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INSTITUTIONAL ASPECTS OF INTERNATIONAL COMPETITION POLICY

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Abstract

A global economy cannot be driven in a consistent way by national competition laws. Both the liberalization of markets and the revolution in information and communication have triggered an unprecedented degree of interrelations of national economies. This leads to the internationalization of restrictive business practices. Despite of the WTO efforts and some agreements inside it related with antitrust, global markets have no competition rules. There are a number of economic arguments addressed to take real steps in order to establish a global framework for competition policy. Currently, the international system of competition policy seems gradually ill-suited for dealing with transnational restrictive business practices. The issue is now which organizational form and what degree of decentralization would be optimal for a multilevel system of international competition policy. Depending on the goals of the project, different degrees of decentralization would be more or less desirable.

Keywords: competition, competition policy, globalization, regulation, international restrictive practices, multilevel system

JEL classification: K21, L40, F02, F53

1. INTRODUCTION

A global economy cannot be comprehensively disciplined from national competition policy regimes. The present work is devoted to clarify the key issues surrounding the internationalization of competition policy, which has been so far restricted to the national borders of states or supranational blocs, such as the EU.

The progressive liberalization that the world economy is experiencing in recent decades has prompted that the interrelationship between national economies to be now deeper than ever. In this sense, the internationalization of economic activity inevitably leads to the internationalization of restrictive business practices, bringing competition policy at the international level. This process has been driven by the information and communication

technology revolution, which has dramatically reduced costs and facilitated the exchange of information.

After this introduction, we try to highlight the need of a global competition framework in the second section. We analyze in some detail the current system that disciplines competition in international markets. Once defined the current model, we are able to reflect on the economic arguments for and against undertake decisive measures on competition policy at international level.

From the third section on, we assume that something must be done to address international restrictive practices. We will analyze the organizational aspects of an international competition policy regime. Thus, we take as a reference point the multilevel systems, such as the EU and we will see how it could be adapted to the stage of international competition policy. Therefore, we shall see the horizontal and vertical allocation of responsibilities is what will determine the proper functioning of the system, rather than its organizational design. The section ends with a discussion on the desirability of more or less decentralization in the multilevel system. After that, we summarize the main conclusions of our study.

2. THE CURRENT INTERNATIONAL COMPETITION POLICY MODEL

In this section, we will study how to address the current problems of transnational competition. An analysis of the *status quo* will allow us to understand the inconsistencies that cover the current international competition policy system. We review both the prevailing strategy for solving global competition issues and the standards or agreements related with competition within the World Trade Organization (hereinafter, WTO).

Present-day, competition cases with international dimension are addressed through unilateralism and cooperation between competition authorities of the nations affected, causing some problems. The inconsistency is obvious. As Palma (2008, p. 288) notes, global problems must be tackled with measures or institutions of the same level. This means to renounce, at least in part, to national sovereignty over the current model is built.

Public international law is the corner stone of this model. Without it, no country would be entitled to prescribe or enforce national competition rules to foreign companies. Therefore, we have a plethora of national competition authorities, some of them supranational, which should ensure the maintenance of effective competition within their respective borders; backed as well by public international law in order to address the problems of transnational competition affecting them.

In this scenario, emerges the "effects doctrine" that "states that national authorities are entitled to prosecute any restrictive business practice which affect competition in their jurisdiction, irrespective of their regional origin" (Klodt, 2001, p.878). This principle is rooted in the famous $Alcoa^{1}$ case (1945). In that dispute, the U.S. Supreme Court banned an international cartel by the Sherman Act, which until then, had only been applied at the national level. The cartel was made by non-American companies in Switzerland, which had allocated the aluminum import quotas in the US. Needless to say, the effects doctrine threatens to undermine national sovereignty.

It is not difficult to realize that the effects doctrine, rather than solving problems, stands as a major source of conflict, as the merger between *Boeing* and *McDonnell Douglas* demonstrated in 1997².

This violation of the territoriality principle is justified by the growing interdependence among countries and the degree of development of international trade. Without the application of the effects doctrine, and with the current lack of binding multilateral competition agreements, transnational companies could escape the national competition laws. Thus, under a strict application of the principle of territoriality, there is a risk that some jurisdictions become competition policy "havens".

Despite this, it is necessary to emphasize that these problems do not confer an absolute right to protect States from foreign conduct that they perceived as economically damaging. Such legitimacy only occurs under certain circumstances, and always under public international law. In this sense, a country cannot enforce their competition rules extraterritorially "without the presence of a direct, substantial and foreseeable anticompetitive effect" (Dabbah, 2010, p. 424).

In order to prevent such conflicts arise, the strategy that has been followed in recent years is the convergence and harmonization of national competition rules, in addition to cooperation among the different authorities.

Generally, convergence is understood by the growing similarity observed between the different systems of competition, a lax definition for our interests. More specifically, convergence refers to the movement from a state of difference to one of similarity; in this case, it is related to the characteristics of the various national competition rules. In turn, each feature acquires a relative importance in the operations concerning the system (Gerber, 2010, p. 282).

It is clear that the more similar the competition laws of the States, the less likely it is that discrepancies arise. However, here, the problem of goals disparity reappears between countries when they design their competition policy system.

The International Competition Network (hereinafter, ICN) is the key institution of this strategy. The ICN provides competition authorities a specialized and informal space that allows them to maintenance regular contacts as well as addressing practical problems of competition. This leads to a dynamic dialogue that serves to build consensus and convergence towards the principles of competition policy throughout the global community of antitrust.

Note that the ICN is a virtual office comprised of specialists in the field of antitrust, so it enjoys great flexibility and dynamism, acting independently with respect to other international organizations. Interestingly, due to its composition, the ICN is an attempt to separate the issues of competition policy from those of trade policy (Clarke and Evenett, 2003, p.101).

The overall objective of the ICN is to develop recommendations for best practices in antitrust. These recommendations are adopted by consensus at the Annual Conference. Moreover, ICN aims to improve governance by promoting multilateral cooperation between competition agencies and creating a common competition culture promoting convergence between the policies of national and regional competition³.

The problem is that the recommendations emanating from the ICN are not binding, allowing each country to decide independently whether they comply with each of the proposals. However, countries will be required to informally implement them through pressure from other members. Otherwise, those competition authorities that do not follow the common consensus guidelines will be hardly credible on further negotiations.

Some authors⁴ argue that, although the strategy outlined solves some of the problems posed by transnational competition, it becomes insufficient to address, in a structural way,

international competition policy. Empirical evidence supports this idea. Cases such as *Boeing* or *General Electric* led to transatlantic trade crisis.

This is unsurprising if we consider that the current model governing international competition, which is based in the extraterritorial application of sovereignty under the effects principle; cooperation between authorities; and the harmonization and convergence of national competition laws, has been built in an improvised way and putting patches.

Despite not to have an international competition policy, global markets have some competition regulations thanks to the WTO⁵. While it is not a comprehensive agreement, we can find rules that rub, more or less clearly, the field of competition policy in some documents of the WTO. Below, we will review the most relevant aspects of these agreements, including the basic principles underlying them.

2.1. Interaction between WTO rules and competition policy

The **Agreement on Government Procurement** (hereinafter, AGP) is, to date, the only legally binding WTO agreement that specifically addresses public procurement. It is a multilateral treaty administered by a Committee on Government Procurement and it is made by WTO Members. The Agreement was negotiated during the Uruguay Round (1986- 1994) and entered into force in 1996, later to be renegotiated and adapted in March 2012⁶.

The preamble to the AGP recognizes the need for an effective multilateral agreement on government procurement. In this field, it is considered essential to have transparent measures, conducting procurement impartially and avoid conflicts of interest and corruption.

Article V.1 of the last amendment to the agreement prohibits that the contracting entities to adopt or apply technical specifications, as well as to undertake assessment procedures with a view to or with the effect of creating unnecessary obstacles to international trade. In the same direction, paragraph 4 of the same Article provides that the entities "shall not seek or accept, in a manner which would have the effect of precluding competition, advice which may be used in the preparation of specifications for a specific procurement from a firm that may have a commercial interest in the procurement".

Likewise, the importance of ensuring that all procurement is carried out in accordance with the principles of non-discrimination and transparency is emphasized in Appendix E of the AGP. The aim is to assure that such procurement secure the best value, while the optimal degree of international competition is reached. In this way, we avoid that national actors benefit from the tender.

While AGP is oriented to the behaviour of governments, like most provisions of the WTO, the following arrangements regulate, somehow, the behaviour of private economic agents. In particular, the **Agreement on Safeguards** (hereinafter, AS) concerns "emergency" measures in response to increased imports of certain products, when such imports cause or threaten to cause serious injury to the corresponding domestic industry of the importing member⁸.

Article 11.1.b of AS reflects the consensus among Members to avoid adopting or maintaining any voluntary export restraints, orderly marketing arrangements or any other similar measures on imports or exports. Among these "similar measures", we can find the following: "export moderation, export-price or import-price monitoring systems, export or import surveillance, compulsory import cartels and discretionary export or import licensing schemes, any of which afford protection". Clearly, these provisions row in the same direction as the competition rules.

More directly related to anticompetitive private conduct, the **Agreement on Trade-Related Aspects of Intellectual Property Rights** (hereinafter, TRIPS) refers to the abuse of intellectual property rights, without specifying the types of abusive behaviour. The TRIPS is an attempt to reduce the differences in regulating intellectual property rights on a global scale, subjecting them to common international standards.

Among the basic principles underlying the TRIPS, non-discrimination (equal treatment for domestic and foreign agents) reappears, as well as the treatment of the most favoured nation and transparency. The objective of TRIPS is "the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations" Again we see how the WTO agreements are related to the objectives of competition policy; both fully coincide in this case.

Besides prohibiting the abuses in this area, as well as the resort to practices which unreasonably restrain trade or restrict the international transfer of technology¹¹, TRIPS contains a complete section¹² on "Control of anti-competitive practices in contractual licenses". Here again, the cases in which such licenses should be pursued are described.

The **Reference Paper on Telecommunications Services** gives explicitly details of anticompetitive behavior. This agreement, signed in 1997, establishes the regulatory framework for the basic telecommunications services and it reflects the consensus among Members to take measures to prevent anti-competitive practices of large corporations that have traditionally provided services in this field. Such anti-competitive practices include:

- 1. engaging in anticompetitive cross-subsidization;
- 2. using information obtained from competitors with anti-competitive results; and
- 3. not making available to other services suppliers on a timely basis technical information about essential facilities and commercially relevant information which are necessary for them to provide services¹³.

Furthermore, we can find some agreements oriented to state intervention as a power, understood in a broad sense. Members have agreed to control behaviors that can affect international competition. This control can be both government and judiciary, allowing private agents to enforce the agreements before national courts. This shows the determination of members for creating a competitive environment (Otero García-Castrillón, 2001, p.17).

In the first case, concerning the government control, subsidies play a leading role. These are regulated by the **Agreement on Subsidies and Countervailing Measures** (hereinafter, ASCM). In this document, subsidies is meant as any financial contribution by a government or public body within the territory of a Member, or where there is any form of income or price support, conferring a benefit.

While recognizing its anticompetitive effects, the ASCM only prohibits subsidies contingent on export of products and those that discriminate foreign and products. The Member suffering the injury by subsidies (importing country) can negotiate with the exporting country and, in the lack of any agreement, impose compensatory measures to offset the adverse effects of the subsidy on domestic production.

On the other hand, the **Agreement on Technical Barriers to Trade** (TBT) submits actions taken by non-governmental institutions to the control of member, as well as conditioning the regulations of the States, trying to avoid unnecessarily restrict international

trade. Countries must determine if such institutions are developed following the precepts of the agreement when acting in their territory. The basic principles of non-discrimination, most favored nation and transparency are also present in this agreement. It is a question of limiting unnecessary barriers to trade, which contributes to the objectives of competition policy.

Regarding state monopolies or firms enjoying special privileges, the **General Agreement on Trade in Services** (GATS) reflects the agreement of members to prevent such companies, by providing exclusive or monopolized services, adversely affect the clause most favored nation. The terms of transparency and non-discrimination are also guaranteed in this field.

Similarly, members must ensure that such companies do not abuse of their dominant position when competing with other operators for the provision of non-monopolization services in the domestic market. It is interesting to stop in Article IX of the GATS, which deals with commercial practices. This Article specifies that certain business practices, other than the abusive behavior recently commented, may restrain competition and thereby restrict trade in services. In such a case, the member may provide consultations to reach consensus decisions that eliminate anticompetitive practices in services provision.

On the elimination, or at least reduction, of monopoly rights, we find the **Understanding on Commitments in Financial Services** (hereinafter, UCFS). This document, framed in GATS just commented, promotes the elimination or reduction of the adverse effects arising from discriminatory measures that prevent foreign suppliers offer in a territory all financial services permitted; and, in general, "other measures that, although respecting the provisions of the Agreement, affect adversely the ability of financial service suppliers of any other Member to operate, compete or enter the Member's market"¹⁴.

We thought it appropriate to leave until last GATT Agreement on Implementation of Article VI of the General Agreement On Tariffs and Trade 1994, or Antidumping Agreement (hereinafter, AA) due to the linkage of this business practice with competition policy. Goods are dumped when they are exported at a price less than its normal value; i.e., when the export price of the asset is less than the comparable price for the like product when destined for consumption in the exporting country, in the ordinary course of trade. Dumping is commonly associated with large companies intend to eliminate competition in order to establish itself as monopolies in foreign markets. It is therefore a strategy of price discrimination internationally.

However, antidumping measures are not based on sound economic foundations. This is mainly due to the decision of a company to sell the same good at different prices in different markets may be due to a number of factors that need not be related to the elimination of competition. Thus, anti-dumping measures are perceived as an instrument of neo-protectionism (Crespo, 1997, p.55).

In fact, despite being a practice of private agents and potentially constituting anti-competitive behavior, treatment of dumping in the GATT-WTO framework goes beyond the problem of international anti-competitive practice to focus on state interests. The AA does not prohibit the practice itself, but leaves open the payment of the penalty where that practice is revealed prejudicial to the interests of the importing country.

This protectionist tool nature gives antidumping dissociation with the overall objectives of competition and efficiency proclaimed by trade agreements. Therefore, the basic rule is that this practice may be sanctioned by the States in the light of other different interests than those arising from the competitive process.

3. ECONOMIC ARGUMENTS FOR AND AGAINST THE INTERNATIONALIZATION OF COMPETITION POLICY

3.1. Economic arguments in favor of international competition rules

The phenomenon of globalization is a challenge for competition authorities around the world. The dynamism that pervades international markets forces these authorities to continuous learning for addressing new business strategies to evade competition. Moreover, the internationalization of markets automatically raises competition policy to a supranational level, which is a challenge for the current competition policy mechanisms, configured to act on the national stage. We must add to this the different substantive issues, visions and objectives that national competition authorities (hereinafter NCAs) maintain, spreading uncertainty to the entire international system.

This inconsistency (international markets regulated by national competition norms and institutions) is clear. Each jurisdiction pursue that domestic competition is preserved in domestic market. Ignoring possible collateral damages abroad, this situation can lead to situations of both **over-regulation** and **insufficient regulation**, which can hardly be avoided by the existing cooperation mechanisms. First, the problems of over-regulation come from parallel investigations that NCAs can initiate to competition matters with an international dimension. This problem gets worse when we consider the extraterritorial application of national competition rules. Here, two difficulties emerge. On the one hand, it is easy to see the duplication of costs due to the multiple investigations on the same case. On the other, international markets are facing a set of competition rules more strict than that prevailing in domestic markets because of the extraterritorial reach of competition policy in some countries through the effect doctrine (Guzman, 2004, p.3).

Secondly, the insufficient regulation would result from the absence or ineffectiveness of competition laws and their extraterritorial application, case that normally involves some developing countries. Logically, competition authorities in countries with the greatest tradition in the field would only act when they are suffering the effects of anticompetitive business practices, which leaves exposed the countries lacking an effective competition policy. Even when these countries have a set of competition rules, they simply do not have enough power to enforce it to big multinational companies.

As it can be seen, the internationalization of economic activity brings negative effects on NCAs. These effects are born from the **limits** of these authorities when dealing with international restrictions on competition, on the one hand, and with the possible **instrumentalization** of competition policy, on the other (Mitschke, 2008, p. 44).

In the first case, we can distinguish at least two factors that limit the effectiveness of competition authorities in a globalized economy: first, the competition authorities are not set up to deal with the competition issues that affect more than one State. Simply, they are outweighed by certain types of international cartels, abuse of market power and transnational mergers.

Second, as we have already mentioned, attempts to address constraints to international competition can lead to **inefficiencies** and **international conflicts** with alarming proportions. Regarding inefficiencies, they can originate from different ways. The most important are those derived from parallel investigations, the imposition of cumulative penalties or contradictions and asymmetric information. In this regard, we also have to

consider that a hypothetical multilateral framework would reduce transaction costs for companies, encouraging global welfare 15.

Concerning conflicts, these have their origin in the extraterritorial application of national competition rules, clearly of intrusive nature from the effects doctrine and other similar legal forms. Indeed, the effects doctrine binds to the second negative aspect that globalization brings to the ANCs: the manipulation or instrumentalization of competition policy for trade or industrial policy purposes. As Fox (2000, p. 1803) notes, "nations tend to make competition-law decisions based on what is good for the nation at the expense of the world". It is the strategy of beggar-thy-neighbor.

For example, it is not unusual to see how competition authorities impose restrictions on a merger of foreign firms in order to protect their domestic firms ¹⁶. This instrumentalization of competition policy for protectionist purposes reflects the inability of States to effectively protect competition at the international level. The tendency to take actions that maximize national welfare is unlikely to have resulted in the maximization of welfare levels of the economy on a global scale (Budzinski, 2012, p.6).

It is not a secret that competition authorities tend not to treat equally domestic and foreign firms. Sometimes, these authorities do not have enough incentive to stop anticompetitive business practices that result for the benefit of their domestic companies, making them more competitive in the global market. This inconsistency would lead to a particular case of the prisoner's dilemma, characterized by Pareto-inefficient Nash equilibrium (Mitschke, 2008, p. 51).

States are also interested in promoting the so-called "national champions" to lead the domestic economy and compete with guarantees in the demanding global market. This would cause a situation of relative tolerance toward those companies by the NCAs, influenced by national interests. Similarly, this tolerance contrasts with the rigor required when addressing restrictions on competition resulting from foreign companies. This asymmetry can both raise abruptness between the different countries as well as avoid keeping effective competition in markets, damaging consumers.

This instrumentalization of competition policy is a problem for the whole system of international trade. Thus, the benefits that should be derived from international trade agreements, targeted to integrate national economies through the reduction of tariffs, are threatened both by private restrictive practices and by the poor competition policy enforced by States. A multilateral agreement on competition policy would consistently address both issues.

Finally, we note that this uncoordinated and discretionary use of competition policy could lead to a situation of "race to the bottom" that provides only minimal protection for competition at national and international levels. In order to improve its international competitiveness and attract foreign direct investment flows, States could relax its national competition policy. This downward convergence would take us, again, to a prisoner's dilemma that would result in the commented sub-regulation on competition, affecting negatively to the whole economy (Mitsche, 2008, p. 52).

3.2. Economic arguments against international competition rules

Despite everything stated until now, there are economists¹⁷ who believe that the problems identified are not enough justification to sign some kind of binding multilateral agreement on competition policy. These authors consider that the defects discussed in

international markets can be resolved through other means such as cooperation and dialogue.

Firstly, one might ask whether the current "model" of international competition policy, based on the performance of more than 100 ANCs that can act extraterritorially and sign bilateral agreements between them, is unable to solve competition issues concurring in the international markets. Are the efficiency looses internationally, discretionary and discriminatory use of competition policy, inter-jurisdictional conflicts, and ultimately, restrictive practices in international markets, so serious to adopt new approaches?

Secondly, it would be advisable to make a cost/ benefit analysis to lighten the necessity of signing any binding multilateral agreement on international competition policy. It is not clear that a supranational competition authority would improve so much the current situation as to offset the costs that this would entail; costs that have both an economic nature (we would have to add a new bureaucratic framework to the already complex and charged world of international relations) and jurisdictional (since the States would have to renounce some of their sovereignty in favor of the strategy in question).

Authors such as Rosenthal and Nicolaides (1997, p. 357) say that many of the problems that affect international trade are motivated by issues of trade and industrial policy. Specifically, these authors believe that there are at least five ways in which these instruments restrict competition, both nationally and internationally: protectionist measures; measures that seek to attract or keep out foreign investors; regulation that confer competitive advantages to domestic companies; the industrial policy measures that promote the creation of national champions; and excessive protection of intellectual property rights in some States. Except the last, the remainder of these cases competition policy has a relatively small impact.

Moreover, the most liberal economists, as the followers of the Austrian school¹⁸, may think that globalization represents a value, rather than a threat to the maintenance of effective competition in the markets. The elimination of trade barriers leaves domestic markets more exposed to the entry of new foreign competitors. Thus, the degree of "contestability" achieved in those markets would be sufficient to discipline competition. However, the evidence shows that in recent decades we are witnessing a new wave of international cartels.

A matter of particular concern to the NCAs is export cartels. However, this does not justify the internationalization of competition policy, since it can be solved through a serious and decisive States joint action. It should be sufficient that export cartels cease to be exempt from national competition policies¹⁹. Another way that export cartels can be addressed is from international cooperation, or by the application of the effects doctrine, as in the *Alcoa* case

Furthermore, merger control is one of the most controversial topics. The lack of consensus, both academic and political, along with asymmetric effects international mergers caused between jurisdictions, difficult to reach a multilateral agreement. Moreover, the importance of this competition policy area on industry structure makes the States reluctant particularly to cede sovereignty in this field. Therefore, the current international discussions on a future international competition policy focus on hardcore cartels.

Regarding inefficiencies, many companies complain that they have to notify about their mergers to many competition authorities. This entails costs and delays. However, such inefficiencies are far from being a decisive factor for the internationalization of merger control. Likewise, as we have just discussed, States attach great importance to their

sovereignty about mergers and acquisitions due to its impact on their market structure, so it seems unlikely that international measures are undertaken along these lines.

Meanwhile, Budzinski (2009, p.370) warns of the economic reasons that have prevented reaching a binding international agreement on competition policy so far. Among them, we can find the existence of asymmetric information, which emerges from the proximity of regulators regarding markets subject of regulation; the divergent positions held by countries relating content and scope of competition policy; and administration costs that would constitute a new body of international bureaucracy.

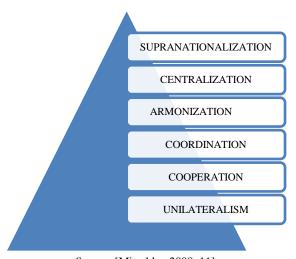
Finally, the issue of international conflicts is one of the main reasons impelling the establishment of international competition rules. First, it should be stressed that such conflicts are far from being the norm but isolated cases. In addition, serious conflicts up to now come from cross-border mergers which are allowed (even desired) by any jurisdiction, but raise suspicions on another(s). This was the case of the merger between *Boeing* and *McDonnell Douglas* already mentioned. However, it is unclear how a hypothetical international competition policy could resolve such conflicts in an objective way, since they involve national interests in economic policy.

4. ORGANIZATIONAL ASPECTS OF A MULTILEVEL SYSTEM OF COMPETITION

After pointing out the need to address the problem of international competition policy, this section aims to clarify a specific question: what institutional design would be more appropriate for such a venture. To this end, we study theoretically the different degrees of international cooperation on the issue. This will help us to understand the current debate on the harmonization of the rules on competition promoted by the ICN. After that, in the next section, the two international organizations we consider candidates to be responsible for competition policy at the international level will be analyzed.

4.1. The institutional design of international competition policy

The market dynamics, in recent years, leads to a pronounced internationalization of economic activity. This has triggered directly a consequent internationalization of competition policy through extraterritoriality and the signing of bilateral agreements. This international cooperation can be classified according to the degree of its intensity. Thus, the following should be noted:



Source: [Mitschke, 2008, 11]

Figure no. 1 Degrees of cooperation on international competition policy

- > Supranationalization would transfer sovereignty from the States, and therefore from the NCAs, to a higher global authority. This would have the power to formulate, in an autonomous way, international competition provisions which would prevail over national competition rules.
- ➤ Centralization entails the transfer of certain national powers to an international institution. This is the case of centralization in the enforcement of competition rules achieved through an agreement, which can be possible, thanks to the intergovernmental cooperation.
- Coordination affects the political actions of one country over the others in order to achieve the best solution for a national or international competition problem. This coordination could be done with *ad hoc* actions or with a coordinated formal framework.
- ➤ Cooperation involves the exchange of information and general or specific knowledge to a particular competition issue. It also covers the reporting of political actions or proceedings begun, the exchange of qualified personnel and technical and financial assistance.
- Finally, **unilateralism** refers to the preference for resolving international competition problems without international cooperation, with the consequent risk of triggering international disputes.

It should be mentioned that these different degrees of international coordination do not imply a static choice. We can conceive of these alternatives from a dynamic perspective, considering that it is possible, even desirable, to move from lower positions (unilateralism and cooperation) to superior alternatives such as supranationalization.

From this perspective, the current strategy of the international community led by the ICN, involving the harmonization of national competition regimes can be considered as an intermediate step towards shaping a real international competition policy.

We can consider the first two stages are overcome. The unilateral solution has been unsuitable because of its intrusive nature and its capacity to promote international conflicts.

The proliferation of NCAs has made the strategy turned aside toward more cooperative terms, embodied in the bilateral strategy. In recent decades, we have experienced sharp increase in the signing of these agreements. The latest addition of such agreements has been the inclusion of the so-called positive comity clause. We are now at the stage of coordination and harmonization of national competition regimes, as the divergence between them has been exposed as one of the main obstacles to a binding multilateral solution.

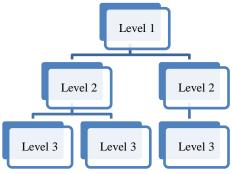
If we assume that the last (and inevitable) stage of this journey is supranationalization, we must ask about what institutional design would be more appropriate. Below we will raise orderly the problem we want to solve, which is the allocation of competences in a multilevel system for competition.

4.2. Competence allocation in a multilevel system

Considering the problem of international competition policy, on the one hand, and the *status quo* of that policy on the other, we can say that it is unrealistic to ask a completely centralized strategy, nor an absolutely decentralized one. Moreover, theoretically, these extreme solutions do not lead to the global optimum (Budzinski, 2009, p.369).

Therefore, the internationalization of competition policy automatically leads to a multilevel system where the main problem lies in the division of powers between these levels (vertical allocation) and between the entities of the same level (horizontal allocation).

This multilevel structure is not new for competition policy. We cannot forget that there are regions such as the EU that has a multilevel antitrust policy. These regional regimes are real institutional networks in themselves. The organizational structure of the multilevel system would be:



Source: [Kerber, 2003, 8]
Figure no. 2 Competition policy regime in three levels

At the top level it would be the international dimension of competition; the intermediate levels would correspond to federal authorities (understood in a broad sense) such as the European Commission and the EU Court of Justice; and the lower levels would be taken by the NCAs. In this context, the allocation and division of powers is crucial to bring coherence to the system without eroding the multilevel character (Budzinski, 2009, p. 371).

But what powers should be assigned? When we analyze the competition regimes of greater tradition and soundness such as the US or the EU, there are two main features (Kerber, 2003, p. 7): On the one hand, rules or norms substantive of competition, and

secondly, the enforcement system of these rules which encompassed procedural rules, the competition authorities, courts and private agents. We can thus consider three elements that can be combined in different ways between the three levels²⁰:

- **a.** Substantive rules
- **b.** Enforcement agencies
- c. Courts

As we have already discussed, we have to consider several dimensions in this allocation of competences, which are summarized in Figure 3 and discussed below:

Table no. 1 Dimensions in the allocation of competences

Tuble no. 1 Dimensions in the attocation of competences							
DIMENSIÓN I	Vertical and horizontal relationships. Additionally, it could arise diagonal						
DIMENSIÓN II	Institutional and application competences	DIMENSION IIa	Creation, implementation and change of provisions				
		DIMENSION IIb	Competition rules enforcement				
		DIMENSION IIc	Enforcing the rules applied				
DIMENSIÓN III	Exclusive and concurrent allocation of competences						
DIMENSIÓN IV	Sustainable and temporal allocation of competences						

Source: [Budzinski, 2009, 374-376]

The first dimension refers to the vertical and horizontal relationships. Additionally, diagonal relationships could also arise, which provide a real network competition system (Dimension I).

Secondly, there are the institutional²¹ and enforcement competences (Dimension II). These include the powers to create, implement and change laws (Dimension IIa), which can be assigned to a different entity to that hosting the competence to apply competition rules (Dimension IIb) or competence to enforce the rules applied (Dimension IIc). In addition, substantive rules can be distinguished from procedural rules, being allocated differently.

The third dimension relates to the exclusive and concurrent allocation of competences (Dimension III). The competence to assert jurisdiction over a particular case of competition can be assigned exclusively to a particular agency. On the other hand, if the allocation of powers is ambiguous, jurisdictional concurrence may arise, which would lead to inefficiencies. This would be the case where, for example, the Spanish competition authority decided to investigate a cartel that affected several jurisdictions (although Spain to a greater extent) and that it was already being investigated by the European Commission.

Finally, there is the sustainable and temporal allocation of competences (Dimension IV). Balancing the centralizing and decentralizing forces in a multilevel system hides a dynamic problem. Multilevel systems evolve along with the allocation and delimitation of competences, and it can cause two types of lacks: a process of progressive centralization that would erode the benefits of decentralized system elements; and a process of progressive decay that would threat to undermine the benefits of centralized elements. In this regard, it

would be desirable to ensure the sustainability of the system, which does not mean that it cannot be changed once an allocation of powers is implemented.

4.3. Horizontal competencies allocation

The basic problem when we raise the allocation and delimitation of competences in a multilevel system is that, in many cases, the geographic scope of the anticompetitive behavior effects does not match the jurisdictions territory, each one of these with its own competition scheme. This inconsistency conveys two issues (Kerber, 2003, p.9):

a. Almost all regimes address the competition concerns if and only if they adversely affect competition in its own jurisdiction. The paradigmatic example of this statement is export cartels, permitted by several competition regimes. This causes gaps in competition internationally. The consequence of this problem is the extraterritorial application of national legislation from the effects doctrine, which is an imperfect solution, as we have seen. The inter-jurisdictional cooperation from binding bilateral and multilateral agreements could be the solution to the inadequate implementation of international competition policy.

b. In contrast to these regulatory gaps, the proliferation of competition regimes causes parallel investigations that affect particularly mergers. This overlap increases transaction costs for businesses and ANCs, as well as making the breeding ground for the emergence of inter-jurisdictional conflicts due to the different perspectives they keep to the same restrictive practice. The solution could be to establish an appropriate allocation of horizontal competences that reduces or eliminates this overlap. For this, bilateral and multilateral rules must be established in order to channel cases of international competition to one of the affected jurisdictions: the "lead jurisdiction".

A possible solution would be that the top-level authority allocates cases to a certain agency of a lower level affected; or that a higher authority itself contends with an anticompetitive practice when this affects several jurisdictions, following the EU model.

Budzinski (2007, p.374) suggests that the solution to this problem of delimitation of competences requires establishing two basic principles in the system to ensure its effectiveness and acceptability: the principle of non-discrimination and the principle of mandatory lead jurisdiction. We are going to analyze what would mean the application of such principles to the multilevel system.

The principle of **non-discrimination** is a fundamental principle in the GATT-WTO framework for international trade. This principle would have several implications when moved to international competition policy.

- ➤ Domestic and foreign consumers and producers cannot be discriminated. This affects both the design and the way competition rules are applied.
- Non-discrimination limits the competence to claim jurisdiction extraterritorially because of the legitimate interest of foreign institutions in designing their laws according to their own preferences²², as long as they respect the agreed principles²³. This limits several "famous" exemptions from competition policy, such as export cartels.
- ➤ In case of discrimination and conflict parties we have to apply, moderately, to the top level which must decide which institution or lower jurisdiction will be responsible to a specific case²⁴. The higher-order entity may also include decisions on competition rules compliance²⁵.

The basic principle of **mandatory lead jurisdiction** states that if an anticompetitive agreement or practice needs to be dealt by more than one competition regime, it will be a leader or principal jurisdiction the one that will review and decide the case for each other. This jurisdiction, chosen by an international commission, would be required to consider the anticompetitive effects in all affected jurisdictions. Thus, the regulatory powers of national systems remain intact²⁶, while the implementing powers are assigned on the lead jurisdiction²⁷, which applies its own system of competition. Deciding which competition law is applied to a particular case corresponds to the upper level. This principle leads to the exclusive allocation of competences²⁸.

Both principles complement each other. While the latter overcomes the problems of multi-jurisdictional tests and procedures, the principle of non-discrimination guarantees respect for the preferences of individual countries while limiting the instrumentalization of competition policy. Both help to reduce inter jurisdictional conflicts and limit the administrative costs of the international bureaucracy (transaction costs) (Budzinski, 2007 p.376)²⁹.

4.4. Allocation of vertical competencies: Centralization Vs Decentralization

As we have seen, for Budzinski, the powers of the upper competition authority would be limited to assign competition cases involving several jurisdictions of the affected, and the persecution of the rules and practices contrary to principle of non-discrimination. Also, the upper level is responsible for complaints and conflict resolution occurring between the authorities of lower order.

This higher level could neither create new laws, nor directly apply the corresponding laws to lower levels. However, the decision on which set of rules apply to anticompetitive agreement is actually assigned to the supranational level, as this is responsible for choosing the lead jurisdiction.

We assume that the establishment of this global level is a prerequisite for good governance of global competition. This embodies in a Commission that represents the final instance in relation to supervision and conflict resolution. It would also be necessary to establish a body of appeal in respect of jurisdictional allocation decisions. Here two options arise: first, an international Court; and secondly, a second chamber of the International Commission. This second option may seem preferable to keep consistency in the selection process and not increase the transaction costs and the administrative burden for companies.

The system proposed by Budzinski is characterized by a relative decentralization. At this point, we need to perform a more detailed discussion about the advantages and disadvantages of decentralization on a global competition policy system. To do this, we take note the comments of Kerber (2003, p. 18-28), who applies ideas from the economic theory of federalism to the issue.

The conclusions from the analysis must be interpreted with caution as the theory of federalism was developed with mainly in the provision of public goods, not a set of laws. However, we can consider that competition policy share, in some way, the characteristics of public goods. We therefore believe it is appropriate to assess the following criteria when we planned the degree of decentralization on competition provisions.

a. Static economies of scale

Competition policy involves several fixed costs, such as the development of competition rules, the decision processes of lawmakers, the implementation of those provisions and the building up of human capital for the application of competition law. As the marginal cost of implementing competition policy is relatively small, medium cost decreases to the extent of the number of cases increases. This means that we are facing economies of scale.

In this scenario, a single centralized global political competition would be more efficient than a regime based on a multitude of heterogeneous systems. Each of these systems should support a volume of fixed costs that would require a large number of cases to reach its minimum efficient scale.

b. Dynamic economies of scale

Due to the learning effect, we can consider that the quality of a law depends on the number of cases that have been decided with this law. Therefore, the dynamic economies of scale appear to be a clear argument for setting uniform and centralized rules, since the smaller the number of competition regimes, the larger the set of court decisions that are based on such laws. In this sense, the quality of competition policy will increase faster.

However, at this point we should also consider the path dependencies. This could lead to the problem that inefficient laws prevailing over time, causing closure effects. Moreover, the centralization process could eventually provoke us to lose the accumulated knowledge. Therefore, the dynamic economies of scale are an ambivalent argument for the degree of centralization / decentralization of international competition policy.

c. Transaction costs

The coexistence of a large amount of competition regimes increases the transaction costs of firms operating in international markets. The paradigmatic case is merger control. Companies are required to comply with a number of heterogeneous criteria in different jurisdictions. In addition, the costs incurred by competition agencies in assessing mergers, which can be multiplied with parallel investigations, may also be considered as transaction costs. Similarly, information costs incurred by companies due to the existence of different regimes of heterogeneous competition have to be taken into consideration.

With all this, we can say that the existence of a centralized uniform system would reduce transaction costs, so it would be more desirable than a decentralized model from this angle.

d. Geographic scope of competition issues

The economic theory of federalism holds that a given problem should be assigned to that jurisdictional level whose geographical scope fits with the problem. The reason is to prevent externalities that foster the emergence of free-rider effects in other jurisdictions with the provision of public goods.

Regarding competition cases, we have seen that those exceeding national borders bring about problems of horizontal allocation of powers between national regimes. Taking into

account the protection of competition in the relevant market as a public good, we estimate that the problem of externalities arises when the relevant market is wider than the jurisdictional territory. Economic theory says that in this case there is a danger of insufficient provision of protection to competition due to free-rider effect. To this should be added, the situation in which a case affects various jurisdictions and it has to be tackled by only one that addresses its concerns.

To deal with these inconsistencies, it should be established an identity between the territorial scope of a competition problem and the jurisdiction that deals with it. Thus, in a multilevel system cases should be dealt at a level that would cover all affected jurisdictions, i.e., to a higher level. The solution proposed by Budzinski -a lead jurisdiction addresses the case considering the interests of all affected jurisdictions- would find a problem of incentives.

In principle, therefore, this geographic inconsistency would lead to centralized EU-style solutions. However, one must consider the internalization of externalities (Coase, 1960) through inter-jurisdictional negotiation embodied in bilateral agreements; more specifically, in terms of comity. A generalization and standardization of these bilateral relations is the multilateral agreement. This strategy, known as "club solution", agrees with the proposal by Budzinski, based on the principle of mandatory lead jurisdiction. Thus, external effects would be internalized by an inter-jurisdictional agree on procedural rules to determine that only one authority can investigate a particular case of competition considering the interests of all jurisdictions affected. The problem would be:

- What authority (lead jurisdiction) is assigned to the investigation?
- What jurisdictions are adversely affected by the restrictive practice?

e. Heterogeneity of preferences and objectives of competition policy

The logic behind that those laws are related to the preferences of citizens is *a priori*, an argument in favor of decentralization of the system³⁰. The greater the heterogeneity of preferences among the population, the greater will be the costs of centralization. Transferred to antitrust, different preferences will give way to different competition policy objectives and, therefore, to different standards and application criteria.

However, this should be nuanced. The likelihood that the objectives of competition policy do not reflect the preference of the constituency has to be considered. This may be due to factors such as the effect of rent seekers, who persuade legislators with activities of dubious legitimacy. In this case, we may doubt the validity of this argument for the decentralization of the system.

f. Heterogeneity of theories, experimentation and learning effect

The problems of information and knowledge are actually a crucial criterion for the allocation of vertical competencies. In this sense, different types of problems can be noted. If the relevant information for problems resolution is not found in the central (top) level, but scattered over lower level jurisdictions, an argument in favor of decentralization immediately emerges. This argument would be valid for both the creation of substantive competition rules and to the application thereof.

In addition, we have to consider uncertainty about the best theories and laws for the protection of competition. No doubt, we have not yet discovered the perfect standards for

competition policy. Competition agencies are in a permanent state of improvement and adaptation of standards and criteria for the evaluation of (changing) business behavior and market structures.

Also, we cannot forget that companies can create new forms of anticompetitive practices or new production techniques leading to new markets. This would mean new challenges for competition policy, which is required to an evolutionary nature. This is a strong argument in favor of decentralization, as long as it promotes innovation and adaptability. Moreover, the diversity of regimes allows the exchange of experiences and subsequent learning effect.

g. Other criteria

There are many other criteria that can help us to determine the optimal degree of decentralization in a multilevel system of international competition policy. First, there is the problem of the consistency of the legal system. Decentralization can pose problems of incompatibility between different jurisdictional levels, generating uncertainty and inconsistencies. On the other hand, the ability of rent-seeking to reduce welfare should be considered. It is usually assumed that under decentralized systems, citizens find easier to control the State, reducing the risk of the effects of rent-seeking.

This detailed analysis of the criteria that should helping us to find the optimal degree of decentralization highlights the pros and cons of both ends. Depending on the scope and the objectives that we set for international competition policy, we must give greater weight to some criteria than others.

5. CONCLUSIONS

The current strategy for international competition policy is the convergence and harmonization of national competition laws. The reason is that the disparity of antitrust regimes is one of the main obstacles for the regulation of competition at international level. However, this strategy is not enough for solving international competition policy issues.

Despite not to have a global competition policy, we can find some standards related to competition issues within WTO. Fields as intellectual property rights or public procurement are indeed regulated by WTO agreements. However, the most controversial competition policy issues (hard core cartels, abuse of dominant position and merger control) remain unregulated internationally.

Among the most problematic issues of the current situation we find inefficiencies, international conflicts and the instrumentalization of national competition policies with protectionist purpose. Moreover, we risk to enter in a "race to the bottom" that wold leave anticompetitive business practices with insufficient regulation. Nonetheless, there are still authors who doubt on the desirability of an international competition policy model.

We can understand the current system in a dynamic perspective. In this way, we would be going towards forms of regulation more integrated. So, the next steps would bring us to the supranacionalization of competition policy.

In this point, it is crucial to ask about the institutional design of a hypothetical global competition policy framework. It seems clear that every way bring us to a multilevel system, integrating national, supranational and the new global level. The key decision would be the allocation of the competences along the entities of the overall system. It is not a question

easy to solve. The option to set the principles of non-discrimination and mandatory lead jurisdiction would help us with the horizontal allocation of competences.

On the other hand, we can think about the optimal degree of decentralization from several criteria. Depending on the weight we estimate for each one (basically: efficiency, effectiveness, fairness and consistency) we will find appropriate provide global competition policy system with more or less degree of decentralization. It is a political decision.

References

- Budzinski, O., 2009. "An International Multilevel Competition Policy System". *International Economics and Economic Policy*, 6, pp. 367-389.
- Budzinski, O., 2012. "International Antitrust Institutions", *Ilmenau Economics Discussion Paper*, Ilmenau University of Technology, Institute of Economics, n°72.
- Circuit Court of Appeals, 1945. United States v. Aluminum Co. of America *et al.* No. 144. Available at http://myweb.clemson.edu/~maloney/424/alcoa.pdf, consulted on 11.12.2013.
- Clark J. L. and Eveneett, S. J. 2003. "A Multilateral Framework for Competition Policy?". State Secretariat of Economic Affairs, **In** Evenett, S. J. (ed.) (2003). *The Singapore Issues and The World Trading System: The Road to Cancun and Beyond*. pp. 77-168.
- Coase, R. H. (1960): "The problem of Social Cost", Journal of Law and Economics, vol. 3, pp. 1-44.
- Crespo, R., 1997. "Dumping, antidumping y fundamentos del Antidumping", Revista Venezolana de Análisis de Coyuntura. volume 3 n°2, pp. 55-81
- Dabbah, M., 2010. International and comparative competition law. Cambridge Universitry Press.
- Evenett, S. J. (ed.) (2003). *The Singapore Issues and The World Trading System: The Road to Cancun and Beyond.* State Secretariat of Economic Affairs (Switzerland).
- Fox, E., 2000. Antitrust and regulatory federalism: races up, down, and sideways. *New York International Law review*, volume 75 (6), pp. 1781-1807.
- Fox, E. M. and Trebilcock, M. J., 2012. "The Design of Competition Law Institutions and the Global Convergence of Process Norms: The GAL Competition Project". New York University Law and Economics Working Papers. Paper 304.
- Gerber, D. J. 2010. Global competition: law, markets, and globalization. Oxford University Press. Oxford.
- Graham, E. M. and Richardson, J. D. (eds.) 1997. Global Competition Policy. USA. Institute for international Economics.
- Guzman, A., 2004. The Case for International Antitrust, 22 Berkeley journal international Law 355, pp. 354- 374.
- Rosenthal, D. E. and Nicolaides, P. 1997. Harmonizing Antitrust: The Less Effective Way to Promote International Competition. **In**: E. M Graham, and J. D. Richardson (eds.) (1997). *Global Competition Policy*. USA. Institute for international Economics. pp. 355-383.
- Otero García-Castrillón, C., 2001: "Privates Parties under the present WTO (Bilateralist) Competition Regime". *Journal of World Trade Law*, volume 35 n°1, pp. 99-122.
- Palma Martos, L., 2008. "The Common Market and Competition Policy in the European Union". Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" din Iaşi. Tomul LV. Ştiinţe Economice, pp. 286-301.
- Yano, M. and Honryo, T., 2011. "Fundamental difficulty underlying international harmonization of competition policies". *International Journal of Economic Theory*, volume 7 issue 1, pp. 111-118.
- World Trade Organization. 1996. "Agreement on Public Procurement". Uruguay Round Agreement. Available at: http://www.wto.org/english/docs_e/legal_e/gpr-94_e.pdf, consulted on 10.12.2013.
- World Trade Organization. 1996 "Agreement on Safeguards". Uruguay Round Agreement. Available at: http://www.wto.org/english/docs_e/legal_e/25-safeg.pdf, consulted on 10.12.2013

World Trade Organization. 1996"Agreement on Trade-Related Aspects of Intellectual Property Rights". Available at: http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm, consulted on 10.12.2013.

World Trade Organization. 1996. "Referent Paper on Telecommunication Services". Available at:http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm, consulted on 10.12.2013.

World Trade Organization. 1996. "Agreement on Subsidies and Countervailing Measures". Available at: http://www.wto.org/english/docs_e/legal_e/24-scm.pdf, consulted on 10.12.2013.

World Trade Organization. 1996 "Agreement on Technical Barriers to Trade". Available at: http://www.wto.org/english/docs_e/legal_e/17-tbt.pdf, consulted on 10.12.2013.

World Trade Organization. 1996. "General Agreement on Trade in Services". Available at: http://www.wto.org/english/tratop_e/serv_e/gatsintr_e.htm, consulted on 10.12.2013.

World Trade Organization. 1996 "Understanding on Commitments in Financial Services". Available at: http://www.wto.org/english/tratop_e/serv_e/gatsintr_e.htm, consulted on 10.12.2013.

World Trade Organization. 1996. "Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994". Available at: http://www.wto.org/english/docs_e/legal_e/19-adp.pdf, consulted on 10.12.2013.

Notes

¹ See *US* Vs *Aluminium Co of America*, 148 F.2° 416, available at: http://myweb.clemson.edu/~maloney/424/alcoa.pdf, consulted on 04.11.2013.

² The Directorate General for Competition of the European Union (hereinafter DG Competition) opposed such merger, held in USA and approved by their respective authorities; but whose effects extend to the EU because the resulting company would operate in the European market. The conflict reached a worrying dimension, due to the heated American reactions, which saw the decision of the DGC a way to protect Airbus, Boeing's European competitor. Finally, the merger was consummated in 2007 but not before numerous modifications imposed by DGC.

³ http://www.internationalcompetitionnetwork.org/about.aspx, consulted on 05.12.2013.

⁴ Such as Yano and Honryo (2011); or Budzinski (2009), among others.

⁵ From its foundation, this organization had been the most appropriate institution for driving global competition. But after the creation of the International Competition Network (hereinafter, ICN) (2001) and "Doha failure" (2004), the strategy of supporting a global competition framework was substituted by the convergence and harmonization of national competition laws through, precisely, the ICN.

⁶ http://www.wto.org/english/docs_e/legal_e/gpr-94_e.pdf, consulted on 10.12.2013.

⁷ The called "Protocol Amending the Agreement on Government Procurement"

⁸ Agreement on Safeguards, Article 2.

⁹ This clause is present in both the GATT and the WTO, and it establishes automatic extension of any better treatment to be granted or has been granted to a party in the same way to all other parties in international trade agreements. It is therefore a special case of the basic principle of non-discrimination.

¹⁰ TRIPS Agreement, Article 7.

¹¹ TRIPS Agreement, Article 8.2.

¹² Section 8

¹³ http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm, consulted on 12.11.2013.

¹⁴ UCFS, paragraph 10.

¹⁵ See Van Cayseele et al. (2003) for a detailed study of such innefficiency

¹⁶ That precisely USA complained when the EU stopped in the first instance the merger between *Boeing* and *McDonnell Douglas* in 1997.

¹⁷ Among others, we can Rosenthal and Nicolaides (1997).

¹⁸ We must remember that these economists consider little less than unjustified national competition policy.

¹⁹ We must remember that antitrust regimes as long-lived as US or Canada have export cartels

²⁰ Fox and Trebilcock's (2012) study on nine different competition regimes reveals that there are three broad categories: (1) the bifurcated judicial model, where the competition authority goes to court for enforcement; (2) the bifurcated agency/tribunal model, where the agency goes to a specialized tribunal for enforcement; and (3) the integrated agency model, where a commission within the agency makes the first-level jurisdiction.

21 The *institutional* concept is used here to mean a set of rules, rather than a specific organization.

²² Dimension I.

²³ Dimension II.

²⁴ Dimension IIb.

 $^{^{25}}$ Dimension IIc.

²⁶ Dimension IIa.

²⁷ Dimension IIc.

²⁸ Dimension III.

²⁹ For a more detailed analysis, see Budzinski (2005, p. 122-140; p. 203-207; p. 229-244)

³⁰ Traditionally, economic theory of federalism assumed that top level politicians possessed perfect information; an absolutely unrealistic hypothesis.