OPTIMAL REGULATION AND THE LAW OF INTERNATIONAL TRADE

Are the limitations imposed on World Trade Organization (WTO) members' right to regulate efficient? This is a question that is only scarcely, if ever, analysed in existing literature. Boris Rigod aims to provide an answer to this fundamental concern. Using the tools of economic analysis and, in particular, the concept of economic efficiency as a benchmark, the author states that domestic regulatory measures should only be subject to scrutiny by WTO bodies when they cause negative international externalities through terms-of-trade manipulations. He then suggests that WTO law, when applied by the WTO judiciary, can prevent WTO members from attaining optimal levels of regulation. By applying a law and economics methodology, Rigod provides an innovative solution to the problem of how to reconcile member's regulatory autonomy and WTO rules as well as offering a novel analytical framework for assessing domestic regulations in the light of WTO law.

BORIS RIGOD practises international trade and competition law at Freshfields Bruckhaus Deringer. He was a Fulbright-Schuman Scholar at Stanford Law School and New York University School of Law and has published in leading journals on international trade law.

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OPTIMAL REGULATION AND THE LAW OF INTERNATIONAL TRADE

The Interface between the Right to Regulate and WTO Law

BORIS RIGOD

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FOREWORD

The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) is probably the most sophisticated tool in the legal arsenal of the multilateral regime to detect 'protectionist' behaviour. It is for this reason that it is the intellectually most demanding instrument as well: analysts and practitioners alike have found it hard to come to grips with its many intricacies. Boris Rigod made a serious contribution to this discussion through this book. By employing a law and economics analytical framework, he presents a coherent analytical framework to discuss key concepts like the 'appropriate level of protection' and 'risk assessment', e.g. the mechanics for establishing the level of protection and how they affect regulatory interventions in the realm of the SPS Agreement.

I have learned by reading this work more than I can express in the few lines of a Foreword. What I would like to contribute in what follows is a 'road map' that the reader could keep in his/her mind when reading this volume, a 'road map' that will help the reader better understand (hopefully) the contribution of Boris.

It is commonplace to state that societies/trading nations differ in their preferences, which are in turn defined endogenously, in principle at least, depending on the level of development but also on cultural factors of each and every society. The World Trade Organization (WTO) regime, as the author clearly explains, does not put into question the choice to intervene or not. It does not prejudge the intensity of intervention either. A trade contract like the WTO was not meant to prejudge similar issues. Because of the trade impact of interventions, there is a need to know whether they are 'genuinely' meant to promote, say, public health (in which case the shifting of trade costs will be tolerated), or not so (in which case the shifting of trade costs is judged inadmissible). How to distinguish wheat from chaff though, when the party detaining private information has a string incentive to behave opportunistically?

The manner in which the 'appropriate level of protection' is defined by each and every trading nation is the starting point of any analysis aiming to illuminate these questions, and the author does a marvellous job in explaining their basis, social cost, and all other relevant parameters that help both students of the issue (like myself), as well as institutional stakeholders to make informed decisions.

His contribution, however, is not limited to what I have described above. The author has managed to provide a methodologically sound approach that I am convinced will leave its mark on the shaping of our thinking on the issues discussed in this volume. He has managed to produce an eminently plausible claim. He has also managed to view in very innovative manner an issue that has been debated time and again by various scholars. It comes close to a definitive work on an issue, and the author must be applauded for achieving as much.

I have benefitted immensely reading this work, as I am sure readers of this volume will do as well.

Petros C. Mavroidis
Commugny, Switzerland

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This book is the result of three years of research at the European University Institute in Florence. During these years, I had the opportunity to learn, live and work with some of the brightest and most impressive people, many of whom have been a great source of inspiration. This book would not have been possible without the small and big influences they had on my personal and academic thinking as fellow students, teachers and friends. I am grateful for having met all of them.

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INTRODUCTION

Is the WTO law on domestic regulations efficient? This is a question that is only scarcely, if at all, analysed in the existing literature.[1] The present contribution aims at providing an answer to this question. Using the tools of economic analysis, the contribution reports the following two key results: first, domestic regulatory measures should only be subject to scrutiny by WTO bodies when they cause negative international externalities. This allows drawing a clear line between members' right to regulate their domestic affairs and the realm of WTO law. Second, it concludes that WTO law, as applied by the WTO judiciary, can, due to shortcomings in the interpretative approach, prevent WTO members from attaining optimal levels of regulation. The first result follows from establishing the purpose of trade agreements on the basis of the terms-of-trade approach to international trade agreements. The second result emerges from an analysis of the case law of the WTO adjudicative bodies, using a hypothetical optimal regulatory measure as the relevant comparator.

The research question is closely related to the question of how much policy space WTO members enjoy in regulating their domestic affairs. This is the case because, as explained in more detail in this book, efficiency depends on the goals pursued by a decision maker, and a treaty that would prevent governments from attaining the objectives they care about could therefore hardly be efficient. The question thus arises whether WTO members' efforts to protect values, such as environmental or consumer protection, are systematically compromised by WTO law, or whether the prescriptions of WTO law are in line with sound economics.

This matters because conflicts between domestic regulatory preferences and the law of the WTO are numerous and a constant bone of

[1] For a notable exceptions, see: Grossman, Horn and Mavroidis, 'National Treatment' and Horn, 'National Treatment in the GATT'.

contention. Negative rulings by WTO adjudicative bodies condemning regulatory restrictions on trade in products such as hormone-treated beef or clove cigarettes, adopted with a view to protect human health, are just the tip of the proverbial iceberg. The list of non-economic values, potentially colliding with the trade interest of other WTO members, encompasses a plethora of subjects, such as human rights, animal welfare and cultural diversity, to mention just a few.

Governmental regulations may or may not aim at attaining such legitimate goals. In any event, such measures can potentially negatively affect international trade flows. For this reason, the law of international trade sets forth a variety of disciplines that constrain governments' abilities to lawfully enact regulatory measures. However, their purpose is certainly not to prevent governments from regulating, but to strike the right balance between the interest of foreign exporters and domestic constituencies.

Nevertheless, this circumscription of sovereign powers can bring about conflicts and discontents. Decisions by international organizations, striking down domestic regulations, are often perceived as undue interferences into domestic affairs. This tension of how to reconcile decision-making powers between the national and the international level is at the centre of many debates in the field of international trade law, mostly coined 'trade and …' issues, such as trade and the environment, trade and human rights, etc. The common thread, underlying all these debates, is the question of how to strike the right balance between the preservation of market access commitments and member states' right to regulate.

There is, in principle, broad agreement that WTO law should not encroach on member states' right to enact bona fide regulatory measures. In practice, however, the problem of how to distinguish legitimate regulatory measures from protectionist measures is very difficult to solve. This is the case because looking only at a measure's effects might be inconclusive and the additional information required is often private, i.e. only the member state in question knows whether the measure in question was adopted for 'protectionist' purposes or not. Therefore, adjudicators have to rely on proxies, such as national treatment and other legal tests, in order to evaluate a regulation's consistency with WTO law. On top of this, the problem becomes even more intricate, as the judicial review of national regulatory measures is decisive in deciding who has the last word when it comes to regulatory decision making: governments and regulators (the national level), or WTO adjudicators (the international level)?

Against this backdrop, the question this contribution aims to answer is whether the law of the WTO systematically obstructs governments in optimally pursuing their regulatory objectives, or whether, on the contrary, it leads to an improvement in member states' regulation. In order to provide an answer to the main research question, it is necessary to ask a number of sub-questions:

- Q1: When are levels of regulation optimal? Or, in WTO lingo, how do governments set their appropriate level of protection (ALOP)?
- Q2: Why, and under which conditions, are levels of regulation distorted, i.e. suboptimal?
- Q3: Why, and under which conditions, should member states' determination of the appropriate level of regulation be subject to the disciplines set forth in international trade agreements?
- Q4: Against this background, does WTO law allow governments to pursue optimal regulatory policies? In other words, is it efficient?

By implication, the answers to these questions provide some clarification on closely related topics such as the relationship between WTO disciplines and domestic regulations that respond to (ungrounded) public anxieties.

The present contribution's methodological approach is grounded on economic theory and, in particular, the terms-of-trade approach to trade agreements. While standard microeconomic theory is applied so as to assess what optimal regulation actually is, and when governments digress from optimal solutions, the terms-of-trade approach is used to explain what role there is for international trade laws in such cases. On this basis, an analytical framework will be developed which is applicable to all types of conflicts between WTO members' right to regulate and the applicable WTO disciplines.

This framework is then used to analyse the relevant WTO case law. To be more precise, it is used to scrutinize what are the implicit costs of the respective rules and norms applied by the WTO adjudicating bodies, and what are their repercussions for regulatory decision making and economic efficiency. It will be shown that the control of domestic regulations is efficient, if it, at least, outlaws domestic regulations that cause international negative externalities but leaves other measures intact.

On the basis of microeconomic theory, the present contribution explains the concept of optimal levels of regulation, and tries to determine the conditions under which governments are likely to adopt

optimal measures. Moreover, it expounds how governments choose individual optimal levels of regulation for their societies.

Next, the contribution shows that there are three reasons for up- or downward distorted levels of regulation relative to the optimum. First, national welfare maximizing governments that preside over countries with market power can have an incentive to choose higher or lower levels of regulation than they would, were they to take into account the full costs of their regulatory decisions. Thereby, they distort trade but increase their countries' welfare at the expense of their trading partners. Second, egoistic governments in which welfare function the well-being of a domestic industry weighs heavier than social welfare may enact instruments leading to skewed levels of regulation to shield that industry from international competition. Finally, governments that suffer or respond to heuristic biases in decision-making processes may choose inefficiently high or low levels of regulation.

Subsequently, it is shown that all deviations from optimal levels of regulation can be interpreted within the terms-of-trade approach to trade agreements. Notably, this implies that even regulations pursuing legitimate ends might run afoul of WTO disciplines. This can be the case: if (i) they shift compliance costs onto foreigners beyond what is necessary to attain a given level of regulation; and (ii) that level of regulation was only chosen because the costs inflicted on foreigners were discounted.

After responding to the theoretical questions, a 'real-world' comparison is undertaken. The congruence of the theoretical framework with the empirical facts is tested. To that end, the relevant WTO case law is analysed with a view to understand whether it can prevent governments from optimally pursuing legitimate ends. The main finding is that, although in principle, theory and evidence are congruent, specific developments in the jurisprudence may lead to inefficiencies. The WTO judiciary fails to provide, in certain instances, for tests that would serve the purpose of the WTO Agreement on a systemic basis rather than 'getting it right accidentally'. The result is that under certain circumstances governments can indeed be prevented from achieving optimal levels of regulation under the current regime.

Thus, the two main conclusions of the present contribution are that (i) domestic regulatory measures should be condemned by WTO bodies when they cause negative international externalities; and that (ii) the WTO law on domestic regulatory measures as applied by the WTO judiciary can, due to shortcomings in the interpretative approach, prevent WTO members from attaining optimal levels of regulation.

Why do these questions matter? First, they are relevant as a matter of policy. Delineating the dividing line between WTO consistent and inconsistent domestic regulations defines the allocation of competences between the international and the national level. This is so because granting WTO judges the authority to strike down member states' regulations shifts decision-making powers from the national to the international level. Questions of legitimacy, participation and eventually public support for the work of the WTO are at stake here. However, as will be shown in more detail, in principle, a clear dividing line can be drawn between, on the one hand, regulations that should be subject to review by WTO adjudicative bodies and, on the other hand, those that should not fall under the scrutiny of WTO law.

Second, these questions are of importance as a matter of legal practice. In order to separate the 'wheat' from the 'chaff', i.e. to distinguish 'protectionist' from 'non-protectionist' measures, we need a benchmark against which member states' regulations can be assessed. This contribution provides precisely such distinguishing criteria, the application of which is showcased on the basis of the relevant WTO case law.

In conclusion, the contribution of the book lies in providing an analytical framework for the assessment of domestic regulatory measures in light of WTO law. This analytical framework allows a precise dividing line to be drawn between the right of WTO members to regulate and the WTO's judiciary's competence to strike down domestic regulations. The theoretical backing for the proposed framework stems from economic theory and, on that basis, we consider how WTO member states' sovereign right to regulate their domestic affairs can be efficiently balanced with the trade interest of other members. In addition, the book explains the decision-making process leading to the determination of levels of regulation and links these insights to the law of international trade. From there, it draws conclusions on why and when international trade law should remedy 'regulatory failures'. Finally, it tests the theoretical results against the case law of the WTO adjudicative bodies and highlights potential areas of concern. It does so by analysing the disciplines under the three relevant WTO agreements: the GATT 1994 (General Agreement on Tariffs and Trade), the TBT (Agreement on Technical Barriers to Trade) and the SPS (Agreement on the Application of Sanitary and Phytosanitary Measures). By implication, it provides an answer to the question of how regulations based on ungrounded public anxieties (e.g. scientifically unproven food risks) should be treated under WTO law.

Law and economics in a nutshell

The purpose of this brief excurse is twofold. First, it shall provide the reader with some minimal background on the economic analysis of law and in particular explain the concepts of 'efficiency', 'utility', 'risk aversion', 'maximization' and 'equilibrium'.[2] Second, two objections to the economic analysis of law shall be discussed, namely the use of 'efficiency' as a benchmark and the rational agent assumption.

The economic analysis of law is the application of the theories and methods of economics to the institutions of the legal system. Its main purpose is to answer two interrelated questions: a positive and a normative one. First, what are the effects of legal rules on behaviour? Second, are these effects socially desirable?

Lawmakers, and the same applies to the parties of an international treaty like the WTO Agreement, are concerned with the question of how the law will affect future actions. For instance, does the threat of retaliatory measures induce compliance with WTO rulings? Will a ceiling on tariffs preserve negotiated market access commitments? Or, will the obligation not to discriminate between foreign and domestic products prevent WTO members from enacting measures protecting the environment? Such questions fall under the first category.

Economic theory provides a scientific theory to predict the effects of legal rules on behaviour. For instance, a ruling by the Dispute Settlement Body (DSB), confirming the violation of WTO law as the basis of potential countermeasures, can be interpreted as a 'price', and presumably states respond to such ruling in the same way as people respond to prices. In other words, legal rules affect agents' incentives. If prices increase, people tend to consume less of the more expensive good. In the same vein, governments tend to respond to more severe legal consequences by doing less of the condemned activity.

Economics has precise theories and empirical methods for analysing the effects such implicit prices have on behaviour and therefore provides predictions of how people respond to laws. For instance, assume that one were to find out that an interpretation of the SCM Agreement (Subsidies and Countervailing Measures Agreement), prohibiting subsidies for domestic production leads to less subsidies. This is a neutral prediction and, as such, it is not clear whether this result is good or bad. It would only answer the positive question. However, if, in addition, it were shown that the costs of

[2] For comprehensive treatises see Posner, *The Economic Analysis of Law* and Cooter and Ulen, *Law & Economics*.

the subsidy exceed the gains from domestic production, this finding would suggest that such subsidies are inefficient. This would indicate that the legal rule is 'good' because it outlaws 'bad' subsidies, both of which are value judgements. As this example shows, economics can provide a method to evaluate the efficiency effects of laws on social values. Thus in a second step the economic analysis aims at determining the costs and benefits resulting from legal rules in order to determine whether they are 'efficient' and thus socially desirable.

Efficiency is always relevant to policymaking because no one seriously advocates wasting public money or any other good that has a value. 'Efficiency' is therefore the benchmark used throughout the book when legal rules are evaluated. The concept is commonly understood as the most cost-effective way to attain a given end or as making the most of the resources available. Alternatively, it is used in a weaker form and defined as a situation in which those who benefit from the current state could potentially compensate all those who incur losses and still be better off (Kaldor-Hicks efficiency).[3] Accordingly, a policy change is efficient if those who gain could potentially pay those who lose to not oppose the introduction of a new measure (Kaldor-Hicks improvement).

Whether such compensation will be paid is a matter of politics and is immaterial for the conceptual assessment of a measure's efficiency. This is not to imply that compensation does not matter for the assessment of real-world policies. In fact, it does a lot because it seems odd to ascertain that the state of the world could be improved just because potential compensation could be paid whereas, in reality, some segments of society suffer. Yet, as an analytical tool Kaldor-Hicks efficiency remains useful to identify those measures which are potentially welfare enhancing. For real-world applications, it still appears to be preferable to use the concept cautiously, and only if compensation can indeed be paid and does not involve significant deadweight losses that outweigh the initial improvement.

It is important to recall that 'efficiency' describes a means–ends relationship. A measure's efficiency can only be assessed relative to the objective the measure aims to attain. Efficiency is thus dependent on an agent's preferences and pursued objectives. One and the same measure can be efficient and inefficient at the same time, depending on the goal

[3] This guideline is actually attributable to Nicholas Kaldor ('Welfare Propositions of Economics and Interpersonal Comparison of Utility') alone as Hicks endorsed Kaldor's suggestion but also proposed an alternative test. Hicks suggested that a measure would be efficient if those who would lose could not pay those would gain to oppose the policy change. See Hicks, 'The Valuation of Social Income'.

pursued. If my aim is to reach a certain destination as quickly as possible, it is efficient to take a plane. If, instead, my aim is to see as much as possible of the landscape during the journey, taking a plane is probably not the most efficient solution. Thus, whether a measure is efficient depends on what agents, people or governments want.

In order to prevent potential misunderstandings, we would like to explain the application of economic analysis to such sensitive matters as regulatory preferences. While it seems natural to apply concepts such as 'efficiency' to understand issues as stock trading or any other accumulation of material wealth; it, perhaps, seems counterintuitive to do so with respect to the examination of non-economic objectives, such as human health and safety or the protection of the environment. However, it needs to be stressed that economic analysis is first and foremost a method to analyse decision making and to understand agents' behaviour in the presence of scarce resources,[4] regardless of the objectives they pursue. For instance, if a society decides that it wishes to improve human health, it will find itself better off, judged from its own perspective, if it does so in the most cost-effective way, using the least resources possible to attain the envisaged standard or establishing the highest standard possible, given its resources. Society as a whole will be better off because if it follows these guidelines it will be able to provide health care to more people, invest more money in research and development, have more hospitals in place and so forth. Thus, efficiency does not necessarily imply that pecuniary interests take precedence over other societal values. It simply refers to the most utile use of scarce resources. It is in this sense that the concept of efficiency is used throughout the book.

After having reviewed the notion of efficiency, what are the other basic concepts of the economic analysis of law relevant for the analysis at hand? First, economic theory assumes that agents, people or governments, aim to maximize their preferences or their 'utility', be it money, votes, an increased level of public health or whatever else people value. The advantage of measuring preferences in utilities instead of (monetary) values or other units is that the final ranking of options is made from the decision maker's perspective. While the concept of monetary value asserts some kind of objectivity and comparability between subjects, the notion of utility depends solely on the evaluation of the decision

[4] Nobel laureate Paul Samuelson defined economics as the 'study of how societies use scarce resources to produce valuable commodities and distribute them among different people'. See Samuelson, *Economics*.

maker. In other words, her utility depends on the intrinsic value the good has for her.

In most contexts, agents are considered to be risk averse. Risk aversion follows from the assumption of diminishing marginal utility, which implies that a certainty equivalent will always yield a higher utility than a fair prospect, comprised of higher and smaller values. If agents are offered the choice between a fair gamble, say 100*0.5 + 0*0.5, and its certainty equivalent (i.e. 50), they are assumed to always turn down the bet and accept the certain prospect.[5] The general intuition is the following: a Euro that prevents us from being poor is much more valuable than a Euro that makes us rich. Of course, under specific circumstances agents could also be risk loving. That is to say, they would accept a gamble with a lower expected utility than the certainty equivalent. They could also be risk neutral, that is to say that they are indifferent whether a gamble offers the same expected utility as its certainty equivalent. However, in the area of governmental risk regulation, risk loving behaviour and risk neutrality seem to be of less relevance.

Another important aspect in determining individual utilities is the initial endowment level, which is decisive for how much one values the next unit of a good because the increase in utility is assumed to be inversely related to a person's wealth level.[6] If one goes from € 0 to € 1, this is much more valuable than going from € 1 to € 2, which in turn is more valuable in terms of marginal utility than going from € 10 to € 11, and so forth. Thus, the utility from any extra unit is steadily increasing but with diminishing rates. This does not only hold for money but for almost any good, be it food, clean air or safety. For example, it will often be essential to prevent foodstuffs from carrying life threatening diseases (highest utility) and diseases with a major health impact (marginally lower utility) but it might be less so to rule out mere inconveniences.

While, on the one hand, the assumption of diminishing marginal utility leads to the diminishing valuation of gains, on the other, it causes increasing disutility for losses. This follows intuitively from the examples above: if it is more valuable to go from € 0 to € 1 than from a higher level of wealth, it is conversely more pernicious to go down from € 1 to € 0 than from € 2 to € 1, and so forth. Hence, to lose everything has a much heavier impact than to lose the same amount but on a higher level of endowment. It follows that an agent is assumed to be risk averse, if one assumes that

[5] Arrow, 'The Theory of Risk Aversion'.

[6] This idea dates back to Daniel Bernoulli when he proposed a solution for the so-called St. Petersburg paradox. A translation of the original text can be found at: Bernoulli, 'Exposition of a New Theory of Measuring Risk'.

her marginal utility for a certain good is increasing by a diminishing rate, an assumption that seems to coincide with many real-world observations.

The capacity to maximize utility implies that agents can act rationally, that is to say that they can rank alternatives according to what they give them in relation to what they want: if an agent is assumed to maximize the utility derived from apples, the rationality assumption suggests that she would be able to indeed pick apples over pears. In addition, in the real world, alternatives are usually constrained. For example, a consumer is constrained by its spendable income (budget constraint). The same applies to governments and all other actors. Therefore, rational agents are assumed to choose the best alternative that the constraint allows, which is also the optimum.

Like the use of 'efficiency', legal scholars often criticize the rational agent assumption for being unrealistic. Indeed, people do not always maximize their preferences and often act irrationally. According to some commentators, this fact undermines the whole endeavour of the law and economics approach. However, this criticism misses the point. The value of a theory does not depend on its assumptions – those might be outrageous – but on the validity of its predictions, i.e. whether a theory's predictions are in accordance with empirical observations.[7] It is immaterial whether real people maximize utility as long as they act in the manner 'as if' they did. Hence, while it is most likely true that the rationality assumption does not reflect the behaviour of real people, this does not prevent economic theory to make useful predictions about actual behaviour, which is relevant for policy purposes. Moreover, the use of economic methods and tools remains useful even when certain assumptions, such as the rational agent assumption, are relaxed, as will be discussed later in the text.

Another key concept is equilibrium, which denotes the tendency of preference maximizers to push towards a stable point. At this point, economic forces are balanced. To illustrate, under perfect competition at the equilibrium, the amount of goods produced (supply) corresponds to the amount of goods asked for by consumers (demand). The incentive set by the price mechanism leads producers to supply the profitable amount of goods, given consumer demand.

Other concepts and tools will be explained throughout the book in the relevant context, either in the text or accompanying footnotes. As a rule, mathematical annotations are reduced to a minimum and are mostly moved to footnotes. In no instance, are they necessary for the understanding of the text and every argument is explained in plain words.

[7] Friedman, 'The Methodology of Positive Economics'.

Finally, graphs and figures are only used where they facilitate the comprehensibility of the arguments and ideas presented.

The foregoing has, hopefully, explained why the use of economic analysis is appropriate and pertinent for the research questions under considerations. Hence, to determine whether the WTO rules on domestic regulation are efficient, to ascertain what optimal levels of regulation actually are, and to respond to the question of which regulatory measures should be condemned by WTO law is impossible without analysing incentives and costs and benefits. Moreover, the WTO Agreement is eventually a treaty about the regulation of economic activities, which makes it particularly prone to be analysed from an economic perspective. Finally, note that many of the assumptions will be relaxed in the course of the text in order to bring theory closer to reality.