economic sector regulators from small market economies face particularly challenging law enforcement dilemmas. Compared to larger authorities, the core of the dilemma is that the local conditions often encompass the dual combination of greater law enforcement challenges— due to fundamentally low conditions of competition in small economies — and lower resources than larger authorities — due to the limited size of government budgets in small economies. In addition to these two fundamental challenges, others include limited judicial resources, limited private sector expertise in competition law and limited technical training for the staff in industrial organisation, competition law and even in the subjects of law and economics. The question I focus on in this note is whether and in what way standards for proving cases might appropriately differ in such economies, if at all. While the exact interpretations of standard of proof are typically subject to judicial interpretation, the general question remains of whether the standards can in all ways “converge” with those of larger economies<sup>1</sup>.

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\* The author wishes to thank many colleagues for extremely helpful conversations. This note speaks from experience after working at one small country competition authority, two large-jurisdiction authorities and an international organisation. This paper does not refer to any specific cases from these experiences, but has arisen from subsequent thoughts on the particular challenges of small country authorities garnered through discussions and experience in more than two dozen countries. The thoughts reported here have emerged after leaving the small country authority and considering the challenges I encountered along with my other head of agency colleagues from other small country colleagues, in our efforts to replicate the standards of proof of large jurisdiction competition authorities. I would particularly like to thank colleagues such as John Davies, Eleanor Fox, Michal Gal, David Gerber, Simon Roberts and others with whom I discussed these challenges, without wishing to suggest they agree with the views expressed here.

This question has significant operational importance in many economies. Without taking a position on what constitutes a small market economy, we can state that of the more than 130 competition authorities in the world, more than 60 are in economies with a population of less than 10 million and more than 35 in countries with population under 5 million.

Many competition law jurisdictions look for guidance in how to evaluate cases to those jurisdictions that produce the most detailed decisions and which are viewed, in some sense, as legal trendsetters, perhaps by default, for many other jurisdictions. These include, most notably, the United States and EU. The appropriateness of their types of case outcomes as models for small countries can be debated. But one point is clear: small countries cannot, with their level of resources, duplicate the EU and US approach to case investigation and levels of proof. The most detailed examination of the need for small economies to have substantive differences in methods and possible remedies is provided by Gal; the book focuses more on concrete standards and methods for evaluating cases rather than standards of proof<sup>2</sup>.

The particular economic challenges of small market economies can include high industry concentration, inability to achieve minimum efficient scale for many enterprises and, at times, high geographic dispersion of economic activity that may further divide a country into smaller constituent markets for some products<sup>3</sup>. The exact nature of the challenges differs from one economy to another.

The challenges of small competition jurisdictions could conflict with the general ambition of creating legal certainty for business, if small authorities and the judiciary act in many different ways towards similar business activities. Greater degrees of legal certainty enhance economic success and willingness by business and investors to undertake investment and take chances. International organisations such as the OECD, UNCTAD, the ICN have sought to create comparable rules for competition throughout the world. This type of convergence, largely around substantive approach to analysis, makes much sense. But achieving convergence around necessary conditions for proving a case would prove much more difficult. In the case of small economy competition authorities, it might mean that they can, in effect, bring no cases. This is because the level of resources devoted to a single case in large jurisdictions can exceed that available to an entire authority in small countries.

In this note I argue for the following points, supposing a competition law exists that is intended to stop the same nature of illegal activities, whatever the size of economy affected:

1. The likelihood of a competition under investigation being one that is against the law is higher in small countries than in large ones.
2. The depth of investigations is about establishing both the likelihood of a violation (mean expectation of an activity's legality) and increasing the level of precision of the likely claim (reducing the variance of the estimate of legality of the behaviour).

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1 David Gerber, *Global Competition: Law, Markets and Globalization* (Oxford: Oxford University Press, 2010), 289. Gerber suggests that claims for convergence of competition law need to be "disaggregated". Focusing on standards of proof separately from other elements is one way to do this.

2 Michal Gal, *Competition Policy for Small Market Economies* (Cambridge: Harvard University Press, 2003), 253. Gal's seminal work on this topic is very complete and cannot be summarised here. Just as examples, mergers may be needed to reach minimum economies of scale more frequently in small economies. Remedies may more appropriately be behavioural than structural. Conduct regulation may be more important due to limited capacities of small economies to self correct. Typical market shares for establishing dominance may be lower in small economies. Efficiencies may deserve higher weight in small economies. Gal also argues that total welfare standards may be more appropriate than consumer welfare standards in small economies.

3 Gal, *Competition Policy for Small Market Economies*.

3. In order to achieve the same expected outcome of a case (e.g., 90% certainty of illegal behaviour), the standard of proof (in terms of the depth of required evidence) should be lower in small economies than in large ones. Such competition authorities might, if they pursue Bayesian updating of likelihoods, also begin with an initial expectation of a violation that is higher than in larger countries.
4. Small country competition authorities cannot achieve an equivalently narrow variance around this estimated likelihood as in a large competition authority.
5. A choice must be made by small competition authorities over whether they wish to achieve the same substantive outcome (reducing illegal activity) or same level of substantive certainty over mean and variance, given the evidence available.
6. The most reasonable choice for a small competition authority, in order to achieve highest value for the level of government resources invested in the activity, is to focus on achieving the same substantive outcomes as in a larger authority. This requires a lowering of the standard of proof for variance and may also require less additional proof, given the evidence available, due to starting with a higher expectation of violation.

I am thus arguing that competition law convergence cannot occur simultaneously over multiple variables. Policymakers must make choices about which variables to focus on. I here suggest that the main variable should be increasing the level of competition in their economy. In practice, this may increase the likelihood of an error in outcomes in small economies.

In practice, one may distinguish between different types of activity for these points, with cartels tending to have different types of proof (often with higher certainty) than abuse or anti-competitive mergers. The arguments outlined here are primarily about merger and abuse policy.

In practice, cartel enforcement against smart business people engaging in cartel activity is particularly difficult in small countries because the ease of forming and maintaining cartels may be higher in such countries, due to local conditions, small business elites, easier and less formal exchanges of information and different attitudes to providing evidence to governments. Cartels will be set aside in the rest of the discussion.

## II. THE LIKELIHOOD OF A COMPETITION UNDER INVESTIGATION BEING ONE THAT IS AGAINST THE LAW IS HIGHER IN SMALL COUNTRIES THAN IN LARGE ONES

Small countries typically have experienced a more recent introduction of competition law than larger countries. This recency, combined with reduced resources relative to larger countries, means that businesses will be aware that the likelihood of being discovered and prosecuted for an illegal act is lower than in larger countries. Larger countries may include more people aware of the law (e.g., by having legal compliance departments) and more other businesspeople or consumers ready to bring illegal behaviour to the attention of the competition authority<sup>4</sup>.

These factors may combine to change the calculus for businesses over the extent to which they take competition law seriously. Not only is the level of awareness of the law possibly lower, but the likelihood of

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<sup>4</sup> Gal asserts that “prevalence of collusive conduct and abuse of dominance is generally much higher in small economies than large ones.” Gal, *Competition Policy for Small Market Economies*, 56.

prosecution being lower means that all companies, if acting as economic lawbreakers, will be more willing to break the law or go to unproven edges of the law.

This tendency may be counteracted by board interest in maintaining a reputation of the company as following the law; but in terms of marginal incentives, the incentives for a company to break the law are higher, given the same gains, because the likelihood of a penalty is lower. This illustrates how the fundamental conditions of small countries may affect the environment of law abidingness.

### **III. THE DEPTH OF INVESTIGATIONS IS ABOUT ESTABLISHING BOTH THE LIKELIHOOD OF A VIOLATION (MEAN EXPECTATION OF AN ACTIVITY'S LEGALITY) AND INCREASING THE LEVEL OF PRECISION OF THE LIKELY CLAIM (REDUCING THE VARIANCE OF THE ESTIMATE OF LEGALITY OF THE BEHAVIOUR)**

Competition law investigations are about gathering evidence and determining the strength of a case against a potential violator of the law. The strength of the case can be portrayed as having two main elements: the assessment of likelihood that the law was violated, based on the evidence, and the narrowness of the range of the likelihood. The first is related to estimating a mean. The second is related to the variance<sup>5</sup>.

A substantial part of the investigative effort in large authorities is about reducing the variance, in part by closing off alternative and innocent explanations of behaviour as well as by buttressing the evidence that supports the primary argument.

But the most important effort is devoted to forming the assessment of the likelihood of a legal violation. The standard or proof can vary from being more likely than not to beyond reasonable doubt, depending on the type of activity under investigation. Note that we are assuming the burden of proof lies generally with the competition authority.

### **IV. IN ORDER TO ACHIEVE THE SAME EXPECTED OUTCOME OF A CASE (E.G., 50% CERTAINTY OF ILLEGAL BEHAVIOUR), THE STANDARD OF PROOF FOR THE LIKELIHOOD COULD BE LOWER IN SMALL ECONOMIES THAN IN LARGE ONES, IF THE INITIAL EXPECTATION OF A VIOLATION IS HIGHER AT THE TIME OF OPENING AN INVESTIGATION**

One may imagine each type of violation (e.g., abuse) having an associated standard or proof. The "likelihood" of the violation may vary from one country to another.

I would like to suggest that, if the prima facie expectation in an economy is for a higher expected likelihood of a violation, with evidence being more limited, the appropriate response is for the competition

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5 A third element may be related to what is called the kurtosis, the variance of the variance, which may relate to the shape of the variance, and the relative weight of (i) finding an innocent company guilty vs (ii) finding a guilty company innocent. For the sake of simplicity, we here ignore kurtosis, simply noting that more could be said on this topic, as it inherently relates to the likelihood of what are commonly referred to as type I and type II errors.

authorities to have lower requirements of additional likelihood proved from the state starting an investigation, condition upon the evidence<sup>6</sup>.

Evidence will be less available in smaller economies because written and documented records of decisions and strategies will tend to be more informal. Emails that might need to be sent in a multinational in order to communicate information across the group will not be equally necessary in a small economy. Decisions may be reached by discussion, without backup documents, and orders conveyed orally, instead of in writing.

The likelihood of a violation can be considered a function of the strength of collected evidence and the initial likelihood of violation. For an extreme example of why this should be the case, if the initial likelihood of a violation were 80% and the evidence only established a 40% likelihood (and generally would never be much stronger than 50%) we would consider that the initial expectations are highly informative about the actual likelihood of a violation and that the evidence was not adding particularly much information content on likelihoods. At the same time, initial expectations would not constitute a sufficient basis for prosecution on its own though. We might seek evidence, and especially to ensure the 20% of non-violations were not improperly prosecuted, but the default expectation could be considered as relevant for the sake of policymaking and devising rules for evidence and prosecution. The relevance would follow from the objective of the competition law to achieve a more competitive environment, which might require a higher likelihood of successful prosecution than in other environments, which could counter-balance the lower frequency of prosecutions arising from resource constraints.

On the other hand, if the initial expectation of violations were 10% and the evidence established a 50% likelihood for a particular case, one would say the evidence is adding substantially to the initial expectation.

Even if the initial expectations (or overall expected frequency of violations) are not taken into account, the standard of proof related to means, if held at as high a standard as for larger countries, would result in many fewer prosecutions in small country authorities. Such an outcome, with few prosecutions, might actually be contrary to the parliamentary intent when passing competition laws.

None of this should be taken to suggest that I am advocating poor quality standards or low quality investigations. On the contrary, I would advocate improving quality and rigour of analysis at all sizes of competition authorities.

## V. SMALL COUNTRY COMPETITION AUTHORITIES CANNOT ACHIEVE AN EQUIVALENTLY NARROW VARIANCE AROUND THIS ESTIMATED LIKELIHOOD AS IN A LARGE COMPETITION AUTHORITY

One particular area to keep in mind is that even if the expected level of probability for entering into the mean estimate for the prosecution is the same for large authorities and smaller authorities, the variance of this estimate is likely to be smaller for the large authorities than the small ones. A large portion of the resources

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<sup>6</sup> For a paper suggesting the relationship between Bayesian reasoning and legal decisions, see, for example, Norman Fenton, David A Lagnado, Martin Neil, "A general structure for legal arguments using Bayesian networks", *Cognitive Science* 37, (2013), 61–102 and Martin Neil et al., "Modelling competing legal arguments using Bayesian model comparison and averaging", *Artificial Intelligence Law* 27, (2019), 403–430. <https://doi.org/10.1007/s10506-019-09250-3>.

devoted to a case by the large competition authorities goes to assessing small “pieces of the puzzle”, that are likely to have a modest effect on the estimated mean but to instead reduce the likelihood of error. This reduction of the variance<sup>7</sup> is an important characteristic of large country investigations.

The small competition authorities do not have the resources allocated to them for investigating with the same level of focus on small pieces of the puzzle. That is, in order for them to do their job, small authorities may need to focus on the evidence about the mean expectation more than the reduction of variance. The judiciary may also be more accustomed to dealing with evidence that is subject to substantial resource constraints.

Furthermore, companies may not find it in their own interest, in a small economy, to provide large amounts of evidence and to invest heavily in their defense, as the gains from winning a case are smaller than in a large jurisdiction. This means that companies may not be willing to pay expert counsel sufficiently to provide the counter-arguments to the same extent as larger jurisdictions, which are often one of the motivators for the narrower analysis performed by competition authorities in large jurisdictions.

Even if companies do wish to invest heavily in their defence, they are unlikely to find a well developed private competition bar. The individual attorney decision to specialise in competition law, which can result in much more refined counter-arguments for cases, can only be justified when there are minimum scale for such a specialisation to be worthwhile. In many small countries, very few corporate counsel would find it worthwhile to establish a primary focus in this way.

## **VI. A CHOICE MUST BE MADE BY SMALL COMPETITION AUTHORITIES OVER WHETHER THEY WISH TO ACHIEVE THE SAME SUBSTANTIVE OUTCOME (REDUCING ILLEGAL ACTIVITY) OR SAME LEVEL OF SUBSTANTIVE CERTAINTY OVER MEAN AND VARIANCE, GIVEN THE EVIDENCE AVAILABLE**

The variance around the standard of proof may then be wider in smaller jurisdictions than larger ones. This size of variance may increase the likelihood of successful prosecutions of innocent parties as well as increasing the likelihood of letting off guilty parties. The higher variance can be viewed as a normal consequence of the expectation of results with (dramatically) lower resources. The extent to which variances would suggest that innocent parties are prosecuted may change if the initial expectation that the frequency of legal violations is high.

The perceived effectiveness of the competition law is first driven by having careful and appropriate estimates of the means.

But the incentives to obey the law also require that error rates be as low as possible within the constraints of the system.

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<sup>7</sup> Note this can also include changing the kurtosis, e.g., to prevent finding of innocent firms guilty.



## **VII. THE MOST REASONABLE CHOICE FOR A SMALL COMPETITION AUTHORITY, IN ORDER TO ACHIEVE HIGHEST VALUE FOR THE LEVEL OF GOVERNMENT RESOURCES INVESTED IN THE ACTIVITY, IS TO FOCUS ON ACHIEVING THE SAME SUBSTANTIVE OUTCOMES AS IN A LARGER AUTHORITY. THIS REQUIRES A RELATIVE LOWERING OF THE STANDARD OF PROOF FOR VARIANCE IMPAIRED TO LARGER COUNTRIES AND MAY LEAD TO A LOWERING IN THE EXPECTED LEVEL OF MEAN IMPACT, GIVEN THE EVIDENCE AVAILABLE, IF THE DEFAULT EXPECTATION OF VIOLATIONS IS HIGHER**

Ultimately, the objective of small country competition authorities and judicial system will be to show their resources are being devoted effectively to their mission and that they are actually making a substantive contribution to their country's economy.

Being perceived to make a contribution to the economy requires a substantial level of activity and that this activity be perceived as an even-handed application of the law to business as well as that politicians and media feel that real progress is being made.

Success also requires that legitimate complaints, often filed by businesses, receive due attention and investigation.

This means that a large part of the challenge of competition authorities in small economies is to have a sufficient throughput of cases while ensuring that the throughput is addressed at the highest level of quality possible in all evidence development and decision documents.

## **VIII. CONCLUSION**

This note has focused on the standard of proof in small market economies. Whatever the size of the jurisdiction, competition authorities face an ongoing challenge with respect to ensuring their standards of proof are at the appropriate levels. In this note I have argued that certain aspects of standard of proof, particularly related to minimising the variance around the mean, may appropriately differ between small market economies and larger ones. Given resource differences, and different starting points of the economy, it may be that variance in small economies would be higher than in larger ones. If this were not the case, small economies might not be able to address legitimate complaints, might not have sufficient throughput of cases and might find themselves not achieving their core objective of changing the business environment in the countries in which they operate from one that was permissive if anti-competitive activity to one that follow the law. Creating an environment in which companies choose to follow the law, out of their own self-interest, is crucial for the ultimate success of the competition law enterprise. Keeping this in mind may lead to relatively different implementation strategies for number of investigations and depth of investigations in small economies compared to large economies.





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**Cómo citar este artículo:**

Sean F Ennis, "Standards of proof by competition authorities in small market economies", *Investigaciones CeCo* (marzo, 2021), <http://www.centrocompetencia.com/category/investigaciones>

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