Department of Political and Social Sciences

The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements

Tatiana Martins Pedro do Coutto

Thesis submitted for assessment with a view to obtaining the degree of
Doctor of Political and Social Sciences of the European University Institute

Florence, March 2010

EUROPEAN UNIVERSITY INSTITUTE

Department of Political and Social Sciences

THE EU AS AN ACTOR IN INTERNATIONAL ENVIRONMENTAL NEGOTIATIONS:

THE ROLE OF THE MIXITY PRINCIPLE IN FISHERY AGREEMENTS

Tatiana Martins Pedro do Coutto

Thesis submitted for assessment with a view to obtaining he degree of

Doctor of Political and Social Sciences of the European University Institute

Examining Board:

Prof. Adrienne Héritier, EUI (Supervisor)
Prof. Christian Lequesne, CERI-Sciences-Po
Prof. Andrew Jordan, University of East Anglia
Prof. Pascal Vennesson, EUI

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Acknowledments

Pursuing a PhD requires curiosity, organization, discipline and hard work. (Un)fortunately, these four attributes are not well balanced throughout the doctoral studies, and there are moments we need somebody else's support to "keep going". I would like to express my sincere gratefulness to those who, in a way or another, helped me through this path. Without these colleagues, friends and tutors this thesis would not have been concluded.

First, I would like to thank the Brazilian Ministry of Education and its agency CAPES for the financial support provided over four years of research work. In a country where higher education is a luxury, I am extremely glad that CAPES supported this project. I would like to thank the agency's personnel for their assistance, namely Marigens Cavalho, Joana D'Arc Gonçalves and Walner Mamede Jr.

I am also sincerely grateful to my supervisor, Professor Adrienne Héritier, for her comments, and for the attention she devoted to each phase of the research, from the first year seminars to the correction of the final draft. This thesis would not have been concluded without her analytical capacity, comments, questions and support.

I also would like to thank Professor Philippe Schmitter for his encouragement and suggestions, especially during my very first months at the EUI.

I am grateful to EUI academic service for their help and patience: Ken Hulley, Antonio Corretto, Françoise Thauvin and Michela Menagli. I am also indebted to the SPS administrative staff, namely to Maureen Leichtner and Marie Ange Cattoti.

I am more than thankful to the European Commission, to the Brazilian Mission at the European Communities, to the EEA, to the WWF and to the permanent representatives who devoted part of their time to answer my inquiries about mixed representation and fisheries policies.

I am indebted to my "Florentine family", for their understanding and support over these years: I would like to thank Elena Luchetti, and also Giulio, Laura … and Pedro.

I would like to thank my friends, for the discussions about the research, for discussions about everything else, for the moments spent at the EUI and, more important, for standing by me at difficult phases of this enterprise. Especial thanks to Sonia Pires, Joana Pereira, Joana Mendes, and to Laurent Meunier, Julien Talpin, Pedro Monaville, Nadia Bougerba and Philipe Delacote. I am also grateful to my closest Brazilian friend who, despite not doing a PhD, was somehow "forced" to embark in this enterprise with me: Rizzia Arrieiro.

It would be impossible not thank my family, who supported my decision to do the PhD, and who made every possible effort to understand the joy, the frustrations and, above all, the unusual working schedule of a PhD candidate. I would never have completed this doctorate without their support, love and care. Special thanks to my sister, Vanessa, who taught me a lot about organization and planning – even though I still have a lot to learn.

Finally, I also would like to thank Roland Rathelot, for his care, patience, encouragement and love throughout the PhD, and beyond.

List of Acronyms

ACFA	Advisory Committee for Fisheries
BINU	Biodiversity indicators for national use
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
CCLM	Committee on Constitutional and Legal Matters (FAO)
CFP	Common Fisheries Policy
CFSP	Common Foreign and Security Policy
CEU	Council of the European Union
COW	Committee of the Whole
CHM	Clearing House Mechanism
CPRs	Common Pool Resources
CS	Coastal State
CVM	Contingent Valuation Method
DWFNs	Distant Water Fishing Nations
EEZ	Economic Exclusive Zone
EU	European Union
EC	European Community
ECJ	European Court of Justice
EFF	European Fisheries Fund
EP	European Parliament
ESU	Environmental scientific uncertainty
EURATOM	European Atomic Energy Community
FAO	Food and Agriculture Organization
FIDI	Fishery Information ad Data Statistics Unit
FIFG	Financial Instrument for Fisheries Guidance
FIGIS	Fisheries Global Information System
FOC	Flag of convenience
FS	Fishing state
GDP	Gross Domestic Product
GEF	Global Environment Facility
IAD	Institutional Analysis and Development
IPCC	Intergovernmental Panel on Climate Change
ICCAT	International Commission for the Conservation of Atlantic Tunas
IUCN	International Union for the Conservation of Nature
IMEC	International Maritime Employers' Committee
IMO	International Maritime Organization
ITF	International Transport Workers' Federation
ITQ	Individual Transferable Quota

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

IUU	Illegal, Unreported and Unregulated Fishing
MA	Mixed Agreement
MCB	Marine and Coastal Biodiveristy
MEY	Maximum Economic Yield
MS	Member state
MSY	Maximum sustainable yield
NAFO	Northwest Atlantic Fisheries Organization
NEFSC	Northeast Science Fisheries Center
QMV	Qualified Majority Voting
RCI	Rational Choice Institutionalism
RFOs	Regional Fisheries Organizations
RP	Revealed Preferences (method)
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SP	Stated Preferences (method)
SI	Sociological Institutionalism
STECF	Scientific Economic Committe for Fisheries
TACs	Total Allowable Catches
TEV	Total Economic Value
TI	Theory of Institutions
U N	United Nations
UNCED	United Nations United Nations Conference on Environment and Development
UNCHD	United Nations Conference on Human Development
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNCLOS	United Nations Convention on the Law of the Sea
UV	Unanimity Voting
WCED	World Commission on Environment and Development (Brundtland Commission)
WTO	World Trade Organization
WWF	World Wildlife Fund

List of Tables and Figures

Tables	Pg.
Table 1: Type of competence and type of mixity	29
Table 2: Theories of Institutions (Diermeier & Krehbiel)	49
Table 3: Completeness of the contract: mandate extension and clarity	71
Table 4: Research design level 1 (L1)	76
Table 5: Possible outcomes (L2)	79
Table 6: Preference, setting and strategies under mixity	89
Table 7: Stabilized vs. Controversial 'world'	92
Table 8: Mandate attributes	102
Table 9: Hypotheses and cases	104
Table 10: Goods and services provided by living marine resources	157
Table 11:Goods and services concerned by the empirical cases	158
Table 12: Environmental Scientific Uncertainty → Case 1	170
Table 13: Environmental Scientific Uncertainty → Case 2	196
Table 14: State groups at the Conference on Highly Migratory and Straddling Fish Stocks	205
Table 15: Supplementary indicators of biological diversity	225
Table 16: Environmental Scientific Uncertainty → Case 3	233
Table 17: Institutional theory and theory of institutions in the light of the empirical cases	246
Table 18: Consensus *vs.* ES	248

Figures	Pg
Fig. 1: Graphic representation of mixity and MAs	23
Fig. 2: Community, member states' and mixed competences	26
Fig. 3: Graphic representation of theoretical approaches to integration	41
Fig 4: Mandate and level of ESU	71
Fig 5: Categories of uncertainty	95
Fig.6: Information about the issue and levels of ESU	112
Fig. 7: Degrees of ESU and available methods to infer causal relationships	113
Fig. 8: Categories of economic value	123
Fig. 9 World fish supply (China excluded)	133
Fig. 10: Distribution of catches throughout the world	135
Fig. 11:	188
Fig. 12: Models on the impact of biodiversity loss on ecosystems	222

	Pg.
PART I	1
Chapter I – Introduction and Main Concepts	3
1. The European Union in international affairs	3
1.1 EU marine resources and environmental diplomacy	7
1.2 The concept of *actorness* and the EU	9
2. Mixed participation of the EC and member states in international treaties	17
2.1 Political dimension of mixity and MAs	19
2.2 Mixity factors	21
2.3 Implications: mixed agreements and EU institutions	23
3. Mixed agreements: a typology	25
4. Organization of the thesis	31
Chapter 2 - Theoretical Background	33
1. Rational choice integration theories: contributions and limitations of (liberal) intergovernmentalist approaches	35
1.1 Intergovernmentalism	36
1.2 Institutionalism	39
1.2.1 Rational choice institutionalism (RCI), institutional theories and theories of institutions	42
1.2.2 The need for a more rigorous design: the contribution of principal-agent approach	50
1.3 Alternative explanations	56
2. Negotiations: main features	63
2.1 Preferences and negotiation strategies in RCI	65
Chapter 3 - Methodology	69
1. Hypotheses	69
1.1 Community Level (L1)	69
1.2 International level (L2)	75
1.2.1 Competence distribution: exclusive, clearly allocated by the contract, or 'fuzzy'?	75
1.2.2 High ESU x low ESU	77
2. Empirical evidence from other global issues: insights from climate change	79
3. Independent variables	81
3.1. Council preferences	82
3.2 Commission preferences	

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

3.3 Scientific environmental uncertainty (SEU)	
3.3.1 Definition of ESU	92
3.3.2 Uncertainty, negotiation and institutions: implications for the research	95
4. Hypotheses in the light of the empirical cases	96
5. Case selection	101
6. Assessment of the dependent variables	103
6.1 Actorness	103
6.2 Rules: clarity of the mandate and completeness of the global agreements	104
6.3 Uncertainty indicators	106
7 Data collection	112
Chapter 4 Exploitation of Marine Living Resources: International And European Frameworks	119
1. Common goods	120
1.1. Common pool resources (CPRs)	122
2. The oceans: from open access to private property regimes	127
2.1 The United Nations Conference on the Law of the Sea (UNCLOS), 1982	130
2.2 Fisheries as a Community policy	130
3. Fisheries management: environmental and economic dimensions	132
4. The EC Common Fisheries Policy (CFP): intergovernmental and supranational dimensions	136
4.1 Mechanisms and provisions	140
4.2 Decision-making	141
5 Interests in the EU fisheries sector: cleavages and preferences	143
5.1 Member states[1]	145
5.2 Preference distribution across MSs within the fisheries sector	154
Part II – Empirical cases	159
Chapter 5 - The Agreement to Promote Compliance by Fishing Vessels on the High Seas (1995)	161
1. The problem of illegal, unreported and unregulated fisheries	163
2. Environmental scientific uncertainty (ESU)	166
3. Level 1 (L1): Distribution of competences	171
3.1 FAO membership: historical overview	172
3.2. Division of competence between the EC and MSs in the FAO	174

[1] A succinct overview of member states' profile, see for example Schare, T. (2006) at http://www.unige.ch/ieug/publications/euryopa/schare.pdf Access on 01/04/2009.

DOI: 10.2870/17665

4. Level 2 (L2)	178
4.1 Strategies	179
4.2 EU actorness	180
5. Final outcome of the global negotiations	180
5.1 Main provisions of the Vessels' Agreement	181
Chapter 6 - Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks (1995)	187
1. Straddling and highly migratory fish stocks: main features	187
2. Level of ESU: indicators	189
3. The Community level (L1)	197
3.1 Council standpoint	197
3.2 Commission standpoint	199
3.3 Distribution of competences	200
4. International level (L2): EC participation in the UN Conference on Straddling and Highly Migratory Fish Stocks	202
4.1 Background	202
4.2 Preparatory sessions	204
4.3 The Conference	205
5. Outcome of the negotiations[2]	209
5.1 Further negotiations: the EC and RFOs	209
Chapter 7 - The Jakarta Mandate on Marine Biological Diversity	215
1. Biological diversity – definitions	216
1.1 Questions around biodiversity	218
2. Importance and value	219
3. Indicators of biological diversity and environmental scientific uncertainty (ESU)	224
3.1 Biodiversity's value	229
4.Environment Scientific Uncertainty (ESU)	231
5. Biodiversity policies in the EU	234
6. International level (L2)	235
6.1 Background: The Convention on Biological Diversity (CBD)	235
6.2 Jakarta 6-17 November 1995	238
6.3 Participation of the EU	240
Chapter 8 - Conclusions	243
1. Overview	243
2. Institutional analysis	245

[2] The Agreement, which entered into force at the end of 2001, was ratified by the EC/EU in December 2003 under the Prodi Commission.

2.1 Environmental Scientific Uncertainty (ESU)	247
3. Case analyses	249
3.1 Case (A): The Vessels' Agreement	249
3.2 Case (B): The Fish Stocks' Agreement	250
3.3 Case (C): The Jakarta Mandate	252
4. Conclusions	255
References	259

ABSTRACT

The mechanisms that enable the joint participation of the European Community (EC[3]) and its twenty seven sovereign member states in multilateral bargains are much more complex than what the three pillar architecture suggests. Nevertheless, the influence of inter-branch negotiations on the EC/EU's international *actorness*[4] still remains a gray area between law and political science. An under-explored aspect regards the distribution of competences – defined as authority to undertake negotiations with third states and international organizations – within the Community institutional framework. Such competences, or *powers*, may be exclusive to member states (MSs), exclusive to the EC represented by the Commission, or shared by both. The last situation, known as mixed participation (or *mixity*)[5] is the key variable of this study.

This thesis seeks to shed light on EU actorness under mixity conditions by investigating how and to what extent the distribution of competences between the European Commission and the Council of Ministers influences the performance of the EC in the negotiation of certain types of global environmental agreements. The methodology consists of comparative analysis of three empirical cases related to the exploitation of living marine resources (fisheries). A two-level approach grounded in rational choice institutionalism is adopted, dividing the study in two main parts: the first focuses on EU level bargains (L1) in order to explain the different kinds of contracts (mandate) established between the Council and the Commission through a principal-agent relationship. The independent variables taken into account are Council's preferences, Commission's preferences, and the extent of the knowledge about ecological processes impacted by the forthcoming policy decisions stemming from the agreements. This last variable was called 'environmental scientific uncertainty' (ESU), as this term is already used by environmental economists.

The second part of the thesis addresses the negotiation of global agreements to which the EC was part, either exclusively or together with MSs. As there is a shift in the level of analysis the mandate – the dependent variable at L1 – becomes an independent variable at L2. The goal is now to explain: a) the effects of mixity as opposed to EC exclusive competence on the EU's actorness. The underlying argument is that the implications of mixity go beyond European integration; in fact they are critical to the strengthening of EU agency *vis-à-vis* other players. They appear as a valuable institutional mechanism in domains marked by scarcity of reliable scientific data about ecological processes (as in ESU). The three cases are studied in both L1 and L2 and relate to fisheries policies[6]: a) the Agreement to Promote Compliance by Fishing Vessels on the High Seas (1995), under the FAO framework; b) the Agreement on Straddling and Highly Migratory Fish Stocks (1995), Under the United Nations Convention on the Law of the Sea (UNCLOS) framework and c) The Jakarta Mandate, an agreement on Biodiversity of Marine and Coastal Areas (1995), under the Convention on Biological Diversity framework. Data stem mainly from Law databases and official journals. Results shall shed light on the external impact of institutional arrangements within the Community, and their relevance to the study of the EU's international relations.

[3] Along the thesis the terms EC and EU have been used interchangeably. EC is preferred since the EU still does not have legal personality.

[4] Jupille & Caporaso (1998), Bretherton & Vogler (1999), Vogler (1999)

[5] McGoldrick (1997); Leal-Arcas (2001).

[6] Although fisheries policy is under the "1st pillar", fisheries agreements may contain provisions that fall out of Community exclusive competence, which accounts for their mixed (MS + EC) character.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

PART I

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 1

INTRODUCTION AND MAIN CONCEPTS

1. The European Union in international affairs

The role played by the European Union (EU) in international politics has been of increasing importance. Today, the Community deals with agendas as varied as economy, sustainable development, human rights, security and justice, intellectual property, environmental protection and so on. Its participation in international organizations has also become more expressive: the EC has full member status within the most important UN agencies and bodies, thus being a contracting party in more than 50 framework agreements. Thus, it carries out talks and negotiations with third states, non-UN organizations and other regional arrangements such as ASEAN and Mercosur, in addition to various multilateral agreements. The mechanisms that allow for the participation of the EC/EU and its twenty seven sovereign member states in multilateral bargains, and which contribute to its development as a critical international player is much more complex than what the three pillar architecture suggests. EU *actorness* results, *inter alia*, from inter-institutional distribution of external competences that determine 'who speaks and negotiates on behalf of the EU.' In most cases competences are mixed; that is, such authority is shared between member states (MSs) and the European Commission.

The Community has been particularly active in areas that do not fall within the "1st pillar," where it does not have formal power to speak on behalf of the 27 member states. In these situations, member states (MS) determine when and by which means the EC can represent them, and how far it can go in the bargaining processes. The attribution of powers, or *competences*, is a function of the preferences of both actors, as well as the intrinsic features of the agenda under negotiation, and is decided through a consultation procedure.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

This thesis seeks to understand by which means negotiations that take place within the EU framework influence its capacity to act in the international realm. The analysis focuses on environmental politics due to the increasing importance of this agenda worldwide, and because of EU major participation in international environmental diplomacy.[1] In this area, the external action of critical and complex actor such as the EU is different from other policy realms such as trade, for example, and also from the Common Foreign Security Policy (CFSC) framework. In multilateral negotiations of environmental agreements such as those tackled by this thesis, the extent to which the EU participates may affect the negotiation process and the outcome itself.

The Council-Commission tandem is an integral part of the EU integration process, and also has a large influence on Europe's international relations. This research focuses on arrangements made between the two actors in order to address the management of marine living resources – an area that requires coordination at the EU level but has, at the same time, important implications for the world's several ocean areas. The purpose of this thesis is twofold: first, it seeks to explain the prevalence of certain configurations of competence[2] distribution at the Community level. Second, it analyzes to what extent, and in which ways, these configurations affect the role of the EU as a player in global negotiations.

Over the course of the integration process, the EC has significantly expanded its domains of action, as well as its powers and authority to represent its member states in front of third parties. This is reflected in the evolution of Community treaties, and also by the adoption of key pieces of legislation (ex, SEA), which have largely contributed to the present profile of the EU.

This profile does not arise exclusively from the legal framework; Europe has proved to be a much more dynamic and creative polity system, still in a *state of flux*.[3] The study of the several political and institutional arrangements has made a contribution to analyze and understand these various formal and informal mechanisms that account for EC's crescent complexity as a polity system. By the same token, the relevance of the EU vis-à-vis other states and international organizations does not result exclusively from the powers placed on the Community.

[1] Vogler (1999).
[2] Roughly defined as authority to undertake negotiations. This concept will be further discussed.
[3] Héritier (1993).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The repertoire of institutional arrangements that have enabled the development of an EU environmental policy is very rich, most notably with regard to policy harmonization in various sub areas, and external representation. One particularly interesting mechanism – despite the small amount of attention devoted to it from political scientists – is the joint participation of MSs and the EC in negotiation processes of global environmental issues, usually carried out under the auspices of the various UN environmental bodies. Such mixed participation ('mixity') extends Community agency to policy areas beyond its exclusive competence – that is, beyond the treaties – and potentially increases MSs' bargaining power as a whole. Goals that are common to most part of MSs are more likely to be achieved because, by pooling sovereignty, the Community can foster cooperation by offering more robust compensations for desirable behavior, and by applying heavier sanctions on the non-compliant parts. The treaties, conventions and protocols signed by both actors (Commission and MSs) with other states and international organizations are called *mixed agreements* (MAs). Put differently, MAs are international agreements where both the EU (represented by the Commission) and its MSs are contracting parts, along with the other signatory states and/or international organizations. Most global environmental treaties and protocols, from the all-embracing UNCLOS, to the Kyoto protocol, for example are mixed agreements.

MAs are international legal instruments that depend on intra-EU institutional arrangements because of the joint participation of MS and the Community. The definition of EC's authority at the international level must be negotiated between the MSs through the Council, and the Commission, and depends on a mandate issued by the former. Striking the balance between the preferences of the EU as a whole, and the more specific goals of each MS is a hard task; in order to address the intricate mechanisms that accommodate the diversity of preferences on supranational institutions and national governments, this thesis uses a simplified model where the Council and the Commission are the contracting parties, and the first dependent variable is precisely this contract. In other words, the fact that competences are granted by the former to the latter allows both actors to be regarded in this study as a unitary actors. The goal is to render the relationship between "the EU, MSs and international actorness" manageable. This choice is further discussed in chapter two.

Mixity has become a common and widespread practice in EU polity, especially in areas of outstanding transdisciplinary character. Nevertheless, there is no systematic analysis of inter-branch bargaining processes, and little interest for the interrelationship between domestic and

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

international politics. The substantive body of literature produced by law scholars tackles the conflicting relationship between international, EC and domestic law, leaving aside the dynamics concerning the formation of these diverse inter institutional arrangements.

Political scientists, on the other hand, are more concerned with the nature of the domestic structure, why they assume multiple forms, and how this variation affects types of regimes, coalition patterns, public policies and, in turn, numerous economic and social aspects of life.[4] A number of authors are particularly interested in the increasingly constrained ability of national governments to freely devise their policy programs.[5] The last thirty years have seen the development of a robust body of literature on domestic responses to external determinants. Such a movement was, in large part, a reaction to the mainstream way of addressing the two political realms; it sought to shed light on an area by the time neglected by the 'international relations specialists' who consider the domestic system as an independent variable to explain foreign policy and international politics, as put by Gourevitch.[6] In a nutshell, this top-down (or inward-oriented) approach seeks to explain the means by which, and to what extent, external actors and institutions introduce norms generated or promoted in the international sphere into the domestic political arena.

Bottom-up approaches, on the other hand, are frequently criticized for regarding international politics as a result of domestic political decisions. This may in fact be the case in a number of studies. But today, given the increasing complexity of the international system, the strong degree of interdependence between states, the multiplicity of transnational actors and the number of linkages among different policy issues make it unfeasible for any researcher today to start from such assumption. In order to approach a complex political issue, methodological decisions need to be taken in order to approach the research object analytically.

This thesis adopts the bottom-up approach in order to explain the variation among mandates granted by the Council to the Commission, and how they relate to EU's *actorness*. Top-down views are not capable of addressing *actorness* appropriately; as a consequence, the relation between EU institutions and their potential influence on multilateral institutions remains unclear. Thus, the Council has its importance underestimated in the study of how the rules for mixed

[4] Gourevitch (1978).
[5] See, for example, Bernstein & Cashore (2000).
[6] Gourevitch (2000).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

participation emerge: as most attention is driven to variation in MSs' preferences (a critical factor in the establishment of MAs), the former is not approached adequately as an institution in its own right. The "MSs-Commission" model tackles important aspects of intergovernmental bargain, and the non-negligible influence of MS in the integration processes.[7] On the other hand, this approach can also be regarded as a form of 'black-boxing' a higher institutional level; it not only bypasses the Council, but also keeps the discussion within the boundaries set by the intergovernmentalist-functionalist debate.

By shifting the focus to an 'inter-institutional debate', this thesis seeks to shed light on the impact of mixity on EU and international levels; it does so by exploring a domain at the same time rich in these kind of Community arrangements, and where the EU has been playing a relevant role: environmental politics.

1.1 EU marine resources and environmental diplomacy

Marine ecosystems are affected by the environment, which have been influenced in a complex manner by a variety of factors including fishing, pollution and climate change. As fishing is a factor of ecological disturbance the wider effects of fishing activities on marine organisms and their habitats have become a major concern. This trend has accounted for the incorporation of an increasing number of environmental provisions in fisheries agreements and policy programs. This thesis focuses on fisheries policies as an environmental issue, which is art of an all-encompassing debate on the sustainable use of natural resources.

With respect to environmental agreements in general, the EU's portfolio is quite varied in terms of scope, number of partners, and issue areas. Its participation might "make a difference" in the negotiation's process and outcomes, given that it influences other parties and helps shape their position. By the same token, its absence may hinder negotiations or prevent them from being concluded. This capacity results from an ongoing process to which treaty powers, institutional mechanisms and the external context have significantly contributed, which are further investigated in this thesis.

[7] The list of studies that adopt this approach is extensive: a good example is Liefferink and Andersen (2005) analysis on "Green Member States" and EU environmental policy.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The status currently occupied by environmental issues in the European agenda is significant: over the last years, six environmental action programs have been published (in addition to many green and white papers), specialized agencies and bureaucratic apparatus have been developed, a high number of pieces of legislation have been adopted, and several bilateral and multilateral agreements have entered into force. Absent from the Community's initial legislation, the agenda has drastically evolved, especially in terms of law and policy formulation. Externalities have also played a pivotal role in respect to institution-building in the EC. Deleterious consequences of industrialization have raised concern and established a pattern that is still observed today: mechanisms of environmental protection are, in most cases, reactive responses to catastrophes and natural disasters. The historical overview provided in the next pages shows how the EU has become a relevant environmental actor.

At the global level, the United Nations Conference on Human Development (Stockholm, 1972) is commonly regarded as a landmark for environmental negotiations and cooperation. Though marking the beginning of a new approach to environmental issues, UNCHD's outcomes faced serious limitations. Like other conferences that took place in the same period, they were severely constrained by the lack of trust imposed by the world political order in force. But the opposition between two economic and ideological projects, the mandatory association with one of the superpowers and the cleavage between the industrialized north and the sub-developed south were not the only pitfalls to the adoption of more concrete proposals: the very limited knowledge of natural processes and the weak participation of non-state actors genuinely interested in protecting the environment also accounted for this situation.

Although the conference remained mainly an arena for state actors, it could launch the basis for further environmental legislation and policy formulation. They strengthened the idea that the environment can only be protected through coordinated actions. As stated by Richard Elliot Bennedict, "when governments face up to these new environmental challenges, they find that traditional tools of national policy and diplomacy are blunted. The nature of these issues requires an unprecedented degree of international cooperation – in coordinating research, in monitoring trends, in harmonizing measures and regulations".[8]

The realization that there are limits to the use of natural resources has granted the agenda a higher

[8] Benedick (1993). *In*: Sjöstedt, p. 221.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

status among states and international organizations. Nevertheless, this was not the end of the problem: as their interests vary depending on the agenda, each of these actors is expected to have a specific set of preferences.

When negotiating on the provisions of international treaties, actors will try to meet their preferences to the greatest possible extent. In the case of global agreements, the negotiations are more difficult as the number of negotiating parts is higher and because of the existence of multiple equilibria. Players will pursue an outcome that meets their set of preferences, and will adopt different strategies based on the characteristics of other players and on the rules, or the institutional setting where the bargain takes place.[9]

The ability to achieve the outcomes that better meet its preferences varies from one player to another, across policy areas, and depending on the 'rules of the game'. In general terms, a player can be considered relevant when it has a 'visible presence' in the international realm. The impact critical actors (states, but not only) exert on other units of the international system has always driven the attention of the international relations scholarship. Different theories have sought to relate this presence to nation states' resources such as population, military capacity, economic power, geographical situation and access to primary goods. Later on, the capability to mobilize such resources also started to be addressed; the same happening with cultural or ideological traces.[10] Scholars that study the external action of the EU agree that the Community has increased its involvement in international organizations and multilateral regimes. On the other hand, participation *per se* does not mean that the EU is an actor on its own right. By the same token, such participation does not imply that the EU is a decisive player capable of circumventing opposition from member states themselves and advancing its proposals vis-à-vis third parts.

In order to better assess the role the EU has been playing in global fisheries, in particular with respect to the environmental provisions of fisheries agreements, it is necessary to review the concept of *actorness* and to tell it apart from other forms of participation, which is presented in the next section.

1.2 The concept of *actorness* and the EU

[9] This point is further discussed in Ch. 2 in the light of Frieden's work.
[10] Nye (1990).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The capacity to shape international outcomes has been investigated in international scenarios constituted not only of nation states but also of intergovernmental organizations and non-state actors, which interact in multiple polity arenas under various rules. Traditional IR approaches do not investigate how an actor is constituted; as nation states were the only players, traditional theories managed to provide an accurate account of international politics. The proliferation of international organizations and various kinds of international regimes highlighted the need for more sophisticated conceptions of the international system. Thus, the increasing interdependence among diverse units of the international system and the politicization of issues previously regarded as irrelevant - such as the environmental protection – has evidenced the fact that actors are not alike. That is, they differ with respect to their capacities and preferences, and in turn do not do not exert the same influence over other players across issue areas.

The emergence of alternative actors and the EC/EU in particular, challenges not only the state centric model but also some fundamentals of international law. At the same time, the growth of EU external activities reflects "a range of internal and external factors, which have combined to create understandings about the external roles which the EC can be expected to play".[11] In order to analyze the external dimension of Community politics, Allen and Smith use the concept of "variable and multidimensional presence" to approach Europe's behavior, since it is "neither a fully-fledged state-like actor, nor a purely dependent phenomenon in the contemporary international arena." In order to avoid conceptual discussions around extensively used terms such as power, influence, leadership or capacity, some scholars have called such "structured presence in the international arena[12]" *actorness*.

The term actorness is particularly suitable to understand the "EU factor" in international politics, given the difficulty – or impossibility – of determining its *nature* (federal state, intergovernmental organization). In this thesis actorness can be broadly defined as the ability of the EU – following cost-benefit analyses of its possible actions or by socializing with the other players after repeated interactions – to operate actively and purposely in relation to other actors in the international system.

[11] Bretherton & Vogler (1999), p.5.
[12] Longo (2003). *In:* Knodt & Princen, p. 158.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

EU consolidation as a global actor has traditionally been regarded, by both member and non-member states as a 'natural' consequence of European increasing presence on the international stage. Actorness, however, depends on clear 'signals' that are recognized by other players; that is, it depends on cohesion among member states and EU institutions, which sometimes clashes with the EU 'logic of diversity'. The result is what Christopher Hill termed the "capabilities-expectations gap", a mismatch between EU's potential as an actor (inferred from its presence and reinforced by discourse) and the capabilities to behave as such in a coherent and effective way.[13] This gap calls attention to to the difference between 'presence' in multilateral *fora*, and 'actorness'. Community presence in international affairs derives from the development of its institutional framework; presence is not the result of a specific EU external policy; rather, it is a consequence of the organisms, participation and decision-making rules, practices and procedures that evolved over time. Delegation to supranational institutions increases EC/EU's visibility in the international scene, but cannot always be translated into actorness, or "the ability to function actively and deliberately in relation to other actors in the international system.[14]"

Actorness does not necessarily depend on highly institutionalized structures; neither can it be ensured by the existence of a formal, state-like, political union, it is rather an attribute that develops through the interplay of internal political factors and the perceptions of third parties who negotiate and interact with the EU. As a consequence, in order to analyze EU actorness one needs to move beyond the formal allocation of competences and formal representation in order to capture the relations with other players given a specific context, and the extent to which it succeeds in making its position prevail in a multilateral setting.

Although a number of works on EU actorness draw on the development of the Common Foreign and Security Policy (CFSP), there are various issue areas not covered by the CFSP where the EU has been able to speak with one voice, or pass one message through many voices. International environment agreements, for example, have received increasing attention from political scientists. The number of multilateral agreements to which the EU is part is the point of depart of Vogler's analysis of the EU as an "environmental actor". To Vogler, the issue of mixed competence differentiates environmental agreements from "other external policy areas and highlights the need

[13] Hill (1993). Christopher Hill, "The Capability-Expectations Gap, or Conceptualizing Europe's International Role," *Journal of Common Market Studies*, Vol. 31, No. 3, 1993
[14] Sjöstedt (1977).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

to understand the determinants of the different ways in which the Union acts."[15] Whilst there is consensus that the extent to which the EU can be regarded as an actor varies across policy sectors, it is still cumbersome to separate EU from MSs' performance and to determine under which conditions the EU is more likely to become an actor on its own right. The study of mixed agreements might shed some light on this joint participation. This thesis focuses on one agenda – fisheries – and on one broad problem – how to ensure long term conservation and resilience of shared fish stocks -and compare agreements that are global in scope. Such restrictions account for less variation and confer a more stringent control over the variables when the comparative analysis is carried out.

Bretherton and Vogler identify four characteristics of actorness: volition, autonomy, ability to employ policy instruments and external recognition. Volition involves the capacity to make conscious choices and decisions and to exhibit purposive behavior; autonomy, which implies some independence from state authorities; the capacity to articulate common positions and strategies vis-à-vis other players accounts for the ability to employ policy instruments that shape the choices made by third parts; last, recognition occurs when other actors take the position of the EU into account when defining their negotiating strategies.

A particularly interesting approach to this puzzle is provided by Jupille and Carporaso identify four dimensions of actor capacity at the global level: *recognition* ('acceptance of and interaction with the entity by others'), *authority* ('legal competence to act'), *autonomy* ('institutional distinctiveness and independence from other actors') and *cohesion* (ability to 'formulate and articulate internally consistent policy preferences').[16] Jupille and Carporaso's dimensions prove useful to this research because they allow the two levels of analysis – i.e., the relationship between distribution of competences at EU level, and actorness in multilateral settings – to be brought together in a coherent manner.

Jupille and Caporaso's approach is also coherent with the variation that is empirically observed in EU external action across policy areas, which reinforces the claim that the degree of the EU's international actorness is affected by the institutional set-up of the policy-making process.[17] Thus, it is a function of objective and subjective elements; the former refers to the behavior of the actor,

[15] Vogler (1999), p. 29.
[16] Jupille & Carporaso (1998), p. 214.
[17] Vanhoonacker (2005).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

as expressed through its public speeches, declarations and defended positions vis-à-vis other players; the latter concerns how other players perceive the actor and its actions, how susceptible they are to incentives and threats as expressed in official declarations, formed coalitions, signed and ratified agreements, among other documentary sources. [18]

The concept of actorness is particularly useful to assess how the EU and its member states articulate their positions in global environmental agreements. The TEU and the latest action programs not only gave the EC competence to conclude environmental agreements with other states, but also have reaffirmed environmental protection, sustainable development and international cooperation as one of its ultimate goals, as stated by the Commission: "most environmental problems have a transboundary nature and often a global scope, and can only be addressed effectively through international co-operation. For this reason, the EC Treaty establishes that one of the key objectives of Community policy on the environment is to promote measures at international level to deal with regional or worldwide environmental problems."[19] Put shortly, the EU is extending its competence over various sorts of environmental affairs, but to what extent has it enhanced its actorness?

At this point, one question arises: drawing on Jupille and Caporaso's actorness dimensions (authority, autonomy, recognition and cohesion), how is it possible to analyze the constitution and the performance (behavior) of the EU as an international player?

This thesis addresses diverse contracts regarding external representation of the EU established between Council and Commission under one same decision making procedure (consultation), and its consequences on EU's capacity to make its position prevail vis-à-vis third parts. The issue area chosen for the empirical analysis is environmental protection, due to the variation in competence distribution, and also because of the prominent role played by the EU over the last twenty years, most notably following the adoption of the Single European Act in 1987.

This research work focuses on specific environmental issues: marine resources management, and fisheries policies. The marine environment receives more attention from biologists and environmental economists than from political scientists, despite the evident relation between technical, economic and political elements of the agenda such as: evident commercial and

[18] Allen & Smith (1990).
[19] European Commission. Accessed at http://www.europa.eu.int/comm/environment/international_issues/agreements_en.htm 20/05/2004

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

environmental concerns, reflected in the number of multilateral agreements that deal with both dimensions simultaneously; an important sociological element represented by pronounced sub-regional identities – many times stronger than national ones; the capacity of regional stakeholders to articulate and pressure national instances, which makes different regions either under or over represented in the fisheries council, therefore distorting what should be 'MS preferences'; a scientific community whose recommendations are not always followed; the necessity to cooperate with other states at different levels and arenas is evident. Last, restricting the research to fisheries policy reduces eventual variation caused by specificities of different issue areas and allows for more control over the research variables. That is, by focusing on one policy are it is possible to eliminate differences due to intrinsic characteristics of each agenda and still have enough variation to carry out the comparative analysis.

Three empirical cases are studied at both the EU and the international levels. At L1 (EU), the aim is to explain what kinds of mandate are issued by the Council to the Commission taking into account varying degrees of information about the fishery-related issue. In this thesis, such scarcity of information, referred to as *environmental scientific uncertainty* (or ESU), is an independent variable; the mandate is the first dependent variable (DV1) analyzed.

Another question addressed in this thesis concerns to what extent the mandate – that is, the contractual relationship established between Council and Commission – influences EU actorness at the international level. The mandate, which has been analyzed at the EU level, now becomes an independent variable. EU actorness is then the second dependent variable (DV2). In short, the empirical cases vary with respect to environmental scientific uncertainty (ESU), mandate containing the distribution of competences between Council and Commission (full delegation to the EC and mixity) and the role played by the EC at global level (actorness). The cases are briefly described below:

The first case is the *Agreement to Promote Compliance of Fishing Vessels on the High Seas*, signed under FAO framework and in force since 1995. It seeks to promote the exchange of information on these vessels (ex: flag, former flags flew by the vessel, tonnage, ownership, crew, etc). The goal is to better monitor vessels activities and combat illegal and predatory fishing, as well as the use of "flags of convenience", so ESU is low. The EC had exclusive competence to negotiate the agreement.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The second case refers to the *Agreement on Highly Migratory and Straddling Fish Stocks*, in force since 1995. It is part of the UN Convention on the Law of the Sea (UNCLOS, 1982). The overall goal of the agreement is to assure that fishery resources of commercial interest such as tuna, codfish and other highly migratory species are explored in a sustainable way. Sustainability implies that the renewal capacity of one fish stock (usually one species) is higher than the total fishing effort of the fleets that harvest such stock. The sustainability threshold is represented by the Maximum Sustainable Yield (MSY), and varies according to the species and geographical zone. MSY is complex to calculate, as it depends not only on numerous variables specific to each species, but also on a number of variables related to the ecosystem in which the species are found. Nonetheless, the concept of MSY is clear: as with other common pool resources, the exploitation of fish stocks has limits beyond which their capacity of renewal is compromised. Despite the existence of different methods to calculate such limits, it is possible to establish one index, which in turn serves as a basis to determine more specific restrictions to fisheries activities such as allowed catches (TACs), harvesting seasons, technical aspects of fishing gears, and so on. With respect to the Agreement on Highly Migratory and Straddling Fish Stocks, EC and MSs share competences and are both contracting parts of the agreement, which characterizes a situation of *mixity*, or mixed competences.

The third case refers to the *Jakarta Mandate on Marine and Coastal Biological Diversity*, an agreement that aims at implementing provisions spelled out in the Convention on Biological Diversity (CBD, 1992) with respect to the marine environment. Again, the EC and the MSs share competences, but ESU is higher in this case. Biological diversity is a highly complex issue that can be defined in a myriad of ways; the existing techniques to measure biodiversity fall short from capturing the complexity of environmental dynamics, as they are limited to a small number of species or protected areas; the value of biodiversity is not fully captured by market prices, which hinders compensation mechanisms that could smooth preference divergences between bargaining actors; the question 'to what extent biodiversity must, or should be preserved?" remains unanswered; finally, differently from straddling fish stocks, there is no boundary set concerning how much biodiversity mankind can afford to loose in order to attain economic growth? Notwithstanding these substantive difficulties, states are willing to spend time and resources in negotiations to define guidelines to halt biodiversity loss, and in the development of policy programs that may not assure the provision of environmental services derived from biodiversity.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The two level approach proposed in this thesis allows for addressing delegation from an inter-institutional prism; the Council is treated as one actor, different from the ensemble of MSs.[20] Data stem from law databases, media coverage of the negotiations both within the Community and in the international realm and supplementary interviews with representatives from the Commission, from member states and the European Environment agency, as discussed in chapter 2. A review of more technical aspects of each empirical case, which are namely related to biology and environmental economics, allowed for the assessment of the level of uncertainty (ESU) around each one of the issues under negotiation.

The study is divided into two parts: the first focuses on the negotiations between European Commission and the Council, which are both taken as single, rational actors. Of particular interest is the role of the independent variable (IV1) "environmental scientific uncertainty" (ESU). This variable refers to: a) the incapacity of estimating the impact of certain economic activities on the environment; b) the impossibility of assigning economic values to common environmental goods or services. It is worth stressing that in this context, uncertainty refers to the lack of knowledge about technical (ecological, biological) aspects of fishery issues, and not about the other players that take part in the bargain. In a nutshell, this part explores the relationship between ESU and the contract established between Council and Commission with respect to external representation of the EU.

The second part of the thesis looks at multilateral (global) negotiations: the propositions advanced by the EC are analyzed in the light of mixed participation and level of ESU. At the international level (L2), the cases are brought into the analysis as follows: the comparison between cases (1) and (2) might shed light on how mixed competences affect actorness, as opposed to exclusive competence. Does actorness necessarily depend on legal authority, or is it possible for the EU to be recognized by other players as a critical actor in situations of mixed competence? The comparison between cases (2) and (3), by contrast, allows the assessment of two different contexts under which mixity takes place: high and low levels of ESU. For both comparisons, the distance between the proposal of the Community and the outcome of the bargaining process (expressed in the agreement) provide some indication of its performance as a global negotiator. Data stem from official documents such as meeting reports and official declarations. The outcome

[20] Preferences of the most important MS are briefly presented in chapter two, but not explored in depth.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

of the negotiation is expressed in the final agreement. That is, each one of the three cases is the result of a negotiation processes.

The supporting argument for this study is that, given the body of existing literature on the EU and integration processes, studies that now focus exclusively on treaty revisions and landmarks of significant increase in delegation to supranational institutions fail to capture the complex constitution of the EU as a global actor. It has been extensively observed that the 'amount' of sovereignty MSs are willing to shift to the Community depends on each MS preferences, the context in which the agenda is addressed, and varies across policy areas. Variation regarding the distribution of competences is inevitable; for this reason more attention should be put on the study of joint participation and the factor that influence power-distributing strategies between MSs and the Community. Legal devices that allow for such mixed participation, albeit underestimated for political scientists, appear as a topic of particular interest because they are capable of tackling the 'dynamics of transitory delegation' that allows for the evolution of the so-called 'multi-speed Europe'.

In the Community level, mixity requires negotiation of authority and attributions between MSs and the European Community that allow for the participation of both actors in various kinds of international institutions. This thesis seeks to analyze why and by which means MAs emerge. It addresses the driving forces operating at Community level – and the implications for states, the Community and third parts involved in the international agreements' negotiation process. I begin by introducing main concepts related to mixed agreements. I proceed by presenting the theoretical framework and laying down the hypothesis orienting this study, as well as the methodology adopted. The following parts systematize the empirical data and lead to possible conclusions regarding how mixed agreements are defined, and to what extent they contribute to the definition of the role played by the EC/EU in international negotiations. Before answering the question the concept of mixity and mixed agreements must be clarified. The next sections provide definitions and also a brief historical overview of competence sharing throughout EU integration.

2. Mixed participation of the EC and member states in international treaties

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

International treaties[21] are public, legal mechanisms by which actors in international law – states and international organizations – demonstrate their commitment to address common problems.[22] These agreements can be regarded as contracts, as the parties involved assume the obligation to follow certain rules laid down by the contract. From an analytical point of view international agreements can be divided into five phases: pre-negotiations; the bargaining process; signature and accession; ratification and compliance (implementation). This thesis focuses on the second and third stages.

Among the many ways of approaching the EU integration process, treaty analysis stands out as one of the most frequently adopted. Indeed, treaties tell a lot about Europe's grand bargains and shifts in the institutional context which were brought about. They have also proved useful to identify favorable conditions and obstacles to European policy-making in several realms. In that sense, not only treaties such as Rome, Maastricht and Amsterdam, but also instruments like the Single European Act are considered as having launched the basis for the most decisive changes of power configurations and political procedures in the EU. Indeed, these moments represent significant steps (or bargains) in the European history of integration, and even researchers interested in processes – also regarded as "what goes on in between treaties" – may use these texts as cornerstones to frame or delimitate their analysis.

The EU has reached its present status not only because of ever increasing levels of delegation expressed in the instruments mentioned above. It is actually a polity system with a myriad of pieces of legislation, court decisions and a set of more or less informal rules and procedures. The importance of widespread analysis based on the "main treaties" is not being disputed; however, it conceals many interesting study possibilities, because pivotal decisions along EU integration were grounded on interpretations or extensions of articles from less visible or "important" pieces of legislation.

Take the example of the Treaty Establishing the European Atomic Energy Community. Signed in 1957, EURATOM contained provisions lying beyond the Common Market project. One of its articles addresses treaties to be concluded by both the EC and member states. It is the formal recognition of the need to balance states and Community's agency, in the integration process

[21] In this thesis the generic term 'agreement' has been adopted, instead of treaty.
[22] Santis (2009), p.2.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

earliest stages[23]. Over time, discussions around these devices became frequent as more powers were attributed to the EC/EU. The situation is summarized by Rafael Leal-Arcas:

"Although the EC increasingly wants to become an international actor and somehow assert its international personality and identity, it also has to accept that Member States and third parties have legitimate interests".[24]

From both legal and political perspectives, the need to coordinate member state and Community participation in international affairs became increasingly evident. The response to such necessity leads to what the literature calls "mixity". A more detailed look at the main concepts is provided in the next section.

2.1 Political dimension of mixity and MAs

In overall terms, mixity refers to situations where member states and the EC share authority or responsibility over a certain issue. Their significance for EC international relations is enormous given the wide number of circumstances in which they apply and the possibilities of Community agency that they allow. It is important to stress that MAs are "normal" international agreements in the sense that, for the third parties there is no legal difference whether the agreement is mixed or not. For mixity does not affect the legal obligations of the signatories; it does not make any difference in neither the ratification nor the implementation by other states. The legal implications of mixity concern exclusively the EC and its members; the political implications, by contrast, concern MSs and the other players.

An agreement is considered mixed when: 1) the EC and one or more member states are parties to it; 2) when the EC and member states share competences, that is, authority of a Treaty lies partly with one or another, even if only states can be signatory parts; 3) if there are requirements concerning its financing or provisions on voting.[25]

[23] See Article 102, which refers to Treaties to be concluded by both EC and member states. "Agreements or contracts concluded with a third State (...) to which, in addition to the Community, one or more Member States are parts, shall not enter into force until the Commission has been notified by all member States concerned that those agreements or contracts have become applicable in accordance with the provisions of their respective national laws."
[24] Leal-Arcas (2001), p. 484.
[25] See MCGOLDRICK, Dominic. *International Relations of the European Union*. Longman. London, New York, 1997. Mixed Agreements are presented in a very clear and didactic way in Chapter 5.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The term comprises a wide range of interactions, and many definitions can be found in the literature. Of particular interest to this study is the one put out by Maurits Dolmans, to whom mixity is observed when "an international agreement with third states is entered into by an international organization as well as by all or some of its Member States."[26]

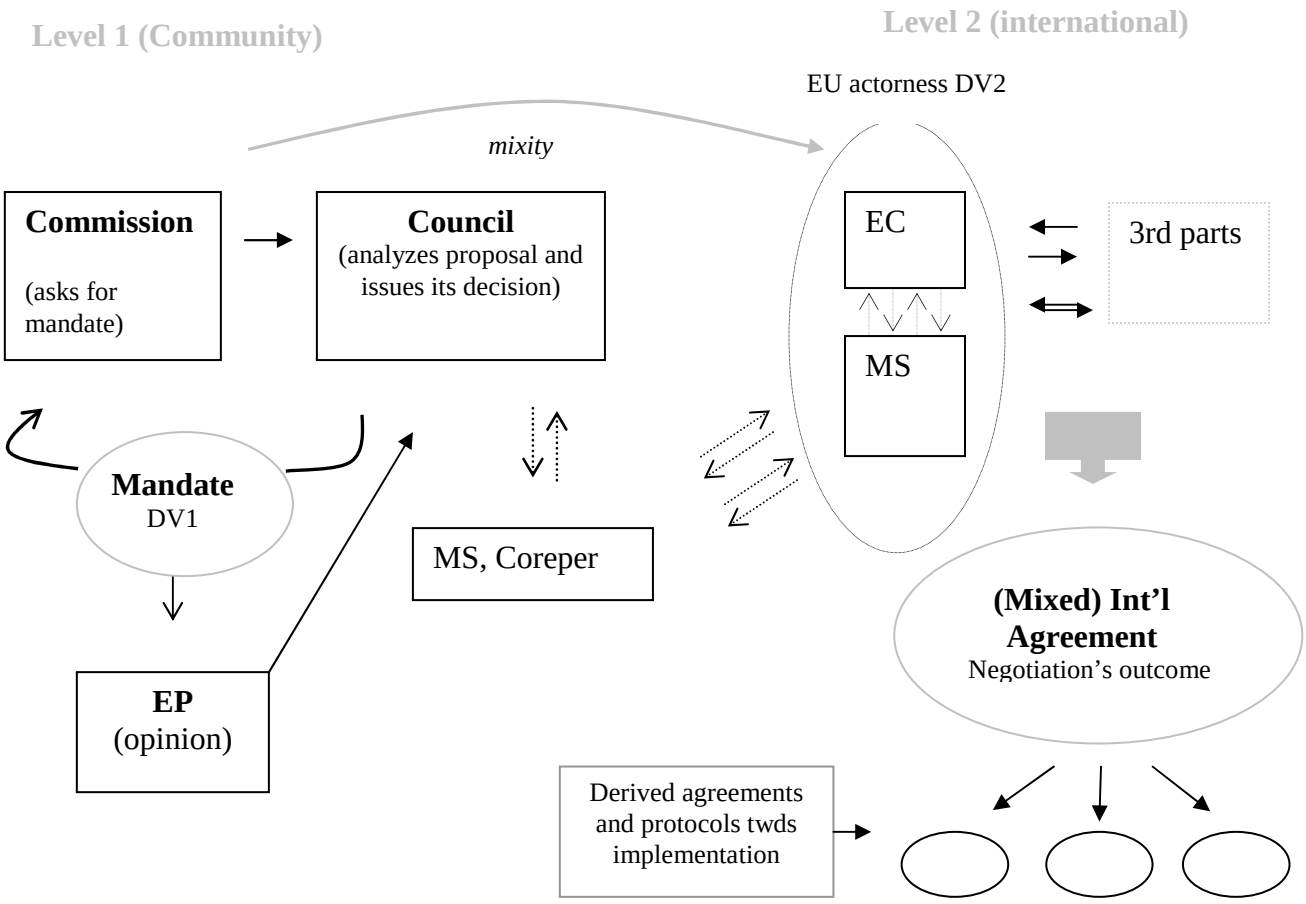
The term "mixed agreement" was first used in 1986, when the Court of Justice recognized the need for participation of both member states and the Community regarding an association agreement with Turkey.[27] Although there is no consensus about their formal recognition in Community law, today little can be questioned in terms of its validity, practice and *de facto* incorporation to the EC legal and political frameworks.

MAs are marked by the distribution of competences between member states and the Community. The term competence refers to the explicit and/or implicit authority to carry out specific tasks such as initiating negotiations, proposing agendas, defining and / or displaying incentives to other parties, participating in disputing resolution mechanisms and enforcing. In the literature both terms "competencies" and "powers" can be found. In fact, competence transfer confers more power to the Community. However, I avoid using the latter, due to the several conceptualizations it has for political scientists. Figure 1 presents a graphical representation of mixty and mixed agreements as addressed by this study.

[26] DOLMANS, Maurits J.F.M. P*roblems of mixed agreements: division of powers within the EEC and the rights of third states*. The Hague : Asser Instituut, 1985.
[27] See Case 12/86, *Demirel v. Stadt Schwäbisch Gmüd*.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Fig. 1: Graphic representation of mixity and MAs



2.2 Mixity factors

'Supranationalizing' competences can prove advantageous for both the EC and member states in the international realm.[28] Actorness increases by pooling sovereignty: third parts more easily recognize a potentially powerful actor capable of boosting cooperation by offering more robust incentives. By the same token, threats become more credible and free-riding, more costly; withdrawal hinders the negotiation.

Despite these potential pay-offs, states are frequently reluctant to delegate powers to the Community in a definitive way. Although delegation facilitates the pursuit of common goals, states have less leeway to pursue more specific interests. Once the European Commission

[28] The consequences on the domestic realm are not addressed in this thesis.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute
DOI: 10.2870/17665

becomes the external representative in the international level, states are no longer able to take part directly in the bargain, and are prevented from adopting positions which are conflict with those of the EC. This might reduce states' individual payoffs in certain policy areas, and raises the risk of supporting positions that are not entirely aligned with their preferences.[29] Thus, if interests among MS are too diverse (or divergent), they cannot make sure that the position sustained by the Community will be beneficial. If every player sticks to its position, the process becomes deadlocked.[30] Over the course of the integration process, alternatives between the two extremes – delegation or non-delegation (deadlock) – have been developed to accommodate expectations, fears and the diversity of interests and preferences. This necessity is discussed and incorporated into the research design in chapter two. For the moment it suffices to present such antagonist need as the following: the more competences transferred, the higher EC actorness, because pooled resources coming from member states allow for compensations to be offered, thus making incentives and threats more credible; the clearer the distribution of competences, the higher is EC actorness. For recognition does not necessarily depend on full authority; thus autonomy and cohesion can be present within the EC competence domain.

MAs offer the possibility of joint participation by member states and the EC, enhancing not only its external role but also the integration process itself. Because of the EU's special character – neither intergovernmental, nor supranational – avoiding precise definition with respect to the division of powers might prove an advantage, since member states and the EC can shift back and forth each ones' attributions this way, they can be perceived as a strong actors without losing capacity to run after specific goals. Nevertheless, this causes concern among third parties, who may require a list of specific powers. That is, demanding legal certainty. In such cases, EC and member states seek to keep the list the less specific possible, in order to preserve flexibility along the bargaining.

Mixity can provide solutions for this "blend of intergovernmental cooperation, functional integration, supranational powers and federalist aspirations."[31] The main advantage of mixity is the flexibility it confers to EU decision-making: first, it prevents negotiations from coming to deadlocks by easing points of potential friction between states and Community institutions, which happens when MS have divergent or even antagonistic preferences (zero-sum situations). Second,

[29] Agency problems are addressed more deeply in the theoretical chapter.
[30] Héritier (1999).
[31] Rosas (1998).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

it prevents less integrationist actors from exercising veto power, which would stall the bargain and hamper cooperation/integration. Third, it allows for the EU to act in front of third parts in negotiations where MSs alone will not have enough bargaining power to make their position prevail. Fourth, mixity satisfies both MS and EC claims, because some authority is shifted to the supranational level, and states still keep control over such authority. This insurance is important because states, being risk averse, are more likely to transfer competences which are not foreseen by the treaties if there are mechanisms that allow them to contain agency loss and avoid consequences derived from unintended delegation.

MAs are, rather than an abnormality of the European legal framework, a consequence of the integration process, where the need and will to constitute an international actor coexist with the plurality of interests among member states and potential payoffs of keeping decision authority over certain agendas. Allan Rosas summarizes the situation: "the European Union being a hybrid conglomerate situated somewhere between a State and an intergovernmental organization, it is only natural that its external relations in general and treaty practice in particular should not be straightforward."[32] Finally, the division of competences confers more flexibility regarding the implementation of the (international) agreement – a deficit that the EU still has to fight. Mixed participation of Community and MSs exerts impact not only on policy implementation in the EU and on multilateral *fora*, but also on EU institutions and the integration process itself.

2.3 Implications: mixed agreements and EU institutions

The implications of MAs transcend the EC's legal personality and influence its performance in international negotiations. Relations within the Community are affected, as certain actors – such as certain member states, or the Council as a whole – may prefer to share competences in order to have an intermediate alternative between supranationalization or no agreement at all. In fact, MAs engender numerous alternatives, depending on how, and to what extent, competences are distributed.

As discussed later in this chapter, the attribution and scope of treaty rights and obligations may not be clearly explicit in the contract between Commission and Council. This boundary between national and Community authority seems blurred, despite the existence of mechanisms to reduce

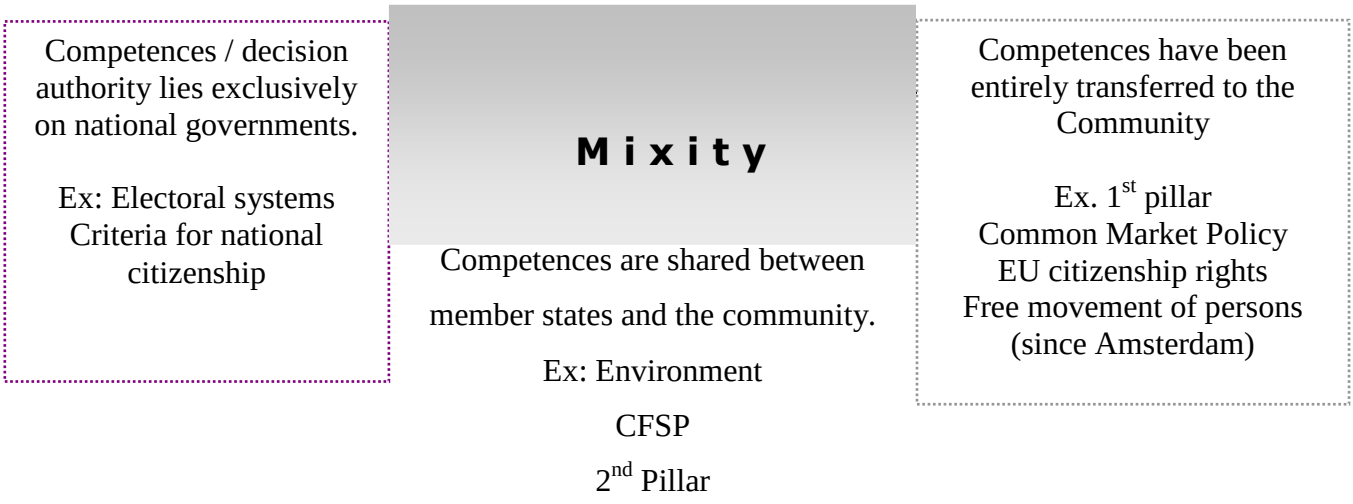
[32] Rosas (1998), p. 125.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

the phenomenon.[33] Under certain circumstances, however both EC and MSs may *prefer* to leave such boundary blurred. Authority may remain confusing because it is made purposely to be so, as put out by Rachel Frid: "The member states keep open the possibility to act in fields where the division of power is not well-established. The advantage (…) is that it makes it possible to avoid confronting the question of what is necessary for the attainment of the objectives of the common market."[34]

Law scholars have set several criteria according to which MAs can be grouped. Though it is often hard to fit existing MAs into one category (for these are not more than ideal types or analytical constructs) these works proved very useful from the methodological point of view. However, MAs remain as a misty area in between the 1st pillar and affairs of domestic concern, as represented in the figure below.

Fig. 2: Community, member states' and mixed competences



Under certain circumstances, the EC's *de facto* exclusive competence might be preferred not only by Community bodies but also by states themselves. On the other hand, there are areas where MS do not want to give powers away to Community institutions. In that sense, Principal-Agent theories provide substantive reasons: states (the principals) delegate determinate tasks to agents, which can be institutions like the Commission or specialized agencies, who gain certain

[33] Subordination clauses, common in environmental agreements, are one of these mechanisms. In this case, a certain number of states have to sign the treaty so the EU can also become a part. Further specifications of what falls into either the EU or states' competence may also be required.
[34] FRID, Rachel (1995), p. 87.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute
DOI: 10.2870/17665

autonomy. By doing this they leave some tasks to be carried out by agents with more expertise and/or credibility. It can also be more interesting to accelerate the whole process, therefore reducing the time between negotiation and implementation phases. A stronger and more credible position is accomplished at the international level. From this perspective, intrinsic characteristics of the agenda play a significant role, such as transboundary character, amount of information available, time framing, proximity to Community's 1st pillar (i.e., issues where MSs have permanently delegated powers to the EC has exclusive competence) and so on.

MAs provide advantages and limitations to the different actors involved: the member states, the Council, the Commission and third states or associations constituting a contracting party. Although we can observe tendencies to either support or avoid mixity, the preferred outcome will depend on several factors. For the states, for instance, it will depend on the interest in some specific area, and how different the state's position is from the community's. For the Commission and the Council, it will depend on the control that each one of them will exert over a certain area.

Generally, this preference depends on the interest for a certain area, willingness to retain control, alternatives available, urgency to conclude the agreement, etc. It is worth remembering that payoffs and drawbacks cannot be put exclusively in economic terms – they also have a political dimension. To put it simply, the trade-off may not be directly related to the issue addressed by the agreement.

Overall, when defining their position regarding mixity, actors evaluate costs and benefits of this kind of agreement compared to other solutions, being them a purely community agreement or separate negotiations for each state (that is, no agreement). Such implications are also to be analyzed by the present study, and will be more specifically addressed in the methodology section.

3. Mixed agreements: a typology

The concept of *mixity* has been largely recognized by EC Law. In general terms, mixed agreements are marked by the existence of shared competencies between member states and community institutions. Macleod, Hendry & Hyett give a more specific definition: "any

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

agreement to which the Community and the Member States are parties is, formally speaking, a 'mixed agreement"."[35]

Mixed participation of both MS and the EC is not a homogeneous phenomenon. Since competences can be distributed in many different ways, their classification can follow different criteria. These typologies are more an analytical tool, since sometimes the agreement does not fit exactly into a specific group. Conversely, they can prove helpful to the research, since they allow the identification of which competences are being transferred, and to *what extent* it is occurring.

According to Dominic McGoldrick, three different situations lead to mixed agreements: when both member states and the EC are parties; when the EC and member states are competent, even if only the states can be contracting parties; and when either the states or the EC has competence to vote, depending on the issue.[36] It is important to note that obligations regarding the agreement's implementation are insufficient to characterize the phenomena, otherwise every agreement could be considered as "mixed".

A more detailed typology is provided by Rosas and commentated by Leal-Arcas. In this case, mixed agreements can be classified according to:

I. **Type of competence** – This classification is related to the relationship between the EC and member states. It concerns the potential powers that the EC may exercise if the Council so decides. Competences can be either exclusive or non-exclusive:

- **Exclusive competence** – In fields of Community exclusive competence, like commercial policy, MSs are no longer competent to act; they cannot exercise powers that are concurrent to those with the EC in this field[37]. For such powers have been transferred in a total and definitive way, and cannot be restored to MSs. As for the international level, MSs cannot adopt positions that differ from those adopted by the EC in its relations with third countries. As a consequence, only the EC may become party to international agreements which relate to areas of exclusive competence, "in order to be in a position to comply with the obligations in

[35] Macleod, Hendry & Hyett (1996), p. 142.
[36] McGoldrick (1997).
[37] [1975] ECR 1355, at 1364.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

the agreements in question".[38] Exclusive external competence are classified as express when it has been conferred by express Treaty provisions (derived from primary law), or by Community legislation (derived from secondary law, such as judicial decisions). If an international agreement is covered in large extent by Community rules, EC competence is also considered express and exclusive.[39]

- **Non-exclusive competence** – when, in principle, both MSs and the Community may exercise their powers. They can be alternative or complementary; in the second case they are further divided into parallel or shared, as shown below:

  - **Alternative** – non-exclusive competence is denominated alternative when its exercise by the Community stops MSs from exercising theirs. That is, powers become exclusive as the Community exercises them. Mixity therefore, ceases to exist. These agreements are also called "false mixed agreements", as the partnership between MSs and the EC does not have legal substance.[40]

  - Complementary – In a situation of complementary competences, the exercise by the EC does not preclude MSs from exercising theirs.

    a. **Parallel** – In this case, the EC is another contracting party, in addition to member states that join the agreement. The EC has no direct effect on the states obligations and rights.

    b. **Shared** – In this case the division of rights and obligations is implicit. Competences can be horizontally (i.e., through sectors) or vertically distributed. There are however, situations when the competences cannot be disentangled, which characterizes cases of 'total mixity', as opposed to 'partial mixity.'[41] As this division is not always clear, and problems are more likely to arise when third states are involved.

[38] Leal-Arcas (2001), p. 506.
[39] Frid (1995), p.87.
[40] O'Keeffe (1983).
[41] Frid (1995), p. 112.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

With regard to the three cases studied in this thesis, one is of exclusive competence and the other two are situations of complementary shared competences.

It is always worth stressing the relation between the Community and the international sphere. The internal competence (that is, with respect to EU matters) *implies external powers* (that is, vis-à-vis third parts).[42] As put by Leal-Arcas, under the theory of parallelism, the treaty-making or external competence of the EC should reflect its internal jurisdiction; "if the EC has the powers to legislate internally, it should also be competent to enter into international agreements in the same fields."[43] This happens because Community competences depend on the specific legal situations which are the subject of regulation by the international agreement. Global agreements – especially environmental agreements – regulate several different legal situations. Mixity becomes then unavoidable: whenever the EC has exclusive competence the Commission is the negotiator,[44] whereas situations which do not belong to EC exclusive competence must be decided together with, or exclusively by, the MSs.

According to this argument, the difference refers to whether such powers are express or implied. This point is important because division accounts for the criteria according to which the mandates (level 1 dependent variable) will be analyzed.

II. **Type of mixity –** If the EC has exclusive competence to address a specific matter, this means that delegation to the Community has occurred. In mixed agreements, this does not happen, and the relationship between the EC and member states has to be defined. This classification concerns the participation of the EC and/or member states. That is, the relation between the parties and the agreement. Competencies can be:

    - **Facultative** – When competence of the EC is non-exclusive, but there are no competencies specifically reserved for member states either. A matter of EC Law then becomes 'facultative, optional and non compulsory.'[45] This is the case with most environmental agreements.

[42] For further explanation under law perspective see, for example, Rama-Montaldo (1970).
[43] (2001), p. 509.
[44] Art. 228 EEC.
[45] Leal-Arcas (2001), p.494.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

- **Obligatory / necessary** – In this case, it is necessary to have the participation of both member states and the EC. The Law of the Sea Convention is an example. Usually, necessary participation is observed in agreements dealing with a large number of issues, where a single position representing the EU cannot be achieved. It is worth stressing that both facultative and obligatory mixity happen in areas out of the EU's exclusive competence, which can lead to difficulties in classifying the phenomena. Useful criteria to tell them apart are: the voluntary participation of all member states, and the divergence (or clash) among their positions and preferences – more frequently observed in the obligatory type. Conversely, when an issue has complex technical aspects, as well as those marked by lower levels of political mobilization (also called less sensitive matters), member states tend to push for – or more easily accept – a stronger role for Community institutions. This behavior is theoretically supported by principal-agent approaches.[46] These cases are more frequently related to facultative mixity. Another factor determining the type of mixity are membership clauses foreseen by the institution the EC and MS will participate. This is not addressed in depth since it is not the result of interactions within the Community, but preconditions externally imposed.

Table 1: Type of competence and type of mixity

Competence					**Mixity**
Type of competence		**Allocation of authority**			
Exclusive		EC			No
Non-exclusive	Alternative ('false mixity')	EC or MSs			No
	Complementary	Parallel EC and MSs			Facultative
		Shared EC and MSs	Concurrent[1]		Facultative
			Coexistent	'partial'	Obligatory
				'total'	Obligatory

[46] Pollack (1997).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

When it comes to broad environmental agreements, shared competences and subordination clauses are of fundamental importance. They allow negotiations to proceed even if some issues face serious obstacles or prove highly controversial, preventing the whole process from reaching a deadlock. In a nutshell, it confers flexibility to rule-making procedures by not specifying, postponing, or providing U-turns for some decisions.

Unclear rules leave more room for interpretation and enhance the role played by legal practice and Court decisions. It comes as no surprise that most of the related academic production focuses on the legal implications of these chimerical but at the same time legitimized and frequent agreements. These studies, however, remain restricted either to conflicts between domestic and international Law, as if no relationship existed between the two levels.

Part of the political science scholarship that adopts comparative methodologies is devoted to the role of certain actors (states, entrepreneurs, social movements) and institutions (such as government systems and decision making rules). Scholars have also paid attention to problems related to and policy implementation. The approaches are either horizontal, i.e., cross-country analysis or top-down. Good examples of the second type are harmonization of national legislation, standardization and directive implementation in different member states. No doubt such studies provide leverage to a greater understanding of European polity. However, the contribution of bottom up views and comparisons with non EU systems is still relatively modest.

To sum up, there is a gap in decision-making and negotiation studies, whose main causes is the exclusive focus on the legal dimension, therefore overlooking mixity's political implications. In the political science realm, a top down approach prevails x sovereignty, a lack of linkage between global and community levels, and also a focus on the implementation deficit. The aspects described above demonstrate the need of studies adopting of a multi level approach, capable of analyzing the factors and implications of these "alternative" or "smoothing mechanisms" – the mixed agreements

This study is motivated by a broad inquiry: with respect to environmental agreements, how is the EU position established, and what is its impact when negotiations move from community to global level? The management of marine resources was the policy area chosen to carry out the study. Of special interest are fishery agreements signed by the EC and/or member states at the international level, as will be develop further on.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

4. Organization of the thesis

The theoretical framework is presented in Chapter two. In brief, I draw on a two-level approach mainly grounded on rational choice institutionalism, adopting a comparative case study methodology (section 3), which will enable the study of negotiation processes and its outcomes. Furthermore, it brings together the concepts developed in the first chapter.

Institutionalist approaches and bargaining theories help us delimitate the object of analysis, define hypothesis and specify variables of major interest. The first sections review key points of institutionalism's most relevant strands, taking into account the considerable diversity within the field. The research design is explicated in accordance with the rational-choice models: for each level the number of actors holds constant and their preferences are assumed as previously defined. However, some issues show high degrees of uncertainty. For this reason I refer also to more interaction-based models derived from sociological institutionalism in order to capture a more complex reality.

The following chapters comprise the empirical part of the study. First, an historical overview regarding the role of the EC in environmental protection and regulation of common resources is provided. A more detailed inspection is made of fisheries and the EU, from early agreements to the establishment – and reform of – the Common Fisheries Policy (CFP). I proceed to the comparative analysis by studying selected cases at both Community and international levels. How variations in mixity account for different roles to be played by EC and member states. Still within the empirical part, mixed agreements will be confronted to situations where the EC has full competence and cases where EC accession does not take place. The final part of the thesis brings together the results for each level of negotiation and kind of agreement in terms of policy outcomes. This allows not only the analysis of the EC as a global actor, but also the assessment of MAs as a political instrument in the bargaining process.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 2

THEORETICAL BACKGROUND

The aim of this thesis is to study how decisions made at Community level influence the bargaining process – and its outcomes – in broader negotiations. How does scientific uncertainty regarding environmental issues account for variation in the distribution of competences expressed in the mandate negotiated between the Council and the Commission, respectively the principal and the agent of this contractual relationship? What is the relationship between competence distribution at the Community level, the position defended by the EU *vis-à-vis* third parties and the global negotiations' outcome? The impact of competence distribution between Council and Commission is analyzed according to a comparative case-study methodology. The cases concern international agreements on management of marine living resources. Fisheries policy has been chosen because it clearly reflects the tragedy of the commons at EC as well as in the international level. Thus, this is an issue area where there is variation with regard to the distribution of competences between member states (MSs) and the EC. It shall be stressed that, theoretically, fisheries fall under the Community exclusive competence. However, in practice this is not what happens, as fishery agreements have environmental provisions and encompass areas beyond the first pillar, so that competences can be shared in many different ways. For this reason there is variation concerning exclusive *versus* mixed competences, and also among mixed agreements.

Another important point to be taken into account is that integration can be defined in several ways: as a process whereby political actors shift their loyalties, expectations and political activities toward a new and larger center,[47] a result of governmental bargaining where an international institution is selected to render cooperation possible between actors with diverse preferences[48], as a pool of sovereignty. The common point of all these definitions is that integration is seen as a gradual transfer of authority related to decision and legislation-making from the national to the Community level, therefore empowering supranational bodies and developing their bureaucracy. Following a rational-choice postulate, the actors involved in this

[47] Haas (1961), pp. 367-368.
[48] Moravcsik (1998).

DOI: 10.2870/17665

process reallocate powers in the expectation of achieving mutual advantages, namely with regard to implementation and bargaining power in front of non-EU members.

Indeed, the influence the Community exerts on national governments' decision and policy-making has largely increased over the last years. However, integration has proved much more complex than what the notion of 'deepening and widening' suggests. The complexity described by Hooghe and Marks[49] as the reallocation of authority upwards, downwards, and sideways that involves member states and European institutions has driven the attention of a growing number of scholars. The need to develop more sophisticated theoretical tools to deal with the plurality of actors and processes of the European polity system has become evident. The contribution of theoretical and methodological elements from various disciplines such as economics, political science, sociology and law has opened new possibilities to better study the EU. Of special interest to this thesis are the relations of the EU with other states and its participation in multilateral *fora* and international organizations amid varying degrees of environmental scientific uncertainty (ESU).

Earlier theories of European integration provide a simplistic account regarding the international actorness of the EU. It wouldn't be adequate to claim that such theories are not 'wrong', but their scope often proves limited to study today's complex scenarios marked by the simultaneous participation of several stakeholders and their heterogeneous preferences in the decision-making instances of the EU. They fall short of explaining the plurality of channels and procedures that allow for such participation, and are inadequate to address the new proto common foreign policy of the EU. The first initiatives to study the international relations of the EU advanced by treating it as an international organization constituted by sovereign states, or by considering it a federal system. Over time, it became clear that the EU polity system could not be subsumed into one of the two categories.

Institutionalist theories have enlarged the possibilities of analytically approaching the EU, because they are less concerned with establishing formal definitions and more interested in explaining how and under which circumstances do EU institutions emerge, evolve and affect the behavior of member and non-member states. The different variations of institutionalism, on the other hand, shed light on aspects that traditional paradigms – namely the intergovernmentalist and the functionalist – leave obscure. It engenders more sophisticated analyses by bringing together different political levels and policy issues, thereby enabling the construction of more complex

[49] (2001).

 DOI: 10.2870/17665

designs. On the other hand, institutionalism needs support from other theories, because it alone cannot account for the postulates and assumptions the analysis requires.

Institutions can be broadly defined as relatively enduring and connected sets of rules and norms that define and prescribe standards of behavior, and structure patterns of activity among states, or across them. In this thesis, the idea is that variations in institutional design observed within the EC influence its agency as a player in negotiations where third the parties are also engaged, and entails the following research questions: 1) what causes variation in the distribution of competences between Council and Commission, and 2) to what extent (and in which ways) do these different configurations affect the capacity of the EU to shape the outcomes of international negotiations? Of particular interest is the influence of *environmental scientific uncertainty (ESU)* – an independent variable related to lack of knowledge about the issue under negotiation, as will be shown further on this chapter, in both the Community and international levels.

This chapter is structured as follows: first, the main aspects of earlier rational-choice theories of European integration are reviewed; their limitations are also discussed in order to show why such theories are incapable of explaining the questions posed by this thesis. Next, two main institutionalist approaches that may provide guidance to my problem are examined; rational choice and sociological. The contribution of institutionalist key concepts that will be used throughout the thesis is addressed; principal-agent (P-A) approach is brought into the design in order to supply institutionalism's need for extra theoretical support, a shortcoming explored by Diermeier and Krehbiel. Finally, the research hypotheses are laid down, variables are discussed and the three empirical cases are introduced.

1. Rational choice integration theories: contributions and limitations of (liberal) intergovernmentalist approaches

Rational choice can provide explanations that go beyond exclusively state-centric views of European integration and the international system. Thus, they are capable of dealing with complex scenarios characterized by the action of multiple players (governmental or not) in different political levels at the same time.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The development of more sophisticated rational choice approaches may be regarded as responding to the criticism to which earlier theories were subjected. Concerning the evolution of the EU, "traditional theories" have faced serious difficulties in addressing contemporary political phenomena. Over time, it has become clear that the intergovernmentalist – functionalist dichotomy cannot capture the complexity of the EU polity system as it is today, not to mention its influence on the international system.

Some scholars advocate a Theory of European Integration due to its 'unique' character. These perspectives, though capable of dealing with the specificities of the EU, do not allow comparisons with other political systems. How can EU polity be addressed? The use of more sophisticated models, coupled with rigorous methodological have significantly contributed to increase knowledge on integration processes and delegation to supranational institutions. More cases, variables and causal mechanisms can be analyzed and controlled; the incorporation of concepts from related disciplines enhances the academic dialogue. Such exchange is potentially fruitful, as it significantly broadens the scope of research and allows for more sophisticated designs capable of dealing with the increasing complexity of phenomena related to delegation, integration and interdependence. To sum up, integration theories have evolved not only because sociological explanations came into play, but also because rational choice scholarship has become more sensitive to the necessity of dealing with more complex and dynamic phenomena, as discussed over the following sections.

1.1 Intergovernmentalism

Intergovernmentalism is a rational choice-based integration theory that considers integration as resulting from the convergence of national interests of states, which in turn express trends and forces of national politics. MSs are, in this way, principals that externalize the preferences of certain domestic actors. Whilst they acknowledge the evolution of the integration process from customs union to political, economic and monetary union, and the successive enlargements, little influence is attributed to supranational agents. Put shortly, institutions that foster international co-operation simply express the relative bargaining power of different governments who may be willing to 'pool' or 'delegate' sovereignty as efficiency and effectiveness criteria require. Following this logic, assigning implementing and monitoring responsibilities to other actors is accepted by governments as a means of locking one another into commitments.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The Intergovernmentalist school gained momentum in the 1960s, namely thanks to the Luxembourg crisis precipitated by French president Charles de Gaulle. The importance of state sovereignty and the refusal to transfer authority to Brussels confirmed Stanley Hoffman's view of the 'obstinate state'.[50] But an explanation for variation in the substantive content of foreign policy was still missing; more specifically the factors that make states more likely to engage in cooperative or conflictive relationship remained obscure.

Andrew Moravcsikls Liberal theory of international politics[51] represents an attempt to look into states' preferences. The theory calls attention to the link between two different levels of analysis (the domestic and international realms). For this reason the relations between society and state are crucial to understand world politics. Liberal theory considers politics as a function of the demands of individuals and societal groups which pursue their material and ideal welfare acting on a rational basis. The state, in turn, is not an actor in itself, but an institution which represents the preferences of certain domestic actors.

By the same token, supranational institutions of the European Community were a function of power and preferences of the member states. Moravcsik regards national governments as the driving force of European integration; they are the primordial gate-keepers, since they participate and connect the three main steps towards integration: the formation of domestic preferences, interstate bargaining and delegation to supranational institutions.[52] Put briefly, they assemble and transmit national demands to the Community level, and supranational institutions are mere agents of member states. Common policies with immediate economic consequences will only exist if the 'big' member states see the payoffs of such policies; common policies that have less impact on the (national) economies will only develop if political implications – a more visible role in the international scene, for example – seem attractive to the key states.

Moravcsik's work is important because by looking at treaty negotiations ('the milestones'), it offers an explanation of how MSs preferences are constituted, and how they determine integration. Its shortcoming is that it cannot capture the complex and comprehensive issues of global environmental politics. If the three empirical cases addressed in this thesis were examined through intergovernmentalist lenses, it would probably be shown that delegation occurs if the

[50] Hoffman (1966).
[51] Moravcsik (1997).
[52] Moravcsik (1998).

 DOI: 10.2870/17665

more important member states see the payoffs of empowering the supranational agents. Competences will be transferred if critical member states are willing to do so; when their preferences are aligned environmental uncertainty is not necessarily an impeditive to delegation, provided that there are means by which the collective principal can control the agent. The preference expressed by each member state, in turn, will depend on the stakeholders that act in the domestic arena. To sum up, according to liberal intergovernmentalism, only the preferences of the critical principals ('big' MSs) matter. Thus, given that the Commission only exists if permitted by the national governments, it is possible to say that principals have full control over the agent, and that there is no room for agency loss.

By looking at the cases, we see that such analysis is incomplete and even misleading. Intergovernmentalism offers an explanation for why or when delegation occurs; to pick only cases where the principal decides to empower the agent does not say anything about the conditions that lead to delegation. From a methodological point of view it would be more interesting to compare distinct outcomes, delegation and non-delegation. An alternative could be to hold the outcome constant – delegation happening (or not) in every case – while varying the distribution of preferences of the critical players (important member states). Thus, intergovernmentalism does not say anything about the "quality" of the contract between principal and agent. The analysis remains incomplete.

Moravcsik's work has been largely criticized for not providing an accurate picture of negotiation outcomes in the EU, for treating the Council-Commission relationship as purely hierarchical, for overlooking the consequences of shared decision making, and for neglecting the fact that private actors can also act directly on supranational instances (Commission and Parliament) and bypass the states. Undoubtedly member states play a central role in the integration process, but in an increasing number of occasions – namely after the two last enlargements – they cannot fully control the actions of the agents. The Council cannot act alone, and cannot impose a collective view either. It depends on the inputs from the Commission, on the decisions issued by the ECJ, and on the views of the EP with regard to a rising number of issues.[53]

Liberal intergovernmentalist analysis may be also misleading to address the questions posed by this thesis, even if rational choices premises are maintained. Let us consider the independent

[53] Hayes-Rensahw & Wallace (1997).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

variable uncertainty (ESU): liberal rational choice approaches would contend that ESU influences the strategies adopted by domestic actors and, in turn, MSs' behavior. Uncertainty *per se* is not necessarily an impediment to delegation: actors already have defined preferences and will act under bounded rationality conditions. Domestic actors pressure MSs to adopt certain positions; the 'big' MSs will, in large part, determine if delegation will occur, and in which terms.

Such logic, albeit theoretically feasible, seems too simplistic. ESU is not a dummy variable, but a characteristic (or a property) of an environmental issue. Liberal intergovernmentalism would have little to say about these different degrees of ESU. Following this line of reasoning, delegation of external powers to the Commission cannot be tackled in such a black and white fashion, because there are several possibilities between the two extremes of exclusive competence (Community and MSs). Again little can be said about the "quality" of the mandate. Little can be said about institutional evolution and change; to study the EU as an international actor implies that it will respond to externalities, and liberal intergovernmentalism cannot deal with such complexity.

When ESU is lower, as in the case of the agreement on fish stocks (case 2), there is a clear need for global action because fish stocks are living and mobile common goods. The advantages of empowering the agent are more evident as compared to biodiversity negotiations; however, key member states may still wish to keep sovereignty over this issue due to pressure of domestic interest groups, and delegation does not take place. Moravcsik "P-A" relationship involves MSs and the Commission: the Council is not regarded as an institutional actor. Such analysis is not only simplistic, but also disconfirmed by empirical evidence; hence it does not take into account that the Commission initiates the legislative process, and that for the Council it is easier to accept the proposal from the Commission (QMV) than amending it (unanimity).

Finally, regardless the level of ESU, if all that matters are the preferences of key MSs, it is useless to investigate the relationship between the two levels. EU actorness would be a function of big MSs and their domestic driving forces. In other words, intergovernmentalism is not sophisticated enough to address the relations between the EC and the international level.

1.2 Institutionalism

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

"… it matters less whether politics occurs within or among nations. What matters more is that politics occurs within a framework of mutually understood principles, norms, rules and procedures – that is, within an institutional context.[54]"

It was shown in the introduction that the fact that the EU can be classified neither as a purely intergovernmental organization nor as a supranational institution or federal state has limited the explanatory power of traditional state-centric approaches. Basically, they fail to explain several aspects of EU integration because they overlook the complexity of the relationship between European institutions and national policies. Decisions are not merely imposed from the top on member states; by the same token, supranational institutions are not mere subordinate agents of national bureaucracies. "Member states exert influence in the shaping of policies at the European level by which they themselves are subsequently transformed."[55]

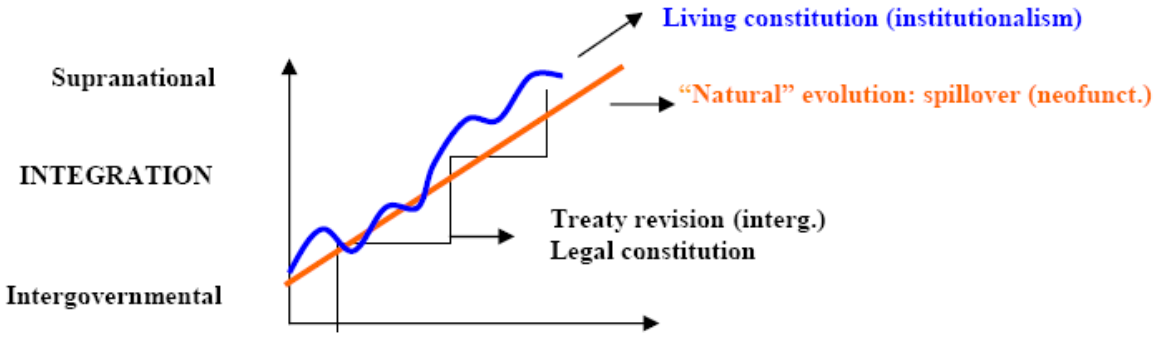
Among the approaches that have contributed the most to the production of cumulative knowledge, Institutionalism stands out as one of the most important. It comprises a wide range of theories that adopt rational choice, sociological, or historical perspectives. These distinct theories share a common claim that institutions influence the political strategies adopted by individuals, firms, groups, and governments, and thereby affect political behavior and policy outcomes. To put shortly, these various strands are loosely bound by the assumption that *institutions matter*. They may vary tremendously with respect to their membership rules, scope of the issues covered, and centralization of decision procedures, control mechanisms and flexibility, among other aspects.[56] But in overall terms they matter because they address collective action problems by regulating social practices, distributing gains, improving learning and communication, establishing sanctions, and so on. From the analytical point of view the institutionalist framework not only calls attention to the relation between actors, politics and policy-making, but also allows the study of these processes across different levels of analysis. What driving forces are responsible for certain types of institutional design, why some designs are preferred vis-à-vis others, and which conditions account for the success or failure of institutional forms? Thus, once created, how do institutions matter, that is, how do they affect political actors' incentives and preferences, and how do they affect policy outcomes?

[54] Jupille & Caporaso (1999).
[55] Héritier (2000) p.2.
[56] See, for example Koremenos, Lipson & Snidal (2001).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Both intergovernmental and neo-functionalist schools agree that EU integration has been the expression of "both the sophisticated accommodation of converged national interests via the construction of governance regimes and the consolidation of a supranational polity."[57] Nevertheless, the debate on what makes European integration happen: the political will of the 'big' states or spillover, limits the analysis of complex integration because they do not capture the dynamics of the process. Institutionalism sheds light on this gray area, provided that more steady theoretical postulates are added. Drawing on Wessels and Schäfer, the following graphic representation of integration shows the three theoretical perspectives[58]:

Fig. 3: Graphic representation of theoretical approaches to integration



Because of its plasticity, institutionalism allows for the investigation of pertinent questions that lie at the intersection of the domestic and the international realms, which are left unanswered by other theories. It enables a cross-policy analysis of the EU's international relations and its actorness under differing conditions, and opens up many interesting possibilities for comparative research, depending on the variables that are brought into the research design.

Differences among institutionalist approaches lie in core assumptions regarding player's preferences, and their behavior. As a consequence, they may provide different explanations to the establishment, evolution and change of institutions. More specifically to the EU polity, institutionalism may provide sophisticated and comparable answers to why and how elected politicians elected by their national constituencies decide to create and delegate public authority to supranational institutions beyond direct democratic control, and the potential impact of power transfer.

[57] Puchala (1999).
[58] (2007), p. 12.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute
DOI: 10.2870/17665

The following section presents an overview of the prevailing perspectives and the phenomena they seek to explain. Taking actors' preferences and behavior into account determines two main branches, roughly categorized as rationalistic and sociological.

1.2.1 Rational choice institutionalism (RCI), institutional theories and theories of institutions

Most institutional approaches applied to the EU seek to explain political outcomes. Actors are assumed to behave rationally: they are self-interested, utility-maximizing individuals who act according to the estimations of the costs and benefits of their decisions. In order to pursue their interests as efficiently as possible, several problems have to be circumvented: the parties involved must have information about other actors' preferences and behavior; they also need data on what they are negotiating; monitoring and sanctioning mechanisms shall be at reach; compensations can also be offered. In a nutshell, uncertainty about the behavior of other players (in Koremenos' terms) must be reduced, whereas the costs of opportunistic behavior must be raised. Institutions emerge as a result of their interdependence, strategic interaction and collective action or contracting dilemmas; they are designed to meet these exigencies by providing focal points, promoting exchange of information and inhibiting cheating and free riding. In a few words, causing the actors involved to adjust their behavior considering the position of other parties – that is, *cooperating*, in Robert Keohane's terms.

RCI takes a functionalist approach towards the question of institutional choice. Political-institutional decisions can be explained in terms of the functions a given institution is expected to perform and the effects on policy outcomes it is expected to produce,[59] taking into account the risks of unintended consequences that are inherent in any institutional design.

Derived from economics, rational-choice approaches comprise a wide range of models that seek to explain social phenomena starting from the assumption that individual actors are constantly making choices according to cost-benefit analysis. Two concepts are central. The first involves transaction costs: the execution any transaction, being it economic or political, involves not only production costs, but also costs for arranging, negotiating, drafting and enforcing contracts. The

[59] Keohane (1984); Pollack (1997).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

role of regimes and institutions is to reduce such costs. Their function is in its essence the same in the domestic level (where there is a central government) and in the international realm, especially in the absence of a central government or hegemonic power.[60]

Taking these costs into account, actors – namely, but not exclusively states – estimate the outcomes of certain actions, and choose the path, or strategy, that will enable the accomplishment of goals established *ex ante*. An advantage of this approach is that it engenders more clearly defined methodologies, generates testable hypotheses and allows different studies to be systematically compared.

Political institutions can be defined as contextual features in a collective choice setting that defines constraints on, and opportunities for, individual behavior in the setting.[61] The place institutions occupy in the research design may vary, according to the puzzle that is being investigated, and to the research question(s). Shepsle[62] distinguishes two levels regarding the study of institutions. In a first level, institutions are taken as exogenous, so their effects can be analyzed. Alternatively one can investigate why institutions assume particular forms, treating them as a dependent variable. In this case institutions are endogenous to the analysis. The two perspectives can be combined in a rational-choice institutionalist research design, as claimed by Diermeier and Krehbiel. Following the authors, I begin by differentiating between institutional theories and theories of institutions.

Institutional theories

Institutional theories aim at understanding the relationships between institutions, behavior and outcomes. The study of institutions by IR scholars gained momentum in the early 1970s due to a series of critical events worldwide: the steep rise in oil prices and OPEC's capacity to destabilize the world economy indicated that other forces, and not only the two superpowers, were determining international politics.[63] The Vietnam War deeply divided Americans with regard to the role of the US in the world, and the country's withdraw had a strong impact not only on U.S.

[60] Keohane (1984).
[61] Diermeier & Krehbiel (2003), p. 125.
[62] Shepsle (1986).
[63] See for example, Ghadar, F. (1977). *The evolution of OPEC strategy*. Lexington Books.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

politics and foreign relations, but also in the way (military) power was studied in academia.[64] All these transformations highlighted the increasing interdependence among nation states, and drove attention to the role of institutions in world politics. More especifically, they investigated to what extent could institutional rules drive the behavior of international actors (states).[65]

Institutional theory needs to outline the conditions under which institutions provide solutions of collective action, distributional problems.[66] Special attention is paid to theory-derived assumptions regarding actors' behavior. As in other rational approaches, institutional theories hold constant actors' preferences; the accuracy of the analysis depends on a proper isolation and control of the features which determine the dependent variable – the actor's behavior or specific outcomes. This case uses institutional theory at l1 in order to explain the outcome of a bargain between Council and Commission. The outcome (DV) is the mandate that transfers competences to the Commission.

Diermeier and Krehbiel propose a four-step method to carry out institutional analyses: first, the behavioral postulates of the actors must be defined. Second, the institutions in effect are formally characterized. The third stage refers to the institutional modeling, where *equilibria* are characterized and the predictions about behaviors and/or outcomes are laid down. Finally, the predictions are assessed: hypotheses are confronted with empirical data and theories are tested.

Theories of institutions

Rational choice assumes that institutions are rationally designed to achieve certain outcomes. Empirically, however, a wide array of institutions are set up, and a number of them are distinguished. From a theoretical perspective, it was necessary to explain not only why and how institutions are established, but by which means they suffer transformations over time.

The strength of these theories lies on the fact that they are capable of providing a better, more accurate, account of the choice for a certain institutional design. Under rational choice, institutional theories alone have serious limitations to deal with evolution and change. This

[64] For a comprehensive discussion on the global repercussions of the war in modern history see, for example, Daum, A.; Gardner, L.; Mausbach, W. eds. (2003). *America, the Vietnam War, and the World*. Cambridge University Press.
[65] Keohane (1982).
[66] Keohane & Martin (1995).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

happens because, since they are created to solve collective problems, the effects of institutions also 'explain' their presence. This shortcoming highlighted the importance of studying the process of institutional dynamics. Theories of Institutions (TI), which are addressed in this section, seek to answer questions left aside by institutional theories, while maintaining methodological strictness inherent to rational choice institutionalism.

Theories of institutions (TIs) seek to explain why some institutional features come into existence and persist, while others are either non-existent or transient.[67] Institutions may assume various forms and change over time; some modifications are intentionally established in order to attain collective goals amid a new context, while others formalize already existing behavioral patterns; some changes may also represent unforeseen effects, or unexpected consequences of previous attempt to modify certain rules of behavior. TIs have been increasingly applied to the study of the underlying factors, dynamics, and impact of institutional change. It is worth stressing that a robust theory of institutions can only be built on the basis of well-formulated and verified institutional theories. The idea of 'actors that change rules, which in turn change actors' behavior and drive them to devise new rules or to modify the ones in force' brings back the idea of boxes within boxes advanced by Frieden: any set is an element of a larger set. The steps follow the same logic described in the previous item because here what is done is to use institutional theories to explain the choice for certain institutions.

Institutions are by no means static: over time, rules need to be updated and modified due to several factors. Changes in the external context can affect the costs and the pay-offs of certain types of behavior. Thus, the influence some players exert in the definition of these rules is unlikely to remain constant over time. Once this configuration changes, institutions may as well become obsolete, since they are also function of the interests of the players involved. In a different setting, actors might change their strategy, or even engage in the pursuit of different goals.

Frieden has shown that the choice between black-boxing and looking inside EU bodies, states, regions, parties and so on depends on the research question. Institutional change may also originate in a lower political level, as liberal theories contend. In this case, a shift in the constellation of these driving forces will probably lead to a change of preferences in an upper

[67] Diermeier & Krehbiel (2003), p. 130.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

level, and need to be investigated. Sociological approaches shed light on this area by considering preferences as a dependent variable, which is subject to change due to processes of learning and socialization that take place along repeated interactions among players. The strengths and weaknesses of these theoretical strands are discussed later in this chapter.

Combining the two kinds of theory

A point worth mentioning is that the two approaches need not be mutually exclusive, on the contrary: when combined, they not only provide a method for analyzing the institutional impact on social and political interactions but also shed light on long term evolution, institutional change and the prevalence of certain institutional forms. In other words, institutionalist theory sees institutions as both dependent and independent variables. As put by Keohane "institutions change as a result of human action, and the changes in expectations and process that result can exert profound effects on state behavior."[68]

The possibilities and potential advantages of this combination – institutions as exogenous and endogenous elements of the analysis – have been further developed by Diermeier and Krehbiel. Their central claim is that institutionalism is "more of a method than a mission."[69] They contend that most of the critiques to institutionalist works are due to the fact that it is regarded as a theory, when in fact it refers to "groups of theories that share methodological, but not substantive assumptions."[70] Reiterating the difference between institutional theories and theories of institutions shifts the focus on the debate around the applicability and of institutionalism: the fact that institutions matter is in fact not a theory. Seen through this prism, institutionalism engenders a number of research possibilities, namely with respect to comparative studies and empirical testing. The method of building Theory of Institutions as in Diermeier & Krehbiel's[71] applied to this thesis is described in the next paragraphs:[72]

A. Postulate The theory of institutions, as applied to this thesis, starts from the following assumptions: rational actors are utility maximizers that design institutions to overcome collective action problems (RCI). Information about the state of the world id incomplete, and actors are

[68] Keohane (1989). p.10.
[69] p. 124.
[70] p.125.
[71] p.131.
[72] Points (D) and (E) will be presented in the results.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

assumed to be boundedly rational: as synthesized by Hart and Moore, they may be unable to anticipate every eventuality, and may find it too difficult to reach an agreement about how to deal with all the eventualities which they do foresee[73]. The scarcity of information regards the environmental problem they seek to mitigate (resource depletion, biodiversity loss), as shown by the level of ESU.[74]

B. Institutional analysis At the Community level (L1), the players are the Council and the Commission, and decision-making rules are defined in the Treaty. The allocation of competences has been previously defined for case 1 (exclusive EC competence), whereas it has to be negotiated in the two other cases, which in turn have different levels of ESU. The type of mandate that emerges from the Council – Commission relation is the first dependent variable (DV1) of the thesis.

C. Second order institutions At the international level (L2), each rational, utility-maximizing player will try to extend its property rights over the natural resource; each one of them wants a multilateral agreement that allows them to exploit the resource as much as they can at the lowest cost possible. This preference is constrained by the maximum sustainable yield (MSY), and by the preferences of other players. Given that actors are risk averse, they will seek to avoid being committed to an agreement that does not favor their preferences. Thus, ESU prevents them from anticipating all the aspects that influence the sustainability of the marine resource.[75] The combination of risk-averse behavior and environmental scientific uncertainty results in an incomplete international agreement; actors may prefer to incur in higher transaction costs and re-negotiate the incomplete agreement in future events than risk being locked in with an unfavorable outcome. More specific matters, such as the allocation of property rights and other distributive issues, will be addressed (re-negotiated) further on.

E. Propositions about institutional choice The relationship between Council-Commission relationship (now an independent variable) and EU actorness (DV1) is analyzed according to the four dimensions advanced by Jupille & Caporaso discussed in chapter one: authority, recognition, autonomy and cohesion. The final outcome of the negotiations (DV2) is analyzed in terms of the

[73] Hart and Moore (1988), p. 757.
[74] ESU indicators are presented in this chapter.
[75] It should be stressed that uncertainty regarding the behavior of other players has been reduced by restricting the policy area, so it is assumed that the constellation of preferences will suffer little variation from one case to another.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

completeness of the contract (which are the three agreements) by looking at specificity of the matters addressed in the final text, as well as the duration of the agreement. The presence of distributive provisions and sanctions are also considered, as they account for the completeness of the contract. These criteria are observed in the text of each of the three final agreements, as available on the UN and FAO's websites.

It is never enough to stress that, albeit created to render the environment more stable and predictable and to solve problems of coordination, institutions may fall short from performing as planned. Such failure may happen because critical aspects have been neglected during the bargain, or improperly addressed by the institutional design. Thus, the effectiveness of certain designs may be limited to a certain period of time only. International negotiators (usually states) are risk averse; finding themselves committed to adopt a behavior that clashes with their preferences is the less preferred outcome of every player. Players will not become part of an agreement that puts them in a worse position as compared to the *status quo*; they will then establish incomplete contracts, or push for agreements that provide room for change over time.[76].

It may seem strange *prima facie* that Commission and MSs may prefer ambiguous or unclear contracts instead of delimitate their respective competences and defining their political domains and tasks. Nonetheless, this is what happens under certain conditions. The Commission and MSs have little incentive to engage in discussions of high political and technical character to specify each one's competences, especially if the division of powers is likely to change. As put by Neuwahl: "concluding a mixed agreement obviates the need of investigating the division of powers, either at the moment of negotiating the agreement, or at any later stage."[77] Put differently: to establish incomplete or ambiguous ('fuzzy') contracts is perfectly compatible with rational choice approaches. As a matter of fact, besides avoiding useless transactional costs, incomplete contracts open up possibilities for institutional evolution and change.

In all three cases, players must adjust their behavior by, for example, reducing fishing effort or creating protected areas. The goal is to ensure the sustainability of marine living resources (a global common) and the subsequent provision of environmental goods and services over time. Players seek to extend fishing rights as much as possible, within the levels determined by the

[76] Koremenos (2005). This point is discussed later in this chapter, and in the conclusion.
[77] Neuwahl (1998). p.4.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

MSY. Because the negative effects of overfishing on the environment are not fully knows, actors adopt incomplete contracts, which will be re-negotiated. As it is the case of straddling fish stocks (case study number two) players do not sign specific agreements to a whole ocean area; instead, they prefer to draft various area-specific or species-specific agreements that regulate fishing rights in a restricted domain. The schematic representation of Diermeier & Krehbiel's method is presented as follows:

Table 2: Theories of Institutions (Diermeier & Krehbiel)

<table>
<tr><td colspan="7">A. Behavioral postulate: Rational Choice Institutionalism (RCI) / Bounded Rationality (BR)
Assuming that some delegation is desired by both Council and Commission</td></tr>
<tr><td colspan="7">B. Embedded institutional analyses</td></tr>
<tr><td colspan="2">1.Behavioral postulate (fixed)</td><td colspan="2">RCI / BR</td><td colspan="2">RCI / BR</td><td>RCI / BR</td></tr>
<tr><td colspan="2">2.Institutions
(game form)</td><td colspan="2">Set by the treaty

Low ESU (certainty)</td><td colspan="2">Consultation, QMV

Low ESU (complex)[78]</td><td>Consultation, QMV
High ESU</td></tr>
<tr><td colspan="2">3.Propositions
Allocation of competence
Characteristic of the mandate (contract) (DV)</td><td colspan="2">Delegation
Clear</td><td colspan="2">Mixed
Relatively clear mandate</td><td>Mixed
Fuzzy mandate</td></tr>
<tr><td colspan="2">4. Empirics</td><td colspan="2">Case 1
Fishing Vessels - FAO</td><td colspan="2">Case 2
Straddling fish stocks - UNCLOS</td><td>Case 3
Jakarta Mandate CBD</td></tr>
<tr><td colspan="7">C. Second order institutions (defined in B.)</td></tr>
<tr><td colspan="3"></td><td colspan="2">Comparison cases 1 e 2</td><td colspan="2">Comparison cases 2 e 3</td></tr>
<tr><td colspan="3">Mandate (IV1)</td><td>Non-Mixed</td><td>Mixed</td><td>Mixed</td><td>Mixed</td></tr>
<tr><td colspan="3">Information (IV2)</td><td>Certain</td><td>Uncertain (low)</td><td>Uncertain (low)</td><td>Uncertain (high)</td></tr>
<tr><td colspan="7">D. Propositions about institutional choice (behavior and outcomes)</td></tr>
<tr><td colspan="3">EU actorness (DV1)</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="4">Negotiation's outcome (final agreement) (DV2)</td><td rowspan="4">criteria</td><td>Specificity (ex, matters addressed and jurisdiction)</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Duration, renegotiation</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Distributive provisions</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Sanctions</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="7">E. Empirical implications and tests</td></tr>
<tr><td colspan="7"></td></tr>
</table>

[78] Low ESU does not preclude the complexity around the index.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

1.2.1.2 The need for a more rigorous design: the contribution of principal-agent approach

Institutional approaches have proved more flexible and sensitive to aspects that cannot be captured by theories of European integration; by contrast, institutionalism needs other theories to have a more rigorous research design that can allow for future comparisons and to generate cumulative knowledge. This section presents the core assumptions of P-A approach, explains how P-A provides leverage to RCI, and how this theoretical-methodological tandem fits into this study.

The Commission is assigned to represent the EU in multilateral negotiations. If the representation is not foreseen in the Treaties, the Council must give the Commission competences so it can speak on behalf of the EU. The attributions given to the Commission vary according to the issue that will be negotiated, and also to what MS expect the Commission to do. The Commission, in turn, exercises a number of functions in the EU polity system; indeed, it has not been created with the specific purpose of representing the EU in the international realm. The fact that the Commission is an existing institution that has several roles and its own bureaucracy, together with its right to initiate the legislative process, makes clear that the Commission also has its own expectations regards the tasks it will perform vis-à-vis third parties.

The situation above clearly describes a principal – agent relationship where a contract (mandate) is established at the EU level (L1) between the principal (Council) and the agent. At the international level (L2) there is also a P-A relationship: the principals are the parties (including the Commission) that bargain to delegate powers to international organizations or institutions. My goal is not to see whether delegation occurs or not, but to understand why, or under which circumstances, certain types of contract between principal and agent prevail. Another objective is to understand the relationship between Council – Commission contracts and EU actorness.

Rational-choice institutionalists have paid increasing attention to factors that motivate delegation, and to its consequences. They draw on previous American political science literature on the US Congress. Particular attention needs to be given to contract theories and principal-agent models, as they have made much of a contribution to the understanding of the complex relationships and

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

interactions that characterize the EU. The following paragraphs present the basis of principal-agent approach, in order to provide the conceptual basis to come to grips to the empirical cases.

Principal-agent (P-A) is a middle-range theory that has its roots in the new economics of organization, and which aimed at explaining contractual and hierarchical relations between actors of a firm. P-A moves beyond the neoclassical theory because it assumes that information is imperfect,[79] and because it brings the concept of transaction costs into the analysis. In economics, it was initially applied by Spence and Zeckhauser[80] to address problems concerning insurance provision. In another seminal article on the topic, Stephen Ross describes the relationship that arises "between two (or more) parties when one, designated as the agent, acts for, on behalf of, or as a representative for the other, designated the principal, in a particular domain of decision problems."[81] The principal and the agent enter into a contractual arrangement, in which the former, having regard to its preferences, chooses to delegate certain functions to the latter in the expectation of achieving the desired outcomes, and also to reduce transaction costs of policy-making. It is worth reminding that the principal is not a monolithic block. In this thesis the principal is composed of more than one actor; the Council is a collective principal.[82] The contract between one collective principal and one agent responds for most delegation relationships. A group of actors reaches an agreement and a contract with the agent is established. Elections, for example, are an institutional mechanism through which principals (voters) delegate powers to politicians in order to be represented in the congress. In international politics there are situations where the preferences of the players are too divergent, or there are veto players. In these cases no agreement is established, and players remain in the *status quo*. In the international realm such an impasse is observed when an international agreement fails to be established, when either parties do not sign or do not ratify the text.

P-A has become increasingly prominent in political science, most notably among scholars interested in bureaucracies and their relationship with decision-makers. When applied to EU analysis, P-A approaches address three main questions: 1) why, and under which circumstances do member states in the Council transfer powers to supranational agents?; 2) through which mechanisms, and to what extent can principals control the behavior of the agent and avoid

[79] As put by Moe (1984), the idea of imperfect information relaxes the assumption of a fully rational and fully informed actor and develops a conception a bounded rationality of the market actor.
[80] Spence & Zechhauser (1971).
[81] Ross (1973), p. 134.
[82] See Nielson & Tierney (2003).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

unintended consequences stemming from agency problems; 3) how do agents escape this control and set the agenda for their member-state principals?

The core assumptions which orient P-A framework are listed by Gary Miller:[83]

1) *Agent impact*: the agent's behavior influences the principal's payoff. That is, in order to achieve an equilibrium that better meets the preferences of the principal, the agent needs to perform as it has been specified in the contract between the two players.

2) *Information asymmetry*: in principle, the principal can observe the outcome but not the actions taken by the agent, unless the principal is willing to afford the costs of directly monitoring the agent, or engaging an independent supervisor to do so.

3) *Asymmetry in preferences*: the preferences of the agent are assumed to be different from the principal's. Such asymmetry, coupled with the lack of monitoring capabilities of the principal may give rise to shirking of the agent.

4) The *principal is a unified rational actor* that acts based on a coherent set of preferences, and is able to move first by offering a contract (initiative). It should be stressed, however, that a number of studies challenge this assumption, most notably in political science rather than in economics[84]. This thesis assumes that actors are "intentionally rational, but limited in knowledge, foresight and time." [85] If information is assumed to be incomplete, the principal will seek to maximize its utility under constraints posed by the setting, and will act under bounded rationality to pursue its interest.

5) *Backward induction based on common knowledge*. Principal and agent share knowledge about the structure of the game, effort costs, probability distribution of outcomes, and about the agent's rationality. That is, the agent will prefer *any incentive package with an expected utility slightly more than the agent's opportunity cost*.[86]

[83] Miller (2005).
[84] Karagiannis (2007).
[85] Simon (1957).
[86] Miller (2005), p.206

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

6) *Ultimatum bargaining*. The bargaining power when setting up a contract lies with the principal. Presumably it is able to impose the best possible solution from the agent's best behavior (i.e., the agent's correctly inferred best response function), which in turn is assumed to be expressed in the outcome.

This thesis focuses on the first question, and explores the factors that account for the shift of competences to supranational institutions. Drawing on the collective action problems that arise when regulating access to common goods such as fisheries I seek to clarify the relation between delegation – either permanent or transitory – to the Commission and its influence on the EU at the international level.

The remainder of this section is organized as follows: first, it explores the reasons why delegation occurs according to the literature. It then looks more in detail at the factors that apply when scientific uncertainty is taken into account. Third, it analyses the factors inherent to fisheries management which have favored or dissuaded the allocation of supranational competencies to the Commission.

Delegation and agency problems

In general terms, delegation occurs because principals aim to achieve certain objectives, but are either unwilling or incapable to do so by themselves for a number of reasons. To overcome this problem they can assign certain tasks to an existing agent, or set up one. According to the existing literature, the main factors driving delegation are:

- Principal's lack of *expertise*. In this case, agents may solve problems of incomplete information by providing decision-makers with technical information they need, in particular when complex technical issues are at stake;
- Need to avoid the costs (time, resources) of renegotiation;
- Need to increase the autonomy of their domestic leaders vis-à-vis domestic groups by adding legitimacy and credibility to common policies;[87]
- Implementation and enforcement of policy measures (external control performed by the agent);

[87] Moravcsik (1998).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

- The exercise of regulatory powers over critical economic actors or over strategic policy sectors, such as monetary policy, in the case of independent agencies and also the Central Bank.[88]
- To coordinate collective action when many principals are involved;
- To achieve immediate recognition vis-à-vis third the parties, and to increase the overall bargaining power of the principals. By pooling resources, the ensuing more powerful player is capable of boosting cooperation by offering more robust incentives and rewards for 'good behavior'. Threats become more credible and free-riding, more costly; withdrawal hinders the negotiation.

The literature on principal-agent applied to the EU points out main four functions the agent is expected to fulfill. First, supranational agents may *monitor member state compliance* with common policies and with international treaty obligations by providing information to the other participants; in effect "painting scarlet letters" on member states that fail to comply with their treaty obligations (naming and shaming penalties).

Second, supranational agents may solve problems of *incomplete contracting*. If we consider international treaties as a contract, we can say that the parties to that Treaty (i.e. the member states) pledge in the contract to behave in certain ways in the future. However, as Oliver Williamson[89] pointed out, every contract is invariably incomplete, since it would be impossible (or at least prohibitively costly) to spell out in detail the precise obligations of all the parties throughout the life of the contract. Information is incomplete. For this reason, member state principals may decide to create an agent, such as a court, to fill in the details of the contract and adjudicate disputes about its meaning.

Third, to adopt regulations that are either too complex to be considered and debated in detail by the principals or that require the *credibility of a genuinely independent regulator* who, unlike the governments of the states in question, would have little incentive to be lenient with firms in a given member state.

[88] Majone (1996); Moravcsik (1998); Pollack (2004).
[89] Williamson (1985).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Fourth, principals may have an incentive to delegate to an agent the power of *formal agenda setting* to a single actor, who will bring forward proposals for consideration by the principals. The objective is to prevent the participants from continuously coming up with proposals, thus blocking or slowing down the legislative process. On the other hand, this delegation is not exempted of risk, since considerable power goes to the agent setting the agenda. Other types of potential problems that arise from delegation are presented in the next section.

In an ideal situation, "well-chosen agents, in an agency constructed to channel their incentives correctly, can be left alone to determine the policy that the elected officials would themselves have chosen, given the time and resources."[90]

Delegating, however, involves some risks; under the assumption that principals and agents do not have exactly the same preferences, and that not all possible situations can be foreseen by the contract, the agent will act somehow differently than what the principals had expected. The literature focuses on two main kinds of behavior the agent may engage: the first is known as 'shirking', also called agency loss, discretion, or drift. Put shortly, it refers to any form of noncompliance by the agent, who acts on a self-interested manner, because of a conflict of goals,[91] and can be more specifically defined as "the departure of agency decisions from the positions agreed upon by the executive and legislature at the time of delegation and appointment."[92]

The second related, but nonetheless distinct, issue is known as agency slippage. In economics, slippage is the difference between estimated transaction costs and the amount actually paid, mainly because brokers may not always be effective enough at executing principal's orders. This phenomenon is regarded as institutionally induced, since "the structure of delegation itself provides perverse incentives for the agent to behave in ways inimical to the preferences of the principals."[93] Since agents are better informed than principals, they can filter or hide information if they consider it potentially harmful to their interests. The agent can also conceal certain actions that principals would not approve in order to avoid sanctions. In the absence of efficient control mechanisms, the agent may use the powers it has been granted against the principal in the pursuit

[90] Calvert, McCubbins and Weingast (1989) pp. 590-591.
[91] McCubbins & Page (1987) p.410.
[92] Calvert, McCubbins & Weingast (1989) p.589.
[93] Pollack (1997), p. 108

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

of its own "selfish" interests. The trade-off between the advantages of delegation and the risks of undesired behavior from the agent's side is generally called "Madison's dilemma". Rules and norms provide alternatives to the dilemma, as effective institutions should be able to mitigate this dilemma by orienting the agent's behavior.

Once the principal decides to delegate, ensuring control over the agent and limiting shirking become a major concern. In order to minimize the risk of agency loss, principals recur to several mechanisms to reduce informational asymmetries in favor of the agent, therefore limiting undesirable behavior. Such oversight procedures aim at monitoring the activity of the agent, to determine the extent of agency losses, and to adopt sanctions against the agent. Nielsen and Tierney's work on the World Bank environmental reform discusses some ways of mitigating agency problems.[94] The first mechanism is screening and selection: the principal chooses or creates an agent before hiring in order to reduce the asymmetries of preferences that lead to agency loss. After the contract has been established, the principal needs to follow up on the agent. Monitoring can take several forms, such as 'police-patrol' (active monitoring of agent's behavior, usually by oversight committees). However, the principal may not wish to bear the costs of directly monitoring the agent and instead indirect mechanisms can be used: 'the principal can rely on fire-alarms' provided by third parties, which are induced to inform the principal about the agent's actions; another option is to assign another agent to follow up the previous one, thus keeping the principal informed; this is the role of the Court of Auditors, for example. Apart from agent selection and monitoring mechanisms, the principal can control the agent by designing an efficient contract that includes credible commitments to punish or reward certain behaviors.

1.3 Alternative explanations: Sociological institutionalism (SI)

Institutional rules are designed by societal actors according to their previous interests, and created in order to overcome collective action problems. Though it can be inferred that interests are formed *somewhere* and *somehow*, RCI takes them as given. The goal is not to explain why and through which mechanisms have interests emerged, since the main concern is on conditions (number of actors, voting procedures, veto players, etc.) which lead to specific outcomes. Repeated interactions concerning institutional establishment and development are also addressed; they are seen as opportunities to exchange information, monitor activities and reassess incentives

[94] Nielsen and Tierney (2003).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

and threats offered in previous occasions. However, not all institutionalist strands share this view, as discussed below.

A number of scholars, however, claim that other aspects influence decision-making and political life in general. For them the weight of ideational aspects cannot be overlooked; paths are not chosen solely because of higher material payoffs, but also because of cultural trends developed over repetitive interactions between the players through mechanisms such as mutual trust, threat perceptions, common identity and other belief systems. Two important arguments support this view. First, in social life an infinite number of decisions have to be made, from very simple to extremely difficult ones. Given that it is not possible to foresee all possible results of all choices available, we turn to former decisions taken in a similar setting. Thus, we take into account the results (or consequences) of past choices in order to determine present attitudes. To sum up, most of decisions are not rationally made; rather they result from pre-views, pre-judgment and understandings of the surrounding environment. The latter element leads to the second argument: choices depend on how the world is seen. If perceptions regarding one same object, person, policy, etc. may largely differ, it is not possible to attest which is the "right", or more rational one. When it comes to political sciences, the impossibility of tackling reality from outside and / or without bias has constituted one of the most questioned points in rational choice models, especially after economists and rational choice political scientists succeeded in developing more complex models, where norms and beliefs could also be incorporated.

This point is particularly interesting for the study of competence distribution, a phenomenon that traditionally belongs to Law studies. Historically, attempts to build a science of politics modeled on economics were never able to displace normative and ideational concerns so present in law studies. Norms and rational behavior still tend to be portrayed as different forces driving social behavior. Notwithstanding, these elements are not necessarily opposed to each other; rather, they are connected and can be brought into the same model.

Sociological Institutionalism (SI)

Sociological institutionalism (SI), which originated in the late 1970s, adopts a broader definition of institutions than rational choice theorists: not only formal rules, procedures and norms are considered, but also moral aspects and symbols that give meaning to human action. That is, behavior is viewed as primarily shaped by the institutional foundations of a society. As opposed

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

to RCI, actors have little influence on the institutions. Actually, the latter provides individuals with norms of behavior and cognitive scripts – i.e., templates that apply to a certain social group. Whoever knows which models are followed is capable to predict the actions of the actors belonging to this social group.

SI's underpinning argument is that institutional variation is due not only to the various functions different institutions must efficiently perform in a society, but also to 'non-rational' practices, "akin to the myths and ceremonies devised by many societies, and assimilated into organizations, not necessarily to enhance their formal means-ends efficiency, but as a result of the kind of processes associated with the transmission of cultural practices more generally."[95]

SI challenges rational choice premises on the need of full information, complete and bounded rationality and predefined, fixed interests. In fact, preference formation stands among the main concerns of sociological institutionalists. Preferences may change due to the certain social practices consolidated along repeated interactions among negotiating actors. Concrete aspects like external pressures, technical complexity and measurable revenues may still play a role. The difference is that there is something more guiding actors' decisions than just material calculations. Along the decision-making process these independent variables may modify and homogenize interests that were divergent in the past.[96]

Sociological institutionalism assumes that players, through more or less regular and institutionalized exchanges adjust their preferences. Arguing repeated times in the same forum and with the same partners has some lasting effects even if the impact might not be noticed in the short run. Under this perspective, institutions are not simply the locus of the bargain; as constitutive rules, they continuously shape the behavior of the participants.

Could SI provide a suitable framework to analyze accurately the research questions proposed in this thesis? This study addresses the contract established within EU framework (L1) between Council (principal) and Commission (agent), which transfers certain competences to the latter in order to allow it to negotiate international agreements with third the parties. Such transference of external powers occurs under varying degrees of ESU. The study proceeds then to the possible

[95] Hall & Taylor (1996), p.14.
[96] Thatcher (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

relationship between different types of contract (therefore, competence distribution) establish at L1, and EU actorness in a global level (L2).

Central to this thesis is the decision to delegate power under varying degrees of uncertainty. RCI would claim that actors are rationally bounded regardless the political level where they are situated: they calculate payoffs and costs, but know that they do not have full information. SI, by contrast, considers institutions important because they help actors to overcome obstacles posed by incomplete information. Actors do not start the game devising strategies to meet their preferences, because they are not taken for granted: they are either undefined or subject to change. Jupille and Caporaso's definition of actorness does not suit this theoretical perspective. An alternative could be to use Hettne's definition of 'purposive actorness': the conscious effort to influence the international order in accordance with one's own values and interests.

SI would reject the bounded rationality assumption, thus attributing the establishment and stability of cooperative arrangements to the existence of shared ideas, social norms and expectations. Such normative and cognitive elements lead actors to follow a logic of appropriateness, as put by Olsen and March: "embedded in a social collectivity, they do what they see as appropriate for themselves in a specific type of situation."[97] The higher the ESU, the more important these parameters (and the beliefs on which it depends) become.

SI is in principle capable of analyzing MAs because mixity has become a recurrent practice over the integration process, even though it was not foreseen in the Treaty of Rome. The allocation of external competences is decided by Council and Commission on a case-by-case basis. For each international agreement that falls out of EC exclusive competence they must define, within the EU framework, a mandate.[98] The two actors are familiarized with the decision rules (consultation procedure). Quoting March and Olsen, it is also possible to affirm that over time and through numerous meetings and negotiation rounds rules have been translated into actual behavior through constructive interpretation.[99] Through argumentation Council and Commission are able to seek solutions for a commonly perceived problem and for defining a common normative framework.[100] SI may provide a good account of mixity, and is also capable of addressing two political levels in

[97] (2004). p. 3.
[98] This thesis assumes that any delegation is better than no delegation, so cases where the two parties could not agree on a mandate are left out of the analysis.
[99] March & Olsen (1995).
[100] Risse (2000).

one same research proposal. Although SI is able to clarify several aspects regarding MAs and EU actorness, it falls short from answering the questions advanced in this thesis.

Variation with respect to competence attribution may be addressed by SI by looking at how MAs evolved over time. If two mandates with the same level of ESU regulate EC external powers in order to negotiate agreements, the mandate setup at T1 is expected to extend Commission's competence, as compared to a previous mandate set up at T0, for instance. SI allows for comparisons over time, but would provide little leverage when contemporary cases are compared. In this case, variation would be due not to learning processes over time, but to other elements. Hence, when ESU is low the international agreement has evident economic impact. The negotiation is based on figures, and cooperation is achieved mainly through financial compensations. For example, if a fishing season has to be restricted in terms of time in order to allow specimens to achieve bigger dimensions, states which harvest this resource more intensively will seek to have their opportunity costs compensated for. After several meetings, players may agree on a value, but it is unlikely that the definition of this number stems from learning processes. The number of meetings will depend on the extent to which actors agree on the value (preferences defined *ex ante*). SI could assert that all actors believe they are rational, which constitutes common belief systems. But this assumption is already *implicit* in RCI, as all the actors are assumed to be rational.

At the international level the picture is more complicated. First, SI does not allow comparisons between exclusive and mixed competences, as the former is foreseen in the treaty and not a result of argumentation; thus, in the cases where competences are fuzzy, the third the parties will have much more difficulty to discuss and argue with "the EU". How would EU preferences be defined? Belief systems are less likely to develop. A possible consequence is that without knowing 'who picks up the telephone when the EU is called', third countries have an incentive to articulate with MSs instead. MAs confer flexibility to the EU but in this case actorness is mobile; this poses an obstacle for the other players to interact with the same actor repeatedly. As a consequence, arguing will not allow actors to define or adjust their preferences.

Conversely SI could provide some leverage regarding the evolution of global regimes with high ESU, such as the treaties on biodiversity. Biodiversity is a fuzzy concept, so argumentation in

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

repetitive events could allow for a common language to emerge. As ESU is high, number-lead negotiations cannot take place, which increases the importance of socialization processes.

Although SI sheds light on important aspects ignored by rationalists (such as the perpetuation of inefficient, 'involuntary' practices), it also has some limitations. It produces models whose applicability is more restricted, because it is more difficult to compare the infinite possible amalgams of rational + specific cognitive scripts observed in different groups (states, organizations, and so on). It also leaves some questions unanswered, such as: when actually does learning take place? How is it possible to identify a shift of interest, and how can we differentiate it from a simple change of strategy caused, for example, by an external constraint? To sum up: given that it is hard to compare different groups because each one has a unique combination of evolving "rational + cultural" factors, how is it possible to predicting other groups behavioral trends and preference choices? Unless these trends are very clear, the analyses of negotiation processes that take place either at EU or at international level are severely hampered by the non – replication, therefore limited applicability of previous sociological institutionalist studies. One last puzzling question regards precisely one of the major "virtues" of SI: institutional change. Institutions might be constantly evolving, but their ultimate goal is to enable actors overcome collective action problems by providing some stability; this hinders the identification of turning points that accounted for substantial changes.

Both paths offer possibilities and limitations. In a nutshell, rational approaches may have more difficulty to explain evolution: institutions change because actors so decided after calculating the payoffs and the costs of changing, or due to unintended consequences (miscalculations, agency loss, unforeseeable externalities, and so on); they also seek to overcome tautological arguments, because the origins of institutions are explained in terms of the effects they will produce. RCI is also accused of not taking into account norms and values, but works such as Garrett and Weingast's demonstrate that such elements can be incorporated in a rational choice design, as they provide focal points that help actors choose one solution among several equilibria.[101]

Sociological approaches, on the other hand, have difficulties in explain institutional stability, to account for where or when major changes have occurred and also to explain how they are

[101] Garrett & Weingast (1993).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

established between actors with very difficult cultural codes, if not for strictly rational reasons (not only to achieve higher payoffs but also to ensure security).

Sociological approaches are neither 'better' nor more humanistic than rational choice ones; nor are they necessarily less scientific. Today, Political Science has a range of lenses to approach different aspects and processes of social phenomena; making an option implies shedding light on some features and leaving others under explored. In that sense, carrying out scientific research is being aware of such limitations while making the most of the available opportunities.

Rational choice can provide models that go beyond exclusively state-centric views of the international system. Indeed, more "traditional theories" have faced serious difficulties in addressing contemporary political phenomena. Actors operating in multiple spheres such as transnational elites, social movements, entrepreneurs, the media and non-governmental organizations have, at most, an extremely limited role. Thus, these perspectives do not provide adequate lenses to the study of decision-making processes across political levels. Their lack of sensibility has limited its applicability and raised criticisms in the academia. Multilevel network and governance approaches are some of the responses to deal with these complex scenarios, but they do not imply, *a priori*, the abandonment of economic viewspoints, nor do they make behavior less rational. It should be mentioned that, although many of the non-state actors mentioned above may be present in the issues related to fisheries and maritime affairs, they do not constitute the core of this research. The cases for the comparative analysis were chosen taking into account the importance of keeping these elements constant.

Finally, it should be mentioned that, although SI can offer some alternative explanations and shed light on possible gray areas on the relationship between Council and Commission, and at the international level, there is no apparent reason to abandon rational premises. That is, despite the change in some of the variables analyzed in each level, rules are assumed to be designed according to a given set of preferences in a negotiation process where actors have a set of potential incentives and constraints surrounding their decisions. Rational-choice institutionalism and P-A theories can be sophisticated enough to deal with empirical cases, and to build a framework where delegation amidst varying degrees of scientific uncertainty can be compared.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Using RCI as a springboard, the next section discusses the main features of negotiation studies. They are of particular interest in the second part of the research design, when international bargains are analyzed.

2. Negotiations: main features

In an article published in 1975, Oran Young stressed the importance of providing a clearer conceptualization of 'negotiation' in order to avoid distortions caused by the excessive application of the term, to better organize research and to build scientific knowledge. He provides a succinct definition of 'bargaining':

"… a means by which two or more purposive actors arrive at specific outcomes in situations in which: (1) the choices of the actors will determine the allocation of some value (s), (2) the outcome for each participant is a function of the behavior of the other (s), and the outcome is achieved through negotiations between or among the players."[102]

Elements from other sciences – namely Economics – were borrowed and amalgamated in order to develop tools for negotiation analysis. Consequently, there is no grand theory of negotiation, especially after more sociological approaches were incorporated. This does not necessarily constitute a limitation; the research(er) gains flexibility since it is not bound to a set of crystallized assumptions. Of course any project should strive for coherency, so it is not the case to pick only the most convenient aspects "available out there". But some guidelines and concepts can be revised to better orient the research and suggest the use of certain tools (methodology, methods, indicators) capable of dealing with the object and variables investigated.

An initial theoretical framework is proposed by Faure & Rubin.[103] For them, negotiations can be analyzed in terms of *actors*, *structure*, *strategies* and *outcomes*. At this point it also seems necessary to define each of these elements in order to avoid different conclusions caused by conceptual misunderstandings.

[102] Young (1975), p.3.
[103] Faure & Rubin. (1993), pp. 17-26.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Actors are parties involved in the negotiation. Though they may not be directly represented in voting procedures, they can develop mechanisms to influence other participants in order to achieve outcomes that better fit their interests. Approaches based on rational choice models assume interests as previously established and known by the actors. On the other hand, perspectives such as sociological institutionalism deal with interests that actors may not be aware of. They seek to explain how these interests are formed by taking them not as a given but as a dependent variable. This study follows rational choice approach, as already discussed.

The second element, *structure*, in Faure & Rubin's definition is the set of constraints within which the exchange takes place. The structural elements most commonly mentioned in the literature are power and resource distribution, time, rules and other restrictions imposed by third actors or the system as a whole. Although the definition of what are the structural elements may vary depending on the level observed, they can be generally understood as the defining components of the scenario where negotiations (or international relations) processes occur.

Strategies, the third element, concern the guidelines and the set of actions adopted by actors to achieve their goals. Again, different approaches study which elements shape actors' strategies. Depending on the context, as well as actor's preferences, resources and motivations, different paths become available. For instance, unilateral action is highly costly, since other actors may establish coalitions to balance power; cheating, despite the potential immediate pay-offs, is a single-shot movement, as it practically extinguishes the possibility of future interactions on the same basis. A third important alternative is cooperation, which can be motivated by subjective aspects such as shared identities and which involves change of behavior in order to achieve mutual gains

There are also other ways of carrying out bargaining studies. Elgström and Smith, for example, present an interesting perspective of potential use in the present research. They provide three dimensions or images according to which (EU) policies can be analyzed. The EU can be regarded as a *process*, therefore emphasizing the various elements of the negotiation and privileging the diversity of actors, strategies, communication and outcomes. The second image is more similar to what Young had proposed in his work on bargaining. It corresponds to the EU as a *negotiation system* with fundamental properties such as interdependence, actors, regularities, interactions and high level of institution. The third perspective goes beyond the other two and views the EU as a

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

negotiated *order* that forms a European position and continuously projects it at the global level.

The most positive contribution of this approach is that it enables us to understand the relation between process, system and order. This allows us to broaden the scope of areas already studied in a limited way and / or addressing issues of high complexity, as the UNCLOS. At this point it is worth stressing that, regardless the approach adopted, it is important to first understand how marine policy has reached its present status in Europe. Some observations regarding EU representation at the global level are also worth seeing, due to the role played by the context in the research proposed. But first of all it is essential to specify what the research is all about by laying down the methodology and the elements that orient and structure the research. This is the focus of the next section.

2.1 Preferences and negotiation strategies in RCI

Preferences are defined by Frieden as the way an actor, in a given setting, orders the possible outcomes of an interaction.[104] Strategies, by contrast, are tools actors use to achieve their most preferred possible outcome. As put by Moravcsik, strategies and tactics are transient bargaining positions, that is, "policy options defined across intermediate political aims"; they involve negotiating demands or policy goals that constitute the everyday currency of foreign policy.

Actors' preferences are not directly observable, only their behavior. However, an actor's behavior incorporates "both its underlying preferences and its strategic response to the setting it faces.[105]" Politics – at any level, but particularly world politics – is exercised within a variety of contexts, or settings. Political issues are not alike; agendas become politicized at different moments and therefore have distinct backgrounds. Access to fishing grounds has been a political issue for a long time, whereas establishing property rights over a species or system genetic patrimony (biodiversity) is a much more recent phenomenon. The relationship between political issues has become more diverse; in today's world politics no issue is completely isolated from others. Issue-linkage has increased in number and complexity, so players' expectations about possible pay-offs also varies. 'Complexity' as used here refers to the plurality of possible issue-linkages, and to the difficulty of "untangling" the agenda. The examples given previously represent the situation more clearly: to regulate access to fishing grounds does face many difficulties, but the preferences of

[104] Frieden (1999) p.42.
[105] Id., p.60.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

the participants are clear and relatively objective. They may prefer fewer geographical restrictions (protection areas) over time restrictions (shorter harvesting seasons), and they are usually concerned with few species. Actors are likely to perceive their pay-offs in a similar way, and compensations are more easily established. The same applies for sanctions. Negotiating biodiversity provisions is dramatically different: some participants – G7 states for example – will be willing to explore biodiversity resources for chemical or pharmaceutical purposes, whereas other players will seek compensation for the non-use of this resource. The north-south cleavage is present in the debate, mostly around the question of who does the resource belong to: to the state where certain species are found, or to the state (and private companies) who invest heavily on the research on potential principles that southern countries would not be able to exploit. What these examples taken from the case studies seek to show, is that ignoring the role of the context on the attitude of the participants offsets critical questions about cooperation on complex environmental issues, for actors rank their preferences based on their potential pay-offs, but they pursue strategies to meet them in the face of the context they are embedded.

Given that political issues are not alike, and that the context also varies, how is it possible to study and compare different situations? A first step to produce an accurate analysis is to separate preferences, strategies and the environment. In order to analyze how outcomes are affected by variations in a component of the strategic setting, preferences are determined *ex ante* and held constant, whereas the setting changes.

Rational choice approaches have been largely criticized for the rigidity of their behavioral postulates and for taking preferences for granted. However, this criticism is flawed. First, behavioral assumptions derive from the paradigm (and from the theory) that guides the research. Frequent changes in these foundations prevent the research from generating cumulative knowledge, because every time a change occurs comparison ceases to be possible. Thus, behavioral assumptions are subsequently confronted with empirical data; systematic disconfirmation shows that it may be the case to go back and re-start from other postulates. But the initial effort is to maintain the regularity of the assumptions used in the research. Second, in any given setting preferences can – and need to be – fixed, so that the behavior they engender can be studied.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

RCI takes preferences as given because this is a methodological necessity, not a dogma, as critics frequently put out. Drawing again on Frieden, preferences must be separated from strategies and kept constant. This procedure does not preclude preferences to be investigated; their black box can be opened by shifting the level of analysis. Rational choice does not deny that institutions are both exogenous and endogenous to actor's choice.[106] In order to investigate why an actor prefers an outcome to another, the research must descend one level so that preferences can be regarded as an outcome of previous preferences that in turn have led to a certain strategy without necessarily giving up rational choice approaches. In a nutshell, when different levels are brought into the analysis, a preference may well become a strategy in another interaction. The "boxes within boxes" standard implies a progression from exogenously given preferences to strategies. That is, what is problematized in one context can be taken for granted in another.[107] The main issue is that North[108] claims that institutions have a dual face because they are shaped by human actors, but at the same time restrict and influence their behavior is perfectly compatible with rational choice postulates. This point needs to be made clear because of the implications to the present research design, given that this thesis analyses two political levels.

[106] Snidal (1996), p.127
[107] Frieden (1999), p. 46
[108] North (1990).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 3

METHODOLOGY

The institutionalist perspective expects variation in the type of arrangement set by Council and Commission, which is expressed in the mandate that determines the terms of mixity according to which the EC (or the EC + MSs) will act in the negotiation of global environmental agreements. The research is operationalized as follows:

First, the variation in the distribution of competences within the Community is analyzed. That is, the contract (mandate) established between the principal Council and the Commission (agent) is the dependent variable (DV). The independent variables (IVs) are: preferences of the Council, preferences of the Commission, and the degree of scientific uncertainty, an intrinsic characteristic of the issue. This concept is addressed in section 4.2. The selection of variables does not intend to be exhaustive – a burgeoning body of literature demonstrates the role of other factors. But they are enough to engender reliable comparisons between different arrangements, to allow for control of causal factors and mechanisms, and to contribute to the production of knowledge in the area.

1. Hypotheses

Different hypotheses are established for each of the two levels of analysis. At L1 (intra Community bargain), I investigate to what extent ESU affects contracting between Commission and Council. That is, how does ESU affect the distribution of competences between the two institutions regarding the external representation of the EU? The mandate is the dependent variable (DV1). At L2, on the other hand, I address the possible relationships between the mandate established at L1 and EU actorness (DV2) by looking at the outcome of the global negotiations as expressed in the provisions of the three agreements.

1.1 Community level (L1)

The contract negotiated by Council and Commission seeks to strike a balance derived from the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

assumption that principals are aware of the fact they cannot achieve their objective without the agent. In this case, member states in the Council acknowledge that important multilateral fisheries regimes have to be established with non EU countries; they need to delegate certain negotiating powers to the agent (Commission) in order to leave the *status quo*. This comparative case-study relates to this shift of competences in situations with different levels of environmental scientific uncertainty (ESU). It is never enough to remind the reader that under uncertainty the relationship between economic activity and environmental impact is questionable, and that there is no consensus about the degree and the severity of the alterations in the environment; estimating the value of an environmental good or service faces serious difficulties. Under uncertainty the possibility that the agent will perform differently from what the principal expects is high. The latter has, *a priori*, two options: restrict the agent's room for maneuver by transferring limited competences – limiting the powers (tight or narrow mandate) of the agent, to put differently.

Despite the control over agency loss, limiting the agent has disadvantages: it might not be possible to offer neither credible threats nor compensations that seem attractive to the eyes of third the parties. Thus, it will not be able to react quickly to proposals put forth by other players, due to the limited agency. After all, why will there be an agent if it cannot perform any tasks? Limited competences may work for specific negotiations where the agenda is narrow and/or players are few. In the cases treated in this thesis, this might compromise EU (principal + agent) actorness in front of third parties.

Another option is to grant "many" competences to the agent through a wide mandate, while investing in monitoring mechanisms to avoid agency loss and unintended consequences. These costs, however, may be prohibitive, especially under uncertainty, because the distribution of the outcomes is unknown, and because the pay-offs may not worth the cost of monitoring the agent. Thus, let us not forget that it is the Commission that initiates the legislative process by submitting a proposal to the Council. Naturally, it is the preference of the Commission to expand its powers, but the possibility that the Council overrules the proposal or asks for a revision constrains the Commission.

The table below recalls the several types of mixity (chapter one) with respect to the characteristics of the mandate: *extension* (large or narrow mandate) and *clarity* (the extent to which competences

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

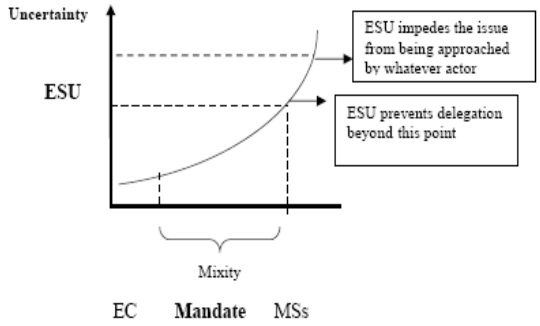
are mentioned explicitly, as a means to help laying down the hypotheses. Many designs are possible; the table indicates the strongest similarities based on the typology already presented:

Table3: Completeness of the contract: mandate extension and clarity

MIXITY				
Mandate extension		**Mandate clarity**		**Type of mixity**
Restrict	Wide	Clear	Ambiguous (fuzzy)	
Yes	No	Yes	No	Parallel
				Shared concurrent
Yes	No	No	Yes	Shared Coexistent
No	Yes	Yes	No	Alternative (*de facto* exclusive)
No	Yes	No	Yes	Shared Coexistent

It is also possible to bring uncertainty (gauged in ESU terms) into the analysis. So far it is not possible to establish a clear relationship between clarity, extension and ESU, as this depends on the hypotheses.

Fig. 4: Mandate and level of ESU



Assuming that some delegation occurs because players want to move from the *status quo*, the following considerations on agency loss can be made for the Community level (statics L1) before laying down the hypotheses.

ESU and agency loss

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

As ESU increases, the more difficult it becomes to control or monitor the agent, because the principal might not be able to devise specific (therefore accountable) assignments to the agent. If the Commission asks for a wide mandate with clear competences, the Council will be more likely to reject it. This happens because the risk of agency loss is higher than the potential benefits of having a more "visible" player (the EU represented by the Commission) in the international realm. To sum up, *high ESU constrains the mandate proposal that the Commission will submit to the Council*. If ESU is held constant, the wider the mandate given to the Commission, the higher the risk of agency loss, because the agent has more leeway to act and can escape from the principal's control.

Completeness of the contract and agency loss

The clearer the mandate, the harder it becomes for the principal to recover the competences that have been transferred to the agent; the more explicit and institutionalized the rules, the less flexible they are. For example: common market is a policy area explicitly delegated to the EC, as stated in the treaties. Member states' agency is severely constrained and their autonomy, virtually inexistent. The provisions contained in EC treaty, as well as ECJ over time do not allow for MSs or the Council as a whole to recover 1st pillar competences. There may be exceptions to Community rules (as it is the case of new MSs); competence devolution, on the other hand, is *de facto* impossible, as the costs of withdrawing the EU are extremely high. The difficulty to recover shifted competences is evident in the case of full delegation to the Community. Nonetheless they may also be observed under mixity, when the allocation of competences is clearly explicated. In this case, some competences belong to the Community and others belong to MSs; situations of Community exclusive competence will also be present. Clearly defined rules establish boundaries between community and states' actions, and define the conditions where such boundaries apply. The more specific the contract, the more rigid it becomes, even if information is incomplete.[109] Clarity can be measured by observing the limits set to agent discretion in terms of policy areas, issues, actions that can be taken without consulting the principal, actions that need principal's approval, and realms of "restricted access" – that is, that explicitly remain under the principal's discretion. These points are observable in the contract between principal and agent. Complete contracts foresee a higher number of situations and are therefore clearer; incomplete contracts, by

[109] Koremenos (2005). Although she uses a different definition of uncertainty, the principle remains the same.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

contrast, are regarded as unclear (fuzzy), as they do not define the locus of authority for certain existing or potentially emerging situations.

To sum, for various reasons the principal needs an agent (the Commission) to undertake in global environmental negotiations. However, they are unwilling to give exaggerated powers to the agent because of the risk of agency loss and the possibility of the agent engaging in a rent-seeking behavior. MSs seek to avoid the risk of seeing themselves bound to agreements that do not express (or even go against) their national preferences. The preference of the Commission is to expand its mandate, whereas the Council seeks to avoid agency loss (risk-averse behavior); the setting varies according to the degree of ESU. Provided that MSs have already decided to transfer some competences, two options – two strategies, in Frieden's terms[110] become available:

a) To restrict the width of the mandate and assign specific though limited tasks to the agent;
b) To leave the contract incomplete, therefore not transferring clear competences that will be "lost" to the agent (see table).

The degree of ESU around the issue is critical for the choice among one of these two strategies. Having in mind the points described above, the first hypothesis (L1) orienting this research can be laid down: *the higher the scientific environmental uncertainty likely it is for the Commission to push for fuzzy agreements*.

For a number of environmental issues, the possibility of unintended consequences is considerable due to the time frame and lack of data; MSs would also have great difficulty in explaining why delegation has taken place amid uncertainty to their constituencies (voters and organizations that participate to justify their decisions the domestic realm[111]. This does not clash with P – A approaches, according to which lack of expertise motivate principals to empower agents. Under uncertainty, however, technical capacity is not critical because it is assumed that nobody has this expertise. Actorness in its four dimensions becomes pivotal, and again is not related only to technical capability. Provided that players want to move from the *status quo, the higher the uncertainty, the more suitable a fuzzy agreement becomes.*

[110] Frieden (1999).
[111] Putnam (1988).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 4: Research Design Level 1			Comments
Dependent variable (DV)	Variation in **competence distr.** between Council and Commission	⇨	allocation of competences and how clearly are they distributed between the two actors
Independent variables (IV)	1) P**references** of negotiating actors (Council, Commission)	1 a) Council preferences (make its position prevail in the international arena while avoiding agency loss) ⇨	(stronger representation in L2 + scale gains) *vs.* (need to control the "agent" + leaving aside specific preferences)
		1b)Commission preferences (expands mandate) ⇨	seeks to increase its powers within limits set by the Council
	2) Intrinsic aspects of the **agenda**	2) Level of scientific uncertainty (ESU) ⇨	ESU influences by hindering actors' forecasts

Hypothesis L1: the higher the uncertainty, the less clear is the distribution of competences between Council and Commission

	Uncertainty	**Authority**		
		Competence	**Distribution**	
Case1 Vessels Agreement (FAO)	Low	Exclusive	Clear (Delegation) ⇨	. Distribution foreseen by Community legislation
Case 2 Straddling Fish Stocks (UNCLOS)	Low-med	Mixed	Clear ⇨	. Stable scenario . Costs of postponing decision[112] > misallocation risks . Future gains of postponing allocation are not significant . Goal→ to reduce renegot. Costs
Case 3 Jakarta Mandate (Biod.)	High	Mixed	Unclear (fuzzy) ⇨	. Unpredictability . Risk of misallocation > renegotiation costs . Risk: agency loss . Goal → not to lock in configurations that risk being inadequate in the future

[112] Namely time, personnel, opportunity costs and possibly political costs (MSs must report to their constituencies).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

1.2 International level (L2)

The three empirical cases are analyzed taking into account the Council-Commission relationship as expressed in the mandate, and ESU. It shall be stressed that the mandate, which was the dependent variable in L1, now becomes an independent variable and engenders three ideal types: exclusive competence, mixity with clear allocation of competences to MSs or the Commission, and mixity with fuzzy distribution of competence. The analysis follows the same structure: the outcome of the global negotiation – that will now be the dependent variable – is analyzed in the light of the preferences of the players and the institutional context.

At L2 the testable hypothesis is that, under high levels of ESU, fuzzy competences (= unclear MAs) lead to better results due to the flexibility conferred to the MS + EC arrangement. The study of the global dimension of the selected cases in undertaken by two-paired comparison: high ESU x low ESU (uncertainty dimension), and mixity x exclusive competence (allocation of authority dimension).

1.2.1 Competence distribution: exclusive, clearly allocated by the contract, or 'fuzzy'?

The first part of the analysis of L2 seeks to assess how and to what extent the distribution of competences influences EU actorness in terms of recognition, authority, autonomy and cohesion. How will the EU act in conditions of mixity as opposed to full delegation to the EC? Thus, to what extent fuzzy competences hamper actorness, if at all? In order to answer these questions actorness is approached through the four dimensions spelled out by Jupille & Caporaso: *authority* (legal competence to act); *recognition* (acceptance by others); *autonomy* (independence from other actors); and *cohesion* (capacity to formulate and (re)articulate internally consistent policy preferences). Two comparisons are made: mixity (clear competence) x exclusive competence, and clear x unclear competences.

<u>Distribution: mixity x exclusive competence</u>

Here scientific uncertainty is held constant, being low in both cases. This comparison allows the assessment of the relationship between authority and other forms of actorness. The method is the same as applied in L1 in order to distinguish between EC preferences and the setting. Preferences

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

are empirically derived and grounded on rational choice assumptions. The outcome of the negotiations is compared with EC preference. The negotiation process is followed through press records (namely Agence Europe). The distance between the two reflects how much the EC had to change (adapt) its position; the broader the distance the less capable it is to shape the final outcome of the negotiations. The two cases used in this comparison are (A) Compliance Agreement (FAO) and (B) Agreement on Straddling Fish Stocks (UNCLOS).

Hypothesis L2a*: full authority → actorness. The more competences shifted to the supranational level, the higher EC actorness*. Following Jupille and Caporaso's terminology described in chapter one, this hypothesis predicts that formal authority (legal competence to act) is critical for the EU to play a more prominent role in the international realm. The pooling of economic and political resources from member states allows for compensations to be offered, thus making incentives and threats more credible. According to this hypothesis, EU actorness derives mainly from formal institutions incorporated in the Community legal framework, and would be maximized under exclusive competence, because full delegation represents the limit to which powers can be transferred to the supranational level.

Clarity: clear competences x fuzzy competences

Here distribution of competences is held constant, being mixed in both cases. Clear competences refer to *ex ante* attributions of principal and agent, and their respective jurisdictions. Two rival hypotheses are possible:

Hypothesis L2b: *authority loci → actorness. The clearer the distribution of competences, the higher is EC actorness*. According to this hypothesis, full competence is not a necessary (mandatory) condition for actorness. Rather, it is the explicit definition of power loci but on definite powers attributed to either the Commission or MSs. In this case, although the EC does not have full authority, it can still be recognized by the other players and exercise autonomy and cohesion within its competence domain. Hypotheses L2a and L2b can actually be collapsed, as they both refer to *domains* of Community exclusive competence.

Hypothesis L2c: *Flexibility → actorness. The less clear the competences, the more flexibility the EC will have.* According to this hypothesis, legal competence and formal authority may not be the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

main element of a relevant international actor; when ESU is high, it is preferable to leave "open spaces" because actors will carry out several cost-benefit analyses over time. These calculations may suffer alterations due to increase of information about the issue (i.e., decreasing ESU), or because over the negotiation process certain options are locked in while others are left out. The flexibility hypothesis does not preclude a rational choice approach; players may shift or adapt strategies over time not necessarily due to socialization, but by updating their calculus in the light of a modified (or evolving) setting.

1.2.2 High ESU x low ESU

The comparison of situations with different degrees of uncertainty seeks to answer how (through which ways), and to what extent mixity provides room for the EC to respond to different bargain situations. Under which conditions does mixity actually influence actorness? Mixity is held constant – that is, both agreements are MAs, and ESU varies. Cases (B) Agreement on Straddling Fish Stocks (UNCLOS) and (C) Jakarta Mandate (CBD) are compared.

Renegotiation costs are a function of ESU and also of the diversity of preferences among the actors. With regard to this point, *the higher the diversity of preferences among the participants, the higher the need of renegotiation* in order to select one among the several possible equilibria. Regardless the ESU (or if it is low in both cases), if preferences are too distant from one player to another, the players cannot accommodate them in one agreement. Subsequent negotiations are then necessary to establish a common ground from which more detailed provisions will be defined. This can be done, for example, by reducing the number of actors, or leaving aside the controversial provisions that lead to a deadlock.

→ With respect to the relationship between ESU and the global negotiations' outcome as observed in the text of the agreement – that is, in the provisions it contains, the following considerations can be made (statics L2) before laying down the hypotheses.

The lower the ESU, the more likely critical players are to push for a detailed agreement, and the more complete the contract will be. Given that information is available and that preferences have been defined *ex ante* according to RCI assumptions, a critical actor (with the more bargaining power) will seek to set an agreement with clear rules that meet its preferences in order to lock in its position in relation to the other players. Clear agreements are preferred because low ESU

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

means that the existing scientific knowledge about the issue allows for a detailed agreement to be drafted and implemented in a relatively short time span. To draft a detailed agreement that can be implemented soon. Players then become concerned with reducing / avoiding renegotiation costs – they are ready to offer side-payments and determine sanctions to make opposition change its behavior. They are not willing to meet again to define these terms. In other words, *renegotiation costs are higher relative to the possibility of unintended consequences.* Critical players will try to pursue it by pushing a rigid agreement: clear provisions, compensation mechanisms, and sanctions.

The higher the ESU, the more flexible the global agreement ought to be, the more incomplete the contract will be. The final agreement must have enough flexibility to be molded over time. Its goal is not immediate implementation, as the players know this is not possible because they cannot calculate the pay offs, and because they will not run the high risk of unintended consequences. In other words, the signatory parties will refrain from locking in options (treaty provisions) that prove counterproductive to some of them later. The goal is to establish an initial commitment between the parties,[113] which will lead to further negotiations in the future: vague provisions**,** room for interpretation, and few specific requirements to be accomplished by contracting parties are likely to be found in the text. *When uncertainty is high, players prefer engaging in renegotiation costs, rather than risking an outcome that will not meet their preferences, or that may even go against them.*

Hypothesis L2d: That is, *the higher the uncertainty, the lower negotiation costs become vis-à-vis the risk of unintended consequences and the more important flexibility becomes as compared to authority.* The possible outcomes are summarized in the table below:

[113] The assumption is that *some* agreement is preferred to no agreement at all.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 5: Possible outcomes (L2)

Actor	Preference	Setting		Strategy
"EU"	L1 strategy	Competence Mixity vs. Non-Mixity	High vs. low ESU	Seek definitive agreement (complete agreement) *vs.* 'tailoring" (renegotiating, incomplete agreement)

Based on Frieden and Faure & Robin

	Setting		Strategy	Global Agreement (DV2)
	Competence	**Uncert.**	**EC position**	**Possible outcomes characteristics**
A	EC exclusive	Low	Pushes for definitive agreement objective: lay down clear rules and avoid renegotiation costs	Clear provisions, specific goals, dispute res. mechanisms resolution mechanisms more rigidity
B	Mixed	Low	Pushes for definitive agreement objective: lay down clear rules and avoid renegotiation costs if renegotiation costs > diversity of interests or Pushes for renegotiation in other arenas (REIOs[114]) objective: pursue more specific interests in for a of narrower scope and/or fewer players	Clear provisions, specific goals, dispute resolution mechanisms more rigidity + exception rules Provisions are clear, but mainly with respect to further negotiations Divide and negotiate separately redistribute the agenda Creates specific institutions or attribute powers to specific existing ones
C	Mixed	High	Pushes for an initial commitment, to be addressed as a whole in further negotiation	Vague more flexibility creates comprehensive institutions

Taking the cases into account

2. Empirical evidence from other global issues: insights from climate change

An analogy with climate change is worth making as a means to make the hypotheses stated above less abstract; by presenting another global environmental issue that bears varying degrees of ESU, this section aims at providing a better visualization of global fisheries' management.

The theory of global warming is derived from studies carried out in the 19th century, which associated the increasing emissions of carbon dioxide CO_2 and greenhouse gas (GHG) with higher atmospheric temperatures. This causal relationship had at the time a high level of ESU; studies

[114] Regional Fisheries Organizations

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

were scarce, and climate change was not perceived as a potential threat. It was not possible to convince chiefs of state, let alone the capitalist elite, that such variations had not been caused by contingent factors. Thus, it was not possible to assess the scale of the atmospheric warming. As a consequence the problem remained restricted to certain scientific circles, and emissions continued to increase. Political leaders only began to address the problem a hundred years later, when the Intergovernmental Panel on Climate Change (IPCC) was set up with the aim of assessing the possible effects of global warming. The indices published by the IPCC, albeit not accepted worldwide, were of utmost importance to the launching of negotiations on the reduction of gas emissions.

As with other complex environmental global issues, climate change brings together ecological, economic and social concerns. The first global agreement to deal with the problem was signed in 1992 in Rio de Janeiro: the United Nations Framework Convention on Climate Change (UNFCCC), which entered into force in 1994 and provided general guidelines for addressing the issue. By that time there was no consensus regarding the causes of climate change, or its consequences on different ecosystems. Some aspects were more evident: cars and industrial emissions appeared as the main responsible, but most of them were not backed by scientific evidence (high ESU). The UNFCCC clearly could not be implemented in the short run; on the other hand, it was necessary to do something to contain or revert global warming – the problem was recognized and could be spelled out, but reliable data lacked. The IPCC Second Assessment Report of 1995 provided further information (input) for the negotiations of the Kyoto Protocol in 1997, but the preferences of negotiating the parties with respect to how to reduce emissions and how to make these cutbacks equitable were still too diverse. Hence, there was no firm established consensus (ESU critical). No state would sign up an implementation agreement on these conditions. For example, supposed that a country with a competitive car industry agreed to cut export subsides, or to pass a bill that obliges domestic manufacturers to adopt a cleaner technology. By doing this, the producers and the country assume these costs, which renders their cars more expensive than those produced in countries that did not change their policy (even though they were environmentally unfriendly) to find out years later that vehicles have actually little to do with climate change. Even if robust evidence (which reduces ESU) confirmed this relationship, the effects on the car industry of this country could not be cancelled out. At this point, for many players (emergent markets, outsourcing destinations, countries with big car industry such as the US, for example), renegotiation costs were a better option than the risk of

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

taking wrong policy decisions. In 2001 a Methodology Report provided further information relevant for the development of the UNFCCC and the Kyoto Protocol, which has now entered into force. A number of other aspects of the Convention are still far from being implemented. The same reasoning is applicable to the UNCLOS and its derived agreements as well as to global fisheries management more generally. Bearing in mind the climate change debate, the next sections lay down the variables that are studied in the present thesis.

3. Independent variables

A clear definition of the independent variables (IVs) allows for the investigation of how, and to what extent, certain factors influence the principal agent relationship between Council and Commission and in turn EU external representation and actorness in global environmental negotiations (this last point is carried out by looking at the negotiations 'outcomes as expressed in the three global agreements analyzed).

In order to separate actors' preferences from their strategies, this study derives the former from empirical observations (induction) guided by the postulates set by P-A and RCI approaches. An important point needs to be underscored: preferences are often traced to the perspective of critical actors that, due to certain factors – more resources, higher mobilization capacity, pronounced interest for a certain issue, strategic culture,[115] and so on – manage to see their preferences put forth by their national governments. As a consequence, national preferences do not reflect a widespread interest shared by an entire country, but the goals of national elites.

This thesis studies how an "EU position"' with respect to the negotiation of an international agreement is established, and what is its impact vis-à-vis third the parties. The term "EU position" refers to the position of the Commission, if competence is EC exclusive, or Commission + MSs in the case of mixed competences. "EU position" regards its behavior, and is composed of "EU preferences" + the setting, because the actor's behavior "incorporates *both* its underlying preferences *and* its strategic response to the setting it faces."[116] But what are EU preferences? Following an inductive approach, one needs to look at the preferences of the powerful actors: in the three cases, the Council and the Commission because they define the mandate that allows for

[115] About strategic culture see Kupchan (1994).
[116] Frieden (1999), p. 60.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

international participation of the EU.[117]. Induction needs theoretical support, otherwise it would be impossible to separate behavior from preferences, and to identify the powerful actors. In this thesis such support is given by RCI and P-A theories.

A final remark, regarding the observation of critical actors in order to induce references expressed on a higher political level and Frieden's 'boxes within boxes' approach, is worth making: it is the level of analysis that determines which boxes will be opened, and which ones remain closed. Of course, many other political levels could be investigated: the preferences of the Council would need to take into account the preferences of MSs and their distribution, for instance. The preference of each MSs, in turn, reflects the interest of very specific actors, since fisheries policy is not an agenda that mobilizes a large number of EU citizens and economic sectors. The decision to start the analysis by looking at the Council and the Commission was made on this ground.

3.1 Council preferences

The position adopted by the Council is a function of member states' preferences, and of the asymmetries between them. For a long time, however, MSs' preferences have been taken for granted; Moravcsik shed some light on the issue and claimed that the preferences of national governments are function of domestic groups that act at the domestic level, and which have interests in certain economic sectors. The stronger the group, the more pressure it will put on national governments, whereas less powerful groups (or groups with lower stakes) tend to remain passive. Today MSs' preferences are usually regarded as a critical variable in the negotiation process in the EU, as they motivate domestic and international actions. MS with more radical positions – that is, MS whose preferences are more distant to the other MSs – will be less likely to support a common international position. Thus, the greater the added bargaining power associated with a pooled representation, the more likely EU member states are to empower the Commission, and the more extensive the mandate tends to be.[118]

As an assembly of representatives of the national government, the Council of the European Union (CEU) is regarded as the main legislative body of the EU. As such, it determines Community guidelines by indicating courses of action to other institutions, makes pronouncements on initiatives that have originated elsewhere and taking political decisions that are later translated

[117] EP has not been included because all three cases follow Consultation procedure.
[118] Frieden (2004).

into legal ones. The Council carries out policy and decision-making functions in Cooperation with the Commission, and also provides a forum where member states conciliate their different positions. Nevertheless, the Council is weakly institutionalized, marked by internal divisions, less dynamic and less transparent than other institutions.

The CEU assumes different formations according to the subject it relies on a pyramid of preparatory committees which extend across several technical and political levels[119]. The national representatives are usually accompanied by technical experts from the COREPER I and from national bodies. Numerous working groups are established to discuss proposals issued by the Commission, which leads to a complex network of committees that encompass MS representatives and also national bureaucracy. With regard to the Fisheries Council, most of the legislation consists of regulations, instead of directives. Its decisions may be taken through qualified majority voting (QMV), but in practice, consensus and informal negotiations prevail.

Taking into account a proposal from the Commission, the Council decides on the competences that should be transferred to the latter in order to enable it to achieve Community goals in both European and international levels, as spelled out by P-A approach. Decisions regarding fisheries are taken by qualified majority, usually in consultation with the European Parliament, as it is also the case with agriculture. Although members states' assembly can assume several configurations depending on the policy area, this thesis focuses on the fisheries Council, which will be treated as a single body[120] in this study.

A detailed account of EU fisheries is provided in chapter 3. However, while acknowledging the crucial role played by national governments over the integration process, this thesis does not engage on an in depth analysis of each member state. MSs' preferences are taken into account inasmuch as they allow for the identification of trends observed in the fisheries council. That is, Council preferences are derived empirically. This choice has been made on methodological grounds; and can be justified on the following basis:

The first reason concerns the decision-making procedures and the relative lack of transparency of such processes. Decision-making within the Council is usually made by consensus or through

[119] Hayes-Rensahw & Wallace (1997).
[120] Council of the European Union. Available at: http://www.consilium.europa.eu/cms3_fo/showPage.asp?id=426&lang=EN&mode=g Access on 20/05/2006

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

qualified majority voting (QMV). The process through which member states reach a consensus, however, is unclear; thus, informal mechanisms play a crucial role in defining what will be the "Council's position". Bargaining in the Council is weakly institutionalized, and may resemble "transactions more than bargaining".[121] An accurate analysis would then need to take into account the preferences of each member state and the decision-making procedures that take place in the Council. Data stemming from official journals or minutes of the meetings would not suffice to provide for an accurate analysis of the process. In other words, other methods of data collection – namely interviews – would be necessary.

Second, the analysis already addresses the issue of scientific uncertainty (in both the EU and internationally) and its influence on delegation to the Commission. To include the distribution of preferences within the Council implies engaging a three-level, instead of two-level analysis. That is, not only would member states preferences regarding fisheries policies need to be taken into account, but also their position vis-à-vis matters marked by scientific uncertainty. This procedure considerably extends the time required to carry out the analysis because of the greater variation.

Thus, regards fisheries, functional cleavages are at least as important as national ones. This trend is observed in the contrast between traditional communities historically attached to certain regions (who express strong loyalty for specific ports, for example) and "new" economic actors that show weak territoriality and are not bound to particular regions or to the flag state of the fleet.[122] not to mention the different interests between regions within one member state, and specific interests related to certain species or fishing methods. The critical role played by different sectors involved in fisheries industry is more efficiently addressed by other perspectives – namely neofunctionalism – which are not part of the theoretical framework adopted in this thesis.

Fourth, the preferences of member states, whilst taken into account in the analysis of the position adopted by the Council, would be poorly related to the rest of the study (i.e., the other two levels). The variation on this level would not contribute to the analysis of the other two levels, as these devote attention to Council-Commission interactions expressed in the mandate issued by the former. It is worth stressing that the P-A relationship tales place between the Council and the Commission. The Council is a collective principal because it is composed by more than one actor

[121] Heisenberg (2005) p. 69
[122] This is particularly the case of Spain and the Netherlands, who own vessels registered in the UK and in France. This issue is further explained in chapter 3.

– in our case, by the member states. But in the analysis, as well as in the primary data that has been analyzed (EC documents) there is only one principal and one agent. Again, the thesis does not deny all the mechanisms that go on within the Council and within each member state; they are simply beyond the scope of this study.

In a nutshell, a two-level analysis is compatible with the chosen theoretical framework, as well as with the methodology and the methods of data collection. Thus, it contributes to construct a framework where more complex or multi-faceted issues (rather than quasi-ideal types) can be accurately addressed by a collective principal – agent relationship. Drawing on P-A literature, the Council has four main motivations to delegate authority to the Commission: to reduce pressure of specialized groups on member states' governments; to lock in distributional Community benefits; because of the Commission's expert authority; and to increase bargaining power at the international level. These factors are described below.

To reduce pressure of specialized groups on member states' governments. National ministers, responding to small but active groups of fishermen, act to increase (or reduce the lesser possible extent) their respective fishing quotas. This happens because, although the sector accounts for less than 0.5 % of the EU's working population, the high territorial concentration of fish-dependent communities creates micro zones with strong capacity for political mobilization. As is also the case with the agriculture and industry, the fisheries Council is more specialized, composed of ministers who serve well-defined constituencies.[123] As shown by Franchino & Rahming, specialized Councils are more likely to be preference outliers. These concentrated organizations manage to permanently lobby national members in the Council; they have succeeded in pressuring local and national governments in a way similar to farmers. In this case, this implies that ministers will overestimate the sustainability of fisheries, and will systematically push for increases in their respective quotas,[124] and for a recognizably inefficient common policy. One advantage of delegation to supranational institutions, in this case, is reducing the influence of such groups on the government, and avoiding their opposition for unpopular measures when fishing activities need to be cut back.

[123] Hayes-Renshaw & Wallace (1997).
[124] Franchino & Rahming (2003).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Access/distribution of resources. Or *locking in distributional Community benefits*. In 1993, in an arrangement between the governments, the Commission and fishermen have established a compromise around a regime of structural aids in order to redress the (social) costs of policy's reforms. Steps towards more sustainable fisheries have been reached because financial compensations were clearly available. This is the case of the ban of drift nets (mainly in France and in Ireland), and modernization of fishing fleet (conversion of vessels or installation of monitoring mechanisms). The main beneficiaries of fisheries structural funds (created in 1993) were Spain (40% of the total), Italy, Portugal, and France.

Expert authority. The Commission itself does not have more technical expertise than the specialized bodies of member states. On the other hand it works as a data warehouse, assembling facts and figures sent by the International Council for the Exploration of the Seas (ICES) (the main provider of scientific information), by member states and by the European Environment Agency, which also assembles and transmit information on a number of environmental issues. In this case the agent does not have more technical expertise, but enjoys authority which arises from the control of specialized and policy-relevant information.

Increase bargaining power at the international level. To some extent, this is a consequence of pooling resources and expertise. By defending one single proposal in international negotiations, the EU can offer more substantial and credible incentives to make third the parties change their position; make more credible threats such as imposing sanctions or leaving the negotiations; extend the possibilities of issue-linkage and side payments, since more resources become available and their variety also increases.

Despite the incentives mentioned above, the structure of the Council constrains delegation. Most commonly, the preferences of member states, acting on behalf of local professional organizations, lead the Council to push for flexible commitments and exception clauses that allow the continuation of current fishing practices in the member states, despite the decreasing levels of most stocks. This is the case of the establishment of the total allowable catches (TACs), a pillar of the conservation of fish stocks. Member states could adapt to the fishing terms to maximize his interests within the rules set by the Commission through national legislation. Nevertheless, regulations are regarded as unjust or illegitimate, which compromises compliance and reduces the motivation for discussing, defining and abiding the rules. As shown in the empirical part of the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

thesis, the ability of circumventing restrictions forwarded by the Commission is regarded as an accomplishment by national ministers and their constituencies.

3.2 Commission preferences

The Commission performs multiple functions, such as formulating recommendations or delivering opinions on matters relevant to the Community, whether are they spelled out in the treaties, or regarded as necessary, in addition to the functions derived from "practical necessities and/or of views within and outside the Commission as what it should be doing."[125] The central position it occupies in the EU system, provides the Commission with a capacity to forge political deals between other actors, both within the Council and between the Council and EP. The Commission exercises legislative and executive functions, and works together with the European Court of Justice (ECJ) as a legal guardian.[126] Furthermore, it acts as a mediator and external representative, functions with a strong potential to influence the decision's outcome, as described below.

The importance of the Commission as a policy initiator and political entrepreneur stems from both institutional and technical factors. First, there is extensive consultation and arbitration prior to the introduction of the proposals given the Commission authority during the discussions with the Council and EP. Several formal and informal mechanisms in order to have a snapshot of the regard of other institutions (especially the Council) over a specific issue take place, taking into account that it is easier for the Council to accept (QMV) than to amend (UV) a Commission proposal. Besides, the Commission has the right to withdraw a proposal before the Council has adopted it, at least under consultation and the first stage of co-decision (2 reports). Although this potential is of limited use in practice, it represents another opportunity for the Commission to better tailor the proposal.[127]

Having expertise on the policy areas affected by its proposals, the Commission then presses the Council by drawing on supranational legal obligations which alter the preferences of some member states or the default condition of decision-making. In order to break opposition, the Commission may adopt a divide and conquer strategy, or threaten the Council with a worst-case

[125] Nugent (2001), p.10.
[126] Id.
[127] Thompson & Holsti (2006).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

scenario so that adopting the legislation proposed is simply less bad than overruling it.[128] However, it is worth stressing that (technical) expertise is one of the factors that favors acceptance of the proposal by the Council, as observed in the case of marine biodiversity, analyzed in chapter 5. Finally, once the proposal is released, the Commission is usually able to present a consistent line and a cohesive position in discussions with the other institutions which is not always the case of the Council and the EP.

With regard to external relations of the EU, the Commission has been assigned a number of tasks. As put by Nugent, it has acted pro-actively so as to establish influential powers and authority in as many external spheres as possible: it is entitled to undertake negotiations with third parties in a wide range of policy areas[129], either by itself or alongside with member states (as it is the case of the mixed agreements studied in this thesis); it advises the Council on EU accession negotiations; coordinates EU humanitarian aid; and participates in the work of numerous international organizations – not just as a negotiator, but in the organizations' routine – and has official representations in over a hundred non-member states.

In order to represent the interests of the EC in the international arena the Commission needs to attain a compromise solution between its original proposal and what is feasible to reach an agreement in the Council.[130] The Commission has to keep a neutral position because if it favors some member state(s), the disadvantaged ones may react by blocking legislation, making pressure by exercising veto power or building coalitions with other disfavored members.

Joint participation (mixity), and the nature of negotiating mandates given to the Commission with respect to the roles and power balance between the former and the Council can lead to tensions between the two institutions, as occurred in 1999 during WTO meetings in Seattle in a working group on biotechnology issues.[131]

In a nutshell, defining representation at international negotiations is a frequent 'problem' of the EU polity system. Usually the Council prefers not to confer wide mandates to the Commission in order to avoid loss of agency control, but this risk must be balanced with the need of stronger

[128] Schmidt (2000).
[129] Supported by ECJ's decisions.
[130] Conceição-Heldt (2006).
[131] This case refers to GMOs and the precautionary principle, which were also being negotiated in UN framework.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

representation vis-à-vis third parts. The Commission, on the other hand, seeks to expand its powers and spheres of action, and pushes for a loose mandate. By doing so, she can also neutralize some less integrationist positions in the Council. The Commission claims that it has been unable to implement a more sustainable policy without sufficient political backing, to have more leeway and in turn be more effective when negotiating with other states. The independent variables can be incorporated into Frieden's model of preferences-setting-strategies, as shown in the figure below:

Table 6: Preference, setting and strategies under mixity

	Preference	**Overall goal**	**Setting**	**Strategies (options)**
Council	Avoid agency loss Meet MSs preferences (under constraints)	Change EU proposal as little as possible. Int'l negotiations' outcome should be the closest possible to the proposal put forth by the EU/MSs	ESU Varying degrees	a) Competences well defined (clearly spelled) but restrict in scope. Series of complete agreements. b) Broad scope but competences unclearly defined (not clearly allocated to MS or Commission).
Commission	Expand mandate Maximize EU utility by achieving Community goals			

Frieden (1999)

3.3 Environmental Scientific Uncertainty (ESU)

This section explores the extent to which current problems faced by the fisheries sector in the EU and elsewhere differ from 'old' ones; the aim is to allow for the establishment of relationships between the nature of certain dilemmas and the institutional solution that has been proposed. Historically, the right to exploit marine living resources (as well as environmental problems in general) has been addressed through laws and weakly institutionalized arrangements between few stakeholders. For instance, problems derived from agriculture, mining and urbanization already raised concern in ancient Rome; by the XIV century, a number of environmental issues were publicly debated in northern Italy, which resulted in a sort of provisions that were part of the legislation of many cities in this region. Today, local problems are still an issue, but not the only one: problems whose costs will be shared by the whole world population – the so-called global

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

problems – have gained increasingly visibility and are now a major concern throughout the world. Environmental scientific uncertainty (ESU), along with the broader scope of "new" environmental issues, is integral part of this debate. Political actors are called upon to make decisions about future potential problems about which current information is scarce. In other words, the position of the actors involved, and institutional responses they provide through negotiation. The following paragraphs confront two different approaches to "environmentalism".

The debate around the common goods goes beyond "purely ecological" concerns: the idea of common heritage of mankind, sovereignty over resources, development, bioethics, precautionary principle, right of future generations and north/south antagonisms illustrate van den Hoye's contemporary environmental problems; thus, they are examples of what Godard[132] called "controversial universe", as opposed to the traditional "stabilized universe".

The emphasis on the dichotomy stabilized vs. controversial context draws attention to how complicated it has become, to address environmental problems. Protection encompasses not only local problems but also more diffuse threats that have been observed more frequently over the last fifty years; they are more difficult to define, to understand and to solve. The more complex the problem, the harder it is to isolate it from other issues and to predict the effectiveness of policy solutions.

In a traditional perspective, environmental problems are caused exclusively by specific human actions (either voluntary or involuntary) or natural catastrophes. There is a specific, clear and immediate relationship between human behavior, and their impact on nature. The consequences, albeit sometimes serious, were narrow in scope and geographical area, and the situation was reversible.[133] Activities which were harmful to the environment ('bad behavior') were more easily identified and fought. Problems arising from either lack of coordination or different preferences were addressed by local authorities. In fact, with the exception of border regions, and resources shared by some states, environmental problems hardly ever went beyond the national level. Solutions are also implemented at the local level, and the same solution could be applied to a similar problem elsewhere – that is, knowledge preceded action, and the expected result was the fruit of previously verified causal mechanisms. This approach to environmental problems reflect

[132] Godard (1993).
[133] That is, the system could be fully recovered. Indicators would be the same as before the shock.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

what authors from different disciplines called a ‘stabilized’ world: its main characteristics are the applicability of one solution to many situations, the predictability of the result, and the direct relation between practice and environmental impact.

Today such ‘conventional’ issues are still frequent. What has changed is that, along with small-scale problems, other kinds of environmental threats have become evident. They do not result directly from a specific action, but from a wide range of activities carried out by numerous actors (individuals, firms, social groups), which are many times encouraged by local policies. It is not possible to precisely determine the share of each of these actors in the overall damage, so it is difficult to assign responsibilities and define sanctions to fight ‘bad behavior’. Thus, the resources affected by these problems are not confined to national borders: marine and air pollution are good examples.

In the ‘unconventional’ world, environmental problems are complex and global in scale. They are the observable part of trans-disciplinary issues that are now poorly understood. Scientists estimate that they constitute a threat to future generations, but scientific knowledge is non-consensual. These divergences hinder the definition of clear goals by the stakeholders; their preferences are more diffuse as compared to a stabilized world, because when information is missing they cannot determine future pay-offs accurately. This scenario was described as ‘controversial world’; it describes situations where the relation between behavior and environmental impact is unclear, and this obscurity has strong political impact because it affects how, and to what extent actors will adjust their behavior and ensure that everyone follows compatible practices.

Godard’s conceptualization is useful because it describes a kind of problem that has emerged over the last years, and to which international actors (the EU included) still fall short of addressing effectively. His description is summarized in the table below:

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 7: Stabilized vs. controversial world

Stabilized	Controversial
External effects over collective goods are observed, or directly perceived	Effects are socially, politically and scientifically constructed, not directly perceived or observed
Preferences of the actors are expressed in market terms, votes or conflicts	Preferences are diffuse
Today's preferences guide decisions	Future preferences and actors play a role in the decision-making (ex, rights of future generations)
Clear attribution of responsibility	Unclear attribution of responsibility
Scientific knowledge is established through causal mechanisms, and is common to all actors involved. The same holds for the risk and consequences of potential damages.	Scientific knowledge is non consensual. There are critical divergences regarding central aspects of the problem.
Knowledge precedes actions	Urgency and irreversibility trigger actions, there is no time to wait for knowledge to become accessible.

Despite permanent scientific controversy, these questions entered the political realm. The scarcity of certain resources (fisheries), and the emergence of environmental goods and services which have recently 'gained' market value call for alternative *formes juridiques* capable of dealing with the access to something as intangible as the preservation of genetic patrimony, for example. Put simply: regardless the actors involved, the varying degrees of complexity of today's environmental challenges somehow influence institution building, as well as their evolution and change. This is why scientific environmental uncertainty is not taken as a given in this thesis. The next section elaborates on the concept.

3.3.1 Definition of ESU

Making choices without sufficiently knowing their implications is part of social life. Different from unintended consequences – when we expect a result and achieve another – quite frequently we are simply not sure about the results of our actions. Still, many times we *must* make a decision. This phenomenon occurs in different social spheres, including in the political realm. To an individual, the impact of choosing under uncertainty is usually minor. Political decisions, on the other hand, may lead to institutions and engender rules that affect the status and the behavior

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

of individuals, organizations or states. The higher the political level, the greater the impact of the decision; the larger the number of factors that need to be taken into account, the more difficult it is to know the possible results of the decision.

Mainstream paradigms in public affairs claim that politics must be based on hard facts provided by Science – that is, in the form of quantitative data. Controlled experiments, repeated results, strong causal relations and statistics have always had a higher status for grounding policy-making. Indeed, science has experienced outstanding progress over the last decades. The rise of life expectancy, the development in sectors like transport and telecommunications, the accuracy accomplished in geophysics, the improvement of knowledge regarding innumerous domains of biology, etc. confirm the statement. Nevertheless, we are confronted by new challenges and threats, especially with respect to environmental dilemmas. Global warming, hazardous wastes, loss of biodiversity are paradigmatic examples. To put it briefly, these issues have common features that distinguish them from traditional scientific problems, like "feeble" information and hypothesis derived from non-controlled conditions. As Funtowicz and Ravets state:

"Policy-makers tend to expect straightforward information as inputs to their decision making process. They want numbers to provide certainty. But the issues concerning policy-related research involve much uncertainty, and also inescapable social and ethical aspects. Simplicity and precision in predictions (...) are not feasible in many cases."[134]

Uncertainty can be understood as the lack of data to guide decision-making regarding the exploitation of common living resources. More specifically, it refers to lack of sufficient scientific knowledge and to the scarcity of data on geographical aspects and ecological processes, as well as established relations between certain practices and their environmental impact. When these elements are unknown, or when their estimation is subject to strong criticism, environmental goods and services cannot be expressed through market values. Therefore, it becomes much harder to offer compensations to encourage other the parties to change their behavior, and it is difficult to impose fines and other "quantifiable" sanctions. Not to mention that it is also hard to assign responsibilities and apply the polluter pays principle.

[134] Funtowicz & Ravetz (1990), p.7.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

It is worth reminding the reader here that the definition I use is more restricted than the one applied by Koremenos, Lipson and Snidal on their work on the design of international institutions[135] because in this thesis uncertainty refers to intrinsic characteristics of environmental issues. This concept is derived from economics and complex systems (Herbert Simon), and later tailored by environmental economists, such as Faucheux and Vercelli.

Uncertainty has driven the attention of economists interested in modeling more complex scenarios. Many authors distinguish between different kinds, or varying levels of uncertainty. The academic debate on whether there are "varieties of not knowing" is long-running and remains unresolved. Works following Bayesian theory, for example, do not separate different kinds of risk and uncertainty, since they assume actors to make decisions as if they knew the probabilities of occurrence of future states. This thesis assumes not only that there is a distinction between risk and uncertainty, but also that the latter does make a difference in the behavior of the negotiating the parties regardless the political level they are located.

Following from the tradition established by Knight and Keynes there is a difference between 'strong' and 'weak' uncertainty (i.e., risk), analogous to Young's 'hard' and 'soft' uncertainty. Drawing on the seminal work of Frank Knight, I begin by making a clear separation between risk and uncertainty. Is his treatise *Risk, Uncertainty and Profit*,[136] he distinguishes between three different types of probability, which he called: "*a priori* probability"; "statistical probability" and "estimates". The first concerns mathematical distribution, and probabilities are know by definition, as in rolling dices. In the second case, probabilities are obtained from the statistical analysis of well-defined empirical data: in Knight's words, statistical probability depends on the relation between the "empirical evaluation of the frequency of association between predicates" and on "the empirical classification of instances". In the third situation data, there is *no valid basis of any kind* for classifying instances: data, even if existent, does not enable statistical analysis. As put by Keynes, "About these matters there is no scientific basis on which to form any calculable probability whatsoever. We simply do not know."[137]

Knight's categorization of probabilities allowed him to differentiate risk from uncertainty: the former refers to a situation where more than one outcome is possible and the probabilities of each

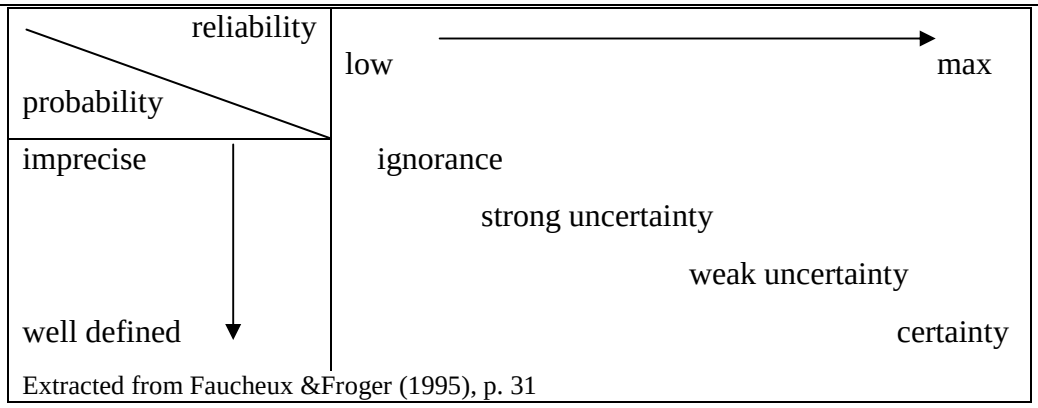
[135] Koremenos, Lipson & Snidal (2001).
[136] Knight (1921).
[137] Keynes (1937), p. 113.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

outcome occurring are known. Risk – also called 'weak uncertainty' – is related to the 'a priori' and to 'statistical' probabilities. (Hard) Uncertainty, on the other hand, involves "events whose probability distribution does not exist or is not fully definable for lack of reliable classification criteria."[138]

Such distinction is relevant to this study because the three empirical cases demonstrate varying degrees of uncertainty. The hierarchy defined by Faucheux and Froger illustrates this continuum: in situations of *certainty* the probability distribution is reliable and can be reduced to one value, thus corresponding to Knight's '*a priori'* probability. On another extreme there is what Shackle names *ignorance*. In between there are situations of *weak uncertainty* - defined by a "unique probability distribution, additive and reliable"[139]. Under strong uncertainty the distribution of probabilities is non-additive, or not reliable.

Fig. 5: Categories of uncertainty



Extracted from Faucheux &Froger (1995), p. 31

Strong uncertainty is of particular interest because many global environmental problems fall into this category. The interrelationship between environmental protection and economic activity is extremely complex and variable. Thus, there is no previous observation of these phenomena, they have no historical precedent. In these scenario decisions are of a non-probabilistic kind.

3.3.2 Uncertainty, negotiation and institutions: implications for the research

The majority of the works on decision-making deals with situations where actors can estimate the probabilities of a set of events occurring. By contrast, there is no consensus normative or positive

[138] Vercelli (1991).
[139] Faucheux & Froger (1995), p.30.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

theory of behavior regarding situations where these probabilities are unknown. In this case the traditional cost-benefit analysis is severely hampered because scientists cannot provide policy-makers with a set of probabilities over possible outcomes (WSTB 2004). Pricing mechanisms, which could allow them to assign economic values to the environmental goods that are under negotiation, are either weak or inexistent. As a consequence it is impossible to value the tradeoff between the increased probability of ecosystem destruction and the costs of protective measures (ex,, preserving species, reducing emissions). In short, the wider the distance between choice and consequence, the higher the uncertainty and the less ability actors have to make specific predictions.

To sum up, there are two ways of dealing with uncertainty: the first is to reduce it, through a better understanding of underlying ecological processes. This has always been the quest in the natural sciences' realm. In fact, its role is no less important today than 30 years ago; however, many ecological systems are inherently uncertain due to their complexity and variability. 'Hard science' alone cannot provide data to orient protective measures. As an alternative, other academic and applied fields became interested in developing methods to deal with uncertainty, and to bring it into decision-making strategies.[140]

Whilst taking uncertainty into account has important implications for decision-makers, it also has an impact on political studies. The study of decision-making under these conditions can help to understand the negotiation processes around complex environmental problems, and their outcome. If institutions are designed to solve problems of collective action and cooperation, then different levels of uncertainty shall lead to different institutional solutions. Hence institutions "are a response to uncertainty. They economize on the scarce resource of cognition."[141] The literature points out three possible outcomes when political decisions are to be taken amidst uncertainty:

Negotiations stall if actors anticipate losses they are not capable – or willing – to cope with. This may occur in virtually all policy-areas due to multiple factors. Decision procedures already institutionalized (such as unanimity rules), re-distribution of resources and competences, and the variety of interest and actors may prevent the establishment of a common ground. An example is the difficulty in common standards definition and adjustment observed in telecommunications.[142]

[140] Vercelli (1994).
[141] Loasby, L.B.(1999).
[142] For a comparative analysis across policy areas and institutions see Héritier (1999).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

If anticipated (economic) costs may lead to deadlocks the same may also happen when such costs remain obscure. ESU is one critical factor, inasmuch as it poses serious obstacles to the identification and assessment of possible outcomes.

Negotiating parties try to come to terms with a less aggressive policy, or the minimum common denominator. This happens when parties agree on a common denominator, when opposition is overruled or when stalemate appears as a worse alternative. It allows policy areas to advance on a "step-by-step" basis, depending on how much room is left for levels of compromise to be adjusted. This is the case of trade liberalization (gradual removal of quotas or subsides) and many environmental agreements such as gas emissions, for example (first actors setup a framework, or general principles, and after, negotiate on the numbers and other indicators to be met). Scientific uncertainty plays a role in the definition of the exigencies to be reached by the concerned actors. In other words, it sets up limits beyond which possible outcomes cannot be assessed or foreseen.

Negotiating parties may devise unclear institutions as a means of proceeding avoiding deadlocks in long or difficult bargains by making broad, incomplete contracts.[143] They might do this because they reckon uncertainty will diminish within a given time frame, or because they envisage changes in actors' positions that will allow more robust solutions (more aggressive policies) to be established.

4. Hypotheses in the light of the empirical cases

This thesis seeks to analyze: 1) what conditions account for variation regarding the distribution of competences between member states and the Community and 2) what relations can be inferred from competence distribution and EU actorness – that is, its performance in the negotiation process? The second point is of particular interest, due to the lack of studies linking legal aspects of the EC (in the case, MAs) and its role as a global actor. The following hypotheses regarding ESU, clarity of the mandate and actorness, which are summarized below, orient the analysis:

- Hypothesis L1: *ESU → unclear (P-A) mandate and incomplete contracting*. The higher the scientific environmental uncertainty (ESU) the more likely it is for the Commission to

[143] Schmitz (2001).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

push for fuzzy agreements as measured by the mandate proposal issued to the Council. When ESU is highly the Commission will not ask for a wide mandate because the Council, being risk averse, is more likely to reject the proposal. The Commission, having the right to initiate the legislative process, will propose an incomplete contract, where more specific provisions can (will, or needs to) be renegotiated over time. In this case the agent is not assigned with specific tasks, only the P-A relationship is declared to exist, as observable in the mandate proposed by the Commission and approved by the Council.

Incomplete contracts allow for future (re)allocations of ownership rights. In the case of MAs, ownership refers to authority to undertake negotiations, or 'property rights' over competences to be exercised in multilateral negotiations at L2. The rationale is analogous to Hart and Moore's approach to incomplete contract and asset ownership. Empirically this is observed by tracking the legislative process through the legal database, and by examining the proposal issued by the Commission, followed by Council's observations and official declarations.

- Hypothesis L2b: *Authority* → *actorness*. The clearer the formal allocation of competences the greater the degree of actorness, because authority and recognition are clearly defined. According to this hypothesis, actorness reaches its maximum when the EU has full competence to negotiate. In MAs, the EU can still enjoy considerable degree of actorness provided that there are *loci* of excusive competence. The authority → actorness hypothesis is empirically observable by the presence of explicit declarations of competence, as it is the case in the Straddling Stock Agreement; the Community is competent with respect to negotiating quotas, fishing seasons, and reporting EU data (that is, compiled data submitted by MSs) on fisheries production, landing and processing. Measures related to research and development, and infractions committed by vessels flying flags of MSs (note: not EU flags), for example, remain under MSs' jurisdiction.

- Hypothesis L2c: *Flexibility* → *actorness*. The less clear the competences, the more flexibility the EC will have, because it will able to change its strategy vis-à-vis the other players by tailoring incomplete contracts over time. This is observable at the moment of the negotiation when tasks are clearly assigned to the agent (or not assigned at all). Attribution of clear competences in the early phases of the bargain accounts reduces the actor's flexibility.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

- Hypothesis L2d: *ESU → renegotiation*. The higher the uncertainty, the lower negotiation costs become vis-à-vis the risk of unintended consequences and the more flexible, or resilient, the global agreement needs to be. Renegotiation is preferred because of risk-averse behavior, since ESU implies that no player has enough information about the issue to propose rigid agreements, compensations and sanctions. Differently from Koremenos' study, in this case the parties are not willing to draft a series of short duration (definite) agreements that will need to be completely renegotiated later on. This difference is due to the fact that: a) Koremenos' concept of uncertainty, despite some overlapping points, does not correspond to ESU, and b) when ESU is high, the cost of renegotiating (non-specific) provisions from the scratch is prohibitive, as none of the issues tackled by the global agreement would be ever implemented. When ESU is high, the parties can write a contract that sets nothing more than a 'message game' (guidelines) to be played at time 2 (t2). Empirically this postponement is observable when the 'final' (global) agreement does not define rights concerning access to the resource, withdrawal from the agreement, exclusion or alienation. Low renegotiation costs are observed when the agreement contains provisions to address more specific issues in the future instead of implementation-related provisions and specific monitoring mechanisms.

It is worth stressing that L1 refers to the community level, L2 b and L2c concern EU actorness, and L2d refers to the final outcome of the negotiations (the agreement). In order to analyze if, or to what extent, MAs influence broader negotiations' outcomes, comparisons with other forms of MSs / Community interactions must be carried out. To make the study possible, agreements will be divided into three groups according to the balance between member states and EC authority as follows: 1) EC exclusive competence; 2) MAs with clearly defined competences and 3) MAs without clearly defined competences ("fuzzy", unclear or ambiguous MAs). The three situations are described below.

a) **Agreements where the EC has exclusive competence and negotiates in the name of all member states.**

Exclusive competence refers to issues and situations where the EC has full authority, that is, speaks and negotiate on behalf of the 27 member states. Granting the Community exclusive

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

competence drastically affects the powers of member states to act unilaterally or collectively. Their interests are expressed through community institutions, namely the Council. The legal basis for exclusive powers stem from ERTA decision, which declares powers exercised by member states incompatible with the unity of the Common Market. Thus, they are enhanced by ECJ decisions. The Community alone carries out contractual obligations towards third countries. From the international relations perspective, EC membership in international organizations and accession to institutions (Conventions, for instance) has a binding effect on member states. Only the Community may take part in negotiations and appears as a contracting part in related agreements. In the case of previous membership of EC states, member states are obliged to withdrawal once the Community accedes.[144] Fishing agreements signed under FAO framework constitute an example of EC exclusive competence.[145]

b) MAs where EC and member states' competencies have been clearly defined

As the term suggests, both member states and the EC take part in the agreement. This does not imply that both will be necessarily contracting the parties in international institutions. Rather, it means that attributions are made explicit and publicized before negotiations and voting procedures (on international agreements) take place. Statements regarding matters where EC has exclusive competence and matters left to member states[146] are present. In that sense, it resembles more a division of tasks between member states and the Community. They are indicated, for example, by explicit voting rules (ex, when member states vote EC is automatically excluded). Lastly, when competences are clearly defined, the direct effects of EC membership on member states' participation are explicated.

A good example is participation by international organizations in the UNCLOS, addressed by the Convention's Article 2, Annex IX: "An international organization may sign this Convention if a majority of its member states are signatories of this Convention. At the time of signature, an international organization shall make a declaration specifying the matters governed by this

[144] This obligation may be only implicit. States with territories out of the EU usually have a special status such as France, Portugal, Spain and Denmark.
[145] Fisheries are subsumed into the Common Agricultural Policy, which lies under EC exclusive competence. However, many agreements incorporate environmental provisions (and so does the "new" CFP as well), therefore requiring joint participation of member states and the EC.
[146] When applied to fisheries this could be, for example, determination of fishing quotas (or TACs, decided mainly by DG Fisheries) and environmental protection, which can be left to member states.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Convention in respect of which competence has been transferred to that organization by its signatories member States, and as well as the nature and extent of that competence."[147]

c) MAs where competences are fuzzy, that is, not explicitly attributed either to the EC or member states.

These agreements are usually grounded on the duty to cooperate and have a prevalence of shared and/or facultative competencies. According to McGoldrick the absence of a formal mandate issued by the Council or lack of explicit provisions with respect to representation by the Community may reflect uncertainties as to competence or negotiating tactic.[148] It indicates lack of knowledge over the issue being negotiated and / or third parties and possibility of substantial evolution over time. To put shortly, possibility of unintended consequences is high due to time horizon, change of context, access to information, and so on. Studies in areas involving research and development such as biotechnology indicate that this fuzziness may confer an advantage in the negotiation process.[149]

A fourth situation worth mentioning, albeit not addressed in this thesis, refers to organizations where MSs have exclusive membership**.** In this case there is no Community representation, even though the EC may be present as an observer. This is the case of agendas that are not comprised by the 1st and 2nd pillar of EC policy. It is also possible that a certain institution does not allow for non-state entity membership, or that EU member states do not agree to withdrawal. This is the case of the International Commission for the Conservation of Atlantic Tunas (ICCAT) until 1997, or the International Maritime Organization (IMO). Exclusive MS competence results from intrinsic properties of the issue under scrutiny, but also depends on the membership rules of the organization, which may allow only states to accede. In such cases it is interesting to check whether coordination between MSs occurs despite the absence of EC formal representation. This however, falls outside of the scope of this thesis. The four situations are displayed in the matrix below:

[147] Source http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm access on 01/08/2005.
[148] McGoldrick (1997), p.86.
[149] Kritikos (2004).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 8: Mandate attributes

Precision (allocation) \ Extension (width)	Wide mandate	Narrow mandate
Clear	*De facto* EC exclusive competence	Mixity parallel or concurrent competence
Unclear	Mixity coexistent competences and possible future concurrent competences[1]	*De facto* MSs exclusive competence

5. Case selection

The selected cases represent three distinct situations found in the European polity with respect to competence allocation (either in the Community or mixed) and distribution (either clearly spelled out or fuzzy), and also with respect to the degree of scientific uncertainty (high or low). They are studied at both Community and international levels, therefore dividing the empirical analysis in two main the parties, L_1 and L_2.

A. EC exclusive competence, low ESU. *Agreement to Promote Compliance by Fishing Vessels on the High Seas* (1995), under the framework Code of Conduct for Responsible Fisheries (FAO). This case allows the comparison between mixity and non-mixity situations.
B. Mixity, low ESU: *Implementation Agreement on Straddling and Highly Migratory Fish Stocks* (1995), under UNCLOS framework.
C. Mixity, high ESU. *The Jakarta Mandate*, on Biodiversity of Marine and Coastal Areas (1995) under the Convention on Biological Diversity (CBD) framework.

Competence distribution is contracted at the EC level between Council and Commission, whereas international negotiations involve third the parties. For this reason two institutional levels are analyzed. Level 1 (L_1) refers to EC and member states interactions and negotiations on authority over a certain issue. Put simply, the definition of the mandate. Level 2 (L_2) refers to negotiations'

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

outcome at international level, and EC actorness with respect to recognition by third the parties, authority, autonomy, cohesion.[150]

For both the Community and the global levels, *outcomes* are the set of rules established by several *actors* through negotiation *processes*. The comparative analysis of these elements follows criteria previously established by other authors and already applied in academia. In a nutshell, the comparisons present in this study are the following:

At L1, the goal is to explore the relation between ESU and the contract between principal and agent. The *ESU → unclear (P-A) mandate hypothesis* (L1) is tested; cases (B) and (C) are compared. Case (A) is not central to this first testing because the P-A relationship in this case is foreseen by the Treaty. The higher the scientific environmental uncertainty (ESU), the more likely it is for the Commission to push for fuzzy agreements, as measured by the mandate proposal issued to the Council, available through Eur-lex and the official journal of the EU.

At L2, the two-paired comparative analysis is organized as follows: first, the *Authority → actorness* hypothesis (L2b) is tested; the more formal allocation of competences the more actorness because and authority and recognition are clearly defined cases (A) and (B) are compared in order to test to what extent supranationalization (i.e., increasing legal authority of the community) determines actorness. ESU is considered low in both cases, whereas there is variation with respect to competence distribution. Put different: ESU is held constant while exclusive competence and mixity are compared in the light of hypothesis L2b.

The *Flexibility → actorness* hypothesis (L2c) is tested by comparing cases (B) and (C). While both cases reflect mixed competences, ESU varies, being low in (B) and high in (C). The less clear the attribution of competences, the more flexibility the EC will have, because contracts can be tailored in the future to attend specific needs of certain negotiations. (B) is expected to go through fewer renegotiation rounds before it finally enter into force.

It must not be forgotten that 'tailoring' implies higher transaction costs due to the renegotiation processes involved. This aspect is addressed by the *ESU → renegotiation* hypothesis (Ld2): the higher the ESU, the lower negotiation costs become vis-à-vis the risk of unintended consequences

[150] Jupille & Caporaso (1998).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

and the more flexible, or resilient, the global agreement ought to be. Cases (A), (B) and (C) are taken into account.

Table 9: Hypotheses and cases

Hypothesis		**Level**	**Constant**	**Variation**	**DV**	**Cases**[151]
L1	*ESU → mandate*	EU	Mixity	ESU	Mandate	(B) (C)
L2b	*Authority → actorness*	Int.	Low ESU	Competence	Actorness	(A) (B)
L2c	*Flexibility → actorness*	Int.	Mixity	ESU	Actorness	(B) (C)
L2c	*ESU → renegotiation*	Int.	-------	--------	Outcome of negotiations	(A) (B) (C)

6. Assessment of the dependent variables

6.1 Actorness

Actors are compared according to the dimensions spelled out by Jupille & Caporaso, already discussed; *recognition* ('acceptance of and interaction with the entity by others'), *authority* ('legal competence to act'), *autonomy* ('institutional distinctiveness and independence from other actors') and *cohesion* (ability to 'formulate and articulate internally consistent policy preferences'). Authority is directly related to the powers conferred to EC institutions (Commission) and the MA design itself,[152] whereas the others seem more related to L_2.

The processes as a whole – that is, negotiations – are analyzed in terms of *actors*, *structure*, *strategies* and *outcomes*, following Faure and Rubin. This point has also been mentioned at the beginning of the study. The assessment is guided by the indicators below:

- EU preference → EU position → EU final position (that is European proposal *vs.* adopted agreement). It can be assumed that the narrower this distance, the stronger was the role played by the EC, and stronger was its capacity to change parties' preferences and behavior;

[151] Case (A) can add up to the analysis, but is not pivotal to the comparison because competence allocation had been determined ex ante. The mandate, in this case, is the Treaty itself.
[152] See section 3 of the chapter.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

- Duration (time) and number of rounds of the negotiation process until the agreement is open to signature, as observable in press records;
- Threats and incentives displayed to third parties. Which is more used? Which carrots and sticks are being used? Are the pay-offs immediate and measurable, or longer term based?;
- Diversity of coalitions. Do they follow a pattern (for example, similar incentives, same partners), or do they vary a lot? Coalitions that tend to be repetitive may show that trust and socialization mechanisms might be taking place. On the other hand, varying coalitions may indicate that third parties are simply responding to material (concrete), incentives - *pragmatic response*;
- In global negotiations, do third parties negotiate, meet and recur to EC delegations or member states? What are the dynamics of this relationship?

Clear rules assign responsibilities for behavior that goes against the agreement; the polluter pays principle is predominant, because rules refer to specific actors, so the costs of detrimental behavior are not divided by all the participants, and the tragedy of the commons can be immediately avoided, provided that monitoring and enforcement mechanisms are effective.

A second set of rules refers to the application of property rights in order to avoid the depletion of the resource. They are still considered clear rules, inasmuch as they derive from the 'best scientific evidence' available, as stated in a wide number of environmental agreements (including cases B and C addressed in this thesis). On the other hand, responsibilities are more difficult to assign because: a) overfishing is harder to monitor. For example, a vessel carrying out irregular activities, or unregistered, is easier to monitor (case A), whereas overfishing derives from collective action: several vessels harvesting beyond MSY over time and b) ESU is relatively higher as compared to the first case. With regard to the application of property rights regarding common pool resources the precautionary principle increases in importance. It must be stressed that, when dealing with global commons such as straddling fish stocks, property rights are transitory given the mobility of the resource.

The outcomes are the results of bargaining and interaction processes. At the European level (L_1), the outcome is the mandate the Commission obtains to represent the EU in front of third the parties. At L_2 the outcome of the negotiations is the international agreement itself.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

6.2 Rules: clarity of the mandate and completeness of the global agreements

The typology created by Elinor Ostrom for rational choice-oriented Institutional Analysis and Development (IAD) framework provides leverage to the case studies. Clear mandate (DV1) and clear global agreement (DV2) refer to the precision in terms of scope and applicability of the rules. As a rule of thumb, explicit rules set by the agreement account for "clarity"; provisions that allow players to address certain cases later, or do not specify under which conditions the provisions should be followed. This is the case of the agreement on Straddling Fish Stocks, which determines that states with "a true interest in fisheries issues" cannot be excluded from regional fisheries arrangements. Rules are divided into seven groups:

- Entry and exit rules – Refer to admission and detachment criteria, therefore affecting the number of participants. The clearer the rules, the more specific are the criteria applicants need to meet in order to become members of the club; the same holds to the rules to quit the club: for example, in which cases membership ceases, possible fines or compensations, etc. Such rules may be broad and all encompassing or not; they are spelled out in the text of the final (L2) agreement.
- Position rules – Refer to some kind of hierarchy or status of members, observable by the number and criteria of the veto players, as well as by systems of differentiated voting (members cast a different number of votes);
- *Scope rules – Delimit the universe potential outcomes, or the boundaries of the agreement, as indicated in the purpose of the agreement, and by the parties and observers to it;
- *Authority rules – Refer to the causal relationship between actions and outcomes. In this case, causality is determined by the combination of authority rules and "scientific laws about the relevant states of the world being acted upon"[153];
- *Aggregation rules – Refer to control over the selection of an action (for instance, prior permission to carry out research activities in a certain area, as is the case of deep seabed mining), as measured by the conditions determining the;
- *Information rules – Refer to the data / information accessed by members and;

[153] Ostrom *in* Sabatier (1999).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

- *Payoff rules – Refer to the benefits and costs of determinate actions. In other words, sanctions that can be imposed and reward offered[154] to encourage certain kinds of behavior.

As a rule of thumb, this rules, whenever clear, are spelled out in the text of the final agreement (see annex); specific provisions – that is, the empirical evidence of clear or fuzzy rules are addressed in each case study.

6.3 Uncertainty indicators

The present literature classifies uncertainty according to the obstacle that prevents actors from anticipating outcomes. *Data uncertainties* are brought about by the quality or appropriateness of the data used as inputs to models; they are doubts regarding the adequacy of the methodology and that the methods to obtain such data were correctly applied. *Modeling uncertainties* arise from the lack of understanding of the modeled phenomena. They can also be called 'interpretation uncertainties': data may exist, but its elements cannot be put together in order to identify possible outcomes. In addition, authors such as Funtowicz and Ravetz[155], and Vesely and Rasmuson[156] mention a third type: *complete uncertainty* about a certain phenomenon. The difference is that in the first two types, the problem can be posed, whereas the latter is dominated by ignorance. But how can we estimate and compare the differing ESU levels of the three cases?

Drawing on the terminology described above, it is possible to define parameters that will allow the assessment of the selected cases. The next paragraph presents a list of ESU indicators. Put shortly, they refer to the existing knowledge that determines the approach to be taken and the problem-framing. For analytical purposes, knowledge (and therefore, certainty) was split into three dimensions: a) problem definition, conceptualization and public awareness; b) data availability interpretation, and consensus (or widely acceptance)[157]. The more comprehensive the issue, and the lower reliability of the indicators (too few or inadequate to model the problem), the higher is the uncertainty.

[154] Items marked with an * are to be used in this study.
[155] (1990).
[156] (1984).
[157] Indicators that are questioned by many participants are an expression of data uncertainty.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The three categories correspond to three stages of problem-solving: problem definition, existence/availability of reliable data, and interpretation of the data. They are described below:

1. **Problem definition** refers to the identification of an abnormality in a certain environmental system that can be related, directly or indirectly, to human action. If the site(s) where deleterious action takes place is different from the site(s) affected, the solution necessarily depends on cooperation (adjustment of behavior) between the populations involved. If the problem cannot be spelled out, formal and/or informal institutionalization processes to promote cooperation will not take place.

   With respect to common natural resources, problem definition is hampered by the difficulty of distinguishing variation in some indicators from ecological impact (direct or not) of human activities. For example, is the temperature of the North Sea really rising, or is it just produced by seasonality? Is climate really changing worldwide? Is biodiversity loss occurring at unprecedented rates? And so on. Many environmental problems have a collective, transboundary and interdisciplinary character, which hinders the delimitation of boundaries and the definition of crucial policy areas for each case. The broader the scope of the problem in terms of geographical area and complexity, the more difficult is its definition. The definition of the problem must take into account the social and economic context as well as the impact of potential alternatives. Last, the 'decision' to problematize a certain issue or to ignore it is also political. This point, however, is not treated in the present thesis/ research; it is assumed that the three cases refer to three, global fishery-related, problems. The factors why certain phenomena do not become object of negotiation are not critical for the present study purposes.

   "Problem definition" relates, most notably, to *modeling uncertainty*, which was described in the previous page. The following points indicate how precisely the problem can be spelled out, and to what extent it concerns or mobilizes political actors:

a) The phenomenon is acknowledged and recognized as a problem by critical players capable of initiating institutionalization process. Empirically this can be observed by looking at speeches of the political leaders, number of conferences on the topic, number of articles

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

published in specialized journals, to name a few sources. A good example that the problem is recognized and raises concern is expressed in the declaration of the EU Commissioner for the Environment Stavros Dimas: "The loss of biodiversity is a global threat that is just as serious as climate change and needs to be tackled with the same urgency. In one crucial way it is more worrying since there is no way to reverse extinction.[158]" This indicator has, in fact, two dimensions:

a_1) acknowledgment;
a_2) concern (public demand).

The two dimensions can be assessed through survey fieldwork and public declarations of government/EU officials. For example, according to the report on attitude towards biodiversity loss in the EU 65% of the EU population was familiar with the term biodiversity, 70% regarded it as a serious global problem and 47% recognized the problem in their own country.[159] It should be noted that public concern is not a necessary condition to institutionalization.

b) Possible effect of potential policies can be listed, even if risk cannot be estimated;
The effects of irregular and illegal fishing are clear: not only do they lead to the depletion of fish stocks, but also hinder the definition of ocean's carrying capacity, because the data collected does not correspond to the reality. This point is addressed in the empirical chapters.

c) Time frame can be estimated (as opposed to indeterminate or unknown time horizon).

Note that the scope of the area of concern will be addressed separately, given its sub-dimensions and relation with data availability and interpretation.

2. **Data are available** and parameters gauging decision-making are relatively well accepted. [160] There are widely accepted models to deal with the problem. In general they

[158] 2007 Environment Policy Review. Available at http://ec.europa.eu/environment/pdf/illust_epr.pdf Access on 08/11/2008.
[159] European Commission, Flash Eurobarometer 219 – Attitudes of Europeans Towards the Issue of Biodiversity. December 2007.
[160] Uncertainty refers to rather to the non-existence of data than to its location. Data dispersion poses problems to policy-making, but this is different from ESU. Data dispersion may lead to problems of asymmetric information among players, whereas ESU influences all the players and affects the incompleteness of the contract.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

consist of core set of indicators (and derived datasets), which are used according to generally accepted assumptions about ecological dynamics. Data are considered to be available when:

a) Main indicators can be identified, or are established and widely accepted;
b) Main indicators can be measured by existent methods (see table on next page);
c) Existent technologies allow the evaluation;
d) Historical series are available. Historical data increase knowledge about the issue and sheds light on cycle and seasonality, therefore shedding light on the underlying causes of ecological change. They also demonstrate achievable goals for restoration and management of marine ecosystems.

The existence and availability of the points mentioned above can be attested by looking at natural science literature, most notably comprehensive periodicals with a large number of subscribers. Particular attention is given to Nature family's journals; an example is Cormac Sheridan's 2005 article on deep-sea prospecting and the production of substances of pharmaceutical potential. One of the most currently used concepts used in fisheries' management is the maximum sustainable yield (MSY). Despite its limitations MSY is a key indicator of sustainability described in the chapter on *Protection of the Oceans, all Kinds of Seas and Coastal Areas* issued at the end of the UNCED 1992[161] as an "expression of the estate of fishery resource exploitation to its sustainable size". Albeit simple to obtain and available for most fishing nations, the use of MSY alone cannot guarantee the sustainability of the stock. Other data that take MSY into account are used to calculate the point where catches compromise future stocks, such as the "deviation in stock of marine species from the MSY level", for example. Historical series are available for stocks of high commercial interest such as salmon and shrimp.[162] These particularities will be discussed in the chapter on the Straddling Fish Stocks agreement.

It is crucial to reduce modeling uncertainty and data uncertainty in order to provide a manageable and stable basis for reporting the status of environmental conditions. It should be noticed that the fact that the model is widely accepted does not mean that it is flawless. Every

[161] United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 1992.
[162] Sources: www.indexmundi.com and www.wwf.org/agriculture/commodities

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

model is a simplification of reality and, therefore, is subject to error. In this thesis, what matters for the establishment of different types of institutions is the extent to which players accept certain models as accurate representations of the environmental issue in question.

3. Data can be interpreted

Sustainable practices depend on good indicators. But data needs to be interpreted in order to assess the severity of the environmental problem, and to streamline policies to improve those indicators, contain environmental damage or recover impacted ecosystems. As for global issues, interpretation can be extremely difficult, because many indices must be brought together.

a) Main indicators can be brought into the analysis in a coherent form;
b) Causal relations between practices and outcomes can be established;
c) Technical/empirical indicators enable the attribution of values. That is, environmental data can be transformed into economic data.

In overall terms, it is possible to carry out a cost-benefit analysis and to base the negotiation on material incentives and potential costs, even if information is imperfect or unevenly distributed. When the elements above mentioned are present, market based approaches express the value of the environmental resource.

There are also other factors that contribute to higher levels of uncertainty, though they are only indirectly related to the "amount of knowledge".

1. Area scope (the broader the scope favors higher levels of uncertainty because more practices, processes and environmental responses tend to be more varied)
   a) Issue boundaries, or multidisciplinary character;
   b) Number of phenomena addressed.

The more disciplines involved, the more complex the issue, and the more difficult it is to model the environmental problem correctly. For example, in the Vessels' Agreement few disciplines are involved; although the vessels may perform complex operations at sea, the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

implementation and monitoring of the behavior prescribed in the agreement's provisions (physical and legal information about the vessel), random sampling of the landings, vessel-tracking via satellite, and so on do not belong to a wide range of disciplines. The technology that allows such assessment is, of course, fruit of previous research and development (e.g., IT, telecommunications), but such equipments are already available and operating, which is one indicator of low ESU.

2. Timing

   a) Long time horizon.

3. Stage of the problem-solving process where ESU becomes significant

The earlier the stage where information (in terms of availability and reliability) is lacking, the higher the uncertainty will be. In these situations, the more conflictive will be the relationship between the rules by which markets allocate resources and the rules which govern ecosystems.[163] A scheme is presented below:

Fig.6: Information about the issue and levels of ESU

Stage	**1 Formulation of the problem**	**2 Data exists**	**3 Data can be interpreted**	**4 Policy can be designed**	**OVERALL GOAL**
Problem	**Biological/ ecological factors. I.e., related to the biology of the resource(s)** **Non-ecological factors**	**Reliable methodology** **Reliable methods of data collection** **Trustworthy data** **Exchange of information**	**Accurate modeling** (the design captures the critical elements) **Efficient enforcement**	**Effective fisheries Policy:** players adjust their behavior and coordinate. Opportunistic behavior becomes more costly	**Future availability of the stocks**

Scarce information (high ESU) — Abundant information (low ESU)

[163] Gowdy (1997).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Given that uncertainty derived from the lack of understanding of complex systems cannot be substantially removed by science, the level of ESU can be empirically assessed by screening articles of more 'technical' character in order to see if there is consensus regarding the definition of the problem and around the relationship between economic activity and ecological impact. This more specialized literature also indicates whether there are firmly established methods to provide the data and, in turn, information required to negotiate provisions of the agreement.

Risk assessment and decision theories seek to design models that allow for inferences about the world to be made, most of which are based on normal distributions or probability density. When it comes to 'novel' global environmental issues it is not always possible to assign probabilities, or to decide on an appropriate form of distribution. Ecological theories that take this aspect into account are very recent, and restricted to few sectors. Modeling methods seek to establish parameter values so that worst and best case scenarios can be foreseen.[164] Other approaches, such as information gap theory, ask how wrong can one be and still get an acceptable result. By doing this, analysts can identify the 'more robust decision' – that is, the one that would still generate acceptable results for a greater degree of uncertainty. In a nutshell, ecologists and some environmental economists have realized that ESU must be identified and gauged somehow, in order to allow for the design of more realistic models, as shown in the figure below:[165]

Fig. 7: Degrees of ESU and available methods to infer causal relationships

	Uncertainty →						
Model approach	Traditional statistics	Traditional modeling	Probability theory	Bayesian statistics	Probability bounds	Interval analysis	Info-gap modeling
Uncertainty assumption	Normal distribution	Other kinds of distrib.	Probability density	Prior distrib.	Bounded probabil. density	Upper & lower limits	Unbounded[166] (no limit)
Prevailing approach	Specialized (units), Atomically oriented →			Precautionary principle (correlated units) →			Ecosystem, Holistic (system as a whole)
Paradigm[167]	Stabilized universe						Controversial universe

[164] Moore (1966).
[165] Halpern at el. (2006).
[166] Unbounded in this case does not refer to rationality, but to whether the possible outcomes are restricted to a certain universe.
[167] See description in section 5.3.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The figure presented above does not aim at clarifying specific aspects of modeling methods; instead it calls attention to the fact that methods have been developed for ecologists to model situations of varying levels ESU, they should be taken into account in the definition of sustainable policies. The consensus – or legitimacy conferred by the scientific community and policy makers - around the accuracy and adequacy of the methods mentioned in the table above can be attested from declarations of support or opposition made by Council and Commission representatives at L1, and EC/EU representatives at L2 that attest to the existence of consensus regarding the methods of data collection and its treatment.

7 Data collection

The two-level analysis of the empirical cases relies on three types of data sources: official documents related to the negotiation processes and their outcomes; press records, and interviews. Official documents provide snapshots of the bargaining processes at both L1 and L2, whereas press records shed light on the dynamics of the process. Points that remained obscured were further investigated by interviews with permanent representatives from member states, Commission officials and observers that participate at both CFP and in multilateral negotiations. The positions adopted by Council are observed empirically by screening reports of preparatory meetings, complemented by declarations and position papers drafted by national governments' officers. The same procedure was adopted in order to estimate the preferences and assess the position adopted by the Commission.

The legislative process regarding the definition of a mandate on the external competences of the Commission was traced through legal databases of the EU. The two main databases used to track the process of contract definition between Council and Commission were Eur-Lex and PreLex. The former covers texts published in the Official Journal of the European Union, and provides information on international agreements where the EU participates, preparatory acts and parliamentary inquires. Eur-Lex also provides access to Commission documents and a collection of consolidated legislative texts of the EC/EU. PreLex, by contrast, contains information on inter-institutional procedures, and provides for a follow-up of decision making processes between the Commission, Council and the EP, and monitors the works of other EU institutions involved in decision-making process (ECJ, Central bank, Committee of the Regions, ESC, and so on). PreLex

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

is a critical source to this research because it tracks all Commission's proposals – including mandates regarding external competence to negotiate international agreements, communications and their transmission to the Council and to the EP. As in EurLex, PreLex provides direct access to electronic texts such as Commission documents (COM), Official Journal (OJ), Bulletin of European Union and other official releases.

The negotiation of the global agreements and their outcomes has been tracked through UN treaty database, which contains reports and minutes of the meetings where the bargaining process took place. Official statements of third parts, EU representatives (either Commission personnel or representatives of member states governments speaking on behalf of the EU) and observers have been consulted. Declarations of official representatives made during preparatory meetings, as well as upon signature and ratification provide evidence about the positions defended by the players over the process.

The databases mentioned above shed light on official meetings as well as on the outcomes of the negotiations carried out at both EU and global levels. Nevertheless, these data need to be complemented by other sources in order to allow for a more accurate understanding of the interplay between the actors and the underlying context of the three empirical cases. The dynamics of the two-level process analyzed in this thesis was further clarified by press records and declarations of officials representing member states, officials representing the EU (who can be either from the Commission or from member states), UN-system personnel and observers. The main sources used to collect the narratives about each case stem from Agence Europe, Rapid, the European Navigator, and the Earth Negotiations Bulettin. The international press agency Agence Europe was founded in 1953 in Luxemburg, and has been considered as the main source of information on Community affairs. It provides a systematic account of policy and institutional processes related to European economic and political integration. Thus, it shed lights on heterogeneity of preferences within the Council – that is, disagreements among member states - and comments from Commission and Council about various aspects of fisheries policies, distribution of competences defined at L1 and mixed representation in multilateral settings. The Rapid database contains press releases of the Commission since 1985, and also a number of releases form other EU institutions, namely the Council. This database has been particularly useful to inform everyday activities of the Commission, and also the opinions of member states across policy areas and over time. Finally, semi-structured interviews with representatives from

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

member states and from non EU countries and from the Commission, as well as technical experts from the EU and abroad[168] and observers provided further clarification regarding aspects that could not be fully understood by recurring to documents and press records. Earth Negotiations Bulettin, published by the International Institute for Sustainable Development (IISD), provides a daily followup of the preparatory meetings and the conferences themselves. In addition to inform about the bargaining process, the bulletin indicated the names of states' representatives and other hey figures who participated in the definition and drafting of the three global agreements treated in this thesis.

The methodology proposed identifies the influence of the Council-Commission relationship on EU actorness at the global level. It is acknowledged that to rely exclusively on records of Council deliberations and meetings between member states' representatives would pose certain shortcomings to the analysis, for various reasons. First, these records express the outcomes of each meeting, which tells little about the negotiation process itself. At EU level, Council-Commission relations consist also of non-institutionalized mechanisms which are not reflected in the formal proceedings. Second, official registers are sometimes incomplete because of restrictions concerning the disclosure of information contained in Council archives. The inaccessibility of certain records is observed also at member state level, as similar restrictions are practiced by national governments. At EU level, this problem was addressed by recurring to press records of European news agencies, thus providing member states' and commission's views on the negotiation processes. Interviews with member states representatives and Commission officials have also been conducted as a means to obtain a richer narrative of the interactions between Council and Commission. In other words, interviews have been used to shed light on specific topics that could not be captured elsewhere, and not as the main data source. Representatives from non-member states (Canada and Norway) and from observer organizations (WWF) were also consulted in order to provide an overall picture of each empirical case. Having determined actors' preferences *ex ante*, the sources mentioned above – deliberations, proceedings, press declarations and interviews – allow for an assessment of the mechanisms of coordination between Council and Commission with respect to external representation of the EU.

The problems of relying exclusively on meetings reports and deliberations are observed at both EU and international levels: while documentation regards negotiations proceedings are more

[168] From Canada, and from the FAO.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

accessible, the views of negotiators (member states, third parts and the EU) remain obscure. As in the study of Council-Commission relations (EU level), this limitation has been addressed by recurring to official statements as a means to estimate cohesion among member states and the EU. 'Declaratory cohesion' has been used as a proxy measure to assess EU representation vis-à-vis third parts under mixity conditions. Such statements can be regarded as 'outputs' derived from negotiation and cooperation processes, and are usually available on line at UN – system websites. UN press releases are not considered official documents, but summarize the discussions conducted and actions taken by the General Assembly. Since participation is mixed, statements may represent views of: a) Member states, (b) Member states speaking on behalf of the EU, or c) the EU. The views expressed in the multilateral setting, as well as representation and cohesion of the EU will depend on the coordination mechanisms used to prepare the intervention, and on the distribution of competences defined at L1. In a nutshell, the study of EU actorness is intimately related to Community politics and the mechanisms and institutions of EU external representation, which highlights the importance of bringing together the two levels in the research design.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 4

EXPLOITATION OF MARINE LIVING RESOURCES:

INTERNATIONAL AND EUROPEAN FRAMEWORKS

The depletion of natural resources is widely recognized as a critical problem of modern societies, and the marine environment is not an exception. Still, for a number of wide-scale ecological problems, little is known about the potential ecological and economic impact of resource depletion. Environmental unbalance may lead to food crisis, water scarcity or interruption of energy supply for example. The exhaustion of common resources derives from the overcapacity to exploit them coupled with the lack of coordinate behavior of the users. In the absence of rules and regulations, users will pursue individual short term goals; they have no incentive but to exploit the resource to its maximum.

This thesis analyses the role the EU has been playing in the design of global-level institutions that seek to guarantee the sustainability of marine living resources. As discussed in earlier chapters, this role results from both EU attributes – in this case, the competences granted to the Commission - and from the context, which in this work is assumed to be determined by the amount and robustness of scientific data. But before moving to the empirical analysis it is necessary to clarify certain concepts that are intrinsic to fisheries policies, and to situate them in a broader debate about the sustainable use of natural resources. The purpose of this chapter is to provide concepts that are necessary to approach the empirical cases, and to present the main challenges to the achievement of sustainable fisheries. A historical overview of the EU Common Fisheries Policy (CFP) and the role member states have played in the evolution of the CFP are presented in order to provide a better understanding of the factors involving the distribution of competences between Council and Commission, and therefore the role the EU plays at the international level with respect to these issues.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

1. Common goods

The debate around between economic growth and environmental quality dates back to the 1960s, with the publication of the so-called "Meadows report" and the predictions of the economists from the Club of Rome that economic growth would stall due to the limited character of natural resources.[169] It is now known that the debate lacked well-grounded empirical evidence, and that the discussions it engendered have for a long time remained as purely theoretical or speculative. But the episode highlights the difficulties of defining environmental indicators and collecting data. Given that different indicators lead to different results, the definition those from which political decisions and policy programs will be derived is of great importance.

Since the United Nations Conference on Human Development in Stockholm (UNCHD 1972), the term sustainable development has transcended the restrict community of biologists and environmentalists; today its use is widespread not only between natural scientists, but also among political leaders and the media. Yet, albeit a central concept in streamlining environmental policy, there is little agreement on its exact meaning, either among ecologists or among economists. The Brundtland Commission's report, entitled *Our Common Future*, was able to establish some consensus around a broad definition: "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[170] Albeit loose, this definition sets a starting point to the establishment of analytical criteria to estimate the sustainability of certain activities, simulate the effects of diverse alternatives and assess policy programs.

Environmental economics has provided specific parameters to model ecological problems, such as efficiency and equity, for instance. Such parameters are based on the conceptualization of environmental resources as assets which are shared by a collectivity, or 'common goods'. Common goods, or resource systems,[171] can be defined in terms of their accessibility and consumption properties. Accessibility means non-discriminatory availability (that is, the good is a priori available to everyone; consumption refers to non-rivalry or exclusion properties – that is, whether the use of the resource by an individual makes it unavailable to the others.

[169] Meadows (1972). Actually the report was drafted by a team of research workers from the Massachussetts Institute of Technology (MIT) formed in 1968 following a request by the Club of Rome.
[170] WCED (1987), p. 43
[171] Ostrom (1990).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

These two dimensions – accessibility and rival consumption – allow for the classification of goods into three categories:[172]

a) Goods characterized by accessibility and non-rival consumption, called "public goods";
b) Goods characterized by accessibility and rival consumption of a limited resource, or "common pool resources";
c) Goods characterized by rival consumption, but to which access can be limited: "club goods".

Traditionally, the provision of public goods was left to the states. Today, however, a considerable part of international politics deals with global-scale problems; in a context marked by increasing interdependence, common goods permanently pose new challenges and call for institutional instruments capable of regulating its provision across political boundaries. In such a scenario, decentralized, self-interested decisions taken by states will be inefficient because the overall provision of the good depends on the coordinated behavior of all states (or other actors) that share the resource.

The classification of common goods depends on the level of consumption and on rules that regulate the access and determine property rights over the resource. Fisheries, for example, were for a log time perceived as "public goods". As catch capacity was lower than renewal capacity, fish resources were perceived as inexhaustible; their consumption, in turn, was considered non-rival. Depletion occurred exceptionally, and the stocks would recover in a relatively short period. Under these circumstances the doctrine of freedom of the seas prevailed. When a decrease in valuable stocks became more evident, governments engaged in devising rules that assigned property rights over sea areas and their resources. Shared stocks – most notably in the Mediterranean and in the North Sea, were no longer regarded as public goods, but as common pool resources (exhaustible and subject to rival consumption), and agreements had to be establish to regulate the access and use of shared stocks. To sum up, the categories listed above are not static, but subject to the assessment of resource availability and to the current rules assigning property and access rights. Of particular interest to this thesis is the concept of common pool resource (CPR), discussed in the next section.

[172] Héritier (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

1.1. Common pool resources (CPRs)

Grosso modo, CPRs are natural substances, species and ecosystems whose right of access and exploration does not belong to any single entity. They are marked by two main features: the first is what Dolsak and Ostrom call 'subtractability' or 'rivalness': the use by one person causes the resource to be unavailable to the others. The prevalence of harvest rates above renewal capacity may bring about the collapse of the stock and compromise the ecological balance of a whole system. The second characteristic is the incentive to free ride, because CPRs are sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use.[173]

To raise the costs of opportunistic behavior in order to assure the availability of CPRs is perhaps the main challenge of environmental institutions. In chapter two it was shown that global issues, albeit constituting a threat to the future state of the marine environment, not only are highly complex but also plagued by scientific uncertainty (ESU). The instruments must take into account biological aspects of the resource – size, renewal capacity, dynamics and homogeneity, ecological aspects – the function of the role in a certain ecosystem, relation with other species and socio-economic factors such as populations dependent on its exploration, market fluctuations, and so on.

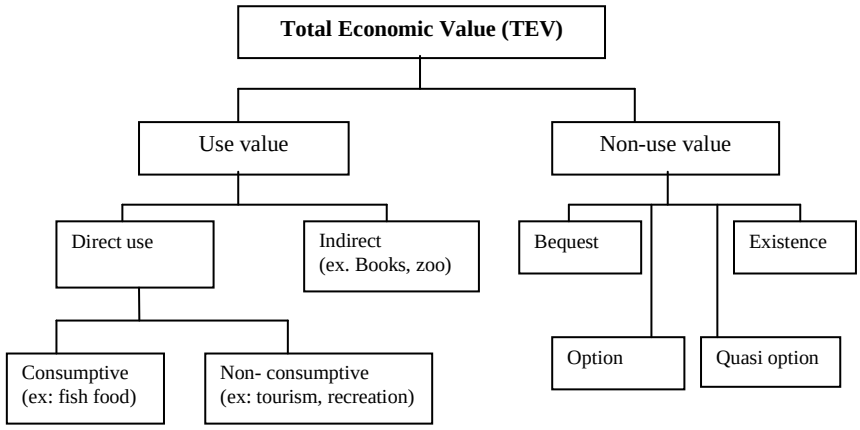
The valuation of natural resources began to attract the attention of economists and natural scientists (to a lesser extent) in the 1970s, precisely in the field of fisheries. Today, environmental economics consists of a burgeoning body of literature that acknowledges the value of both the environment and economic activity and makes choices based on those values. The goal is to balance the economic activity and the environmental impacts by performing cost-benefit analyses (CBA). Supporters of this approach such as N. J. Beaumont argue that "valuing nature is implicit, by both individuals and society, whenever a decision is made about the environment, and that the use of monetary valuation only formalizes this process."[174] Nevertheless, methodologies are still developing, and their use remains controversial. An example that still raises significant controversy is the valuation of biological diversity due to "the lack of standardized quantitative descriptor of biodiversity among natural scientists"[175], which is discussed in chapter six.

[173] Ostrom (1990), p. 30.
[174] Beaumont (2008), p. 386.
[175] Id., p. 387.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The literature in environmental economics roughly divides the total economic value (TEV) of a natural resource in two categories: use value, (or instrumental) which can be measured by market prices and are immediately incorporated in decision-making processes, and non-use value. A typology of economic values is presented in the figure below:

Fig. 8: Categories of economic value



Market values reflect the economic benefit, in terms of market prices, derived from the actual use of a good or service, such as harvesting wood, fish products, hiking, recreational activities motivated by, or related to ecological concerns (ex: books about wildlife). Market value approaches rely on the observed market prices for environmental goods and services. The estimation of value not only takes into account the direct use provided by the resource (fisheries, plantation) but also indirect uses and option values (conservation of the resource). That is, starting from actual values, these methods can calculate resources' new market values following a change in its provision or productivity. The main advantage is the method is its simplicity and capacity to simulate different scenarios in a straightforward way, which is particularly useful to ground negotiating positions and define (or justify) policy choices. On the other hand, the kinds of value it can capture are limited. Thus, the assumption that the availability of the resource and its value are immediately may lead to oversimplification, as this relation may be of higher complexity.

Market cost approaches, instead, are based on the assumption that the value of a good or service corresponds to the costs of producing or replacing it, so that the costs of achieving a specific goal can be inferred. As in market value methods the alternatives are measured in monetary units, which allows for a straight forward comparison. Nevertheless, the fact that non-use benefits

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

cannot be assessed narrows down its potential application to sustainable development, as the value of preservation and conservation policy options is not considered.

Values and costs may also be drawn on existing (known) values of a certain resource and transpose them to a different location – the so-called benefit transfer methods. This movement helps overcoming research time and budget constraints stemming from carrying out independent surveys. The main difficulty here is to ensure that there is enough similarity between the two situations so that values can be inferred. A number of criteria concerning the availability of the resource, populations and time frame must be fulfilled, and statistical tests are necessary in order to prove the validity of the method, and to indicate possible biases.

Whereas use values of natural resources can be directly expressed by observed market prices, non-use values are problematic because they are not traded and cannot be inferred from market prices or production costs.[176] This leads to disagreement among economists and policymakers on a precise definition of this concept.[177]

The literature points out several types of non-use, or intrinsic values. **Existence value** refers to the benefit generated by the fact that a specific resource exists at the present time. Such value is determined by the individuals, regardless the fact that they may never have any direct benefit, or even have access to the resource. One parameter to translate existence values into market prices are voluntary contributions individuals make to the preservation of exotic endangered species. **Bequest values** follow the same rationale, but the value individuals attach *today* to the resource rises inasmuch as they believe it is important that the resource is available *in the future* for future generations. Bequest values are particularly pronounced in issues related to *common heritage of mankind*, or when dealing with an environmental service with a very long time horizon, as in biodiversity. **Option value** results from the projection individuals make about the future value of the resource. The greater the complement of contemporary biodiversity conserved today, the greater the possibilities for future biodiversity bec+6ause of the diverse genetic resource needed to ensure continued evolution in a changing and uncertain world.[178] Option values tend to be treated as market values; however individuals may consider both use and non-use values in their forecast. If the weight of intrinsic values for a certain resource is considerable, market methods

[176] Asafu-Adjaye (2005) 2nd ed.
[177] Plater et al.Environmental Law and Policy: Nature, Law, and Society. 1992
[178] Barker (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

are incapable of capturing the reality. Finally, there are **quasi-option** values. A body of literature aims at isolating more specific aspects of the attribution of non-consumptive values. Two examples are **vicarious consumption benefits**, i.e., the utility an individual derives from the use of environmental resources by others non-consumptive uses, and **stewardship value**, which is related to moral benefits derived by *feeling* responsible for the existence or protection of certain resources. The list is not exclusive; however, for the purpose of this study, it suffices to consider the four main types of value mentioned early in this paragraph.

The weight of non-market and non-use values on the overall price of a resource depends on the information about its status or availability (whether it is scarce, for example), its potential or actual contribution to human welfare (if it is healthy), and individuals' perception of the non-tangible benefits of particular features (moral values). The following paragraphs provide an overview on the most currently used non-market valuation methods.

There are two broad methods of non-market valuation: **revealed preferences (RP)** and **stated preferences (ST)**. Revealed preferences draw on individual's behavior in real or hypothetical markets in order to estimate the value of a good or service. Such values may also be based on information from the market price of close substitutes. Different methods are not necessarily competing. Rather, they can be combined so the results can be submitted to stronger validity tests. The main shortcomings of these methods are the difficulty to represent individual's choices (namely by leaving out critical variables) and the risk of multicolinearity.

Sometimes, however, the value attributed by individual to an environmental good or service can only be revealed by the person herself. This situations call for stated preference models. One example are **Contingent Valuation Methods** (CVM), which rely upon individual responses to particular (contingent) circumstances taking place in a hypothetical market[179] where the good, the institutional context and financial mechanisms have been defined. Most commonly, individuals are asked the maximum amount of money they would pay to use or to preserve a specific good or service.

The boundaries of the non-use values and non-market values (substantive and subjective opportunity costs) are not clear cut, which can lead to very different results in the assessment of a

[179] Seller, Stoll, Chavas (1985).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

natural resource. Another critical aspect when using such methods is the selection of the interviewees: responses obtained from individuals with technical expertise allow for the evaluation of the resources, whereas the general public is strongly influenced by the media and the appeal of certain issues. Policy-makers might be aware of such misperception; still, they are likely to respond to the demands of their "constituencies" in order to maintain their support.

The valuation methods mentioned above have become increasingly sophisticated both in conceptual and methodological terms. They are able to capture certain subjective aspects and attach an overall (i.e., not only material) value to a resource. Besides data uncertainties, there is one shortcoming. Although these methods provide the basis for environmental policy decisions – namely at the national and regional level – they are based on single-function, mono-specific valuation studies.

In order to correct the distortions caused by single function it is necessary to study the natural and social sciences together in one single discipline, by drawing on concepts and methods from both ecology and economics. Both are concerned with the way in which living systems organize themselves in order to pursue individual and collective goals. Comprehensive, all-encompassing or ecosystem approaches have been increasingly advocated by policy makers at the national and international level. They have provided, for example, the guidelines for the reform of the EU's Common Fisheries Policy (CFP) in 2002.

The ecosystems perspective, which has been developed most notably by ecological economists, addresses the relationships between ecosystems and economic systems in a broad sense. Its aim is to analyze issues that are "fundamentally cross-scale, transcultural and transdisciplinary", and to propose alternative approaches to research, and to its application in policy-making and institutional building.[180]

Ecological economics focuses on a broader set of goals, which comprise: a) to evaluate human activities within a certain system in terms of ecological sustainability; b) to enable a fair distribution of property rights and resources amongst various populations, as well as between present and future generations; c) to allocate resources efficiently taking into account the

[180] Costanza, R.; Cleveland, C.; Perrings, C. (2000).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

constraints just mentioned, including natural capital and ecosystem services.[181] In fact, the main difference lies not in the definition of the goals themselves, but in the way they are brought together into these works.

Despite the advantages, ecosystem approaches that tackle multiple functions and uses, or that follow up environmental changes over time in order to establish 'before and after' comparisons, are scarce. Due to the high level of complexity and prohibitive costs they have been namely applied to the environmental valuation of ecosystem services across the range of global issues. Still, the elaboration of such approaches poses a large methodological challenge; nonetheless, they could generate "a better and more comprehensive information base" capable of providing considerable leverage to more accurate rational decision. Their great advantage is that they emphasize the ecological relationships within a system, are capable of incorporating consumer preferences, in addition to being compatible with a "common monetary metric deployed across competing issues."[182]

All the methods described above are used to estimate the present and potential future value of the resources addressed in the three empirical cases. The next sections discuss the environmental goods and services provided by seas and oceans.

2. The oceans: from open access to private property regimes

Regulating the exploitation of seas and oceans is probably the best example of common pool resource management, both in regional and global scales. For centuries, the exploration of marine resources has been the object of disputes, conflicts, regulation and collaborative programs. The simultaneous use of the concept of common good, sovereignty claims and use rights has brought together maritime powers, colonial territories, other coastal and landlocked states, non-state actors and several institutions. It is not hard to see why it constitutes not only one of the oldest branches of international relations and international law, but also one of the most dynamic: since the beginning, a wide array of issues have been constantly emerging and calling for the creation or reformulation of instruments capable of addressing them.

[181] Daly (1992).
[182] Turner *et al*. (2003). p. 494.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

As John Vogler puts out, "a systematic attempt to draw up principles for the use of the oceans is evident even at the beginning of the seventeenth century."[183] That is, modern norms regulating this "global common" are contemporary to the establishment of the Westphalian order. For a long time, Grotius' doctrine of the freedom of the seas was predominant over more restrictive approaches, for two reasons: first, because the conception of *mare liberum* was supported by the maritime powers (namely the UK), the only ones with technological and financial means to profit from sea resources. Second because at that time the exploitation of such goods did not pose any significant environmental threat and marine resources were perceived as non-exhaustible.

This scenario remained stable until the 1930's, when the collapse of certain animal stocks due to overfishing and harpooning led to the establishment of fisheries regimes, and also to the development of scientific studies aiming at improving the knowledge about the limits to the exploitation of marine resources – that is, their carrying capacity, and their economic potential. Also, problems related to pollution, growing tension between coastal states, and an increase on military presence in the "sea threatened to transform the oceans into another arena for conflict and instability."[184] Fearing the possibility of losing control over living and mineral resources, states began to oppose to the doctrine of *mare liberum*. The first challenge took place in 1945, when President Harry Truman unilaterally extended jurisdiction over the U.S. continental shelf. Less than one year later other states[185] also started to amplify the limits of their territorial sea up to 200 miles. This sudden expansion and the fear that sooner or later all marine resources would fall into some state jurisdiction motivated uncontrolled exploitation and endangered many species in a very short time period. It also pushed for a series of Conferences aiming at establishing mechanisms to reduce this pace and make the whole scenario more stable. Of critical importance were the Conferences held in 1958 and 1960 under the auspices if the United Nations. A number of treaties, agreements and joint enterprises already existed; however, they were dispersed across geographical regions and political administrative levels. All these aspects motivated the organization of an ambitious initiative, the III United Nations Conference on the Law of the Sea, or UNCLOS.

[183] Vogler (2000), p.44.
[184] United Nations Division for Ocean Affairs and the Law of the Sea. http://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm#Historical%20Perspective, accessed in 30/05/2004.
[185] The first states to follow this movement were Argentina, Chile, Peru, Ecuador, Egypt, Ethiopia, Saudi Arabia, Libya and Venezuela.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Until the mid 1950's the vast majority of the studies on the primary production of industrial fishing were carried out by biologists, and fisheries management relied exclusively on the study of a limited number of species. The impact on the ecosystem as a whole was not perceived as significant and therefore left out of the analysis, as it still is the case of most fishery assessments. By that time scarcity was sporadic and resulted from a combination of over fishing and climatic factors. Given that commercial stocks would rapidly recover, their renewal capacity was over estimated and they continued to be perceived as an unlimited resource. Policies were defined mainly by national and local governments, or through bilateral agreements;

Biologists, nevertheless, lacked methods and tools to define optimal production, price and market potential: their voice in policy-making was then limited. In the absence of arguments supporting regulation or reduction of harvesting activities, as well as the lack of coordination that put states under prisoner's dilemma, the interest of fish industries prevailed. As a consequence, they were simply granted subsides and support to increase the catches.

One of the first studies to approach fisheries in "non-biological" terms was published by Scott Gordon in 1954. The Economic Theory of Fishery models the problem of stock damage over time, taking into account fish production in terms of weight and fishing effort. These models sought to define the best possible design for fishing agreements and to predict the impact of existing treaties on fish stocks.

The UNCLOS provoked a major interest for this kind of approach: the establishment of EEZs opposed fishing and coastal states (FS and CS, respectively) and called for the establishment of *contracts* as a means to regulate activities in these areas. FS have the technology to exploit marine resources but need access to other EEZs because of the demand for exotic species. CS, on the other hand, may lack the technology or financial conditions required for the enterprise. However, it was UNCLOS 1982 which motivated a large number of studies in both economics and among researchers from political science and international relations. The former made an important contribution to approach actors' interplay, interests, negotiation processes and institutions in charge of tackling the problem of access and capacity. The next section provides a historical account of the UNCLOS as a means to the present the framework and to provide the background

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

from which the three empirical cases develop. The issue of mixed participation of MS and the EC was already debated during the long negotiation process which led to the UNCLOS.

2.1 The United Nations Conference on the Law of the Sea (UNCLOS), 1982

By the late 1960's, the potential sources of conflict concerning nations' rights over the sea seemed impossible to untangle. The decision to approach maritime issues altogether lead to a nine-year negotiation process initiated in 1973. The final outcome was the Convention on the Law of the Sea (UNCLOS, 1982), a comprehensive attempt to regulate the use of the seas and marine resources. That is, a "Constitution for the Seas" composed of 320 articles and 9 annexes, currently ratified by 148 countries.[186] The most relevant provisions refer to territorial sea limits, research and exploration rights, areas beyond state jurisdiction, management of living marine resources, environmental protection, dispute settlement procedures and a bureaucratic apparatus for dealing with these issues. To sum up, as the cornerstones of a new institutional context regarding sea politics had been set; former treaties were either incorporated or replaced by provisions spelled out by the UNCLOS; issues lying beyond any former regulation were addressed, and more actors (states and international organization) were brought into the bargaining and drafting processes.

The question this thesis approaches is not exactly *why* states engaged in such a resource-consuming enterprise; the players (states, and the EC) acknowledge the collective action problem, and are concerned for its potential consequences. Immediate pay-offs were offset by future costs of non-decision, namely with respect to straddling fish stocks. More important to this research work is to investigate *how* diverse preferences converge to an acceptable solution; which circumstances allow certain positions to prevail, and how they are translated into more specific rules. In order to understand the process through which Council and Commission coordinate their participation in MAs, it is important to understand the driving forces that accounted for the establishment of European regulation over a common resource. An overview of the Common Fisheries Policy (CFP) is provided in order to allow for an analytical look at the empirical data.

2.2 Fisheries as a Community policy

[186] Source: The United Nations Convention on the Law of the Sea http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm# , accessed on 03/04/2005.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The conservation of living marine resources – notably fisheries resources – is the issue area chosen to conduct the comparative analysis. *A priori*, fisheries is a matter of EC's exclusive competence, whose guidelines are spelled out by a formal Common Policy (CFP, 1983). However, environmental provisions have been brought into the debate at both community and international levels. As a consequence, varying degrees of EC authority and participation with respect to fisheries' regimes and organizations are observed. Community active participation in negotiation processes, economic and ecological importance of this agenda, and the diversity observed in terms of MA design make marine fisheries regulation a rich and interesting arena to understand and assess EU performance, as well as mixity's advantages and drawbacks.

The first agreements established by the EC as third states had a bilateral character and simply referred the acquisition of fishing rights to be paid by FS.[187] Though the contract offered a solution to the dilemma involving different groups of states, consequences have proved deleterious to certain stocks. FS could easily exceed the limit imposed by the contract, which drove them not to fully declare the total catch or to throw dead fish back to the sea. To sum up, these contracts stimulated overfishing as well as the omission of data about the amount harvested.[188] The impact of the arrangements described above have lead to the establishment of institutions in order to constrain harmful practices, increase access to the vessels for verification purposes and promote exchange of information regarding the catches.

This approach is based on concepts stemming from decreasing revenues, contract theory and rational institutional design which facilitated its adoption by social sciences. It has been used to tackle ecologic issues of sustainable development and management of common resources. In fact, many studies had proved useful and contributed to policy formulation in several areas and organizations. Thus, the advances in marine biology have greatly increased knowledge of ecological processes and aspects of species with higher economic interest. Finally, monitoring technologies, laws and institutional mechanisms have helped reducing asymmetric information.

[187] That is, access to EEZ to fish up to a predetermined limit.
[188] For an economic perspective, see for ex, Mach-Stadler, I. & Pérez-Castrillo, D. *An Introduction to the Economics of Information – Incentives and Contracts*. Oxford University Press. New York, 1994.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

3. Fisheries management: environmental and economic dimensions

In your opinion, what is today's most serious environmental problem at global scale? If such worldwide survey were carried out, "the collapse of fish stocks" would certainly be absent from the top of the ranking. Despite its importance for marine ecosystems, food security and directly dependent local communities, fisheries' conservation has much less visibility than issues related to climate change, biodiversity loss, deforestation and emission of persistent pollutants, for instance.

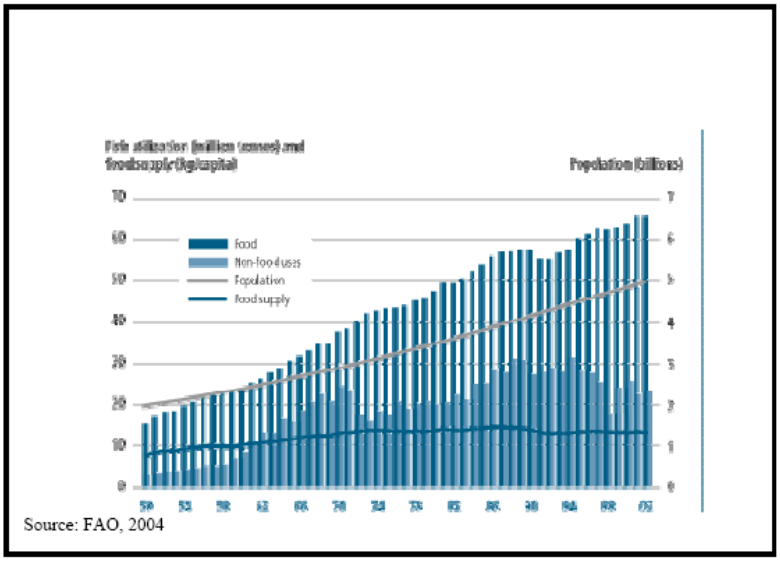
Nevertheless, marine fish scarcity is indeed a major problem. According to the Food and Agriculture Organization (FAO), at least 60% of the most important commercial stocks will be seriously threatened if exploitation increases. Seven out of top ten species are considered to be fully or overexploited (anchoveta, Chilean jack mackerel, Alaska pollock, Japanese anchovy, blue whiting, capelin and Atlantic herring), and can no longer absorb the impact of increases in catches. As put shortly by the 2004 report on The State of World Fisheries and Aquaculture, *the global potential for marine capture fisheries has been reached, and more rigorous plans are needed to rebuild depleted stocks and prevent the decline of those being exploited at or close to their maximum potential*.[189]

Global production from capture fisheries and aquaculture supplied about 101 million tonnes in 2002, providing an apparent per capita supply of 16.2 kg. Despite a remarkable development regarding aquaculture in the past decade, ¾ of the total amount of food fish still comes from catches in natural environments. Hence, not only fishing itself but also related activities such as processing and trading have traditionally provided *basis for food security, employment, income and cultural traditions in coastal and inland communities*.[190]

[189] FAO The State of World Fisheries and Aquaculture (2004) http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/007/y5600e/y5600e00.htm Access on 15/08/2005.
[190] Source FAO, Sustainable Development Department, at http://www.fao.org/sd/EPdirect/Epre0044.htm access on the 23/08/2005.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Fig. 9: World fish supply (China excluded)



Source: FAO, 2004

Initiatives aimed at the protection of fish stocks – and marine living resources in general – can be roughly divided into three groups: promotion of aquaculture and fish farming, by catch reduction and establishment of sustainable exploitation standards. The third point is by far the most critical. Estimating fish populations and their renewal capacity may vary considerably depending on the field research methods adopted. Thus the definition of quotas, or total allowed catches (TACs), is hindered by political and economic interests of fishing nations and private groups involved in their exploitation and trade. Finally, implementation and monitoring problems are commonly observed.

As put out by Carr and Scheiber, "the effort to establish effective global, conservation-oriented management standards for marine fisheries is a relatively recent phenomenon[191]." One of the earliest examples is the 1958 United Nation Convention on the High Seas which contained principles aiming at conserving fish stocks endangered by the development of surveying and harvesting technologies in the 1950's. Though too general to be translated into concrete measures, the 1958 Convention sets the principle of sustainable use of fish resources, later recalled by all of the following agreements.

UNCLOS 1982 Convention on the Law of the Sea addresses the problem by reforming the legal ordering of fishing activity, regulating activities on the high seas and conferring new obligations

[191] (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute
DOI: 10.2870/17665

and rights to on coastal states. Provisions worth mentioning refer to limit determination of territorial sea and Economic Exclusive Zones (EEZs), as well as rules for exchange of scientific information that will guide conservation-oriented norms. Furthermore, it transfers to international regional fishing organizations the responsibility over the sustainable use of their respective stocks. As a result, a set of institutions have developed in order to make and enforce specific rules and procedures more adequate to each case of commercially relevant fish stocks.

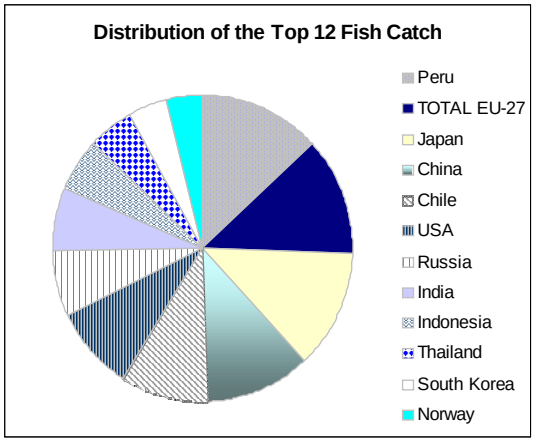
FAO lists six organizations under its auspices, and another twenty independent regional bodies (see annex). All organizations claim to base decisions on "the best scientific evidence data available." However, studies on fish population and renewal capacity may largely differ depending on the methodology adopted. For this reason, determining the data source is crucial for agenda setting and the negotiation process as well. Despite this difference**, t**heir share the common objective of ensuring durability and economic viability of fish stocks by determining, for example: minimum size of specimens, fishing seasons, trawlers maximum capacity, net standards, penalties, and so on. Also of great importance to conservation are the relations between non fishery-related practices (ex, industrial emissions of persistent pollutants), natural phenomena (ex, Tsunami) and stock population. That is, sustainability comprises more than exploitation in itself. Fishing organizations and also the EC, recognize the need to incorporate environmental concern into the Community Fisheries' Policy. The legal and political implications are enormous, given that the agenda is no longer under the Community exclusive competence, but shared with member states. This point is the central focus of the thesis and will be analyzed in the following chapters. At first, however, it is necessary to understand how has Community policy with respect to marine resources evolved, as well as its participation in related international affairs. An overview is provided in the next section.

In Europe, the first common regulations date back to 1970. They lay down the rules on access to fishing zones and establish a common organization of the market. However, setting up a framework for structural policy becomes a complex enterprise due to differences within, and among EU's several marine environments (Atlantic, North Sea, Mediterranean, and outermost territories), and between marine and freshwater ecosystems. In addition to the ecological dimension, the EU strategy in this case touches upon economic aspects and social policy concerns, most notably with regard to fishing-dependent communities and work/employment possibilities in fisheries-related industries.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

In addition to the difficulties concerning the common policy, a large number of issues transcend the European level due to the mobility of most stocks, and the weight of EU activity in the world's fish catch. Community fleet reaches around 100.000 units and represents 8.9% of world's fishing vessels (see figure). Though large part of the vessels operates mainly within EC limits, the fishing sector as a whole relies heavily on access to resources shared with third countries or located in international waters regulated by UNCLOS framework and regional fisheries organizations.

Fig. 10: Distribution of catches throughout the world



UNEP

Rank	Country	Catch	%
1	Peru	8450.6	0.129
2	TOTAL EU-27	8205.5	0.126
3	Japan	8128.1	0.124
4	China	7567.9	0.116
5	Chile	6038	0.092
6	USA	5939.3	0.091
7	Russia	4461.4	0.068
8	India	4324.2	0.066
9	Indonesia	3637.7	0.055
10	Thailand	3348.1	0.051
11	South Korea	2649	0.041
12	Norway	2561.8	0.039
	Total	**65311.6**	**1**

Accession to such institutions depends on two aspects: Community competence and organization rules. The legal basis for membership lies on Article 43EC which confers the EC implied exclusive competence in the case of marine fisheries, therefore preventing member states from becoming parties to such treaties. From the fishing organization point of view, rules vary significantly, and accession may also be linked to member states' withdrawal.

Fishery accounts for approximately 1% of the gross national product of the member states. Though its importance is unevenly distributed, it can be the economic core of certain (coastal) areas, namely in Spain, Portugal, Greece and Denmark. They also supply fishery products to the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute
DOI: 10.2870/17665

Community market, one of the largest in the world. Producing some eight million tons of fish, the EU is the world's third largest fishing power after China and Peru.

Nevertheless, the European Community remains the world's largest importer, with an annual trade deficit of 7 billion. The 2002 reform provides for an increase in this trend. Not only does it include further mechanisms of regulating marine resources' exploitation, but also broaden the scope of issues currently addressed by the CFP. Given that many of these agendas that are being brought into the debate are not under the Community's 1st pillar, MAs can be expected to increase their importance even more, especially in a European Community with 27 member states, new decision-making rules and higher diversity of interests. The study of the chosen agreements can teach much more than fishery management; they can shed light on relevant aspects of EC negotiating system, and its underlying driving forces. As summarized by Rachel Frid, "the CFP and its external aspects, though relatively marginal to the Community's economic activities demonstrates many of the possibilities for and limitations on Community action in IOs where the Community is exclusively competent and so has implications that go beyond the sector directly concerned."[192]

4. The EC Common Fisheries Policy (CFP): intergovernmental and supranational dimensions

"There is no simple, legislative solution to these complex problems. Given the diversity of physical, economic, cultural and institutional conditions, the response must be a flexible strategy focused on addressing the real problems on the ground."[193]

Fisheries products have no specific provision in the EC Treaty but, by operation of Article 32 EC, are considered "agricultural products" under the Common Agricultural Policy (CAP). Agricultural products are defined as those originated from the soil, stock-farming and fishery, and the operation and establishment of a common market for all these products were to be dealt with by the CAP.[194] Fishery is addressed in articles 32 to 38 of the EC Treaty. Under Article 32, the internal market extends to fishery products and must be accompanied by the establishment of a common fisheries policy. Article 33 outlines its main objectives: to increase productivity, to ensure a fair standard of living for the fishing community, to stabilize markets, assure the availability of supplies and ensure

[192] FRID, R. (1995).
[193] COM (2000) 547 final. Access on 27/03/2008.
[194] Arts 32 and 33.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

that supplies reach consumers at reasonable prices. The remaining Articles establish a common organization of the markets (Article 34), provide for coordination of efforts in the spheres of research and vocational training (Article 35) and lay down competition rules (Article 36). Articles 37 and 38 concern the rules of procedure for the organization of the market. These articles remain as the basis of the Community Common Fisheries Policy (CFP) whose main objective is to "conserve the resource, to preserve the ecosystem and sustain economic activity". This goal encompasses several measures to balance exploitation and conservation of the stocks in a long term basis.

Nevertheless, fish resources are, in most cases, mobile; it is this 'weak territoriality' that differentiates it from other agricultural sectors, since fish resources are not constrained by the same frontiers that have been fundamental in shaping the CAP. In addition to features inherent to fisheries such as the mobility of the stocks and the need to engage in cooperation arrangements with third countries, a number of factors pushed for the creation of a specific policy. Between 1956 and 1965 world investments in the sector lead to an increase of 50% in the production of fish products. Such growth was supported by member states' subsides to exportation, restriction of imports, and a wide array of measures to improve vessels' capacity. In the 1960's, however, certain European stocks (e.g., herring) were perceived to be threatened, which underscored the necessity of regulating and monitoring fishing activities.

The implementation of the United Nation's rule of a 200 mile fishery conservation zone by was incorporated into the Regulation establishing the fisheries structural policy in 1971. Following a global trend, in 1977 MSs together extended their fishery limits out to 200 miles, except in the Mediterranean. The Community fisheries zone created by such extension triggered negotiations among MSs to regulate catches in Community waters, which lead to the formalization of the Common Fisheries Policy in 1983.

Enlargements also played a pivotal role in shaping the CFP due to the maritime tradition of applicant states. For example, in 1973 the overall fish production of the UK, Ireland, Denmark and Norway, doubled the total catch of the initial six member states. The principle of equal access to fishing zones was a sensitive issue during accession negotiations and one of the main causes of opposition among Norwegian voters during the membership referendum in both 1973 and 1994. The EC had incorporated the principle of equal access to the *acquis communautaire*, and wanted applicant countries to comply with it immediately. The new member states, on the other hand,

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

sought to abolish it during the negotiations. A solution was provided with the Act of Accession,[195] which authorized these states to temporarily maintain exclusive fishing rights for their vessels in waters up to six nautical miles from their coasts.

Since its early stages, the CFP has faced a number of setbacks to be put into practice. At the EC level, difficulties in determining the total allowable catch (TAC), as well as the harvesting quota of each member state, have turned the negotiations within the Council into "battering sessions." Thus, there is the problem of access of the vessels from one member state to another's territorial sea. Negotiations with third countries also involve the issue of access to territorial waters and Economic Exclusive Zones (EEZs) and vice-versa.

To the Commission, the TAC should be shared according to the principle of freedom from discrimination of the common market rule. Fishery resources are unevenly spread between the waters of member states; there are significant discrepancies among member states' fleet and fishing capacities. Compliance appears as a critical problem, since fishermen will continue to fish in areas where they have traditionally fished, regardless the fact that these areas were now restricted. However, the main reason why it is so hard to strike an agreement among multiple stakeholders affected by fisheries policy is because it is difficult to determine the value of the stock, and the value of its non-use; this hinders the estimation of financial compensations for non-use and does not deter opportunistic behavior from the stakeholders.

Over time, a number of events had an impact on the size and structure of the Community's fleet and its catch capacity, and pushed for further developments in this policy area. The CFP had to adapt, for example, to Greenland's withdrawal from the Community in 1985, and to the accession of Spain and Portugal in 1986. In addition to successive enlargements, a number of agreements with third countries and international organizations have created opportunities for further developments of the CFP.

The 1990's began with an in-depth review of the common fisheries policy based on assessment reports presented by the Commission. The cornerstone of the new policy was laid with the adoption two years later, of a regulation establishing a Community system for fisheries and aquaculture, which provides the current basis for conservation policy and the sustainable management of fishery

[195] Arts. 100 to 103.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

resources. The 1992 CFP reform sought to reduce fleet capacity and overfishing. It was envisaged that the EU would become a "model for the world at large" in finding a balance between the environment and trade, while emphasizing the external dimension of the EU and the necessity of international action in fisheries agreements with third countries.

Whilst the CFP involves common pool resources and distributive issues that need to be addressed at supranational level, it also has a strong intergovernmental character (such as the CAP). The preferences observed within the Council tend to reflect the situations that prevail in the different member states; acting on behalf of small but well organized professional organizations, the Council tends to push for exception clauses (such as quota exemption, for instance) and other instruments that allow the continuation of current fishing practices in the member states, despite the decreasing levels of most stocks.

The reactions to the Bonino Plan of 1996, expressed in the Intergovernmental Council meeting one year later, well illustrate the situation: reductions of fleet capacity faced strong opposition of the UK, Netherlands and France. British officials, for example, agreed that there were "too many boats chasing too few fish", but opposed to the scale of the cuts being proposed by the Commission.[196] Unable to solve the problem of quota hoping by Spanish and Dutch nationals who had bought vessels from UK owners, and who would fish under British quotas, British fisheries minister Mr. Tony Baldry pushed for (and obtained) an increase in certain quotas of species with high commercial value, most notably codfish.

Member states could adapt to the fishing terms to maximize his interests within the rules set by the Commission. Nevertheless, regulations are regarded as unjust or illegitimate, which compromises compliance and reduces the motivation for discussing, defining and abiding the rules. On several occasions the Council has asked for more account to be taken of the "specific nature" of the situation in their respective countries.[197] The ability of circumventing restrictions forwarded by the Commission is regarded as an accomplishment by national ministers and their constituencies. Thus, by focusing on specific issues, governments avoid domestic criticism of national fisheries policies, "capitalizing on the tide of Euroscepticism that sweeps many fishing constituencies".[198]

[196] Source: The Independent, 14/10/1996. http://www.independent.co.uk/news/britain-resists-eu-plan-to-conserve-fish-1358365.html Accessed on 01/04/2009.
[197] French Minister Philippe Vasseur.
[198] Gray (1997), p. 150.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Nevertheless, the preferences of the Council (and not within the Council) depend not only of the specific interests of member states, but also on the extent to which such interests are aligned or opposed. Put shortly, it is the constellation of interests (and the relationship between them) which defines the preferences of the Council (one of the independent variables addressed in this thesis).

4.1 Mechanisms and provisions

The CFP regulates the exploitation, processing and trade of living aquatic resources (fish, shellfish and mollusks) and aquaculture. These activities are carried out in the territories of the Member States, in the Community fishing zone, or by fishing vessels flying the flags of Member States in the waters of non-member countries or in international waters. The CFP is oriented according to four main axes:

a) Conservation and sustainable management of fishery resources;
b) Organization of the markets;
c) Structural policy;
d) Relations with third countries and international organizations.

The conservation and sustainable management of fishery resources is the bedrock of fisheries policy given that many stocks face serious risk of exhaustion if harvesting is not strictly controlled. It is the dimension that is most affected by ESU. Its guidelines are based on scientific advice and on the precautionary principle on the one hand, and on good governance and consistency with other Community policies on the other.[199] They are determined by the Council determines the annual Total Allowable Catches (TACs), that is, the limits for a particular fishery, usually expressed in tons of live-weight equivalent, but are sometimes set in terms of numbers of fish.

The common organization of the market in the fishery products is based on four key components: first, common marketing standards are specified to ensure that certain quality levels are met; second, producer organizations set up to ensure the rational use of fish resources and to improve market conditions;[200] third, price stabilization arrangements, including financial intervention mechanisms; fourth, rules governing trade with non-member countries. The creation of a common

[199] Moussi (2005), p.388.
[200] Defined by EEC Regulations No. 3796/81 and I05/76. The European Association of Fish Producers Organizations has now 32 members from 10 member states.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

market for fishery products did not face significant difficulties, as opposed to conservation measures.

The fisheries structural policy is designed to help the fisheries and aquaculture sectors to adapt their equipment, facilities and production processes to market requirements and the constraints imposed by climatic phenomena, pollution, external regulation, among other factors. It was introduced in 1970 with the support of the European Agricultural Guidance and Guarantee Fund (EAGGF).

The aggravation of structural problems in the sector leaded to the creation of the Financial Instrument for Fisheries Guidance (FIFG) in 1993, replaced by the European Fisheries Fund (EFF), in force from 2007. In overall terms, these mechanisms support the restructuring of the Community fleet by granting aid for scrapping, exporting and reassigning fishing vessels for other purposes, and for improvements relating to safety and improvements to the living and working conditions on board. Community structural assistance can also be provided in other areas, such as aquaculture and the processing, promotion and marketing of fishery products. Aid schemes for training fishermen and other socio-economic measures are also foreseen.

d) Relations with third parties. The external aspects of resource policy are governed by a 1976 Council resolution known as The Hague Agreements. Fishing by third country vessels within the economic zone of the Community should be regulated through Community Agreements; by the same token the activities member states' fishing industry depend on agreements signed under the EC framework. As put by Moussis, the Hague Agreements allowed the EC to present itself to third countries as a single coastal state. Therefore, they enabled the international recognition of a Community 200 mile zone, its right to set TACs within its limits and to negotiate the access of fishing rights beyond the EC limits. A number of international agreements, most of them bilateral, were signed on the basis of this Council resolution. By 2005 international fishery agreements represented 25% of supply of community market.

The orientation of the EC is to seek new alliances (sic) with third parties, most notably with developing coastal states with similar interests in sustainable commercial fishing activities. In less diplomatic terms the EC has striven to come up with regional policies with regional fisheries organizations and developing countries who exploit (that is, compete for) the same stocks.

4.2 Decision-making

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The different legal instruments governing fisheries are adopted following a consultation procedure, i.e., which the Council, acting on a Commission proposal and after consulting the European Parliament, adopts Community legislation. The Council fixes the total allowable catches (TACs), distributes them according to states' quota system after intensive negotiations and adopts the common market rules and the procedures for applying the price system. The Commission manages, in particular, the Community fisheries surveillance and inspection arrangements. In practice, the implementation of the legislation involves both member states and the Commission, depending on the sphere of action. To execute its implementing powers the Commission is assisted by various committees[201] made up of representatives of the Member States and the fisheries and aquaculture sector and scientific experts such as the Scientific, Technical and Economic Committee for Fisheries (STECF), which provides advice on all projects relating to fishing zones and resources. The Commission also consults other parties affected by the CFP, through the Advisory Committee on Fisheries and Aquaculture (ACFA).

Consultation procedure is adopted in the three cases analyzed in this thesis; it is the simplest and oldest of the procedures using qualified majority voting (QMV) in the Council of Ministers. Today, it is used in cases where the Treaties do not expressly specify the situations under which the cooperation, codecision or assent procedures must be used. Yet, it applies to a number of areas, such as free movement of capital and competition policy. The European Parliament (EP) is consulted on Commission proposals and issues opinions. The Council is not bound by these opinions when taking its final decision on the legislation. On the other hand, the introduction of consultation procedure has increased the pace of integration, as less integrationist positions in the Council are defeated by qualified majority. Under these conditions the Commission will make the most pro-integrationist proposal that will be approved by the Council.

> "(…) given that the agenda-setting power lies with the Commission, the pivotal player in the Council will not be able to set policy at its ideal point. Rather, the Commission will propose a more pro-integrationist policy – but one that the pivotal player in the Council still prefers to the status quo and hence will vote for in the final stage of the consultation game."[202]

[201] Comitology procedure will not be addressed in this study, as all three cases fall under consultation. For more information of comitology applied to fisheries policy, see: http://ec.europa.eu/fisheries/faq/committees_en.htm
[202] Garrett & Tsebelis, (1996), p. 283.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The reason for not including the EP's preferences among the independent variables is twofold: first, the consultation procedure applies for all three cases, so that the role of the EP is considered to be held constant. Second, the Parliament plays an advisory role. The limitations of the EP to exert influence in fisheries-related consultation procedures is illustrated by Thompson and Holsti's study on the exercise of power by EU institutions, where they estimate the capabilities of both the Commission and the EP relative to the Council. Their results show that, for this agenda Council and Commission have equal capabilities, whereas the EP's is significantly smaller.

It is worth reminding ourselves that consultation is still largely adopted in a number of decision-making procedures in the EU. In fact they apply to issues where the Community has been able to play a more concise and therefore influential role. Furthermore, providing a framework to analyze the distribution of competences under consultation provides some leverage to the understanding of more complex models of decision-making procedures. Finally, limiting the analysis to consultation allows for the analysis of variation regarding scientific uncertainty in power transferring (or not) to supranational bodies with regard, which is another important though poorly understood aspect in decision-making in/by the EU.

5 Interests in the EU fisheries sector: cleavages and preferences

The following sections present fisheries general trends and give information about the preferences of the member states. The goal is to identify cleavages within the sector that cause stakeholders to have different preferences, thus providing a better account of the aspects that determine preferences within the Council, and how they relate to the dependent variable (namely) at L1, i.e., the contract between Council and Commission.

The ultimate problem faced by any group of states that share common living resources is to avoid the tragedy of the commons: the exhaustion of certain resources caused by the behaviors of many individuals acting alone.[203] With regard to marine resources, the challenge is to ensure the sustainability of the stocks – and of related economic sectors – over time. EU fishery faces region-specific problems related to certain fish populations and to the availability of alternative economic activities. Given that these problems are very specific, it is not impossible that different regions of

[203] Hardin (1968).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

one single country have opposite preferences with regard to national fishery policies. On the other hand, the core characteristics and problems of the sector are common to all member states, such as: the small weight of the fishery sector on national economies, structural deficit, and the geographical concentration of fishing activities at regional level instead of national level. These points are addressed in the following paragraphs.

Fisheries account for a fairly small share of domestic economy of member states: in most of the Member States the value of landings is less than 0.5% of GDP and fishers account for less than 0.6% of jobs. However, its contribution to regional economies varies considerably and can be significant at the local level. About 95% of all fishers (283 000) and 75% (234 000) of those employed in related activities can be found in coastal, fishery-dependent zones[204]. Two regions in one same country – take for example Galicia and Pais Vasco in Spain – can be much more diverse in terms of fleet composition, infrastructure and alternative economic activities than communities located in two different countries.

With the exception of Denmark, Ireland and the Netherlands, all old member states have a negative balance of trade for fishery products. The increasing structural deficit puts national governments in a difficult situation, as they must get to grips with the demands of the consumer market-processing industry, retailers and consumers, the interests of EU producers, and the need to devise and implement sustainable fisheries policies.

When deciding on which instruments to use in a specific fishery a number of factors are taken into consideration, for example: the nature of the fishery; fishing seasons; if the fishery is species specific or mixed; if there is too much by-catch; whether is if for reduction or direct consumption and so on; the market situation (stocks demand, supply, and prices); experience from the regulation in previous years; the need for adjustments due to development in catches and quotas; fishing patterns of the fleets.

The distribution of fishing rights at the domestic level varies from one state to another, as well as the policy instruments used to limit the captures. All member states had to reduce their catches in order to ensure the availability of future stocks. Some of the measures have been adopted by all the states: establishment of vessels' catch limits (for example, on a monthly basis), limiting the

[204] Source : OECD. http://www.oecd.org/dataoecd/55/10/39854705.pdf Access on 28/05/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

number of days at sea per month, setting time closures (weekends, summer, etc), reducing the number of new fishing licenses, establishing minimum landing sizes (in some cases higher than those of the CFP), banning specific gear types (as in the case of driftnets), and creating individual transferable quotas (ITQs) for some species.[205]

As it is the case of agriculture, fishery is embedded in a deeply rooted relationship between economic actors and the nation-state. There is extensive evidence in Europe and elsewhere of the strong bonds between fishermen and local communities, as well as their attachment to territorial units. In Europe, fisheries associations manage to pressure local and national governments, and do not see the EU as a public space to solve the conflicts in the relationships with other member states.

5.1 Member states[206]

The overarching objective of a fishery policy is to ensure the sustainable management of the resource in the long run. This comprehensive goal has biological, economic and social dimensions. Fisheries management is marked by multiple objectives, which are sometimes conflicting; as a consequence, multiple objectives cannot be simultaneously maximized. Different goal orientations – within and outside the EU - are a major source of conflict, as well as structural effectiveness, biological changes and cultural characteristics of interests groups.[207]

In most member states, fishing industries have a small weight on the economy. Nonetheless, this policy is particularly relevant in certain regions throughout the EU because of their geographical concentration. Fisheries have a high political salience for Spain, Portugal, Great Britain, France, Ireland, the Netherlands and Denmark, for example.[208] Fishery-related issues also reflect the disparities of regional development within member states, as it is the case of Italy and Spain. As depicted in the next pages, fisheries differ in terms of operations, scale of the activity, diversity of the catches and the fleet, and management structure. This section presents an overview of the main characteristics of the most important fishing nations of the EU; the aim is not o explore the

[205] Not all member states have ITQs.
[206] A succinct overview of member states' profile, see for example Schare, T. (2006) at http://www.unige.ch/ieug/publications/euryopa/schare.pdf Access on 01/04/2009.
[207] Hannah & Smith (1993).
[208] Conceição-Heldt (2004) p. 43.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

mechanisms of preference formation of each state, but to provide some indication about member states' preferences and the points that raise concern among them in the Council.

The CFP, as well as multilateral agreements with third parts, concern not only the various producers (fishermen and fishing industries) but also other industries involved in the processing and commercialization of fish products. Germany, for example, has a small number of vessels but an important processing industry, and this fact affects the German preferences regarding the CFP. The German fleet attained its maximum size in 1994 (2458 vessels). The North Sea is the most important fishing ground (36% of the landings). Concentrated in few species for human consumption (Alaska Pollock, herring, salmon and various tunas), most of which straddling or highly migratory. Over the last twenty years its capacity has declined, namely due to the collapse of the deep sea trawler fleet. On the other hand, Germany has an important fish-processing industry, which relies on imports from non-EU countries (Norway and the Community of Independent States), and also from Denmark. Germany has advocated cutbacks in national fishing quotas and an overall reduction of TACs, which are regarded as *the primary tool for management of fish stocks*,[209] followed by technical conservation measures (reduction of by-catch and non-targeted species, for example).

A different scenario is observed in the Netherlands, due to the high number of vessels with strong fishing capacity and export-oriented activity. Although the Dutch fleet consists of 511 vessels, the country has considerable fishing capacity. The marine fisheries are concentrated in the North Sea and in the north-eastern part of the Atlantic Ocean, and targets mainly flatfish, whereas distant water fishing is carried out in the West African coast (50% of the total water distant). The number of vessels has sharply decreased over the last twenty years, and the employment in the sector has also shrunk. On the other hand, the size and power of the cutters has remarkably increased; today the Netherlands is one of the few countries where fish production has increased over the last years, and which exhibits a positive trade balance for fisheries products. Most part of fishery-related jobs are in the processing and services sectors (retail and marketing).

The prospects for Dutch fishing are function of the catches and their value. The rising fuel prices and labor costs render reduction efforts more necessary to ensure the return on investments made in the Dutch fishery sector. One can expect further downsize regards the number of vessels,

[209] Source: FAO http://fao.org/fishery/countrysector/FI-CP_DE/en. Access on 25/05/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

diversification of their activities (ex. transport), along with and agreements with third parties in order to ensure the stability of the catches. Environmental pressure has also increased, as beam trawlers are particularly harmful to bottom habitats. Efforts have been put on reducing these damages (especially on non-targeted species), but the most likely is that capture will be further reduced.

The economic situation of UK fisheries is mixed: while the condition of pelagic and shellfish stocks are considered healthy, the whitefish sector (cod, haddock) has faced 'boom and bust cycles' due to a combination of overfishing and environmental factors. The government recognizes that fisheries management in the UK and in the EU lag behind global best practices, and that the problem stems from *perverse incentives generated from the interaction of the whole system*,[210] and not from isolated factors. A more comprehensive and holistic approach that takes into account economic and institutional factors has been advocated, instead of the adoption of enforcement measures alone. Such approach depends on coordination with other member states that share certain fishing grounds such as the English Channel, for instance.

As in other European countries, fishermen account for a small percentage of the national workforce (0.2% in Scotland, 0.1% in England and Wales). On the other hand, their geographical concentration makes them relevant actors in regions such as the South West of England (20% of UK fishermen) and Aberdeenshire (13%). The UK spends significant public funds to reform the fish industry. The reform consists of reducing fleet capacity, and searching for new sources of supply such as the oceanic slope in northwest of Scotland, and aquaculture. Special effort is put on agreements with Norway: Norwegian catches and sea farming have a strong impact on UK fisheries because the two countries share some important stocks (cod, for example) and fishing grounds. An outstanding example regards Scottish salmon stocks, which have leveled off due to overproduction in Norway. Quota management has been delegated to the 23 producers' organizations (POs).

The main issue concerning UK fisheries concerns also Spain and the Netherlands, and refers to a practice called quota hopping, defined as the reflagging of fishing vessels in order to fish against the catch quotas of another country. Economic concerns expressed by the indigenous UK fishing industry and by politicians refer to losses in regional incomes and employment due to foreign

[210] Source: FAO http://www.fao.org/fi/fcp/en/GBR/profile.htm Access on 25/05/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

landings and crewing. By acquiring vessels from British owners, or by obtaining UK licenses to Spanish vessels, Spain legally compensates the loss of their traditional fishing grounds stemming from the 1980 EEC–Spain Fisheries agreement and carried forward through the transitional arrangements of the 1985 Act of Accession. In short, despite the restrictions imposed on Spain before its accession to the EC, Spanish industries were able to "fish their traditional grounds for the species for which there is particularly strong demand in Spanish markets."[211]

The international dimension of the Community Fisheries Policy is of particular concern to states such as Spain and Portugal, which carry out activities in non-EU economic zones or in international waters. These states have a especial interest in the agreements signed with third states, and have been particularly active in forging a community diplomacy regarding fisheries issues with African and Mediterranean countries, as well as with Canada. Portugal, for example, has a large and diversified fishing industry. Although small traditional polyvalent[212] vessels amount up to 87% of the fleet, they represent only 8% of the catches. The remaining 92% are harvested both within and beyond the EEZ. Nevertheless fishing in non EU waters has diminished considerably over the last years because of two main factors: first, the interruption of the EU-Morocco agreement; second, the need to adjust the fleet to maintain its competitiveness. The resources to these structural changes come mainly from the EU (54%) and the private sector (32%). As a result a number of vessels had their license suspended, or continue to operate under another flag. Fish processing industry has also decreased due to the lower stocks of sardine and codfish. The latter has been responsible for rising imports, most of which from Norway.

The discrepancy between different regions of one same country is also a topic raised by the discussions around the CFP. Italian fisheries, for instance, exhibit two main trends: the heterogeneity of the fleet, classified as multi-gear and multi-species oriented, and the age of the vessels. 45% of the vessels are more than 25 years old, and another 19% is between 15 and 25 years. Most artisanal vessels (65%) are concentrated in the south - namely in Sicily, Sardinia, Campagnia and Puglia. Bottom trawling accounts for 39.5% of the production, and is located mainly in the north-central Adriatic. Although Italy is in seventh place in the EU with an average

[211] Hatcher et. Al (2002).
[212] i.e., there is more than one fishing method on board. Small catches of several species.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

production value of 590 million euros, the share of value-adding is comparatively low and has recently even been on a downward trend, since only a small part of the captures are processed.[213]

The number of vessels has decreased sharply over the last years. A number of reports issued from Italian authorities blame the CFP and the vessels decommissioning scheme for the deficit observed in the sector. In fact, the reduction in the number of vessels, as well as the interdiction of drift nets has affected Italian fisheries. Nevertheless, other factors have proved more important: a) the increase in imports of both raw material and processed products (namely from Spain) coupled with lower exports;[214] b) the serious depletion of the stocks of finfish, crustacean and mollusk resources; c) the losses in the landing sites, as only 25% of the reduction is landed in harbors. The rest of the landing takes place in beaches and small docks; d) the emphasis that has been put in aquaculture (40% of Italian production) rather than on structural reforms of the fleet or assistance to fish dependent communities. Initiatives of integrated management have been launched in the Adriatic, bringing together both EU and non EU states with fishing interests in the region. After Spain, Italy is the second major recipient of financial aid from the EU (8.8% of total EU aid between 1994 and 1999), which come almost exclusively from the Financial Instrument for Fisheries Guidance.[215]

Situated in the Iberian Peninsula and with two maritime façades and two archipelagoes, Spain is a predominantly maritime country. Despite the decreasing consumption of fish due to higher prices and changes in the population, sea products are still important in the Spanish diet. Thus, there is a great fishing tradition along the coast, and a number of zones are highly dependent on fishing activities. Over the last years industrial fishing has decreasing and long distance fleet is being reduced.

Fish trade is strongly deficitary. The Spanish production targets mostly the Community market; imports come from other EU countries in the case of fresh fish, and from third countries with whom the EU has fishing agreements, in the case of frozen fish. Most part of the catches consists of pelagic species such as cod, sardine and tuna-like. Galicia appears as a leading fishing region, with 78 (nearly 20%) fishing ports, and nearly 25% of the landings. Thus, most part of the imports

[213] This is due to consumers' preference for fresh fish. Source: Eurofish http://www.eurofish.dk/ Access on 25/05/2008.
[214] Spain is also the largest importer.
[215] Set by the Council Regulation (EC) No 1263/1999.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

(namely from France, Ireland and the UK) arrive through the Galician port of Vigo.[216] In terms of overall fishing power, Galicia is followed by Andalusia and Catalonia, though the Canaries and Basque Country also appear as important fishing regions.

Spain joined the EC in 1986 with substantial fishing capacity and notable experience of international agreements, since it had already concluded 15 bilateral fishing agreements. Since its accession to the EC its participation in various international agreements has gradually involved Spain in Community diplomacy, in which it naturally plays an active role. Under the auspices of the EU, Spain has also concluded a variety of fishing agreements with third countries. While these have resolved the problem of access to those countries' EEZs, some problems of the management of such access and the business side of such agreements remain.

Spain also participates in the work of various multilateral bodies, either as a member in its own right (ICCAT, CCAMLR, IWC and regional bodies belonging to the FAO) or as an EU Member State in bodies such as NAFO, IBSFC and NASCO, which manage the exploitation of deep-water fishery resources).

Spanish fishing effort has been reduced in order to cope with the CFP, namely through the adoption of lower limits for the catches and reduction of the number of days of fishing seasons. The Spanish government has adopted a system of individual fishing rights, which are attributed taking into account the 'historical activities carried out by the vessel' measured in terms of fishing effort, presence in the fishing zone, technical aspects of the vessel, alternative working possibilities available to the vessel's owner, among other indicators. Each vessel or enterprise has its own quota, which can be transferred to other Spanish boats or companies. Finally, investments in the sector are concentrated on technological improvements such as systems to localize fish stocks, conservation of the captures and on board safety devices (crew empowerment included).

In France, as with most European fish industries, possibilities for further development are scarce; they are restricted to tuna-like stocks, species of recent commercial interest and new exploitation sites (deep sea). The last large investments in the sector were made in the 1980's, and it is very unlikely that French vessels will see something similar in the short and medium terms.

[216] An increasing volume of imports arrive by airplane. Source: FAO, http://www. fao.org/fi/fcp/es/ESP/profile.htm. Access on 25/05/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Responsible for 10% of the EU captures, France is the 4th largest producer in the EU. Thanks to its three coastlines (Atlantic Ocean, Mediterranean and North Sea/English Channel), and to a large continental shelf, French fisheries are characterized by the diversity of its fleet, fishing techniques and targeted species. French production does not meet the increasing demands of the internal market – consumption *per capita* of 33.6kg/year.[217] Despite the larger volume of fish imports from the UK, Norway and Spain the price of the stocks has decreased. French exports face the opposite situation: although the amount exported has decreased some 4% in the last five years, the value of the products has increased around 8%. It should be mentioned that 80% of French exports are intra-EU, while 58% of the imports come from third countries.

The sector accounts for 0.14% of the French GNP. However, the economic activity of certain regions, depend on fishing sector. The pressure exerted by Brittany (one of the country's total capacity) and the Mediterranean (20%) on the central government has traditionally been quite strong, as compared to its contribution to the overall economy. The central government, in turn, has sought to obtain financial aid from Brussels (Commission), to increase (or not to reduce, depending on the stock) French TACs in the Council.

Fishing quotas are distributed to producer organizations (POs) for allocation to their members. POs are representative groups set up by producers and recognized by the government. POs must draw up a management plan for the relevant species, i.e. a market-led fisheries management strategy. Quotas are allocated by the Minister for Fisheries. After consulting the National Committee for Sea Fisheries, the national quotas for the main stocks are divided into sub-quotas by PO, based on vessel catch history.

In certain regions fishery is a critical activity, which employs large part of the population. There is evidence that, under such conditions, the participation of the local population in fisheries management (definition of quotas and enforcement) has proved successful.[218] Denmark's 400 islands form a coastline of approximately 7 300 km. Though regarded as a fishing nation, the overall contribution of the fisheries sector to the Danish economy is only about 0.5 %. However,

[217] Main species are tuna, salmon, sardine, trout, moule, oysters and shrimp.
[218] Interview with Mr. Aaron McLoughin, WWF. Brussels, June 2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

fisheries remain quite important in specific regions of Western and Northern Jutland, and on the island of Bornholm in the Baltic Sea.

Three types of fishery are observed: industrial fishery for reduction – that is, for fishmeal and fish oil;[219] pelagic fishery for human consumption;[220] and demersal fishery for white fish,[221] flatfish,[222] lobster and deep water prawns. Reduction accounts for approximately 73% of the Danish fishery. This capture has decreased along the late 1990's and is now stable, but its value continues to decrease. Species for human consumption, by contrast, have seen an upward trend in their value. The major part of the production is exported (79% to other EU states).

From 1987 to 2001, 1,197 vessels were decommissioned with capacity reduction subsidies, in line with EU decommissioning schemes. In 2000, 738 companies – most of which small and medium sized – were dealing with processing and trade in fish products: 83 in smoking and drying, 47 in canning and filleting, 5 in fish meal and fish oil, 310 in wholesale trade and 293 in retail trade.[223]

Denmark has a national management scheme in order to allocate the quotas determined by the EU Council. The principles used in the scheme are discussed with the association of fishermen organisations and the fishing industry before the conditions are finally assigned. It should be stressed that association membership has fallen drastically (more than 30%) over recent years. The discussions take place in the Regulatory Committee, where the organisations and the Ministry of Food, Agriculture and Fisheries are represented. Except for herring stocks, there are no individual transferable quotas. Denmark, as other Scandinavian countries (Norway included) make big investments in vessel's surveillance as a means to control illegal activities and have information on discards. These countries have pushed for a more widespread use of such technology in order to have an accurate account of vessels' activities at sea, but face strong opposition from Mediterranean countries.[224]

The comprehensive approach advocated by the Commission has been put into practice in specific cases such as Irish salmon stocks. Ireland has a high level of fish consumption *per capita* (16

[219] Species: sandeel, Norway pout, blue whiting and sprat in the North Sea, sprat in the Skagerrak/Kattegat, and sprat in the Baltic Sea.
[220] Mainly herring and mackerel, which are stored in tanks.
[221] Cod, hake, haddock, whiting, saithe
[222] Sole, plaice, flounder.
[223] http://www.fao.org/fishery/countrysector/FI-CP_DK/en
[224] Interview with Norwegian representative to the EU, June 2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

kg/year). Despite the declining demand, market values have increased on average 2.6% per annum, rising from US$ 285 million in 1999 to US$ 316 million in 2003.[225] Also by 2003, approximately 6.000 individuals were directly employed in the marine fishing industry. A further 4.200 were employed in the processing of the fish and another 2.000 employed in ancillary industries. 71% of seafood companies are based along the western coast.

Ever year the Irish Marine Institute issues a stock book to provide scientific advice, short term forecasts and advisory overviews, as well as specific considerations on commercially exploited fish stocks of interest in Ireland, namely those that have TACs determined by the CFP. Pelagic species dominated the volume of landings, and the salmon industry receives particular attention. A national commission composed by stakeholders and fisheries biologists monitors the status of wild salmon and sea trout stocks and proposes annual limits to their exploitation. The total allowable catch (TAC) of wild salmon and sea trout, for each of the 17 fishery districts, is defined by legislation, and enforced by regional fisheries officers. A tag scheme has also been introduced as a means of obtaining accurate catch statistics of these stocks. Thus, it enables the identification of illegally caught salmon at different phases of the distribution chain. Given the limitations set by the CFP, Ireland's fishery policy has been focusing on the elaboration of products of higher added value (convenience fish dishes), development of markets for non-quota species, and of marketing capabilities of Irish fish companies. Support to the processing sector based on aquaculture products has also been provided.

An overview of member states' fishing profile highlights the differences that emerge within the Fisheries Council. Member states negotiate quotas between them, and make informal agreements regarding the use of fish stocks. Hence, states who do not share the same stock may support each other in the Council, therefore making informal alliances. For this reason the council cannot be regarded as the mere expression of MSs interests. Even when decisions are taken by QMV, MSs' votes do not necessarily express MSs 'preferences. This behavior is illustrated in Leal-Arcas work, where the Council is considered an institutional actor on its own right, comparable to the US Senate, for example[226]. For this methodological reason this thesis does not engage in an in depth analysis of each member state. Instead, it looks at the Council as an actor, as described in chapters 2 and 3.

[225] http://www.fao.org/fishery/countrysector/FI-CP_IE/en
[226] Leal-Arcas (2004).

5.2 Preference distribution across MSs within the fisheries sector

In order to overcome allocation conflicts, fisheries management policies depend on the establishment of objectives and targets that allow for effectiveness to be assessed over time. In the CFP these aspirations are often all-encompassing and therefore imprecise, and "no indication of aspiration levels is given from which future measurement can be made".[227] Individual fisheries or fishery areas often exhibit more distinct objectives that predominate, than those expressed in the CFP. Thus, fishing has been increasingly regarded as an ecosystemic activity – that is, sound fisheries policies should also take into account non-targeted, and non-commercial species, as well as the protection of the area where production takes place.

The next paragraphs describe elements that influence actors' preferences, in order to provide a better understanding of the distribution of interests within the EU – that is, both among member states, and across different sectors. They also shed light on the factors that have contributed to the shift of competences to the Community level, as will be discussed later.

The main difference concerns the place where fishing activities take place: within territorial limits, in the EEZ, or in international waters. The type of vessel and the number of days at sea also vary. There are three main types of activities: *coastal fishing* is performed by the smallest boats, which spend up to four days at sea; *high-sea fishing* is carried out by medium-sized boats in EU waters in voyages that last from four to twenty days; and *high sea fishing* (also called deep sea fishing) involves vessels that are more than thirty meters long, and usually lasts for more than twenty days.

The size of fishing areas, as well as the characteristics of the national fleets, are important factors in the definition of actors' preferences, because they are deeply related to the carrying capacity and to the quotas that are determined every year at the EU Fisheries Council. In the past, for example, both the UK and Ireland opposed to a Common Fisheries Policy as they could rely on their national stocks and on their coastal fishing fleet. Now, however, three groups can be distinguished: fleet that remain in EU waters, boats that fish in third countries waters, and those

[227] Mardle et al. (2002), p. 427.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

whose capture takes place in international waters. The two last groups have far more interest in promoting international agreements that benefits the Community.

The diversity of the fleet and the catches also plays a role because the more diverse, more alternatives fishermen have if the quota for a certain species is attained, or during closed seasons. They may also have some leeway to catch species with higher value, provided that the quotas are not (officially) attained. Last, the less diverse the catches, the more specific will be the interest of lobbying groups, and the relatively stronger will be the pressure they exert on governmental authorities (see item "c").

The characteristics of the fleet and the fishing areas are not the only relevant aspect in determining MSs' preferences regarding the CFP. The weight of fishing activities in the economy is small for all EU countries. Member states' interest with regard to fisheries – observed through the distribution of preferences within the Council – is due not to the impact of fishery sector on national economies, but to the access of specific groups to national instances, as well as the capacity of local governments to influence national policies in the sector. More important than overall economic indicators are the concentration and type of fish-dependent zones within the national territory, and their political representation. There are two types of zone where fishing is critical to the local socio-economic fabric: 1) developed and industrialized zones, with diversified activities, and 2) less-developed, often rural zones, where fishing is the only activity possible for a large part of the workforce.

The separation between fisheries and fish processing industry is also worth considering. Usually the states with larger processing industries are also large producers (ex, Denmark). Germany is the only exception, as it has an important processing industry but little fleet capacity. The weak processing industry observed in some states (Italy, Portugal) is associated with a demand for fresh fish and with the development of the fishing zone (facilities to disembark the fish and other logistic factors).

The existing channels to the national governments are also critical. Fishery affairs are administrated by few governmental bodies; stakeholders have mainly localized, specific interests. As a consequence, they can exert a focused and relatively strong pressure on the few competent instances. Most commonly they demand quota exemptions and subsides.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

In more centralized states (e.g., France) these groups have a direct access to the Minister of Agriculture and Fisheries who, in turn, votes at the EU Fisheries Council. This direct access considerably empowers these small groups. The more centralized the state, the stronger the pressure stakeholders can exert. In more de-centralized setting (ex, Spain), more interests are represented at the national level, as stakeholders have more access to their regional governments than to national bodies.

Another important cleavage in the sector is between large x small scale fishing. The former depends on large vessels owned by a fishing company, and the crew usually receives a minimum wage. The largest part of the European fleet (80% of the vessels) performs small-scale fishing. In this case activity is carried out by boats owned by natural persons who are generally on board, and the crew receives a value corresponding to a share of the catch.

With regard to external trade, the cleavage observed within the EU does not represent a straightforward conflict between protectionist and potentially opportunist states. The main producers of marine products are also the main importers from third countries: Spain, Denmark, UK, France, Italy and the Netherlands. The only exception is Germany, which has an important fish-processing industry but small catches. Instead, the opposition is between actors that demand more border protection, and actors that push for more openness and for the maintenance of cheap imports for the fish-processing industry. As put by Lequesne, the divide is more inter-sectoral than interstate, as shown by the opposition of ship owners from Belgium, France, Spain, Ireland, Portugal and the UK and the business sector in the same countries with respect to protective measures.[228]

Preferences of negotiating actors (be them MSs or all the players that engage in multilateral negotiations) also vary according to the service or good provided by the natural resource. This point is of particular importance to this thesis given that EU external representation, as well as the distribution of preferences in the international realm, is related to the existent or potential benefit of the resource. Thus, the value an actor (MS, Commission, third country and so on) attributes to a resource (and therefore its willingness to preserve it or exploit it) depends on the level of ESU, as described in chapter 2. The most important goods and services produced by the marine

[228] Lequesne (2004), p. 134.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

environment are listed in the table below: Albeit its informative character, the various goods and services at stake in negotiations involving marine resources' management justify how complex actors' preferences can be. For this reason preference formation is not investigated in this thesis.

Table 10: Goods and services provided by living marine resources[229]

Good/service	Definition	Valuation method
Production services		
Food production	Organisms extracted from the marine environment for human consumption	Market
Raw materials	Organisms extracted from the marine environment all other purposes	Market
Regulation services		
Gas and climate regulation	Balance and maintenance of the chemical composition of the atmosphere and oceans by marine organisms	Avoidance
Disturbance prevention and alleviation	The dampening of environmental disturbances by biogenic structures	Avoidance
Bioremediation of waste	Removal of pollutants through storage, dilution, transformation and burial	Replacement*
Cultural services		
Cultural heritage and identity	Cultural value associated with the marine environment (painting, cultural traditions)	Market, CVM*
Education/schooling (Human capital)[230]	Cognitive development. Ex: education and research, learning from marine organisms	Market
Leisure and recreation	The refreshment and stimulation of the human body and through the perusal and engagement with marine organisms in their natural environment	Market
Non-use values: bequest and existence	Value derived from marine organisms without using them	CVM
Option use value		
Option use value	Currently unknown potential future uses of the marine environment	Market, TCM,CVM*
Supporting services		
Nutrient cycling	Storage, cycling and maintenance of availability of nutrients mediated by living marine organisms	Replacement
Resilience and resistance - 'glue value' or 'infrastructure value'[231]	The extent to which ecosystems can absorb pressures or recover from damage	N.A.
Biologically mediated habitat	Habitat which is provided by living marine organisms (ex, coral reefs)	N.A.

*Not used in Beaumont's study.

[229] Adapted from Beaumont et al. (2008).
[230] Originally called 'cognitive values' by Beaumont. The former denomination was changed for disambiguation.
[231] Turner *et al.* (2003).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

With regard to the cases tackled by this thesis, the table below summarizes the services provided by each one of the three issues tackled by the empirical cases. Economic sectors with pronounced interest are listed on the right.

Table 11: Goods and services concerned by the empirical cases

	Environmental good or service	**Commodities**	**Sources of demand**
Combating irregular fishing	Reduction of predatory behavior (monitor and sanctioning) Substract to more precise data. Enable more accurate models by rendering data more reliable.	Rights over territorial seas and EEZs	Fishing industries; fish-processing industries; fishery-dependent communities; fishermen organizations; national governments; foreign governments.
Conservation of straddling fish stocks	Food provision; ecological equilibrium; species diversity.	Fishing rights; fish products[232]; shares in related industries	Fishing industries; national governments; foreign governments.
Biodiversity conservation	- **Buffering / cushioning / 'glue value'** Environmental stability, resilience (public good /service) - **Potential future (commercial) value** (private good) a) Potential source of chemical compounds or active principles of economic interest. b) Potential increase of non-use value.	Bio-prospecting rights; BD credits; BD concessions; protected areas; shares in biotech companies; debt-for-nature swaps; land acquisition.	Pharmaceutical, cosmetic and biotech companies; agribusiness; environmental groups; foreign governments; other international actors and organizations.

This chapter explained some critical aspects that influence the definition of a Common Fishery Policy at EU level, as well as points that prove controversial in global negotiations. By describing such particularities in a separate chapter, one may now look into the empirical cases bearing in mind the particularities of this policy issue. The next chapters address the three case studies that constitute the basis of the comparative analysis carried out in this thesis.

[232] Only salmon and shrimp have values (prices) in the agricultural commodities index. www.indexmundi.org or www.wwf.org/agriculture/commodities. access on 04/11/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

PART II

CASE STUDIES

The debate over the future of the CFP revealed more clearly not only its shortcomings and internal systemic weaknesses such as poor enforcement, the lack of a multi-annual perspective, fleet over-capacity and insufficient stakeholder involvement, but also the external challenges that the Community will need to address over the coming years resulting from new trends in world fisheries[1].

[1] European Commission (2004).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 5

THE AGREEMENT TO PROMOTE COMPLIANCE BY FISHING VESSELS ON THE HIGH SEAS (1995)

The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (in this thesis referred to as "vessels' agreement") was adopted by FAO Resolution 15/93 at the 27th Session of the FAO Conference in November 1993. Although the agreement formally became part of the Code of Conduct for Responsible Fisheries in 1995 (Art.1), it is a legally binding treaty, and will be analyzed independently in this study.

The first empirical case studied in this thesis, as will be shown by the indicators, is characterized by a low level of ESU and a clear allocation of competence – in fact, EC exclusive competence – as foreseen in the Treaty. For this reason, the P-A relationship as expressed at L1 is taken as given. The analysis of L2 sheds light on the other three hypotheses regarding the relationship between clear allocation of competence and stronger actorness, and also with regard to the outcome of global negotiations.

Flags of convenience, unreported fisheries, piracy, and other irregular practices, pose serious threats to marine life resources, distort labor markets and affect fishery-dependent communities. As put by European Commissioner Franz Fischler, "illegal fishing is a scourge which compromises our efforts to achieve sustainable fisheries and, if not curbed, even threatens to destroy entire fisheries."[2] To the omission, the control of fishing activities and landings carried out by member states are often insufficiently rigorous. At the international level, DG Fisheries support the reinforcement of the international monitoring, control and surveillance (MCS) network; the Commission has proposed new measures to improve controls, by the port state, of fish landings by vessels registered in non-EU countries; third country

[2] Franz Fischler, Commissioner for Agriculture, Rural Development and Fisheries. Speech delivered in Brussels on 07/03/2001 http://www.eu-un.europa.eu/articles/en/article_121_en.htm Accessed on 31/03/2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

vessels be authorized to land products only if the flag state certifies that the products on board have been legally caught. The Commission also proposes allowing port authorities to provide services to third country vessels, and establishing stricter rules for the transhipment of fish. In addition, the Commission together with certain member states and Norway advises that alert systems should be established to draw the attention of the authorities and operators to vessels or states which might have infringed CFP's management rules.[3] Albeit favorable to more sophisticated control mechanisms such actors (Commission, Norway, Sweden and Denmark) admit that it is not feasible to implement such stringent surveillance throughout Europe.

Predatory behavior has been fought using more stringent regulations and monitoring the activity of fishing vessels. Oversight and enforcement procedures face obstacles even in areas under national jurisdiction. In international waters these difficulties would be insurmountable without international institutions. Their effectiveness not only by ensures that MSYs are respected, but also helps stabilizing market prices and contributes to the generation of more accurate data to orient policy-making in the sector.

The vessels' agreement provides subsides to ensure that fishing practices carried out in international waters do not pose threats to EEZs and coastal zones, which are under states' jurisdiction. It emphasizes the exchange of information and monitoring as the main instruments to fight illegal, irregular and unreported fisheries (IIUFs). Combating IIUFs depends, first of all, on an explicit definition of what constitutes an irregular behavior, so that future sanctions can apply. Second, it requires the coordination among fishing nations in order to define parameters orienting the collection of data on fishing vessels, to render their activities more traceable and accountable in the sector, and to establish and apply appropriate sanctions.

This chapter is organized as follows: first, the main aspects related to the activities of fishing vessels on the high seas are presented, and the level of uncertainty (ESU) is determined according to the indicators previously described. In the light of the hypotheses defined in chapter two, the following sections focus on the international level (L2) by addressing the relationship between competence and actorness, as well as the outcome of the global negotiations, as expressed in the provisions spelled out in the Vessels Agreement.

[3] Source: private interviews with Commission officers and Norway representative, June 2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

1. The problem of illegal, unreported and unregulated fisheries

Alongside the discharge of toxic substances, over-fishing poses serious threats to both marine ecosystems and economic sectors dependent on exploited species. In order to avoid fish stocks depletion two broad strategies stand out: the first is to determine optimal levels of resource exploitation. This task can be extremely complex, especially when species are not confined to clear geographical boundaries, and the availability of reliable information on such species is to play a decisive role. This aspect will be addressed further on, when other fishery agreements are to be analyzed.

The second strategy involves inhibiting irregular fishing activities. This practice consists of various kinds of free riding behavior that raise exploitation beyond the renewal capacity of the stocks and brings about ecological imbalances. The impact of such practices goes beyond stock's depletion for several reasons: first, irregular fishing must be, by definition, concealed; it is then imperative that the harvest is carried out in the shortest time possible, and the protection of non-commercial stocks (and the system as a whole) is not a concern. As a consequence, the levels of by-catch and losses due to inadequate procedures are notably higher in this kind of activity. Thus, such landings do not figure in the official records, which distorts fisheries statistics and in turn, economic and ecological models based on these data.

Deleterious fishing activities fall within three broad categories: illegal, unreported and unregulated fishing - generally referred to as IUU. *Illegal fishing* takes place when vessels operate in contravention of the laws governing the fisheries concerned regardless the level such regulations take place. In other words, it is a problem that concerns national jurisdiction as well as regional fishing organizations and international law.[4] *Unreported fishing* is about activities that have not been reported, or have been misreported, to the competent authorities. Usually unreported fishing is also illegal, as for example, in the case of catches carried out in the EEZ of a state different from the vessel's. However, this is not always be the case, as captures performed in the territorial sea or EEZ of the state to which the vessel belongs may be

[4] CFP Reform 2002 – Analysis of EU fisheries Policy reform Proposals and Communications. IEEP London, No. 5, 29 May 2002. Available at http://www.ieep.org.uk/publications/pdfs//CFPBriefings/CFP5.pdf Access on the 20th December, 2005.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

underreported by small organizations and larger industries in their home country, namely when they exceed the quota.

Unregulated fishing generally refers to activities conducted by vessels without nationality, or vessels flying the flag of a State not party to the organization governing one particular region. It also refers to vessels fishing in protected areas or using methods inconsistent with conservation and management measures determined by national law, competent regional organization, or international law.

The three dimensions mentioned above are addressed by the 'Compliance Agreement', which is an important part of the *International Code of Conduct for Responsible Fishing* called for in the *Declaration of Cancun* applies to fishing vessels and vessels engaged in the transhipment of fish. It aims at any vessel used or intended for use for the purposes of the commercial exploitation of living marine resources.[5]

Of particular concern is the problem of 'flags of convenience' – that is, the permission for a vessel to operate under a national flag without that state controlling fishing activities.[6] Albeit being a current practice, the attribution of convenience flags is actually a subterfuge that hinders the identification of IUU practices. In that sense, it is a means of avoiding compliance with measures of sustainable fisheries. The attribution of convenience flags hinders the attribution of responsibility in the event of unlawful fishing, in the case of accidents at sea or if competition rules on maritime navigation are violated. FOCs, as well as other IUU practices have "disastrous effects on fishing stocks, secondary catches, working conditions, and the salaries and safety of crews."[7] IUU fisheries are particularly threatening to highly migratory fish stocks or species harvested in the high seas. This is the case of tuna-like species, one of the most targeted groups of marine resources; in the 2001/2002 season, illegal catches were estimated in more than 25.000 tones – 18% of the total catches.

In brief, a "flag of convenience ship" is a ship that flies the flag of a country other than the country of ownership. The modern Flag of Convenience ("FOC") system developed after the Second World War primarily as an employer strategy to avoid unions and high wage costs. It

[5] Agreement to promote Compliance with International Conservation and Management of Fishing Vessels on the High Seas Art. 1.Source: FAO. http://www.fao.org/DOCREP/MEETING/003/X3130m/X3130E00.HTM#Top%20Of%20Page Access on the 20/12/2005.
[6] Idem, 2002.
[7] European Parliament / Agence Europe Bulletin nº 8116, 19/12/2001. Accessed on 20/03/2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

should be remembered that under conventions of International Law, the flag flown by a ship – that is, its ensign – determines the source of law to be applied in admiralty cases. Owners of these FOC vessels are in most cases nationals of Greece, Japan, the U.K., the U.S., Hong Kong and Norway, although the ships fly flags of the Bahamas, Liberia, Panama, Bolivia, Mongolia (two land-locked states), Malta, Cyprus, Cayman Islands, Tonga, Luxembourg and others.[8] the attribution of FOCs is a major threat to Community fisheries; non-governmental sources point out that the EU ranks second among the ten top locations where companies that own FOC fleets are established. With 168 Community vessels flying FOC, it comes just after Taiwan (169) and just before Belize (145), Panama (145) and Honduras (121).[9]

Vessel owners engage in free-riding behavior when they seek to escape stringent control by registering the ship under countries with weaker regulations in order to reduce costs pay lower taxes, benefit from flexible or non-enforced labor laws and safety standards, to name a few factors. Countries that provide FOCs offer advantages such as fewer requirements for registration, or no nationality based employment restrictions. As put by Churchill and Lowe, "these states are often said to be lax in the qualifications required of the crews of their ships, and to be unwilling or unable to exercise effective jurisdiction over their ships in matters of pollution control and shipping safety,"[10] as indicated by past records. FOCs undermine the benefits of international fisheries agreements because boat owners do not comply with their home countries' conservation policies. In fact, it is amongst FOCs that the highest number of accidents and irregular procedures are observed.

The number of boats involved in this practice has increased steadily. This causes maritime shipping to operate in a deregulated environment, therefore encouraging opportunistic and predatory behavior. Institutional alternatives have been set up to inhibit this practice in its varied dimensions, such as the International Transport Workers' Federation (ITF) and the International Maritime Employers' Committee (IMEC). This bargaining system seeks to reduce differences between the two sectors and correct failures in the labor market divided between high-wage and low-wage employees on the global scale.[11]

[8] Source: International Transport Workers' Federation (ITF). http://www.itfglobal.org/ Accessed on the 02/01/2006.
[9] Source: Greenpeace / Agence Europe Bulletin 7910, 24/02/2001.
[10] Churchill & Lowe (1999). p.259.
[11] Lille, N. "Global Collective Bargaining on Flag of Convenience Shipping". *In: British Journal of Industrial Relations*. No 42, vol. 1 March 2004. pp 47-67.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The vessels' agreement does not contest the sustainable levels determined by other agreements, but provides supporting measures to ensure that vessels do not exceed these limits. By setting up common standards to measure fleet capacity, and by publicizing information regarding fishing fleet it is possible to monitor activities, report forbidden practices and impose sanctions. Vessels operating on the high seas are constantly carrying out their activities in other states' EEZs, being Spain and Portugal the EU member states that recur to this practice the most. In order to operate legally, a formal authorization from the state or organism responsible for the region is required. In that sense, information requirements are by themselves a negative incentive to illegal practices, since ship owners may be prevented to follow these practices due to the higher potential costs implicated. In that sense, raising flagging requirements and increasing the amount of information needed to obtain the authorization minimizes the risks of allowing a vessel to "legally" practice predatory fishing; the accompanying sanctions raise the cost of inappropriate, short term interested, behavior. The next section examines the level of ESU related to the vessels' agreement by looking at the information contracting parties are required to provide, as well as the means and techniques through which it is obtained.

2. Environmental Scientific Uncertainty (ESU)

The problem of IUU demands higher information standards related to fishing vessels and their activities. This requires an enhanced information exchange not only about the vessels themselves but also regarding their catches, discharges and landings. In that sense, FAO's agreement is part of a more comprehensive plan oriented along three axes: a) Flag State control; b) Port State Control; c) Market control. States are responsible for monitoring compliance by persons, companies and vessels under their jurisdiction with national, regional and international fisheries regulations. They also have to take the appropriate measures to combat IUU fishing activities as illegal goods necessarily transit through ports. Last, they must combat free riding behavior by ensuring that no economic benefit is made from selling illegal goods. Put shortly, FAO agreement sets guidelines for the establishment of information systems that will enable a more stringent and efficient control of fishing activities. Under the agreement, players can establish measures that may include monitoring of arrivals and departures,

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

inspection of fishing gear, catches, crews and vessel status. Market control measures are also foreseen, states must monitor goods imported or traded on their territory.

In fact, the agreement main concern is to diffuse information about fishing vessels, so they can be monitored more easily and accurately. Information already exists, but needs to be reported and compiled. Vessels owners are responsible for providing information, and no particular technology is required in order to obtain the required data. The veracity of the data provided can be, in most cases, easily verified through inspection, carried out at the port where the stocks are received. Setting standards and defining channels through which information can be exchanged facilitates monitoring and verification if an authorized vessel is involved in IUU. In the case the boat is not registered, sanctions can be more severe and also applied in less time. But what kind of data is required? Basically it comprises former and present names of the vessel, registration number, radio call sign, origin – that is, where it was built, length, fishing methods, tonnage, as well as authorization records (if the vessel had had permission denied by any state, for example).

The goal of the agreement is to combat practices that may hamper the international conservation and sound management of fisheries common resources. As observed in Article 1, the terms addressed in the agreement are clearly defined. For the purposes of this Agreement:[12]

> (a) "Fishing vessels" are those used or intended for use for the purposes of the commercial exploitation of living marine resources, including mother ships and any other vessels directly engaged in such fishing operations;[13]
>
> (b) "International conservation and management measures" are those that aimed at conserving – that is promoting – a rational and sustainable use of one or more species of common living marine resources that are adopted and applied in accordance with the relevant rules of international law as reflected in the UNCLOS 1982.
>
> (c) "Vessel's length" refers to: (i) "For any fishing vessel built after 18 July 1982, 96 percent of the total length on a waterline at 85 percent of the least molded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder

[12] http://www.fao.org/DOCREP/MEETING/003/X3130m/X3130E00.HTM#b1 Access on 10/06/2006.
[13] Vessels of less than 24mts might be exempted from the obligations foreseen in the agreement.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

stock on that waterline, if that be greater. And (ii) for vessels built before 18 July 1982, registered length as entered on the national register or other record of vessels".

(d) "Record of fishing vessels" is the collection of data with relevant details of the fishing vessel.

It can be noticed that the problem addressed by the agreement can be clearly spelled out, and that the information that needs to be publicized and exchanged is also precisely defined. The indicators that compose the on-line database, and which will be monitored over time are the following, as spelled out in Art. VI. Data requirements are further specified in the FAO's *HSVAR information requirements*[14].

1. "Core" (main) indicators

(a) Name of fishing vessel, registration number, previous names (if known), and port of registry;
(b) Previous flag (if any);
(c) International Radio Call Sign (if any);
(d) Name and address of owner or owners;
(e) Where and when built;
(f) Type of vessel;
(g) Length.

2. Additional indicators:

(a) Name and address of operator (manager) or operators (managers);
(b) Type of fishing method or methods;
(c) Molded depth;
(d) Beam;
(e) Gross register tonnage;
(f) Power of main engine or engines.

[14] ftp://ftp.fao.org/FI/DOCUMENT/complian/Information_requirements.pdf Access on 15/01/2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The records sent by states[15] are sent to The Fishery Information and Data and Statistics Unit (FIDI) of the FAO Fisheries Department, and fed into the HSVAR database according to the Fisheries Global Information system (FIGIS). Each vessel is assigned an identification number; inconsistencies are communicated to the country of origin. Whenever possible, records are also checked against the Lloyds Maritime database. Put shortly, the indicators necessary to combat IUU practices are firmly established; techniques to measure such indicators (properties of the vessel and its crew) are relatively simple and available, and historical series are available. Information reported by signatory states is compiled in the FAO's FISHSTAT database.

Illegal and irregular fishing are an acknowledged problems not only in European straits but worldwide. Such activities threaten the sustainability of fish stocks for two reasons: first, they exceed sustainable limits posed on each state; second, these unreported catches compromise the collection of accurate data on fisheries, and the subsequent establishment of MSY levels in the future. Put shortly, IUU practices have clear impact on marine fisheries worldwide.

The fight against IUU fisheries depends on devising tools that allow states to track the activities of their vessels throughout the year. Vessels can have their activities constantly monitored, as it is the case of Danish vessels for example, but this procedure proves too costly to other Mediterranean member states. Another way of obtaining information about vessels' activities is to define detailed and specific indicators that must be informed by each boat. Specialized agencies or fisheries ministries bring indicators together, and each state assembles data on catches and landings, which shall be made available upon request. By allowing for a comparison of the capacity of each boat (which depends on its size, processing equipment, engine, and so on) and its production, these reports provide an indication of the regions most affected by IUU, and the vessels that engage in such practices.

The criteria used to determine the level of scientific uncertainty (ESU) described in the methodology is summarized in the table below:

[15] Usually in excel format.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 12: Environmental Scientific Uncertainty → Case 1

CASE 1 –Vessels Fishing on the High Seas (FAO) **Level of environmental scientific uncertainty involved**	
Problem definition and recognition	
Problem can be clearly spelled out	Yes
Acknowledgement (public awareness)	Yes
Concern (is the agenda politicized?)	Yes (concentrated)
Potential effects are known	Yes
Potential effects are speculative	No
Time frame can be estimated	Yes (immediate)
Data	
Main indicators are firmly established	Yes
Assessment: current technologies and techniques are available	Yes
Main indicators can be measured	Yes
Historical series are available	Yes (with restrictions)
Non-market indicators	No
Information (Data can be interpreted)	
Indicators can be brought together in a coherent form	Yes
Causal mechanisms can be identified	Yes (IUU)
The impact of these mechanisms can be measured	Yes
Indicators cam be translated into economic value (market value)	Yes (penalties are attributed)
Scope	
Number of issues/disciplines involved	Few (tech. specifications)
Relation (boundaries) between different issues/disciplines	Clear
Diversity of stakeholders	Little
LOW LEVEL OF UNCERTAINTY	

Since the problem can be clearly defined, and that the data require no special equipment or technique to be obtained, the level of ESU can be considered low, according to the criteria defined in chapter two, and summarized in the table above.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

3. Level 1: Distribution of competences

EC and member states with respect to membership to the FAO

EC accession to the Food and Agriculture Organization (FAO) represents a major breakthrough in the history of the EC. From the institutional point of view it was the first time that the Community became a member of an UN organization on its own right; it is also an important political step taken by the EC, which initiated the talks on accession and participated intensively in the organization constitution amendment.

The EC has clearly external powers to act in several fields addressed by FAO and its committees. Some powers may be shared with member states, as it is the case of research and technological development and environment for example, but large part of the agenda – such as commercial policy and fisheries – falls within the Community's exclusive competence. The analysis of EC performance sheds light on the coordination processes seeking to build European positions in multilateral *fora*. In addition, it shall provide important guidelines for the further analyses, where the relationship between community institutions and member states is not so clearly determined.

The process summarized above gives an idea of the diplomatic efforts made by the EC on its way to obtain full membership. However, Community and member states also had to define their positions, make coherent statements and supply information required by FAO – which usually referred to specification of competencies. A coordination system was adopted as a means of regulating EC activities at the FAO – a permanent organization with an already broad scope of activities.

It was not before 1991 that the EC became a member of the organization on its own right. The main impediments were the FAO's membership rules, which allowed only states to accede. That is, the role of the remained limited, despite its legal personality and external powers related to the FAO, as spelled out in the Treaty of Rome. Today, the Community participates together with the 25 EU Member States in meetings of FAO's main governing bodies (the Council and the Conference) and Technical Committees (Agriculture, Fisheries, Forestry, Commodity Problems and World Food Security). The division of competences between the EC

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

and the MS was originally established at the time of the accession and revised after Maastricht. For this reason, this chapter departs from the Declaration of Competence by the *European Community in Respect to Matters Covered by the Constitution of the FAO*. A brief historical of EC-FAO relationship is provided in advance.

3.1 FAO membership: historical overview

The history of EC participation in FAO begins before the Community's accession, in 1991. In fact, cooperation could be dated even further back, to 1962, when some important initiatives were discussed by the two entities. They aimed at promoting regular exchange of information and laying down consultation procedures with respect to food and agriculture, fishery and forestry included – that is, agendas tackled by the Treaty of Rome.

Since there is no explicit power in the EC Treaty for Community accession to international organizations, the Commission's proposal to the Council was grounded on a mixture of explicit and implied powers originated in the Treaty of Rome, namely in the following articles:

Article 43, which concerns Common Agricultural policy and implied external powers in agricultural matters;

Article 113, which concerns the Common Commercial Policy,allowing the Commission to submit proposals and make recommendations in order to obtain authorization from the Council regarding not only policy implementation but also in negotiations with third countries;

Article 235, which confers the Council the authority to, acting on a Commission proposal, to "take the apropriate measures" whenever Community action should prove necessary to achieve common market objectives. This article concerns specifically powers that were not provided by the EC Treaty.

Furthermore, non-permanent observer status was granted to the EC. This participation was in principle limited and dependent on invitations issued by FAO to the European Commission. On the other hand, the possibility of further agreements establishing formal and permanent relations between the two had always been left open. But by the early 1970's the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Commission signaled its dissatisfaction with the limited role it could play as an observer. The main reason was that, despite the privileged right to speak, in the sense that it could make statements before all members of the concerned body or committee, the EC lacked credibility because any MS could, depending on the statement, contradict the posture assumed by the EC, threfore weakening its the position as a "bloc".

As an observer, the Community did not have any voting rights. This was not the most serious obstacle for EC agency, given that decisions at FAO are usually taken by consensus and not many issues are submitted to voting procedures. The central point was the fact that the EC was excluded from drafting committees and did not have any voice with respect to approving reports produced at conferences and FAO bodies. Hence, it could not become party to agreements that set up bodies under the organization's, which have independent legal status. In other words, it was not only that the EC had very limited agenda setting an agenda approving role at FAO; it was also prevented from participating in smaller bodies. This is crucial, since many cooperative programs, joint decisions and implementation measures take place not within FAO itself, but within more specific fora. In the case of fisheries where robust body of concrete decisions (eg, implementation agreements, finantial contributions, clearer and shorter time frames, etc) take place in these regional arenas, not being allowed to participate becomes a serious drawback for the EC to play a significant role.

EC *de jure* membership

Talks regarding the EC's accession formaly began in April 1989 under the Spanish Presidency. when the Council called for a reform in FAO constitution that could allow enhanced participation of regional international organizations (REIOs), therefore granting the EC a new status.

Crucial steps regarding the acquisition of membership status at the FAO were taken in 1991. That year marked the conclusion of a framework cooperation agreement that enabled to elaborate projects on technical cooperation, in addition to power to start up implementation. Another step towards higher institutionalization was the establishment of yearly meetings in

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

order to follow up policies and programs on agricultural and rural development, and to review cooperation in other areas. The negotiation process is usually divided into three phases:

First, actors seek to design the rights and obligations concerning REIOs and, more specifically, the EC. Such negotiations – and also related preparatory work – demanded considerable effort from both parties and included FAO consultations to other UN organizations. Though no agreement on the definition of REIO could be reached, draft amendments to FAO constitution were elaborated, so the EC Council *could get a more detailed view of the considerations involved to enable it to take the right decision on this important matter*.[16]

The second phase started in February 1991 and involved the amendments to the FAO Constitution and General Rules. The negotiations were carried out by the FAO Secretariat, the Committee on Constitutional and Legal Matters (CCLM), and the EC Commission, and were observed by a representative of the Presidency of the EC Council.[17] As many member nations did not support the accession of a non-nation member, the amendments adopted left room for further negotiations, in addition to the creation of the ad hoc Regional Economic Integration Organizations Committee (REIOC), which allowed the participation of nations that were not part of the CCLM, such as Latin American states and also France, Japan, USA, Netherlands, and others. The third phase concerned negotiations between representatives of FAO member nations and the EC Commission. Finally, in November 1991 the Conference of the FAO adopted without any negative votes the amendments concerning REIOs' accession. In the same occasion, a secret voting procedure approved EEC's admission by 98 votes in favor, 6 against and 3 abstentions.

3.2. Division of competence between the EC and MSs in the FAO

During FAO meetings, in application of the relevant rules established in that organization's Basic Texts, the European Commission speaks and votes on behalf of the European Community and the member states on issues of Community competence, as it is the case of: a) matters related to commercial policy, in accordance with article 113 EC and b) fisheries, in accordance with Article 102 of the 1972 Treaty of Accession.

[16] Frid (1995). p. 241.
[17] The Presidence was occupied by Luxembourg (1st semester 1991).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Member states maintain the right to vote whenever matters lie within national competence. It should be underlined that, under the FAO framework, national competence is an exception, and not the rule, since in this case is very restricted due to full delegation. This is the case, for example, of the election of chairpersons and designation of drafting committee on fisheries.

Should there be situations of mixed competence the predominant character of the issue is taken into account, in order to determine voting and speaking rights.[18] Common positions are adopted by consensus between EU member states and the European Commission. When the matter is not predominantly of Community competence, or in cases where it has not proved possible to arrive at a common position, MSs speak and vote, but the EC also has the right to take part in the discussion; EC and MSs may also vote separately on specific items of the agenda, therefore expressing the internal division of competences within EC framework in a clear way. Nevertheless, this procedure is exceptional and depends on an authorization issued by the FAO's Secretariat.[19] According to the area, competences are distributed as follows:

a) Agricultural policy;

b) EC's Common Agricultural Policy (CAP) comprises agriculture and trade of agricultural products and lies under the Community 1st pillar. Other issues such as productivity, prices and structural policy are negotiated by the Commission. However, some of the products regulated at FAO meetings are absent from EC's list such as wool and furs, for example. There is also a small number of products over which states retain competence (e.g. alcohol, potatoes). Finally, some provisions concerning forestry are not exerted externally by the EC;

c) The approximation of provisions laid down by law, regulation or administrative action – by MSs;

d) Policy on research and technological development relating to food industries;

e) Community's competence comprises also cooperation with third countries and organizations. Notwithstanding, the Commission can only act after submitting a

[18] Source: Description of EC's delegation Work in Rome (25/08/2004), at http://europa-eu-un.org/articles/el/article_3754_el.htm, access on 10/12/2005.
[19] Application of the Council and Commission Arrangement of 19 December 1991 Concerning the Preparation of FAO Meetings.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

proposal in order to obtain a Council mandate, which is analyzed in a case-by-case basis. Such situation falls under the same procedure of mixed agreements;

f) Environmental policy;

g) Other policies – to be analyzed on a case-by-case basis.

The agreement to promote compliance by fishing vessels has been framed under the Community Fisheries Polices (CFP); the thrust of the vessels' agreement is considered to be of EC competence. In 1993, however, MSs tried to keep the right to vote due to a number of provisions that deal with the emission of fishing licenses. The licenses are granted by states, but are also an instrument to regulate the number of fishing vessels and in turn the exploitation of the fishery. The episode, which is describe in the next paragraphs, illustrates MSs' fear of unintended consequences of delegating powers to the Commission, and also the consolidation of the Commission as an actor on its own right, contrary to intergovernmentalist explanations of EU integration.

As mentioned earlier in this chapter, on 19 December 1991 the Council and the Commission concluded an arrangement 'regarding preparation for FAO meetings, statements and voting' ('the Arrangement'). Member Organizations cannot become members of any body set under those agreements unless and until those agreements have been amended to allow for such participation. The arrangement stipulates the Commission shall speak and vote for the Community in matters of exclusive Community competence; where an agenda item deals with matters of national competence, member states shall speak and vote. Following the typology proposed by Rosas, this characterizes a situation of non-exclusive, alternative competences. In the FAO framework, and because of the topics addressed by this organization (agriculture-related), most commonly the Commission has exclusive competence.

When items on the agenda are marked by mixed, complimentary participation of MSs and Commission[20], the aim will be to achieve a common position by consensus. The presidency of the Council speaks on behalf of the EC when the essence of the issue lies in an area outside the exclusive competence of the Community, but MSs and the Commission may also speak. Member States will vote in accordance with the common position. By contrast, the Commission

[20] See typology of mixed agreements in the first chapter.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

shall express the common position when the thrust of the issue lies in an area within the exclusive competence. MSs may also speak, and the Commission will vote in according to their common position.

The agreement on vessels fishing on the high seas contains several provisions regarding the registration of vessels, which is a matter of MS competence. For this reason the Commission proposed to the Council that the shared-competence formula be used for the adoption of that agreement. Conversely, the Commission retained the right to vote, given that the FAO agreement dealt essentially with conservation and management of fishery resources, which is an EC matter.

On 16 March 1993, following the Council-Commission arrangement, the General Secretariat of the Council of the EU informed the FAO that MSs should have the right to vote. However, during the 103rd FAO Council meeting in June 1993, the clauses relating to registration and flagging were removed from the draft agreement. The modified draft introduced a "system of authorization for fishing on the high seas by the flag state, with a view to ensuring that international conservation and management rules are respected." The Commission regarded the attribution of fishing licenses as an instrument of fishing resources' management, as give fishing vessels access to waters and resources Put shortly, the clauses that fell under MS competences were removed from the draft, which changed the mixed character of the agreement.

Understanding that the subject of the agreement was now a matter of EC competence, the Commission proposed again the shared-competence formula, nonetheless with the Community having the right to vote. No agreement was reached and, at the 27th FAO Conference meeting, the Coreper transmitted to the FAO the indication of shared competence with member state vote.

At the EU fisheries Council of 21 of October the Commission put forward a proposal for a Council regulation that would grant MSs access to Community waters, whilst preserving the principle of relative stability. This proposal raised concern among MS, as it did not tackle the constraints which would be applied to Spain and Portugal, at the time applicant countries. The proposal specified the minimum information needed to grant licenses to Community fishing

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

vessel, which would be guarantee a common standard of enforcement. Opposition was particularly strong in the UK, who feared a cutback in the concession of fishing licenses, and to whom open access represented a menace to its fisheries resources. During the Council, some MSs' representatives declared that the proposal was inacceptable. Mr. Michael Jack, UK representative, declared that MS "were being asked to sign a blank cheque".[21] As no matter on the agenda was voted, the indication of shared competence with member state vote continued to prevail at the FAO with respect to the Vessels' Agreement.

At the meeting of the EU Fisheries' Council of 22 November 1993, the Commission asked the Council to approve a declaration asking the Coreper to reconsider to reconsider the question of voting. The Commission claimed that, given that the Coreper is an auxiliary body of the Council, it does not have the power to take decisions regarding external representation and voting in the FAO meetings. The Commission took the case to the ECJ, who annulled the decision of the 'Fisheries' Council, which gave MSs the right to vote in the FAO for the adoption of the Vessels' Agreement.[22] The ECJ recognized that the functions of licenses to fish on the high seas are not comparable to authorizations to fly a particular flag, which falls under MS competence.

4. Level 2 (L2)

Even when joint gains are perceived, players will only be able to cooperate if they manage to overcome time-inconsistency problems. The constellation of MSs' preferences described in chapter three indicates the pressure made on national governments not to shift competences to the Community, or to later violate the terms of the agreements. Such resistance, which stems from short term interests of domestic actors, may be intense enough to render international commitments prohibitively costly for a certain period.

For all three empirical cases, the expected value of the benefits of cooperation is positive in the long term. That is, the preference of a sufficient number of the players is to move from the status quo. The problem is how to design a 'shock-absorbing' agreement capable of conserving

[21] Interview to the Hansard Digitisation Project, Directorate of Information Services of the House of Commons and the Library of the House of Lords. Available at http://hansard.millbanksystems.com/written_answers/1993/oct/21/fisheries-council Accessed on 20/07/2009.
[22] http://eur-lex.europa.eu/Notice.do?mode=dbl&lang=en&ihmlang=en&lng1=en,pt&lng2=da,de,el,en,es,fi,fr,it,nl,pt,sv,&val=212234:cs&page=

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

initial commitments, keeping the negotiation process in motion and avoiding that hypothetical violations do not triggers a retaliatory spiral.

4.1 Strategies

Players will still become parties to a multilateral agreement in the following situations:

a) They consider the literal renegotiation hypothesis. Nevertheless, to embark on a new bargaining process to start a completely new agreement will consume more time and resources as the number of parts increases.
b) When formal flexibility provisions are built into the agreement early in the negotiation phase – during pre-negotiations, which are not addressed in this thesis. An international agreement is considered flexible when it contains provisions that allow contracting parts to suspend previously negotiated concessions without infringing or abrogating its terms[23].
c) When the agreement contain provisions that allow the parts to address specific topics in the future.

At L2, negotiating parts will try to avoid locking-in unfavorable outcomes. Alternative (a) is compatible with a risk-averse behavior, but proves counterproductive if the number of players is high, or if several rounds are required. This happens because renegotiation costs will outweigh the benefits for a longer time horizon. So states entering into a multilateral agreement under conditions of uncertainty should be likely to build flexibility provisions into the agreement.[24] The flexibility provisions observed in trade regimes are escape clauses. Flexibility stems from the possibility of giving exceptional treatment when a set of particular features come into play. Works that draw on flexibility theories claim that these exceptions allow players to deal with ESU – although these provisions can be found in multilateral environmental agreements they do not address ESU. For this reason, it is important to clarify what kind of uncertainty the thesis regards as an independent variable.

[23] Kucik & Reinhardt (2008).
[24] Id, Koremenos (2005).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

4.2 EU actorness

In this case, all four dimensions of EU actorness as defined by Jupille and Caporaso are met: the community has full *authority* (legal competence) to act provided by the Treaty. Formal authority confers 'objective legal personality' to the EC, which implies a high level of *recognition* by the other parties.

Regarding the issues tackled by the Vessels' Agreement, higher *authority* leads to *cohesion*, because the EU has already triggered the coordination process within its institutional framework. As a consequence, it is capable of coming up with firmly established position, and of setting standards (or trends) at the international level. The hypothesis authority-actorness (HL2b) is confirmed, provided that ESU is low.

5. Final outcome of the global negotiations

The main obligation of signatory parties is to ensure that vessels flying its flag do not engage in IUU practices. Crucial to the accomplishment of this objective is the role of the states in keeping an updated record of fishing vessels, and in providing information about such vessels if required. The main benefit concerns the reduction of information asymmetries by making information on vessels fishing on the high seas available. The standards set by the agreement and the diffused information facilitate the monitoring of the concerned vessels, as well as the reporting of irregular activities.

In order to analyze the final outcome, the provisions set out by the agreement are examined: they refer to the objectives and scope of the agreement, membership and participation rules, the problems tackled by the agreement – in this case mainly the flagging issue and the exchange of information about fisheries activities, and the mechanisms of dispute settlement.

The agreement seeks to fight various forms of illegal, irregular, and unreported fishing to ensure*, inter alia*: that fishing limits[25] are respected; that reports on catches that are compiled by international fisheries organizations actually reflect the state of fisheries in the different sea

[25] Determined by other agreements.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

regions throughout the world; that oversight and sanctioning mechanisms are standardized and adopted worldwide as a means of combating free riding behavior, such as the flags of convenience. Of particular interest is the concern with deterring flagging or reflagging of vessels fishing on the high seas in order to increase compliance with international conservation and management measures; and specifying flag states' responsibility over vessels flying their flags, and that operate on the high seas. Strengthening international cooperation and increasing transparency through the exchange of information on high seas fishing, as stated in the Preamble.

The Agreement is open to acceptance by any full member or associate Member of the FAO, as well as to non members of the FAO provided that they are members of the United Nations or of any of specialized agencies of the UN or of the International Atomic Energy Agency.

Should regional economic integration organization fulfill the specifications mentioned in the above paragraph, they may as well become party to the agreement. In this case, they are required to provide information concerning who is responsible for the implementation of any particular matter covered by the agreement.

5.1 Main provisions of the Vessels' Agreement

Flagging

The general obligation of flag states is to ensure that their vessels do not engage in any activity that undermines the effectiveness of international conservation and management measures, as spelled out in Art. III. To this end, the Agreement sets out three key obligations concerning vessels' authorization:

a) A vessel may only fish on the high seas if it has been authorized to do so in accordance with the procedures established by the flag state.[26]

b) A flag State is not allowed to authorize its vessels to fish on the high seas unless it is able to exercise effectively its responsibilities under the Agreement.[27]

[26] Art. III(2)
[27] Art. III(3).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

c) The third point contains more specific rules regarding reflagging. Thus, states are not to authorize a fishing vessel to fish on the high seas where it is known to have engaged in IUU activities while flying the flag of another state, regardless this state is party to the Agreement or not. Thee are, however, exceptions: (i) when any period of suspension by the other State of an authorization for such fishing vessel to be used for fishing on the high seas has expired; or (ii) no authorization for such fishing vessel to be used for fishing on the high seas has been withdrawn by the other state within the last three years.[28]

Exceptions are allowed for the legitimate change of a vessel's ownership, and – more generally – if the flag State determines, after having taken into account all relevant facts, "that to grant an authorization to use the vessel for fishing on the high seas would not in any case undermine the object and purpose of the Agreement."[29]

Exchange of information and transparency

Other provisions in the agreement seek to promote the free flow of information on the activities of the concerned vessels. States are required to establish and maintain a record of their fishing vessels authorized to fish on the high seas.[30] The agreement details the data to be included in such records,[31] and sets out four mechanisms information exchange:

a) States Parties are required to exchange information on fishing vessels' activities, in order to allow for identification of vessels flying their flags that have engaged in activities undermining international conservation and management measures.[32]
b) Where a party has reasonable grounds for believing that a fishing vessel voluntarily in its port has been involved in IUU, that party is required to notify the relevant flag state accordingly.[33]
c) The agreement urges states, to enter into cooperative agreements or arrangements of mutual assistance on global, regional, sub-regional or bilateral levels.[34]

[28] Art. III (5) (a) and (b).
[29] Art. III(5) (c) and (d).
[30] Art. IV.
[31] Art.VI
[32] Art. V(1).
[33] Art. V(2)
[34] Art. V(3).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

d) The FAO acquires a data warehouse function, thus playing a central role in receiving, compiling, organizing and distributing information.
e) The FAO may also require parties to submit information concerning violations by their fishing vessels, including actions and sanctions imposed on them.[35]

To sum, flag states are required to provide detailed information to the FAO which, in turn, makes this information available to other contracting parties and to fisheries management organizations. Such exchange is possible due to FAO-developed High Seas Vessel Authorization Record (HSVAR) online database.[36] It should be stressed that although only a small number of states currently have comprehensive national fishing records, the technology and methods to collect such information are existent.

Dispute settlement

The vessels' agreement does not contain a compulsory dispute settlement procedure. Disputes in the first place are to be settled by consultations, which seek to reach a solution as soon as possible.[37] Should this procedure fail, the agreement defines obligations concerning further submission of the dispute to several *fora*. Nonetheless such action depends upon the consent of all parties to the dispute;[38] if no agreement is reached on how to settle the dispute, the parties continue to consult and cooperate with a view to reaching settlement of the dispute in accordance with the rules of international law relating to the conservation of living marine resources.

In overall terms, the low level of ESU corresponds to precise rules and short distance between the agreement and its implementation. The fact that there are no clear dispute settlement mechanisms has in fact been criticized in many studies, as well as by official representatives to the signatory states and organizations. Nevertheless, the absence of specific, ex ante determined procedures may also be considered to be due to the precise rules and indicators laid down by the other provisions. In fact, the establishment of courts and dispute resolution procedures indicates that the agreement (the global contract) is incomplete and that there are unforeseen circumstances that will need to be addressed ad hoc over time. The lack of such institutions as

[35] Art. VI(8)(a).
[36] Available at www.fao.org/fishery/collection/compliance-agreement. Last accessed on 10/12/2008.
[37] Art. IX(1).
[38] Art. IX(2) and (3)

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

established by the vessels agreements shows that: i) the guidelines are precise enough so that IUU can be immediately recognized; ii) the disputes which cannot be solved through consultation can be addressed by governance structures set by other institutions under the UNCLOS umbrella.

According to the indicators presented in chapter 3**,** the analysis of the issues tackled by the "vessels agreement" indicates a low level of ESU; The problem of IUU fishing activities is clearly spelled out: irregular fisheries are en environmental and economic threat because they move the level of production beyond sustainable threshold. IUUs distort fisheries statistics and compromise the estimative of MSY for the following years. Thus, they also exert pressure on regular fishermen because unreported fish brings market prices down, which ends up encouraging them to engage in illegal activities to stay competitive. As a free-riding problem, irregular fishing can be combated by raising the costs of opportunistic behavior and creating incentives for compliance. The thrust of the agreement is to reduce IUU through more stringent monitoring of vessels' activities on the high seas, coupled with more accurate reports on landings and discards. The data the Agreement requires refers to physical characteristics of the vessels (length, tonnage, engine power, and so on), register (former owners, flags, registration number, owner and manager's contacts), and technical aspects (types of fisheries, fish conservation and processing systems). Information on landings depends also on records kept by the ports. Discards on the high seas require more sophisticated, satellite-supported monitoring systems to be installed on the vessels, given that patrolling activities are hard to be carried out in international waters. Such systems, albeit costly, already exist, and are already used by Scandinavian countries. These characteristics show that the Vessels' Agreement deals with an issue of low ESU, given that indicators are established and uncontroversial, and can be brought together in a coherent manner.

Players might accept to sacrifice an outcome closer to their preferences if transaction costs are reduced. Their preference is to address the topics present in the agenda in one single contract, to be implemented in the short term.

Under exclusive competence third parties are most likely to *recognize* the EU as an actor; in certain circumstances they may perceive heterogeneity of preferences with the EU, and focus the negotiations on one or few member states. In the case of the Vessels Agreement, higher

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

authority leads to higher actorness, because the EU has already triggered the coordination process within its institutional framework. As a consequence, it is capable of coming up with a *cohesive* position, and of setting standards (or trends) at the international level. Further investigation is necessary to assess EC's *autonomy* in this case. Exclusive competence favors *autonomy*, but does not preclude interaction between Commission and Council. This dimension could be better assessed by verifying under which conditions the EC has been able to advance proposals beyond the lowest common denominator.

The outcome of the global negotiations – the agreement itself – has a clear scope, and well-defined membership rules. The general obligation of flag states – to ensure that their vessels do not adopt a free-riding, thus predatory, behavior – are explicated, as well as the requirements the vessel must fulfill, and the information the flag state must report to the FAO. One multilateral contract is capable of defining explicit obligations, establishing sanctions and setting dispute resolution mechanisms; it is unnecessary to engage in further transaction costs.[39]

[39] The fact that players address the whole agenda by drafting one agreement does not imply homogeneity of preferences; negotiations may still be tough and exhausting, points need to be left out of the agreement, other provisions (participation clauses, for instance) need to be included, and so on. However, the payoff is still higher than renegotiation costs.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 6

AGREEMENT ON STRADDLING FISH STOCKS AND HIGHLY MIGRATORY FISH STOCKS (1995)

Straddling fish stocks are a special category of internationally shared fishery resources that straddle – that is, transit between – exclusive economic zones (EEZs) and the high seas. The lack of cooperation between coastal and distant water fishing states, more than the estimation of sustainable fishing limits, is the main cause of overexploitation of commercial stocks worldwide.[40] In the 1990s, the Commission recognized that one of the main problems facing the EU fishing industry was its overcapacity, and that Community subsides granted during the 1980s have encouraged overfishing. EU fisheries policy seeks to strike a balance between short-term interests of fish-dependent groups, and long term conservation objectives. Two comprehensive reforms of the Common Fisheries Policy (CFP) have sought to balance EU fleet capacity and the fishing opportunities in EU as well as in international waters.

This chapter is organized as follows: first, the main features of the issue are presented, comprising the difficulties of determining sustainable levels of production.[41] The level of uncertainty (ESU) is determined according to the indicators presented in chapter two. ESU is then confronted with the distribution of competences in order to assess the research hypotheses defined for the EU level (L1). The remainder of the chapter addresses the international level (L2) in the light of the mandate granted at L1, in order to analyze the relationship between the distribution of competences under mixed participation and the role the EC/EU played in the negotiation of this agreement. The outcome of the global negotiation process – the Straddling Stock Agreement itself – is analyzed at the end of the chapter.

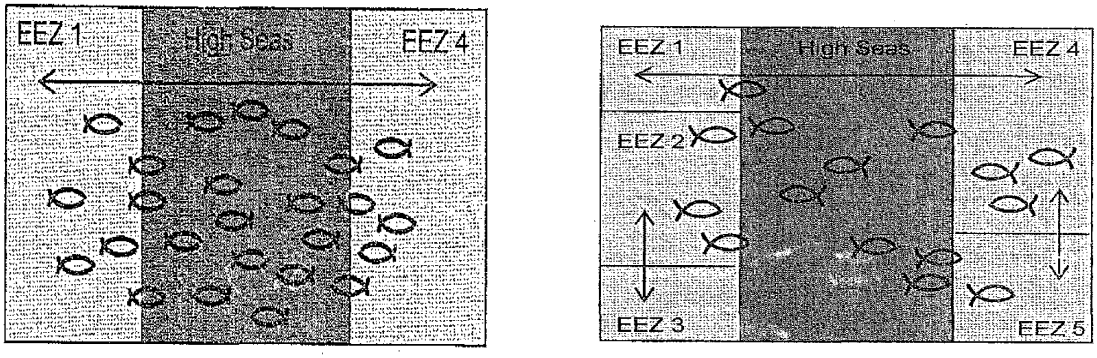
1. Straddling and highly migratory fish stocks: main features

[40] Pintassilgo & Lindroos (2008).
[41] 'Production' refers to harvesting, or fishing at sea. In this thesis the term does not refer to fish farming, neither fish processing industry.

The term *highly migratory fish stocks* is usually used to denote tuna and tuna-like species, marlins, swordfish and other species that carry out extensive migrations, which can occur in both EEZs and high seas.[42]

Such species have high commercial interest, as they constitute the basis of certain countries' diet, such as Japan for example. Thus, their market value has increased significantly over the last decade due to reduced stocks and subsequent higher production (fishing) costs. Fish farming has been encouraged most notably in Europe and in Asia in order to ensure the supply of such stocks. Nevertheless, the production of these commodities depends on high sea fishing and, in turn, on common pool resource management. The figure below provides a graphic scheme of straddling and highly migratory fish stocks.[43]

Fig. 11: Representation of straddling and highly migratory fish stocks



Straddling Fish Stocks **Highly Migratory Fish Stocks**

Highly migratory fish stocks are common pool resources that have become scarce over time due to overfishing and sea pollution. The sustainability of these stocks constitutes a collective action problem; since the resource is limited, the right to exploit it has to be distributed among fishing nations world-wide. Their preferences depend on the situation of the main fish resources it exploits, their geographical position, the number of other countries who share the

[42] Source: OECD (2001). http://stats.oecd.org/glossary/detail.asp?ID=1233 Access on 03/01/2009.
[43] Meltzer (2005). A more detailed graphic representation is provided in the annex.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

same resource, the weight of fisheries in the national economy, domestic stakeholders such as fishermen, industries, environmental organizations and fish processing industries, to name a few examples.

These factors lead actors to form coalitions, which is more likely to happen among actors with similar characteristics - for example, coalitions among costal states, states with short continental shelves, whaling nations, to name a few examples. Coalitions are also formed when states, albeit competing for the same resource, sacrifice short-term preferences to achieve higher payoffs ins the future - for example, when states share one same stock, and their preference is to move from the *status quo* in order to avoid the tragedy of the commons (collapse of the resource). By the same token if states have opposite preferences there is a zero sum situation and the more unlikely it is for these two states to adhere to the same coalition.

One of the most widely-used indicators in fisheries' management – especially in the definition of the total allowable catches (TACs) at EU level, and also in the Agreement on Straddling Fish Stocks – is the maximum sustainable yield (MSY), based on developments of the economic Gordon – Schaefer model. Despite its limitations, MSY is a key indicator of sustainability described in the chapter on *Protection of the Oceans, all Kinds of Seas and Coastal Areas* issued at the end of the UNCED 1992 as an "expression of the estate of fishery resource exploitation to its sustainable size".[44] Albeit simple to obtain and available for most fishing nations, the use of MSY alone cannot guarantee the sustainability of the stock; other data that take MSY into account are used to calculate the point where catches compromise future stocks, such as the "deviation in stock of marine species from the MSY level", for example. Historical series are available for stocks of high commercial interest such as salmon and shrimp.[45]

2. Level of ESU: models and indicators

A number of models used in natural resource management face several limitations: first, population data are usually analyzed in isolation from other data; second, these models tend to be rather unstable numerically and third, parameters are often poorly determined. Notwithstanding these difficulties, stakeholders, policy-makers and negotiators must make

[44] United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 1992.
[45] Sources: www.indexmundi.com and www.wwf.org/agriculture/commodities

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

decisions about resource management based on the analysis provided by these models. This section describes the three main indices used to determine sustainable fisheries: carrying capacity, maximum sustainable yield and total allowable catches. The level of ESU is assessed subsequently.

Fishery reference points are indicators required to model fish populations and understand their dynamics over time, therefore allowing for the setting up of targets and limits to harvesting (i.e., catches). The most frequently used reference points are fish mortality rates and biomass.

The first concept used to define fishery limits is the carrying capacity of the system, that is, the maximum population an environment can support without significant negative impact on its populations. The carrying capacity is measured by the number of individuals (specimens) or total weight of the population (biomass); living space parameters are also included. In fact, relative biomass – that is, biomass per surface unit (area, volume, length, or flaw) – is the most commonly used parameter of carrying capacity of a fishery. One limitation of carrying capacity is that it is usually species-specific, which reduces the possibilities of ecosystemic assessments to be carried out. There are, however, statistical methods that allow many data sets to be analyzed simultaneously. Studies using bayesian techniques to estimate the maximum reproductive rate and carrying capacity of each stock have been used successfully for certain species (namely codfish). Put briefly, albeit not extensively used, there are ways to systematically estimate productivity on a per area basis.[46]

The ultimate goal of natural resources management is to conserve options for future generations. The most frequently used approaches to fisheries management are based on the Maximum Sustainable Yield (MSY) and Maximum Economic Yield (MEY); the former refers to 'the maxima in terms of physical yield', whereas the latter concerns the economic value and social benefits derivable from a given resource.

Also called maximum equilibrium catch, MSY is formally defined as "the largest average catch or yield that can continuously be taken from a stock under existing environmental

[46] For information purposes, an article published in 2001 in the Canadian Journal of Fishery Aquaculture Science by Myers et al. carries out a meta-analysis of population dynamics of North Atlantic cod. Available at http://www.fmap.ca/ramweb/papers-total/carrying_capacity_ocean.pdf Access on 20/12/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

conditions."[47] It is worth remembering here that the overall fish population in one year depends on the mortality (production included) of preceding years. In other words, if the environmental conditions remain unchanged, the future number of individuals depends on the number of individuals capable of reproducing at t_o. Species that are heavily exploited show fluctuating recruitment,[48] so MSY might be obtained by taking fewer fish in some years than in others.

Two main models are used to estimate the MSY: a) Schaeffer model and b) Pella-Tomlinson model[49]. The Schaefer model assumes a logistic growth of biomass. In this former case, MSY corresponds to 50% of the species' carrying capacity. The Pella-Tomlinson model, by contrast, applies to a higher number of species, such as tuna. In this case the MSY lies between 30-40% of the carrying capacity. Regardless of the model, MSY can be expressed in number of individuals or, most frequently, in terms of biomass (B_{MSY}). This thesis does not discuss nor try to assess their accuracy: it suffices to know that, regardless the margin of error of such estimations, there are bio statistical models available to determine how much can be harvested without compromising future stocks.

In fisheries policies (as well as in other environmental issues) technical difficulties have strong political implications. The determination of the Total Allowable Catches (TACs) are crucial to understand not only the CFP and the difficulties of delegating more powers to the Commission, but also the consequences of these quotas in mixed agreements. The next pages provide an explanation of the system, and relate some aspects of the TACs to the negotiations between Council (principal) and Commission (agent).

Total Allowable Catches (TACs) and their political implications

The Total Allowable Catches (TACs), and their distribution along the quota system of the member states are a central feature of fisheries' conservation policy. TAC-setting takes into account scientific advice and tries to reach a compromise between safe (sustainable) harvesting levels, consumers' demand, the interests of the fish industry, fishing potential in the waters of third states, and specific needs of regions that are highly dependent on fishing activities.

[47] Northeast Fisheries Science Center (NEFSC) http://www.nefsc.noaa.gov/techniques/tech_terms.html#msy Access on 15/01/2009.
[48] Recruitment is defined as the amount of fish added to the exploitable stock each year due to growth and/or migration into the fishing area. That is, the number of fish that grow to become vulnerable to the fishing gear in one year would be the recruitment to the fishable population that year. Source: NEFSC.
[49] Other models are also used.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Arrangements for managing the fleet are also included, with the main aim of adapting the Community fleet to existing fishing possibilities and discouraging overfishing. These points are dealt with in the empirical chapters.

First proposed in 1976,[50], TAC allocation is based on the principle of 'relative stability' and takes into consideration three main factors: 1) traditional fishing patterns of the Community fleet; 2) preferences applied to fishermen in regions with few employment alternatives; 3) losses suffered by member states' vessels in third countries after the introduction of the 200 mile limit. The quotas were estimated for seven major species, and a coefficient was attributed to each species: cod (1.0), haddock (1.0), saithe (0.77), whiting (0.86), plaice (1.0), redfish (0.87) and mackerel (0.3).[51]. Despite the coefficients, relative stability remained imprecise as a concept.

Over the years methodologies have been developed with the aim of obtaining a more accurate estimate of the stocks and in turn a more effective distribution of fishing quotas. However, two major problems hamper the adoption of TACs as a conservation measure. First, the scarcity of scientific evidence available poses some constraints, in the sense that only a small number of species have been studied thoroughly; in a large number of cases population estimates are merely indicative. Today, the Council sets the TACsS for 103 stocks. However, only 39 of them are worked out using biological data about the stock in question and about catching of that stock, and about discards made estimated with sufficient data – the so-called *analytical TACs*. The other are *precautionary TACs* – usually based on historical data on catches and landings, they shall apply to stocks for which no scientifically-based evaluation of fishing possibilities is available for the year in which the TACs are to be set. As summed up by Karagiannakos, the uncertainty and lack of economic and social parameters, theoretical deficiencies in population dynamics theory, the unreliability of the biological data require an estimation of capacity reduction to be taken only as an indicative measure.

The other serious obstacle is the political pressure made by the various stakeholders, which usually lead to considerable alterations of the scientists'" recommendations, resulting in upwards revisions of the resource capacity, overestimation of the stock and subsequent overfishing.[52].

[50] Regulation 170/83.
[51] Karagiannakos (1999) *apud* COM SEC 105 final, 21 January 1981.
[52] Karagiannakos (1999).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Finally, there is a problem of compliance with TACs and quotas throughout the Community. This happens not only because of overfishing, but also due to the discharge of by-catches and less valuable stocks. Commission estimates reckon there is a discrepancy of nearly 60% between the officially declared catches and the real ones.

The Council also may introduce supplementary conservation measures if there is a risk of stock exhaustion. Recovery plans have been laid down for stocks which are below the safe biological levels. The measures may involve limiting the number of fish which can be caught, technical measures aimed at ensuring better protection of juveniles -– more selective gears, for example -– and reducing the fishing effort by cutting back the number of authorized vessels, number of days' fishing, etc. along with the inclusion of specific monitoring and inspection activities. Such plans are not specific to the EU area; in fact, a number of cooperative arrangements with non EU states, such as the fishery resources management in the Mediterranean and in the Baltic Sea regions.

TACs have been the primary tool of conservation employed by the European Union. The calculation of the sustainable catch (EU's MSY) depends on the relationship between the current catch and future catch possibilities, which is very difficult to establish, partly due to the intertemporal relationship involved and partly due to the multispecies character of most fisheries, which involves complicated interactions between different species. MSY reduces a highly complex issue to a single number, thus making many simplifications that may not exist in reality. MSY is grounded on well-established and widely accepted 'scientific' principles today MSY is regarded as incomplete. In order to reduce modeling uncertainty, more sophisticated sustainability indicators have been developed.

The main shortcoming of MSY, as well as its derived indices, is that it is a mono-specific management goal; as a consequence, the effects of recruitment variation in the ecosystem as a whole remain obscure. On the other hand, being a function of environmental conditions and the harvest strategy employed, MSY enables comparisons within one same are over time to be carried out. From the policy formulation point of view MSY remains a valid index because it sets limits to fish production and contributes to the reduction of fishing pressure.

MSY is a complex index that brings together numerous variables. Improvements can be made in the sense of having more data that allows for the buildup of more sophisticated ecological

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

and bioeconomic models. Research priorities aim at producing the following data: a) a comprehensive gathering of time series of reliable data; b) more accurate ecological 'sizing factor' of MSY; c) parameters to assess ecosystem productivity, as well as the impact of other factors on fish stocks[53]. Coupled with more accurate models it is imperative to obtain precise knowledge of effective fishing capacity change, as well as of fishing effort deployment.

Despite the complexity of determining accurate sustainable levels for fisheries, there is no confusion regarding the definition of straddling and highly migratory fish stocks; there is little disagreement about the meaning of basic terms such resource depletion, overfishing, as well as with regard to the parameters currently used to measure the sustainability of fish production (MSY, carrying capacity).

Catches of many bottom-living European fish stocks have declined dramatically over the last decades as result of overfishing.[54] The environmental problem, in this case, can be clearly spelled out, and is perceived as such by the stakeholders involved: fish industries as well as independent fishermen, acknowledge the depletion of the resource, as it takes more days at sea, or more power capacity in order to attain the same production of past years. Potential effects of overfishing are known: the collapse of certain stocks not only where the fish is harvested, but also in distant areas that share the highly migratory stock.

The object of the agreement – fish stocks – is defined in Article 1 so as to include molluscs and non-sedentary crustaceans. The term "highly migratory" is defined in Article 64 of and Annex I to the UNCLOS.[55] "Straddling" is referred to (although not explicitly defined) in the context of the Agreement as the outer limit (200 mile) of national jurisdiction over fisheries.

The present level of data available on straddling fish stocks allows for the definition of limits to the production of commercially exploitable species. The most currently used indices, carrying capacity and MSY, allow scientists to identify trends in population growth, and to point out under which conditions potential factors may lead to increase, decrease or do not cause

[53] European Parliament – Committee on Fisheries, 09/09/2008. Available at http://www.europarl.europa.eu/document/activities/cont/200809/20080912ATT37080/20080912ATT37080EN.pdf access on 02/01/2009.
[54] ICES and European Commission. Graphic representation of estimated landings overtime can be found at: http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0360en01.pdf Access on 12/01/2009.
[55] Cetaceans are not included.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

significant changes in a certain populations; usually an order of magnitude of such factors can be given for the degree of change, and upper and lower bounds can be established.

Models that use MSY can be used as a basis for policy recommendations of a quantitative character. Variables and indicators can be spelled out, and reasonable time for frames can be defined for (environmental and economic) goals to be achieved. Such models are complex and involve a margin of error. Whatever the methodology used to estimate sustainable levels for fishing activities, a number of assumptions about the stability of the ecosystem analyzed and the absence of major climate variations must be respected. The likelihood or probability of occurrence can be determined for an event or for representative outcomes based on time series, multiple observations or by running population-growth models.

Data needed to compile the indicator have been established and can be obtained using current technology and sampling techniques. In most countries the Ministry of Agriculture and Fisheries is responsible for gathering these data. In the EU, these data is compiled by the DG Fisheries. Information is provided by member states and by the International Council for the Exploration of the Seas.

Once sustainable limits are set on the basis of the best scientific advice available, political actors engage in bargaining process in order to reconcile scientific recommendations with economic needs and the preferences of the stakeholders. Measures aimed at the following topics can be defined: overfishing-related thresholds; minimum fish size; gear specifications; commercial seasons; recreational seasons; closed areas; commercial trip limits; limits to vessel size or horsepower capacity; quotas for scientific research. In addition to these, complementary management measures may include: commercial incentives, compensation schemes, and processes of adjustment to annual specifications and restrictions. In a nutshell, despite the shortcomings of the indices used to define the limits to sustainable fisheries, and the difficulties in bringing together ecologic, economic and political preferences, issues relative to the agreement on straddling and highly migratory fish stocks can be considered as having a relatively low level of ESU, according to the parameters defined in chapter two, as summarized in the table presented below.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 13: Environmental Scientific Uncertainty → Case 2

Case 2 – Level of environmental scientific uncertainty		
Problem definition and recognition		
	Problem can be clearly spelled out	Yes
	Acknowledgement (public awareness)	Yes
	Concern (public demand)	No
	Potential effects are known	Yes
	Potential effects are speculative	No
	Time frame can be estimated thorough modeling techniques	Yes (medium term)
Data		
	Main indicators have been established	Yes
	Assessment: current technologies and techniques are available	Yes
	Main indicators can be measured	Yes (limited number of species)
	Historical series are available	Yes (with restrictions)[56]
	Non-market indicators	No
Information (Data can be interpreted)		
	Indicators can be brought together in a coherent form	Yes
	Causal mechanisms can be identified	Yes
	The impact of these mechanisms can be measured or modeled	Yes (not with precision)
	Indicators cam be translated into economic value	Only for commodities.
Scope		
	Number of issues/disciplines involved	Many
	Relation (boundaries) between different issues/disciplines	Clear
	Diversity of stakeholders	Little
LOW – MED LEVEL OF UNCERTAINTY		

[56] Available for most of the species concerned by the agreement

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

3. The Community level (L1)

3.1 Council standpoint

As described in chapter 4, the CFP seeks to provide a unified approach to the creation of a sustainable fishing industry in Europe that comprises structural measures and a common approach to the conservation of fish stocks. The quota system is central to the understanding the preferences expressed by the Council, which will in turn affect the leeway the Commission will have when negotiating multilateral agreements. In the EU, the Commission proposes overall TACs to the Council on the basis of scientific advice; the Fisheries Council distributes these quotas among member states. The Council may adopt the Commission's recommendation, but in practice its annual meetings are concluded with a steep raise in the TACs in order to meet the demands of the member states.

Given that without the distribution of TACs there is no CFP, every year member states must move from the *status quo*. To follow the Commission's indication would keep players at the *status quo* and lead to a non-agreement because equilibrium would not be possible under the CFP's existing rules. With regard to environmental concerns, on the other hand, non-agreement is an option; this scenario is a major pitfall of the CFP.[57]

This thesis does not seek to examine in depth the negotiations around the TACs among member states because the focus of this study is on the Council as an actor, and its relationship with the Commission. What is important to the analysis is the ineffective character of the system of TACs distribution, and the influence of decision-making rules in the position adopted by the Council. It is worth reminding that the Council, following internal negotiations, issues its decision regarding TACs and CFPs provisions. For this reason the preferences and motivations of each member state are not scrutinized. The ineffective outcome resulting from the combination of self-interested political behavior, majority rule, and institutional framework observed in the CFP are also found in other realms of the public sector. Inefficient and ineffective outcomes have been investigated in both American and European political science, and grounded on a non-negligible body of literature.[58] When defining systems of property

[57] Franchino (2003).

[58] See, for example, Fiorina (1978); on inefficiency and excessive bureaucratization in the US. Shepsle and Weingast, 1982) ; Franchino (2003) on fisheries policy.

rights to overcome the tragedy of the commons, political actors have strong incentives to pursue their specific, short term interests.

Such specific preferences are translated into various measures which aim at taking social, economic and political considerations of certain regions into account in the allocation of the quotas. Fishermen associations are aware of the consequences of overfishing. An increasing number of actors such as the Scottish Fishermen's Organization (SFO), for example, have strengthened the dialogue with NGOs and environmental ministries in their countries of origin, and are "truly willing to take [environmental] recommendations on board".[59] Nonetheless, in the absence of mechanisms that ensure fishermen's revenues when fishing efforts are cut back, or in closed seasons, some communities and firms have no economic alternative than going out at the sea.[60] Permanent member states' representatives recall the several particularities of their fishing industries (shallow continental shelf, dependence on activities carried out in non EU countries, lack of financial resources to engage in more aggressive vessels decommissioning schemes and so on) to justify their position in the Council. As stated by a member of the COREPER, it is not possible to overlook the socio-economic aspects of the national industry; these aspects must be taken into account together with environmental considerations.[61] As no equilibrium would be possible to accommodate the diversity of preferences of member states within the levels recommended by scientific advisors and endorsed by the Commission, the solution is to raise the harvesting limits.

Political determinants of member states are crucial to understand the preferences of the Council, as small groups organized at national or regional level manage to pressure national governments, and succeed in obtaining quota exemptions and subsides. Stakeholders such as producers' associations or processing industries can focus on specific governmental bodies. This means that relatively small groups have considerable power to determine Community policies, as they have, in practice, direct access to the fisheries Council. The Council is

[59] Interview with Mr. Aron Mchloughin, WWF- Brussels, June 2009.
[60] Id.
[61] Telephone interview with Mr. Rui Rosário, Portuguese Permanent Representative to the Council, June 2009. This point was also stressed in private interviews with other members of the COREPER.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

assumed to be a short term maximizer; this assumption is confirmed by the fact that Council decisions dish out quotas, "defying all scientific advice on stock recovery".[62]

Representatives also question the quality of scientific data that orient Commission's position. As declared by Michael Jack, UK representative at the September 1994 EU Fisheries Council. "Most member states recognised the value of taking decisions on fish TACs and quotas in the context of a longer term view of the prospects for stocks. However, more work is needed at technical level before the Council can reach conclusions."[63] As discussed later in the chapter, the estimation of the MSY commercial species does not show a high level of ESU. Ministers reluctance to accept scientific advice should be seen mainly as a political strategy, coupled with the inability (or impossibility) of scientists of feeding EU institutions with clear concise reports.

Because of intense domestic pressure, fisheries ministers resist cuts in quota and water down Commission's proposals. From 1985 to 2000, the Fisheries Council increased more than 30% of the Commission's proposed TACs.[64] Most national governments claim that it is not feasible to agree unanimously on lower TACs or quota hopping bans, for example, because "they fisheries ministers must take socio-economic concerns into account when it is necessary"[65]. The best possible outcome is to extend certain privileges such as quota exemptions, or to strengthen the links between flag ownership, landing sites and nationality of the crew. As a consequence, Ministers of Fisheries and Agriculture, while acknowledging the situation of fish stocks, are primarily concerned with the loss of jobs in certain regions – and their political cost - and with the "tremendous socio-economic impact" of the measures advanced by the Commission and by the EP.[66]

3.2 Commission standpoint

The Commission has a longer time horizon and a European-wide constituency. As put by Conceição-Heldt, "although Commissioners come and go, the civil servants remain in office

[62] Declaration of Greenpeace advisor for EU Marine Policy, Mrs. Saskia Richartz. http://www.greenpeace.org/eu-unit/press-centre/press-releases2/Tuna-plan N.A.
[63] http://hansard.millbanksystems.com/written_answers/1994/oct/17/fisheries-council Access in April 2009.
[64] Franchino & Rahming (2003).
[65] Interview, Portuguese representative (June 2009)
[66] See, for example, declaration of Mr. Luis Atienza, Spanish Minister for Agriculture and Fisheries in 1995 with regard to the constraint of fishing rights in the North Atlantic. Source: Agence Europe, bulleting nº6419, 13/02/1995.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

longer than national representatives and are free from popular mandates".[67] The Commission is less affected by the specific, short-term interests that exert pressure on the Fisheries Council. Member states' representatives will push for policies that best serve their immediate electoral interests. As a consequence, the "multiple objectives of fisheries management cannot be simultaneously optimized"; the tendency is that equilibrium in the Council can only be achieved if fishing limits are set beyond MSY levels, unless a strong externality (such as natural disasters or sudden collapse of a stock) is introduced. The Commission internalizes the negative externalities and considers the negative cross-country effect of setting the measures and is more likely to pursue conservation objectives and collective, long term goals.[68]

The proposals put forth by the Commission are based on scientific advice that stems from the International Council for the Exploitation of the Seas, from member states and from the European Environment Agency (EEA). Environmental NGOs and international organizations also provide the Commission with data on fishing activities carried out in European sea regions, and by EU vessels that fish in international waters. Over the last decade the Commission has sought to enhance the exchange of information with such organizations, and has willing to incorporate advice from these organisms to a greater extent.[69]

In addition to scientific advice the fisheries policy advocated by the Commission is guided by precautionary principle, preventive action and on the polluter pays principle. The Commission seeks to go further in reductions, but faces fierce opposition of member states, which are more sensitive to specific socio-economic aspects and more likely to push for an equilibrium that meets the needs of their constituency. As stated by former Commissioner Emma Bonino, it is more reasonable to support a compromise despite the concessions made to member states than to "leave the fishing industry without a framework".[70]

3.3 Distribution of competences

The question of which elements of the Stocks Agreement fall within exclusive competence concerns Community law. Before the negotiations, however, the question proved controversial;

[67] Conceição-Heldt (2006), p. 285.
[68] Franchino & Rahming (2003).
[69] Private interviews with representatives from NGOs, EEA and from the DG Fisheries. May-July, 2009.
[70] Commissioner Emma Bonino declaration to Agence Europe following the Council meeting in Luxemburg on 16/04/1997. Source: Agence Europe, Bulletin nº 6955.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

the Commission sustained that the EC should have authority to negotiate the provisions, as the fisheries management was a matter of exclusive competence. Although the Council shared this view, some member states opposed to conferring full competence to the Commission, as the formers would not become parties to the agreement in their own right, but bound by EC participation. As a consequence, Council decided that competence would be shared between MSs and the EC.

When negotiations regarding the agreement officially began, MSs and the EC were required to discriminate between the areas of competence of EC and MSs. The EC would exert authority over Community issues, i.e., related to the conservation and management of living marine resources. Defining TACs, allocating quotas were clearly "Community business", other measures related to the conservation of fish stocks were subject to debate. It is also worth stressing that the EC was competent to regulate the activities of vessels flying flags of EC member states. As put by Hedley, there were not two categories regarding the distribution of competences between EC and MSs:

- EC exclusive competence, related to the conservation of marine living resources;
- Shared competences, related to the requirements of developing states, scientific research, port state measures and measures applicable to non-parties;
- Competences that apply for both the EC and MSs, such as definitional matters and relationship with the Law of the Sea. These competences generate both Community law and national legislation on such matters;
- Matters of MS competence in compliance with Community law, mainly related to rule enforcement by MSs over their vessels (that is, vessels flying their flags);
- Matters of MS competence in accordance with national legislation, such as affairs related to vessels' crew and officers.

Hypothesis L1: ESU and distribution of competences

This Fish Stocks Agreement reflects a situation of low ESU and clear distribution of competences with respect to external representation of the EC. However, in order to confirm hypothesis L1 – that high levels of ESU lead to incomplete contracting and unclear attribution

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

of competences through fuzzy mandates – it is necessary to look at the third empirical case. On the basis of the assumptions adopted in this research, the opposite hypothesis – that the relationship between low ESU leads to clear attribution of competences – cannot be laid down either.

4. International level (L2): EC participation in the UN Conference on Straddling and Highly Migratory Fish Stocks

4.1 Background

The conservation of fish stocks had already raised concern during the UNCLOS negotiations. The need for a legal framework to prevent stocks from collapsing was consensual among the negotiating parties. However, until the early 1990s, negotiators left conservation and management problems to be resolved directly at the regional and sub regional levels. In the absence of an overarching framework the regime proved unworkable. Species of commercial interest exhibited patterns of migration through different ocean regions. This biological aspect, coupled with decreasing levels of the stocks due to the growing fishing pressure which took place along the 1980s, forced the international community to face the problem at a global scale.

The preparations to the UNCED tackled the problem, but negotiations proved long and difficult. The outcome of these initial negotiations is expressed in Chapter 17 of the Agenda 21. The final text contains the following program areas: integrated coastal zone management; marine environmental protection (including land- and sea-based sources of marine pollution); sustainable use and conservation of living resources (at the high seas or under national jurisdiction); critical uncertainties for the management of marine environment and climate change; promotion of cooperation and coordination at international and regional levels; sustainable development of islands. Albeit being addressed in the Agenda 21, the section on oceans was the longest and one of the most complexes of the document. It was clear that states would need to engage in further negotiations to avoid a future 'tragedy of the commons'.

The issue of straddling and migratory fish stocks could not be resolved during the UNCED's four preparatory meetings. In order to avoid "lengthy and acrimonious discussions" in the Main

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Committee, Singapore ambassador Tommy Koh requested that the US hold informal consultations to establish a commitment between Canada and the EC, which was achieved by the day after.[71] The resulting text calls upon states to convene an intergovernmental conference under UN auspices with a view to promoting effective implementation of the provisions of the Law of the Sea on straddling and highly migratory fish stocks. The EC supported the conference, but conditioned its approval to the inclusion of an additional text stating that the negotiations "would draw on scientific and technical studies by the FAO and be fully consistent with the provisions of the Law of the Sea, in particular the rights and obligations of both coastal and distant fishing states."[72]

The UNCED 1992 listed the concerns raised by developing nations distant water fishing states and international organizations regarding overfishing, over-capitalization of the sector, excessive fleet size, flags of convenience, insufficiently selective gear, unreliable databases and lack of sufficient co-operation between states." The proposal to hold a conference to address highly migratory fish stocks was put forward by Canada. The European Community, on the other hand, succeeded in gaining the conference organized under the UNCLOS framework with no amendment to be adopted regarding the 200-mile limit.[73]

The decision of holding a Conference on Straddling and Highly Migratory Fish Stocks was taken on 22 December 1992[74]. The Conference, which was formally established by the Resolution 47/192 of the General Assembly of the UN, derives mainly from the Cancun Declaration, which in turn took into account the provisions of the UNCLOS 1982 and the 1984 FAO World Conference on Fisheries Management and Development; the deliberations of UNCED 1992 were also considered. The general objectives of the conference are stated in chapter 17 of Agenda 21:

> '[to promote] effective implementation of the provisions of the United Nations Convention on the Law of the Sea on straddling fish stocks and highly migratory fish stocks. The conference, drawing, *inter alia*, on scientific and technical studies by FAO, should identify and assess existing problems related to the conservation and

[71] Source: Earth Negotiations Bulletin 07:16 http://www.iisd.ca/vol07/0716048e.html Accessed on 30/06/2009.
[72] Id.
[73] Warbrick & McGoldrick (1995) http://journals.cambridge.org/download.php?file=%2FILQ%2FILQ45_02%2FS0020589300059108a.pdf&code=fb6c876dcacc1375d298f403f4d38dc7 Access on 01/10/2008.
[74] Resolution (47/192).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

management of such fish stocks, and consider means of improving cooperation on fisheries among States, and formulate appropriate recommendations. The work and the results of the conference should be fully consistent with the provisions of the United Nations Convention on the Law of the Sea, in particular the rights and obligations of coastal States and States fishing on the high seas.'[75]

4.2 Preparatory sessions

In April 1993, an organizational session for was held in New York in order to define rules of procedure and the agenda. Ambassador Satya N. Nandan from Fiji chaired the Conference. The first substantive session of the Conference took place in July 1993 in New York in July. The debate focused on the nature of conservation and management measures to be established through cooperation, and mechanisms for international cooperation. Other topics that were discussed included regional fisheries organizations, minimum data requirements for the conservation and management of fish stocks, flag state responsibilities. Special requirements of developing countries were also discussed. The participation of the EC was defined during these sessions: "the representatives of the European Community should participate in the Conference in matters within its competence without the right to vote."[76] The Presidency of the Commission was responsible for issuing the credentials of the EC.[77] At the conclusion of the session, the Chair tabled a draft negotiating text[78] that served as the basis for negotiation at the second session of the Conference.

The second substantive session of the Conference met from 14-31 March 1994 in New York. General statements were followed by general informal meetings. The last days were characterized by "informal-informals", which were held in an attempt to prepare a new version of negotiated text.[79] These sessions were closed to NGOs. Put shortly, one third of the negotiation took place behind closed doors. A revised negotiating text (RNT) was released on the final day of the conference.

[75] Source: UN. Document available at http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm Access on 22/12/2009.
[76] United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Rules and procedures. A/CONF.164/6, May 1993. Available at http://daccessdds.un.org/doc/UNDOC/GEN/N93/249/63/PDF/N9324963.pdf?OpenElement Access on 25/06/2009.
[77] At the time, Delors III Commission.
[78] A/CONF.164/13
[79] Earth Negotiations Bulletin, http://www.iisd.ca/download/asc/enb0744e.txt Access on 10/09/2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The third session, which took place in New York from 15 to 26 August 1994, began with a review of the revised negotiating text drafted five months before. The session produced a draft agreement[80], praised by certain representatives as a consensus towards a binding agreement.[81] Nevertheless, remaining questions still needed to be addressed, as pointed out a few months later by German representative (speaking on behalf of the EU), Dr.Wolfgang Runge. Among these points Dr. Runge mentioned the concepts of biological unity of the fish stocks, the compatibility of conservation and management measures, and effective enforcement provisions. The concept of "biological unity" had been stressed by Commission representatives and diplomats of most EU fishing nations. By contrast, the need top accommodate management and conservation concerns mirrors the discussion within the Fisheries Council, and between Council and Commission, while less emphasis is put on the precautionary principle.[82]

The fourth session was held in New York from 27 March to 12 April 1995. Two points proved controversial: high seas enclaves (art. 14) and compliance and enforcement (art. 20).[83] The Chair circulated a revised text of the draft agreement, but delegates were reluctant to negotiate the new version, and blocked the bargaining process by making several long interventions. This strategy caused plenary discussion to be canceled, and informal negotiations were also interrupted. It was not before the final morning of the conference that delegates collected the chair's Revised Draft Agreement[84] and made general statements before the closure of the session.

4.3 The Conference

Representatives from 105 nations and the European Community managed to identify and assess existing problems related to the conservation and management of highly migratory and straddling fish stocks, and to consider means of improving cooperation among states. The problem of overfishing and subsequent depletion of commercial stocks was largely acknowledged – in fact, as seen earlier in this chapter, it was the awareness among fishing nations what triggered the negotiations of the agreement. However, despite the general

[80] A/CONF.164/22
[81] Canadian Ambassador John Fraser. http://www.iisd.ca/vol07/0740015e.html Access on 10/09/2009.
[82] See chapter 4.
[83] Earth Negotiations Bulletin http://www.iisd.ca/download/asc/enb0744e.txt Access on 10/09/2009.
[84] The Revised Draft Agreement consists of 12 Parts containing 48 Articles and 2 Annexes. A/CONF.164/22/Rev.1

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

agreement on the need to establish appropriate conservation and management measures, states strongly differed with regard to the means to achieve this goal.

The tension between coastal and distant water fishing States and repeated the divergence observed during UNCLOS negotiations years before. Over the negotiation process, three critical groups of states are distinguished: coastal states, which pushed for binding agreements and quick implementation; distant water fishing states, whose position was the closest to the status quo; and a heterogeneous group of region-states with varied fleet and diverse preferences.

The conference was marked by the clash of preferences of coastal and distant water fishing states. Coastal states (CSs), which are immediately affected by stocks' depletion, urge quick, and sometimes radical, action. This group, which was quite heterogeneous, encompassed three sub-groups: a) extreme coastal states" such as Chile, Colombia Ecuador and Peru. The preferences of this subgroup were varied, "ranging from predominantly straddling stocks concerns, to migratory, or a combination of fisheries issues in and beyond the EEZ"[85]; b) activist coastal states – Canada, Argentina, Norway; and c) moderate reformists such as Australia and New Zealand.[86] A last group, consisted of developing states, did not have a clear organization, and was usually represented by India and Indonesia.

CSs advocated 'unambiguous sovereignty', or 'special interest', over stocks within and beyond the EEZ, including the right to inspect and arrest distant water vessels from foreign countries. By contrast, while requesting special rights to manage the resources in the adjacent high seas for biological reasons, they rejected the idea that measures taken to manage stocks on the high seas need also apply within their EEZs. Canada was the fiercest supporter of this thesis, claiming that fishing practices in the high seas adjacent to its EEZ undermined the conservation efforts.

Distant water fishing states (DSs) argued that, given the massive investment in the fishing industry over the previous decades, they should not react with the same degree of urgency as coastal states.[87] DSs argued that, although the UNCLOS was favorable to CSs, it did not confer

[85] Barston (1995), p. 160.
[86] Barston (1995).
[87] Declarations reported by the Earth Negotiations Bulletin.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

special rights to the group with regard to high seas fisheries. Thus, as 95% of worldwide catches originated in the EEZs, CSs should manage their own EEZs properly before attempting to regulate the high seas. The distant water-fishing group, which questioned the legal validity of coastal state jurisdiction, supported a non-binding final agreement and opposed to dispute settlement provisions. This coalition included Korea, Japan, Poland and China.

Besides the CSs *vs.* DSs, a coalition formed by the United States, Russian Federation and the European Union comprised players with divided interests, mainly due to the diversity of their fleet, fishing industries and communities and production patterns. The opposition between coastal and distant water nations was present also within the EU. This aspect, along with the diversity of the seas where the European vessels operate, would prevent the EU from pushing for an agreement with specific and clearly defined provisions.

Table 14: State groups at the UN Conference on Straddling and Highly Migratory Fish Stocks

Groups		
	Sub groups	**States**
Coastal States (CSs)	Extreme Activist Moderate Developing	Chile, Ecuador, Colombia Canada, Argentina Australia, New Zealand, South Pacific India, Indonesia, G77
Distant water fishing states (DSs)		Japan, China, Korea, Poland
Heterogeneous (coastal and distant water concerns)		USA, Russian Federation, EU

While coastal States requested special rights to manage the resources in the adjacent high seas for biological reasons, they rejected the idea that measures taken to manage stocks on the high seas need also apply within their EEZs. This question of the compatibility and coherence between the measures taken in the high seas and the EEZs was one of the most contentious and, as the Chair put it, pitched biological concepts against jurisdictional arguments. This led to many proposals from the distant water fishing States that the mandate of the Conference be slightly modified in order to adopt measures or recommendations that would not necessarily apply only "on the high seas".

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The dichotomy between CSs and DSs was also apparent when the scope of application of the measures was discussed. On the one hand, most delegates favored an approach where regional organizations are empowered to take the relevant measures and enforce them. This approach is particularly relevant as it takes into account both the geographical and biological specificities. As such, this point is not disputed. However, a number of delegates insisted that a more global approach is also necessary as a safety net, in case the regional agreements fail. Distant water fishing States resent this approach and describe it as too intrusive and threatening to their interests.

This conflict was also reflected in the debate over the final text. A legally-binding agreement would be implemented through the regional organizations, but also be applicable at a more global level. It is important to note, however, that the discussions did not stall on the issue of the form of the final agreement. As some observers noted, a legally-binding agreement adopted by all but the major distant water fishing states would be of very little practical value. A number of like-minded states advocated a legally-binding approach and actually submitted a draft Convention to be considered by the Conference.[88] This document, however, was never been used as the basis for negotiation, as the chair favored a consensus approach and did not think this draft Convention would gather enough support at the present time.

An issue that caused controversy and exposed the need for cohesion regarding the CFP was the conflict between the EU and Canada known as the 'Green Halibut War', when the latter seized a Spanish trawler on the high sea. In this event, the position of the UK and its refusal to condemn Canada undermined EU unity in the face of this external threat to its fishing opportunities.

5. Outcome of the negotiations[89]

As put by Boyle, divergences about straddling fish stocks highlight differences between coastal and high seas fishing states, and more generally, about the interest of the international community in the sustainability of the stocks.[90]

[88] A/CONF/164/L.11/Rev.1
[89] The Agreement, which entered into force at the end of 2001, was ratified by the EC/EU in December 2003 under the Prodi Commission.
[90] Boyle (1999). The author addresses the settlement of disputes relating to straddling fish stocks.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The Agreement uses several general provisions of the UNCLOS as a point of departure, but incorporates several progressive developments in international law, such as the precautionary approach. Hence, it accords regional fisheries management organizations (RFOs) a key role in managing straddling and highly migratory fish stocks. States' duty to cooperate by either by becoming members of RFOs or by adopting conservation measures set by them is stated in Art. 8.

5.1 Further negotiations: the EC and RFOs

The interest in becoming member of a RFO is the access to a share of the available fishing opportunities. States will be willing to enter a RFO if the benefits yielded from membership offset the costs of opportunistic behavior they can exercise as non-members. The costs by contrast involve complying with the standards set by the organization, coupled with the risk of suffering predatory behavior from the non-members. For the states that are already members of an RFO, new entrants represent cutbacks in the allocation of fishing rights, as the resource will be shared by a higher number of players. The equitability of allocation rules by RFOs important because, if the distribution is perceived by potential new members as inequitable, they are tempted to stay outside the organization and engage in unregulated fishing. By contrast, if the new member gets too many benefits raises opposition among existing members.

Regional fishery commissions often fall short of being effective, in most due to the following factors:

a) Advisory character – Some of these RFOs are advisory bodies without legislative or executive powers (e.g., ICES) or have not been able to use their regulatory powers to manage of transboundary stocks. Other bodies (e.g. INPFC and NAFO) have regulatory competence to manage a small number of species within only a restricted part of the areas included in their convention, which poses a considerable hindrance to the setup of comprehensive ecosystemic approaches to marine resources' management;
b) Some commissions are concerned primarily with resources found in coastal areas and within the limits of the continental shelf. Some resources may indeed migrate to other sea areas or to the high seas; nevertheless, they are not addressed by such regional

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

organizations as international resources, but by localized approaches that do not take other regions into account in the management of such species;

c) Fishery commissions usually function on the basis of consensus among their contracting parties or member countries, which is hard to achieve;
d) Financial support to such commissions is scarce, and dependent on member states. they lack properly constituted bureaucracy and are incapable of providing sound and prompt information to the participants. The failure to centralize and distribute information in turn undermines members' commitment to the organization;
e) Such bodies do not exert any control over non-members; in most cases they are not entitled to punish infringements or misreporting by their members.

In the RFO framework there are fewer players as compared to global agreements, and preferences tend to be less diverse. Under these conditions the EU can play a critical role; its presence confers credibility to the agreement and raises third parties' potential payoffs of being a member of these organizations. By pooling Community resources the EU can support the establishment of institutionalized bodies (for example, a secretariat and an organizational structure that allows for the RFO to carry out its activities. The EU gains from participating in a high number of RFOs because of its dimension, geographical position and various marine systems within its territorial limits, from the Mediterranean to the Baltic Sea, and throughout the eastern part of the Atlantic; thus, it cannot afford to have a free rider behavior, and it must fight IUU practices performed in European waters, as well as by EU vessels. The EU is member to the following RFOs: ICCAT, GFCM, IATTC[91], WCPFC, IOTC, CCSBT, NAFO, NEAFC, SEAFO, Donut Hole and CCAMLR. Only Japan participates in a larger number of such organizations. The performance in RFOs indicates that the EU might favor establishment of proper management systems by exercising functions such as:

a) Control over the marine resources under the jurisdiction of the MSs is a precursor to proper management. In that sense the EU can assume a governmental function in distributing Community rights and setting national standards, supporting research projects on resource assessment and encouraging cooperation in sensitive areas such as the Mediterranean and the North Atlantic for example;

[91] As a cooperating state.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

b) Compilation of reliable statistics and establishment of common standards for fishery-related data, reducing information costs and mitigating information asymmetries among MSs;

c) Control of access to the resource;

d) Establishment of common fish inspection systems, as well as systems for measuring contamination of marine products by pollutants.

e) Pool resources in order to support research institutions to provide the information needed for sustainable development.

f) Diffuse technology required to increase scientific knowledge about marine ecosystems, which comprises training and exchange of personnel between institutions worldwide.

g) Pool resources to invest in geographical information systems that allow the assessment and estimation of marine resources.

The issue of the participation of intergovernmental organizations as well as NGOs in the agreement raised strong debate during the preparatory sessions. The reason was that the Fish Stocks Conference, convened under the UN framework, was open exclusively to UN members. Although the EC had participated actively in the UNCED, it had never acted as a negotiating party in a UN conference. Concerning EC participation, most states recognized the need for EC participation. Nevertheless, some of them expressed concern of establishing a precedent by giving additional rights to the EC, whereas sustained that parties should follow the same rules of procedure as UNCED, which has called for the fish stocks conference[92]. In the first of four sessions it was established that: "The representatives of the EEC shall participate in the Conference in matters within its competence without the right to vote. Such representation shall in no case entail an increase in the representation to which the states members of the EEC would otherwise be entitled."[93]

In a number of respects, the EC occupied a unique position at the Conference; one reason is that it represented the diverse preferences of its member states, of which three groups can be distinguished: a) landlocked states (Austria and Luxembourg); b) states that carried out fishing

[92] Hedley (2002).
[93] Annex 2 of the Agreement. http://www.fao.org/docrep/V9929E/v9929E10.htm

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

activities in their territorial seas or within the ZEE (Scandinavia, Italy)[94]; c) states with fishing activities in the high seas (Portugal, Spain, France)[95].

The rules of procedure conferred the EC the status of full participant, together with MSs. The agreement was a case of mixed participation; in practice, however, formal representation was made only the Commission, as MSs refrained from speaking, except for two British statements in respect of dependent territories. Despite the cooperation between both types of actors, there were difficulties in establishing common positions at the beginning of the negotiations, mainly because the UK and Ireland tended to back up the more moderate goals of coastal-fishing states.

A Community position could be reached not only by addressing UK and Ireland fisheries, but also due to an externality involving over the right to exploit marine resources in the Northwest Atlantic[96]. An issue that caused controversy and exposed the need for cohesion regarding the CFP was the conflict between the EU and Canada known as the 'Green Halibut War', when the latter seized a Spanish trawler on the high sea. In this event, the position of the UK and its refusal to condemn Canada undermined EU unity in the face of this external threat to its fishing opportunities. The disagreement over the access to the resource, and the position adopted by the UK, highlighted the lack of cohesion of the EC "common" fisheries policy. The episode strengthened a demand for regulation at EC level. To sum up, differences between member states, coupled with an external factor (Canada), provided ministers with incentives to delegate powers to the Commission to solve their problems (see Epstein and O'Halloran, 1999: 219) and exert a stronger position vis-à-vis third states

The EC succeeded in advancing the following proposals: a) principle of the biological unity of straddling stocks, regardless they are found in the EEZs or in the high seas. The statement made

[94] Non EU coastal states concerned include Argentina, Australia, Canada, Chile, Iceland, Indonesia, New Zealand, Norway and Peru.

[95] Russia, Japan, Spain, Poland, Korea and Taiwan account for 90% of deep-sea fishing production, Source: Agence Europe, 31/07/1995.

[96] In 1994 Canada adopted a bill preventing foreign vessels from fishing straddling stocks in the regulatory area of the Northwest Atlantic Fisheries Organization (NAFO) – an area beyond the Canadian Exclusive Economic Zone (EEZ) with the aim of protecting stocks of Greenland halibut, also harvested by Spanish vessels.

The divergences between the two countries mounted in 1995, when Canada intercepted a Spanish trawler fishing in the high seas 245 miles from the Canadian coast. The vessel was fired at by the Canadian patrol, stopped, inspected and arrested; the captain was detained and released upon the payment of bail. A few days later Spain took the dispute to the ICJ. The case is described, for example, in Linhares (1999), available at http://www3.interscience.wiley.com/cgi-bin/fulltext/119084633/PDFSTART access on 30/12/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

by the EC drove attention to the importance of looking at the stocks on both sides of the 200-mile limit as part of one biological unit;[97] b) the inclusion of the precautionary approach in the text of the agreement; c) delegation of further responsibilities to regional organizations (RFOs). The fact that states and the EC could apply for membership to all RFOs is considered a victory of European negotiators. Thus, although recognizing the existence of "a clear momentum towards a binding international instrument." the EC declared that it would adopt a flexible position.

The agreement was opened for signature on 4 December 1995. In its final form, the Fish Stocks Agreement consists of three parts divided into fifty articles, in addition to the preamble. Two annexes deal with the standard requirements for the collection and sharing of data and guidelines for the application of precautionary reference points in the conservation and management of straddling fish stocks and highly migratory fish stocks. The EC was an active participant in the negotiation of the agreement; nevertheless the EC only signed the agreement in June 1996, as internal procedures were not yet completed. As pointed by Hedley,[98] this delay was due to the fact that the agreement had to be evaluated 'in the light of the negotiating directives determined by the Council.' Thus, the EC needed to resolve internal competence issues, which had not been determined during the multilateral conference.

[97] http://www.iisd.ca/vol07/0711002e.html access on 10/10/2008.
[98] Hedley (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CASE 3

THE JAKARTA MANDATE ON MARINE BIOLOGICAL DIVERSITY

> *Malgré un état durable de controverse scientifique, ces questions sont passées dans la sphère politique (...) Le développement du génie génétique et du commerce international exige ainsi de nouvelles formes juridiques concernant les ressources génétiques et les innovations dans la biotechnologie. L'ampleur des menaces et la nécessité d'agir dans l'urgence ont conduit à un besoin de fermeture institutionnelle e à l'élaboration de la Convention sur la Diversité Biologique.*
>
> Aubertin, 1999

The protection of genetic patrimony of marine species is an important part of the biodiversity debate. It raises not only ethical and economic concerns, but also discussions about property rights, political participation of local communities and the best available instruments to access and deal with this relatively new and less tangible issue. Of particular significance to fisheries management is the 1995 Jakarta Mandate on Marine and Coastal Biological Diversity (the Jakarta Mandate), which aims at promoting the conservation and long-term sustainable use of marine living resources.

The Jakarta Mandate represents a step towards the implementation of the Convention on Biological Diversity (CBD) with regard to marine environment. Concluded in 1992 at the United Nations Conference on Environment and Development (UNCED), the CDB is a pact among world's governments which sets out commitments for maintaining the world's ecological underpinnings while pursuing economic development. The Convention promotes the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. The signatory parts of the

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CBD, including the EU member states, commit to achieve these goals by adhering to a wide array of coordinate measures and policy programs that encompass, *inter alia*:

the identification of activities likely to have significant adverse effects on biodiversity; the determination and observation of harvesting limits in order to guarantee the future supply of fish products; monitoring; the adoption of instruments of legal protection; education; research; the establishment of special protected areas; the control of alien species and genetically modified organisms; the development national strategies for conservation and sustainable use of biodiversity; the inclusion of biodiversity in Environmental Impact Assessment for planning and development; the exchange of information, cooperation and coordinated actions between signatory parties, and so on.

The 'Jakarta Mandate' is an important commitment regarding the implementation of the CDB, as this is the first time that the protection of marine and coastal biodiversity and its sustainable use have been promoted within a global legally binding framework.[99] Unlike the former cases, (marine) biodiversity is marked by high levels of uncertainty.[100]

This chapter introduces the agenda on conservation of biological diversity and its particularities, with especial attention paid to environmental scientific uncertainty. The following sections provide a historical perspective of how the issue entered the Community agenda. I then proceed to the analysis of the variables.

1. Biological diversity – definitions

The term *biological diversity* was coined in 1980 by Thomas Lovejoy, the PhD tropical and conservation biologist and World Bank officer. However, it only became widespread in 1988 when the term biodiversity was used by the American entomologist E. O. Wilson, following the 1985 National Forum of Biological Diversity. Since then its use has become widespread amongst academics from several areas – not only from the natural sciences realm, but also from humanities and social sciences.

[99] This international commitment was further supported by a meeting in 1997 of experts from a Roster of Experts on Marine and Coastal Biodiversity as established by the Jakarta Mandate.

[100] This point is developed later in the chapter.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

A widely accepted definition of biodiversity is imperative for communication and cooperation within and among states, regional and international organizations, agricultural industries, research centers and other players that can benefit from either the uses or non-use of biodiversity. Thus, a consensual definition is fundamental to devise campaigns and to engage various social actors in the implementation of conservation strategies. Nevertheless, biodiversity does not have a firmly-established, single standard definition; the term often subsumes problems and threats that have concerned local governments and communities for a long time, but which now are perceived as holistic or global.

In broad terms, it is the "variation of life at all level of biological organisation." In other words, the diversity of genetic patrimony of a certain group, as put by the CBD: it is "the variability among living organisms from all sources, including, 'inter alia', terrestrial, marine and other acquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems."[101]

Although biodiversity is traditionally related to the number of different species of a certain region, 'variation of life' does occur at various levels. These the relationship among these different levels have been underscored not only by ecologists but also by a widening array of political actors, from NGOs and grassroots movements to political parties and representatives of the civil society worldwide. Three levels of biodiversity are most frequently recalled: within species, among species within one ecosystem, and among ecosystems, in addition to the variety of functions performed in a certain system. These levels are summarized below:

- **Intra specific genetic diversity** – refers to the variation among different populations within one species, related to populational genetics;
- **Species diversity** – refers to a higher level and encompasses various species within a certain ecosystem. This is the focus of works and programs on geographic regions called "hotspots";
- **Ecosystem diversity** – overall variation between different ecosystems;
- **Functional diversity** – this is not exactly a fourth level. Rather, it refers to the variation of functional roles (in other words, the scope of functions) performed in a certain

[101] CBD, Art. 2.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

ecosystem or geographic area.

The exploitation of marine biodiversity is related not only to traditional sectors such as fisheries (species diversity), but also, to other sectors such as the pharmaceutical and other biotechnology products (genetic diversity), and tourism (ecosystem level), for example. Global biodiversity agreements shall take into account the preferences of various interest groups concerned with the exploitation or preservation of marine biodiversity

This division justifies multi-level approaches to tackling the biodiversity issue. However, data is needed in order to devise institutions and measures to conserve biodiversity, and this is where the difficulties begin, since there is no consensus about what indicators are to be taken into account. A variety of measures are available, each related to a particular use of the data. The following section presents the most common indicators.

The definition provided by the CBD, albeit reaching a consensus, is too broad to derive specific measures. Many agreements drawn upon the CBD do not clearly state what level of biodiversity is being addressed. That is, the problem cannot be clearly spelled out, and is subject to different interpretations of the negotiating actors.

1.1. Questions around biodiversity

Biodiversity is a dynamic concept because the genetic composition of species changes over time in response to natural and human pressures; in turn, the occurrence of species in ecological communities changes as a result of ecological and physical factors.[102] Biodiversity does have an impact on the functioning of ecological systems and human welfare: but the causal mechanisms, as well as the extent to which they are affected, depend on *which kind of* biodiversity one refers to.

Although it seems clear that viability of any ecosystem depends on a minimum composition of organisms, the critical threshold of diversity associated with different environmental conditions in different temporal and spatial scale.[103]

[102] Turner, Button & Nijkamp (1999).
[103] Perrings & Pearce, (1999).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Applied research on biodiversity has potentially major effects on the production of food and health products, and is therefore an integral part of the discussion about strategies of development and sustainability. But in order to come up with effective agreements and, later on, policy solutions, one has to answer the following questions: How severe is the problem of biodiversity loss, and what is the actual weight of human activities? How can biodiversity loss be recovered, and how much would it cost?

While biodiversity loss has been a natural part of the history of Earth's biota, it has always been countered by origination and, except for rare events, has occurred at extremely slow rates. Currently, however, loss far exceeds origination, and rates have proved to be higher than average rates in the past[104]. The reduction of biodiversity loss has become a matter of public policy when food supplies, sources of wood, medicines and energy, and opportunities for other economic activities such as leisure and tourism were perceived to be in jeopardy.

A number of studies on the contribution of human activities to biodiversity losses have been carried out since the 1980's. Most models focus on genetic diversity of specific populations, or on the number of species; the assessment of the ecological diversity is restricted to specific areas, usually the so called hot spots. This body of work has shed some light on the importance of biodiversity, especially with regard to endangered species, and to those which are commercially more important. However, despite the significance of earlier studies, there is no truly comprehensive understanding of the geographical patterns of species richness, which prevents scientists from knowing the future of biodiversity with much precision.

Although ecologists have long examined the ecological function (or role) for individual species, the study of the ecological function of biodiversity itself, i.e, the variety of responses by species in the ecosystem to environmental change, is very recent and extremely complex. As the evolutionary biologist Hervé Le Guyader contends: *we know little about species biodiversity, and even less about the diversity of genes and of ecosystems. We may thus have to protect organisms that we don't know much about*.[105]

2. Importance and value

[104] See UNEP's Global Biodiversity Assessment.
[105] Source: http://www.cnrs.fr/en/science-news/docs/biodiv_gb_web.pdf Last accessed on 20/03/2008.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Importance and value are often (mis)used interchangeably by political actors and also by the media. Although this thesis does not aim to discuss the difference between the two terms in depth, a few points are worth clarifying. *Importance* refers to the (existence of) benefits that arise from biodiversity. *Values*, on the other hand, 'quantify' importance by gauging and comparing costs and benefits. This distinction may not be evident, owing to the weight of non-market and non-use components on the agenda.

There is a well established consensus that "the importance of biological diversity to human society is hard to overstate,"[106] and that "most scientists consider that biodiversity is essential to the future of human kind."[107] *Importance* can be understood as the recognition of a benefit that stems from a certain resource or process. The next section lays out the most diffused explanations about the importance of biodiversity by drawing on the ecology literature.

Four alternative explanations

Biological diversity is traditionally regarded as critical to ecological stability; this explanation, known as the **diversity-stability (D-S**), was advanced by well reputed ecologists such as Odum and MacArthur. D-S rationale is the same as that used in economic to address risks and investment: diversification reduces specific risks. The idea advanced by Odum and MacArthur is that, the larger the number of species in a certain area, the higher will be the number and variety of ecological relationships. The environment tends to be more stable because mono-specific degradation will be less likely to affect other species. Empirical studies carried out in the artic support their claim that, if a given species preys on several others, its population size will fluctuate less in response to environmental variation affecting one prey. By the same token, the population of a species that has many predators will vary less in response to exogenous changes in one predator's population size. In a nutshell diversity leads to more stability inasmuch as it reduces unsystematic (i.e., specific) risks.

This axiom started to be questioned in the 1970s. One reason for changing attitudes has been that "stability" is a multi-vocal concept. Thus, alternative research methods indicate that this

[106] http://www.unep.org/themes/biodiversity/
[107] McNeely (1996).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

correlation is not always positive. In a nutshell, "the plausibility of the hypothesis has varied as different kinds of ecological stability have come into play."[108]

Later on ecologists divided stability into two empirically meaningful categories: 1) resistance to invasion by new species, and 2) temporal stability, expressed by the mean value of a variable (usually biomass or productivity), divided by its standard deviation, both calculated over time. Temporal stability supports the claims laid down in the 1950s, and can be applied to entire ecosystems as well as to component populations. Since the 1990s a number of experimentally-driven research program, along with a shift in focus from population to ecosystem stability, then led to the rehabilitation of the D-S hypothesis.

Other three explanations – the so-called "early hypotheses" – are used to estimate the functional role of diversity in ecosystems: the rivet, the redundancy and the idiosyncratic models, which are briefly described below. In fact, contemporary research on biodiversity uses more sophisticated modeling techniques, but the terminology is often used when referring to varying dynamics.

The **rivet model** draws an analogy between species and rivets in an airplane. Every species plays a role in the integrity of the system as a whole. The system, in turn, can afford to lose some rivets. In other words, it can absorb changes without compromising its performance within certain limits. Beyond this threshold, however, the system collapses.

The **redundancy model** assumes that the rate of ecosystem functions increases as more species are present, but only up to a point. After this point, more species are redundant and do not improve ecosystem functions. In this theory the loss of species has no initial effect, as opposed to the rivet hypothesis. Nevertheless, there is a limit beyond which but after a certain functions of the ecosystem begin to suffer.

Finally, the **idiosyncratic model** describes trajectories that do not exhibit a clear trend. Such response is expected in cases of low diversity, where every change - extinction or introduction of species, or the modification of abiotic factors – is critical. As stressed by Naeem et al., this

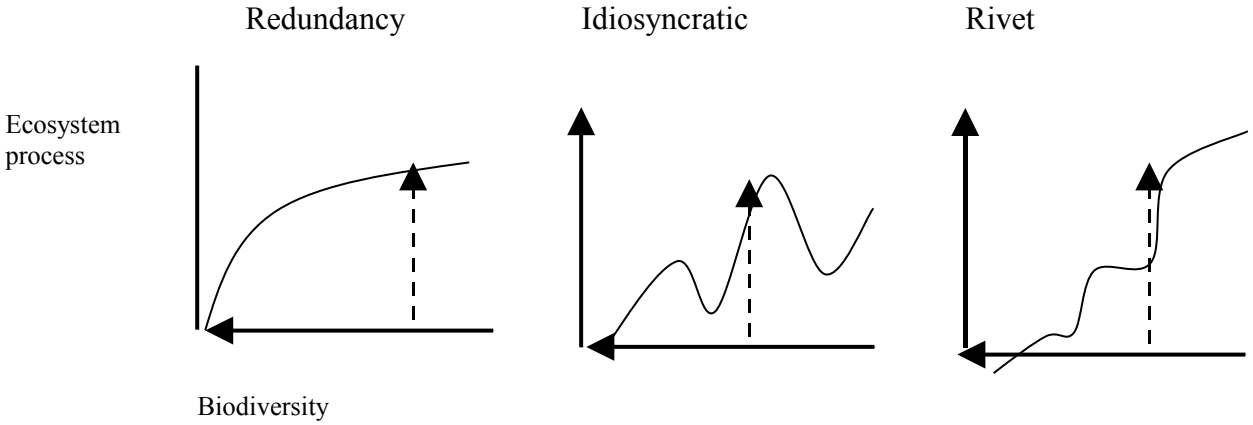
[108] M. Mikkelson (forthcoming).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

does not mean that responses are unpredictable. Rather, it implies that the slope of the relationship is context-dependent and non-monotonic.

The three early hypotheses are illustrated below. The purpose of Fig.12 is not to provide an estimative model on how much may one ecosystem afford to lose in terms of biodiversity. Instead, the aim is simply to represent the complexity and the difficulty of modeling and calculating these functions in order to make clear policy recommendations.

Fig. 12: Models on the impact of biodiversity loss on ecosystems



The underpinning idea of these models is that extinction of one species triggers a cascade effect that may put other species at stake. Some species are considered to be "key stones": their extinction will have major implications for other "relevant" organisms, and must therefore be protected. This allows biodiversity programs to lay down their priorities.

They all share the same starting point: ecological systems are non-linear and associated with threshold effects. Such thresholds are defined by critical values for populations and organisms. However, the threshold values for many of the most important natural ecosystems are simply not known. There is uncertainty about these values, and also with regard to the consequences of crossing this threshold.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The current consensus is that higher diversity does render the system more stable, due to insurance, averaging and negative covariance effects, which are explaind below:[109]

Insurance effect: Different species do better under different conditions. The range of conditions that at least some species do well in also increases; this provides a buffer for exceptional effects, therefore protecting the community as a whole. The insurance function is aligned with the models mentioned in the previous section. The loss of biodiversity reduces the ecosystem's capacity to recover from abrupt environmental changes, and also limits its capacity to respond and adapt to slight changes over time. And, in turn, the ecological services necessary to human existence.

Averaging effect: Stability is measured as variability relative to community abundance. As diversity increases, the value of the variability will naturally decrease. One problem, however, is that the impact of additional species can be confused with the effect of larger numbers of individuals.[110]

Negative covariance effect: Since species are competing for resources such as space and food, any gains that one species makes will be to some extent at the expense of the other. Diversity renders disturbances less detrimental to the entire system, as the losses in one species are offset by the gains of another.

All these theories highlight the regulatory and protective role of biodiversity, thus pointing it out as essential to maintain the viability of agriculture and fisheries, and of life on Earth in general. Four main arguments support this claim: 1) biodiversity determines resilience against changing circumstances. In fact, low levels of biodiversity have been associated with pest infestations and climate change; 2) provides the basis for the development of several industrial processes; 3) are the point of depart to the discovery and development of new medicines; 4) reduces pollution and recover contaminated areas (bioremediation).

In addition to providing several environmental goods and services, biodiversity works as an insurance against the risk that an ecosystem will collapse. But the risk is not known, or there is substantial variation according to the theory adopted; the exact impact in environmental terms

[109] Source: http://canadianbiodiversity.mcgill.ca/english/theory/ecosystemfunction.htm Last accessed on 10/02/2008.
[110] See Doak *et al.* 1998 and Tilman *et al.* (1998) for examples of this debate.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

is also unknown; the probability of a collapse cannot be assigned at a global level either. In a nutshell, the insurance provided by biodiversity is actually against uncertainty.

Such benefits may have a material character, when it is possible to measure the revenues through market based approaches,[111] but they also have a subjective dimension, in the sense that their importance is based on ethical grounds and cannot be directly expressed in market prices.

This difference between material and subjective character is critical to the analysis of the negotiation and institutionalization process related to global environmental issues. Given that institutions are created by rational actors in order to solve problems of collective action, one assumes that players will only establish institutions after calculating their potential benefits, and after comparing such benefits with the costs and risks of setting up rules that encourage certain kinds of behavior (institutional building). Importance *per se* does not allow for such comparison; in other words, it is not sufficient to trigger institutionalization process. Although it can certainly lead to the mobilization of specific social/political groups, it alone cannot provide the foundations the establishment of global agreements.

3. Indicators of biological diversity and environmental scientific uncertainty (ESU)

Indicators allow for the identification of major trends in biodiversity, as they shed light on its trends and dynamics (is biodiversity declining and if so, at what pace) in different regions of the world. They are of utmost importance to allow between scientists, politicians, stakeholders (farmers, representatives of pharmaceutical and chemical industries, etc) and the general public. Indicators point out the importance and therefore the value of a good or a service, which will in turn be taken into account in policy decisions.[112]

The following paragraphs briefly describe the indicators that are most commonly used in defining policy goals and negotiating regimes, and their shortcomings. They are then confronted with the uncertainty indicators presented in chapter 3.

[111] Cap. 1.
[112] This statement is valid for the two levels addressed in this thesis.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Biologists Andy Purvis and Andy Hector "recent years have seen exciting advances in our knowledge of biodiversity, our identification of factors that have shaped its evolution and distribution, and our understanding of its importance. But we can see only a small, probably atypical, part of the picture (…).we need more basic information about more groups; and not just species lists, but who does what and with whom."[113]

CBD's definition is all-encompassing and commonly accepted. As a consequence, biodiversity is conceptualized, measured and treated in many different ways and at different levels. On the one hand, the plurality of indicators provides information on the many domains related to biodiversity. On the other hand there are two shortcomings: it increases bargaining costs because more time and resources are needed for players to agree on the indicators used. In a worst case scenario, negotiations stall because the indicators had used incompatible indicators before arriving at the table and are unwilling to afford the cost of adjusting one to another. In short: the lack of well-established indicators put the solution for the collective action problem at stake, as it jeopardizes the establishment of incentives and compensation mechanisms.

Measures of biodiversity vary in scale (from genes to ecosystems) and purpose. *The* best indicator does not exist: a broad suite of measures meets specific needs, but impedes public awareness and a general understanding of the issue. Measuring biodiversity is of utmost importance for both natural scientists and policy-makers. The difference between these two groups is that the latter, as well as conservation practitioners, want 'biodiversity baselines' to measure changes in biodiversity over time and the effectiveness of conservation strategies. To support their position they need as few indicators as possible (ideally, one single overall indicator). For scientists, by contrast, this reduction is either not possible, or at the very least misleading, because large-scale patterns fail to capture the complexity of underlying processes. Consequently scientists set up a large number of indicators from which biodiversity datasets are derived. The choice of an appropriate measure depends on the aim of the assessment, and must take into account the tradeoffs between usefulness, completeness and required time and financial resources.[114] Statisticians and economists have an intermediate function: they seek correlations between different indicators and feed the policy-making process with synthesized, simplified information.

[113] Purvis and Hector (2000).
[114] The Royal Society (2003).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

In the absence of coordination, each state would set up its own indicators, and methods of data collection would differ significantly. Some coordination has been produced by multilateral institutions. One example is UNEP's project on Biodiversity Indicators for National Use (BINU), with the aim of producing "indicators that respond to the actual needs of decision-makers and natural resource managers in each country."[115] It consists of creating 'data warehouses' compiling existing relevant data sets to then select the indicators that should guide political decisions. Though policy measures are to be set up by national governments, the project seeks to extend the access of biodiversity information to political actors on various levels. The aim is to increase political participation, and to foster coordination among actors that share these resources. Unfortunately there are still critical differences regarding the production of indicators in all three levels of biodiversity, and the lack of consensus has set back international negotiations in a number of agreements and joint actions. WWF's Living Planet Report,[116] UNEP's Global Environment Outlook,[117] and the Millennium Ecosystem Assessment are other examples. There are several databases, but most temporal records are less than 50 years old. That is, these data sets span few generations of the organisms under study, which is too little time in evolutionary terms. Another pitfall is that, for a long time, research and policy-definition on biodiversity conservation were based exclusively on the idea of 'richness', i.e., on the number of distinct species per area or ecosystem. Assessing biodiversity in terms of overall distribution of known living organisms according to their taxonomic group has some limitations, as it is known that other forms of variability (intra species and between ecosystems) are equally important to environmental protection.

According to the paradigm described in the previous paragraph, the abundance of taxonomic categories is the utmost goal, and policy efficiency is measured in terms of extinction rates. The advantage of this method is that it is relatively simple to estimate, and it provides stakeholders with clear figures. Conversely, most experts claim that this approach is misleading: it minimizes the probability of endangered species becoming extinct by setting up protected reserves and zones of restricted access in mega-diversity regions (hot spots) around the planet. Nevertheless, it doesn't seek to minimize the value of biodiversity lost. Thus, it offsets the actual causes of extinction. An economic perspective is supposed to be based on cost-effectiveness rather than on scarcity. Since it is not possible to secure all species, conservation

[115] Source: UNEP. Available at http://www.unep-wcmc.org/collaborations/BINU/activities.cfm Last accessed on 10/10/2006.
[116] http://www.panda.org/news_facts/publications/living_planet_report/index.cfm Access on 01/02/2008
[117] http://www.unep.org/geo/ Access on 01/02/2008

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

programs should pursue the largest amount of conservation for a given level of expenditure.[118] An alternative is to define a set of key species, and to follow up their diversity over time, as adopted by the WWF. Despite the practicality, extending the results on the key species to the environment as a whole has proved disputable.

A second approach to biodiversity conservation focuses on extinction rather than on living species. Whereas extinction is an inherent fact of evolution, this process has been accelerated, potentially bringing about serious impact on human activities. Protecting biodiversity is then, avoiding species extinction and in turn, the physical, social and economic consequences of ecological disequilibrium. But the calculation of extinction rates is disputable, because the number of currently existing species is greater than the number of described species. It is not possible to project past extinction rates into the future because extinction has increased as a result of anthropogenic action. Thus, scientists cannot extrapolate the results obtained in the study of one species to other species or to other ecosystems, which represents a serious pitfall in terms of providing leverage to policy making.

A number of supplementary (indirect) indicators can provide leverage to species-based approaches, such as:

Table 15: Supplementary indicators of biological diversity

• Number or percentage of endemic species; • Existence of Action Plans for critical species; • Identification of species of conservation concern;	Population patterns Genetic mapping
• Number or percentage of endemic species; • Immigration rate of exotics • Phylogenetic relationship: the broader the distance, the higher is the amplitude of the ecosystem (= higher biodiversity) • Known ecology and physiology • Existence of ex situ seed banks • Species inventory complete (few new species) • Specimens of most species in preserved collections	

Despite the advances in terms of biodiversity policy-making, knowledge in this area is still scarce, especially in developing countries. Improving knowledge in terms of species,

[118] OECD (2002).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

geographical areas, current status of biodiversity, ecosystem services, and methodological issues might shed light on trends in state of biodiversity, therefore enabling faster and more significant improvements with regard to institutional and policy development.

A number of studies on the contribution of human activities to biodiversity losses have been carried out since the 1980's. Most models focus on genetic diversity of specific populations, or on the number of species, thus the assessment of the ecological diversity is restricted to specific areas, usually the so called *hot spots*. This body of work has shed some light on the importance of biodiversity. Nevertheless, the focus on species rather than biodiversity as a common good favors policies aiming species which: 1) are known to be severely threatened; 2) have high commercial value; 3) receive more attention from the media and from pressure groups also responsible for funding conservation programs. That is, the larger groups (insects, for example) are overlooked. Albeit important, these works do not provide a comprehensive understanding of the geographical patterns of species richness, which prevents scientists from knowing the future of biodiversity with much precision.

Biodiversity loss can also be indirectly estimated through threat assessments. Those consist of a systematic account of factors that account for BD loss such as: population growth, marine activities, land-based economic activities (agriculture, share of GMOs among the total production), hazardous emissions, animal migratory patterns, and so on. The stronger the pressure, the more pronounced or faster will be biodiversity loss.

The aim of threat assessments is to point out market and policy failures together, so that mechanisms for the equitable sharing of benefits are more likely to efficiently promote conservation. This method has been used with success in other ecosystems, most notably with respect to the use of land (forests x crops). This is because it is agriculture – more specifically, extensive monoculture – that poses the most serious threats to biodiversity, along with deforestation, climate change, pollution, unsustainable harvesting of natural resources and the introduction of exotic species.

When applied to the biodiversity of marine environments, threat assessment needs to consider economic activities – namely fishing effort, measured by the number of landings, average size of the specimens, size and composition of the fleet, and so on.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The following factors have to be considered: widespread pollution; over-fishing; over-harvesting; introductions of exotic (alien) species and increased exploitation of offshore and deep-sea resources, and certain land-based activities. Measures against such practices, however, cannot guarantee sustainability since the overall support function value of biodiversity is not captured.[119] Thus, incentives to abandon predatory practice, fines and compensations are arbitrated rather than estimated because modeling uncertainty questions the present data. The problem is not whether biological diversity indicators are being measured accurately, but if these critical indicators can correctly express trends in biodiversity.

3.1 Biodiversity's value

"The economic and political dimensions of biodiversity have never been taken into account, yet it is at the heart of EU innovation, technology and competitiveness."[120]

Under uncertainty, non-market values are of utmost importance in shaping actors' preferences and in determining their negotiation strategies. In addition to non-market values, the weight of non-material values of aesthetic and moral nature also plays an important role. The two sides of the problem: lack of scientific data that would allow the discussion to be framed in economic terms, and the fact that current methodologies short from capturing all the "value" residing in diversity.

Nevertheless, it is worth stressing that in order to carry out a cost benefit analysis in this case, non-market and non-material values need to be captured through techniques capable of converting them into resources that can be quantified. Benefit-cost analysis of coastal biodiversity – and unfolding management programs – requires that economic benefits are expressed in monetary values so (the costs of) different policy alternatives can be compared. Without explicit measurement and consideration of use and non-use values, benefits may be underestimated and resources, under allocated.

Economic (market) value of biodiversity

[119] Turner,Button and Nijkamp, 1999.
[120] Mr. Nunes Correia, Portuguese Minister of the Environment (2005).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The environmental role of biodiversity is the subject of an ongoing debate; the multiplicity of models and the difficulties of applying previous methods of data collection and analysis to other environmental settings hinders the establishment of a consensual definition. If not accurately measured, environmental goods and services that have less visibility – or no property rights assigned to it – are considered to be cost-free. Without institutions, such perception will lead to the tragedy of the commons, as discussed in chapter three.

With regard to biodiversity, the criteria of utility give priority to those "species or ecosystems the loss of which will have the greatest negative impact on people."[121] From a rational choice perspective, the negotiation of agreements on biodiversity depends on identifying and measuring its value. If only market based approaches are applied, the species that have outstanding (or evident) economic value will be the first target of conservation programs.

An example of market value assessment is Aylward's work on the pharmaceutical value of species information. To date, using a market-based approach he estimated the value of pharmaceutical prospecting in Costa Rica would amount to US$ 4.81 million per product;[122] in another paper he suggests policy guidelines for developing countries to assess the value of the genetic patrimony of tropical environment and other megadiversity spots.[123] Other examples of first order species are domestic food crops, fodder plants for domestic animals, luxury materials of animal origin (eg, ivory), animal and plants related to the conservation of touristy sites, species that play a critical role as the watershed of major irrigation systems, or that contain erosion processes, for example.

Market-based approaches can also target specific ecosystems. The advantage of focusing on ecosystems is it allows for correction of market failures within the selected area. That is, undervalued species, and not only those of commercial interest.

Given that knowledge about biodiversity's function is limited, and that there is absolutely no consensus regarding how much biodiversity different biota can afford to lose, it might well be the case that species that are crucial in the conservation of variability of a certain ecosystem are simply not taken into account by resource management initiatives and biodiversity programs in

[121] McNeely (1996). p 43.
[122] (1993).
[123] Aylward & Barbier (1992).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

general. In other words, since their importance is not recognized, no value is assigned to such goods. As a consequence they are left aside the cost benefit analysis and are unlikely to be included in specific conservation projects. As they are not taken into account by resource management policies, their future is compromised, and the result is environmental degradation (market failure).

The economic value of biodiversity loss, and therefore its insurance value, comprises two components: the first refers to use and non-use associated with loss of ecosystem function, and is more oriented to biological resources. The second is related to the loss of ecosystem resilience, and is more oriented to the value of biodiversity. The distinction between biological resources and biological diversity is important because policies face temporal and budget constraints. That is, there are not enough resources to maintain or increase the biodiversity of all ecosystems.

A brief comment should be made with regard to resilience and resistance: albeit critical to the provision of all other goods and services, scientific knowledge about their relationship with biodiversity is lacking. As Beaumont argues, the *fundamental uncertainty* around resilience and *resistance makes this service impossible to value at the present time, and as a result it tends to be overlooked*.[124]

4. Environmental Scientific Uncertainty (ESU)

The setup of biodiversity action programs, and in turn the effective management of marine biodiversity depends on the use of comprehensive (ecosystem) approaches that combine different valuation methods, and which are capable of properly addressing the goods and services biodiversity provides. On the other hand, many indicators are unavailable; in other cases the value of biodiversity is based on subjective indicators, as shown in the previous section. Finally, there is no consensus as regards to the methodology used to determine levels of biodiversity, let alone to evaluate genetic resources.

From a political perspective, biodiversity encompasses a wide range of agendas presently being discussed in several international *fora*, in which the players and institutions are competing to

[124] p.392.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

set up the priorities and to choose the tools best adapted to the management of genetic resources. The first challenge is to define biodiversity, therefore establishing a common vocabulary and common criteria that allows for the attribution of values of biodiversity assets, evaluation of different systems, and geographic and temporal comparisons.

A number of documents and studies issued by the Commission, the EP and the European Environment Agency (EEA) recognize the scarcity of scientific knowledge about biodiversity factors, especially with regard to non-commercial (untargeted) species and to functional interactions in the environment. On several occasions they highlight the "limitations to understand, measure and predict the response of ecosystems to human impact and to natural variations."[125] Formulations of the precautionary principle[126] applied to biodiversity and biotechnology issues have specified the relation between scientific evidence and a typology of scientific uncertainty. They stress the necessity to demonstrate the safety of a new technology before adopting it in large scale - or, according to US representatives to the WTO, "harmful until proven safe".

Another critical issue is the compatibility and the hierarchy of international agreements signed within the framework of the Convention on Biodiversity, the WTO and the FAO. Another priority is to redefine equitable means of cooperating with developing countries that possess a large share of the world's biodiversity. This gives them new bargaining power in international negotiations.

Regardless of the approach, and the level at which the bargaining takes place, biodiversity policies require priorities to be set. This proves complex due to the lack of consensus in the scientific community regarding: a) the measure of diversity to be adopted; b) the potential threat and its imminent character; c) the chances of any intervention to be successful (probability of reaching the desired outcome), and d) the choice of the indicators to undertake the analysis.

[125] COM/2001/0162 final. 52001DC0162(04). http://eur-lex.europa.eu/LexUriServ.do?uri=CELEX:52.

[126] The precautionary approach derives from German air pollution legislation in 1968 as a result of suggestive but not conclusive evidence that industrial air pollution was damaging the environment. The principle justifies the government's authority to take preventative action against environmental damage, and underscores that the regulatory actions must strive for to balance the potential for harm.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 16 – Environmental Scientific Uncertainty → Case 3

Case 3 – Level of scientific uncertainty involved		
I - Recognition and definition of the problem		
	Identification of environmental abnormality related to human action	Yes
	Acknowledgement – scientific community	Yes
	Acknowledgement – political leaders / policy makers	Yes
Awareness	Concern - general public*	Yes
Definition	Problem can be spelled out	Yes
	There is consensus regarding definition of the problem	No
	Potential causes have been established	Yes
	Potential causes are speculative	Yes
	Potential effects are known	Yes
	Potential effects are speculative	Yes
	Risk can be estimated	No
Time	Time frame can be estimated	No
II - Data	**exists**	
	Current indicators capture the problem thoroughly	No
	Some indicators have been established	Yes
	Technology and techniques to measure the indicators currently exists.	Yes but not equally around the world
	Established indicators can be measured or estimated	Yes
	There is consensus regarding the methodology (the consensus ensure that indicators are standardized)	No
	Historical series are available	Scarce and recent
	Data on non-market values can be collected (surveys, etc)	Yes
III - Information (Data can be interpreted)		
	Indicators can be brought together in one (mathematical) model	Yes (under spec conditions)
	The model captures the relationships of the problem thoroughly	No
	There are reports that reflect the status of the problem (or the indicators) over time	
	Analysis can be derived from the reports	Yes
	Analyses are contestable	Yes
	Use values prevail over non use values	No
	Market values prevail over non market values	No
	Existence of Non-market based approaches to estimate values	Yes
	Environmental data can be translated into economic data	Under very spec circumstances
IV -Scope		
	Non linear ecological relationships	Yes
Complexity	Multi disciplinary	Yes
	Trans disciplinary	Yes
HIGH LEVEL OF ENVIRONMENTAL SCIENTIFIC UNCERTAINTY		
*Source: Eurobarometer (2007)		

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

5. Biodiversity policies in the EU

The Council Decision 93/626/EEC of 25/10/1993 approves the conclusion of the Convention on Biological Diversity.[127] In relation to the matters covered by the CBD, the Community has adopted several legal instruments, both as part of its environment policy and in the framework of other sectoral policies, such as the 1982 Convention on the conservation of European wildlife and natural habitats, the Convention on the conservation of migratory species of wild animals, Convention on international trade in endangered species of wild fauna and flora (CITES), the 1989 European Program on Science and Technology for Environment Protection, the 1992 Regulation establishing a Community system for fisheries and aquaculture, the Regulation establishing a financial instrument for the environment (LIFE), among others.

The Commission acknowledges the general lack of information and knowledge regarding biological diversity and highlights the necessity "to develop scientific, technical and institutional capacities to provide the basic understanding upon which to plan and implement appropriate measures with a view to maintaining biological diversity".[128]

In February 1998, a Community Biodiversity Strategy, which sets out the Action Plans in the areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Cooperation. The Commission, as well as several marine research institutes recognize that the actual impact of fisheries on biodiversity has not been fully identified. Nonetheless the Commission issued a Communication of 14/07/1999 on Fisheries Management and Nature Conservation in the Marine Environment[129] highlighting the environmental impact of fish production, and puts forward a strategic European framework for the sustainable exploitation of fisheries resources and biodiversity.

In terms of policy programs, the EU has committed to stopping the decline of endangered species and habitats in the EU by 2010, but this goal proves unfeasible. In concrete terms, the EU seeks to expand Natura 2000 initiative, a network of over 26,000 protected sites throughout Europe, where plant and animal species and their habitats must be protected. This goal is

[127]OJ L 309 , 13/12/1993 P. 0001 – 0020. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31993D0626:EN:HTML Accessed on 30/09/2009.
[128]http://europa.eu/legislation_summaries/environment/nature_and_biodiversity/l28102_en.htm Accessed on 30/09/2009.
[129]COM (1999) 363

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

feasble, as it determines specific objectives (establishment of protected areas), which are to be implemented by member states or regional governments. Albeit important, these areas do not allow for a comprehensive understanding of the importance and value of biological diversity. The EU has called for a systems approach, were environmental protection is approached through an interdisciplinary perspective. Today, such views are expressed in a communication called "Message from Athens: biodiversity protection beyond 2010", that delivers a seven point plan for nature protection.[130] Such views have been discussed for a long time; nonetheless their entry into the mainstream discourse is recent.

Prior to the COP-2 the Community had already managed to establish a legal framework to address specific aspects of biodiversity, including those related to CITES convention. On the other hand, a comprehensive approach to biodiversity is still a recent development, especially with regards to marine genetic resources.

The high level of ESU certainly prevents the Commission from extending its competences in the external realm; on the other hand, it has been capable of increasing dialogue both with member states, NGOs and member of the EEA. As state by a non-member state representative, "for problems with a long time horizon and no immediate solution, it has been much easier to engage in negotiations and agree on broad aspects."[131] To sum up, in the case of marine biodiversity, it was not hard to define a broad common position, precisely because no specific points or sharp divergences between member states could emerge.

6. International level (L2)

6.1 Background: The Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) is the first international instrument to recognize the intrinsic value of biological diversity and "acknowledge the inherent right of all

[130] The points are: 1) a vision why biodiversity matters; 2) a better understanding of actions that need to be taken; 3) fully functioning network of protected areas; 4) protection of ordinary biodiversity in Europe; 5) protection of global biodiversity; 6) integration of biodiversity into other policy areas; 7) funding; 8) climate change. Source: European Commission, DG Environment.
[131] Private phone interview, June 2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

components of biological diversity o exist independent of their value to humans."[132] Prior to the CBD, non-binding instruments addressed biodiversity as a global issue: the World Charter of Nature[133] (1982) and the FAO Undertaking on Plant Genetic Resources (1983). These instruments addressed the genetic viability of the Earth, the conservation of unique areas and the relevance of exploring and evaluating genetic resources. The UNCLOS does not refer expressly to marine biodiversity, but is considered to establish a legal framework the use of the oceans and their resources.

The CBD is based on recommendations issued by the IUCN Commission of Environmental Law in the late 1980s, and formalized in an UNEP meeting in November 1988. In the occasion an "Ad Hoc Working Group of Experts on Biological Diversity" was set up to take "particular account of the need to share costs and benefits between developed and developing countries and ways and means to support innovation by local people". By February 1991 the working group was formalized as the Intergovernmental Negotiating Committee (INC). In a conference held in Nairobi in May 1992, the 70 participating states agreed on a text that would serve as a basis for the CBD.

As the preparatory meetings fell short from concluding the Biodiversity Convention, controversial points were left bracketed in order to allow the work of the INC to take place. It was assumed that the UNCED would simply incorporate the relevant language from the Convention right into the Biodiversity chapter in Agenda 21. however, when group negotiations recommenced, delegations sought to re-open negotiations on issues that had been previously resolved. Discussions proceeded with difficulty on issues such as: the equitable sharing of benefits derived from the benefits of research and development of biological and genetic resources; rights of countries of origin to benefit from biotechnological development; national registration of biological resources; and technology transfer. A broad compromise was reached in the end of the conference, but matters related to the sharing of the benefits derived from biodiversiy remained as a controversial point. The conservation of biological diversity and the sustainable use of biological resources are the objectives of chapter 15 of the Agenda 21.

Albeit being opened for signature in June 1992 at the Rio Earth Summit, bioiversity was addressed by a separate treaty negotiated in parallel to the UNCED. The CBD provides a framework that seeks to provide a basic structure for action at national and international levels.

[132] http://www.oceanlaw.net/people/profiles/hedley/pubs/biodiversity.htm Accessed on 20/06/2009.
[133] Adopted in 1982 as UN General Assembly Resolution 37/7.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Nevertheless, it does not establish detailed measures for the protection of specific aspects of biodiversity. The CBD contains three main obligations established at the national level: conservation of biological diversity, the use of its resources in a sustainable manner and the fair and equitable sharing of its benefits. The convention reiterates the sovereign right of the states to, in accordance with international law, exploit their own resources. For areas beyond national jurisdiction, each party shall, cooperate with other parties as far as possible, for the conservation and sustainable use of biodiversity. As of September 1993 165 countries had signed the convention, whereas 30 countries had ratified it.

In May 1993, UNEP's Governing Council established the ICCBD to prepare for the first meeting of the Conference of the Parties (COP). The first session of the ICCBD took place in Geneva from 11 to 15 October 1993. Two working groups were formed: WG I dealt with the conservation and sustainable use of biological diversity, the scientific and technical work between meetings, and biosafety. WG II tackled financial mechanisms and funding needs, rules of procedure for the COP, technical cooperation and capacity-building.[134] despite the debates, the WGs could not produce reports that could be approved by the Plenary. In order to solve the impasse, it was decided that a scientific and technical committee would meet before the second session of the ICCBD.

Albeit unadopted, the reports provided guidance the next session, which was held in Nairobi in June 1994. Progress was made on issues concerning rules of procedure; the establishment of a clearing-house mechanism (CHM). The Convention also establishes a Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), which aims at providing scientific and technical assessments of the status of biological diversity, and providing advice on scientific programs. On the other hand, issues such as the biosafety protocol, along with the right of ownership and access to *ex situ* genetic resources remained unresolved.

The First Conference of the Parties (COP-1) took place in Nassau from 28 November to 9 December 1994, after the entry into force of the CBD. Although the issues addressed were practically the same as in Nairobi, from a political point of view, the presence of 133 States, 120 NGOs and 75 high-level representatives confirm the relevance of addressing these issues globally. Governments' representatives agreed on the adoption of the medium-term work program; on the establishment of the clearing-house mechanism and the SBSTTA. The Global

[134]Source: Earth Negotiations Bulletin. http://www.iisd.ca/vol09/0939003e.html Accessed on 30/06/2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Environment Facility (GEF) was defined as the interim institutional structure for the financial mechanism.

6.2 Jakarta 6-17 November 1995

The Ministerial Segment of COP-2 began with speeches by Daniel Mills (UK) and Anita Diana Sumutki (Indonesia), who emphasized the importance of biodiversity to future generations. The Philippines, on behalf of the G-77, nominated Indonesia's Minister of Environment, Sarwono Kusumaatmadja, as President of COP-2. Representatives from India, Cameroon, Zimbabwe, Belarus, Slovakia, Canada and the UK were elected to the Bureau. The Ministerial Segment took place on 15-16 November 1995, during which delegates heard statements from 80 speakers, including 36 ministers. At the conclusion of the second day, the Jakarta Ministerial Declaration[135] was adopted.

In addition to the Ministerial segment of the conference, the Committee of the Whole (COW), chaired by Avrim Lazar (Canada), met throughout the first week of COP-2 to discuss each issue area on the agenda. Delegates then divided into four contact groups in order to negotiate draft decisions: Peter Unwin (UK) chaired the group on budget and work program; John Ashe (Antigua and Barbuda) chaired the group on financial resources and mechanism; Effendy Sumardja (Indonesia) chaired the group on biosafety[136]; A.K. Ahuja (India) chaired the group on marine, coastal and terrestrial issues. This group was further divided into two sub groups: Enio Cordeiro (Brazil) examined forest issues, whereas the other, chaired by Peter Bridgewater (Australia), dealt with marine and coastal issues.

The importance of the private sector in the development of biodiversity technology was brought up by Australia, Colombia, the EU and also by the UNCTAD[137]. The importance of technology transfer and its relationship with the CHM were stressed by Bangladesh, Indonesia and the EU.[138] Switzerland, supported by the UK and Brazil, noted the need for a background document identifying the needs with respect to technology transfer. The Netherlands Director General for

[135] UNEP/CBD/COP/2/L.2/Rev.1

[136]The EU was particularly interested in the issue. German Environment Minister Angela Merkel's call for specific regulations governing plant genetic resources in agriculture, albeit beyond the scope of this thesis, is worth mentioning.

[137]Statement of Mr. Juan de Castro, UNCTAD Coordinator on Biodiversity.

[138]Statement of SPANISH Minister of Public Works, Transport and Environment Jose Borrell Fontelles, on behalf of the EU.

Agriculture, Nature Management and Fisheries offered assistance to the Secretariat for meetings on agrobiodiversity.

With respect to the Conservation and Sustainable Use of Marine Biodiversity several interventions, including those by the G-77 and China, the EU and the Alliance of Small Island States (AOSIS), supported the recommendation for an *ad hoc* expert panel on marine and coastal biodiversity (MCB) under the SBSTTA. Subsequent meetings focused on drafting the terms of reference and a work program for a 15-member panel. France, supported by the UK, stressed the need to have a competent group of experts. India supported a bigger panel and Brazil pushed for governmental participation in the panel. Delegates drafted new text « calling for a roster of experts to be responsible to the Executive Secretary and to provide input to SBSTTA. » Delegates also added a paragraph in the decision reaffirming that the SBSTTA is the only scientific, technical and technological authority under the CBD to provide advice to the COP. After the COW adopted the decision, Chair Lazar noted that a key point in the final negotiations was that any authoritative body must be open-ended.

The final decision on marine and coastal biodiversity instructs the Executive Secretary to provide the SBSTTA with scientific, technical and technological options for recommendations to the COP. Such alternatives should be drawn on inputs from conference parties and an open-ended roster of experts (maximum number of 15 participants). Delegates agreed to select the ad hoc panel "on the basis of nomination by regional groups for a period of three years. [139]» the SBSTTA, in turn, was asked to provide a summary review at the next conference (COP – 3). The COP declared the global consensus on MCB as the Jakarta Mandate on Marine and Coastal Biological Diversity.

Some other key decisions taken by COP-2 included: the designation of the permanent location of the Secretariat as Montreal, Canada[140]; agreement to develop a protocol on biosafety; operation of the clearing-house mechanism; adoption of a program of work funded by a larger budget; designation of the GEF as the continuing interim institutional structure for the financial mechanism; consideration of its first substantive issue, marine and coastal biodiversity; and

[139]The terms of reference and work program for an ad hoc panel of experts are listed in the Annex II of the decision issued by the contact group.
[140]Bidding countries were Kenya, Spain, Switzerland and Canada.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

agreement to address forests and biodiversity. Finally, delegates accepted Argentina's offer to host COP-3 in Buenos Aires, from 4 to 15 November 1996.

COP-2 marked two parallel progressions in the development of the CBD. With regard to internal affairs priorities established by the Convention and COP-1 were reviewed, which gave way to further procedures and work programs (institutions as rules of procedure). Hence, as several points of the agenda were beyond the CBD, COP-2 provided an contextual framework to several ongoing international policy processes, thereby initiating the Convention's external dimensions (institutions as regimes).

6.3 Participation of the EU

The third case represents a situation of high ESU as observed by the impossibility of clearly defining the problem, as well as its possible effects on the environment. EU MSs are risk-averse: they will not grant competences to the agent if the risk of agency loss is high. On the other hand, biodiversity is a diffuse environmental problem, which drives MSs to constitute a global actor in order to lock out certain scenarios. Some delegation to supranational institutions is needed. In order to solve this impasse, the principal opts for the following alternative: not to specify the terms of the mandate but signalize that the EC is participating in the negotiations. Given that Community participation depends necessarily on the coordination between Council and Commission, the former is capable of identify agency drift early, and then adopt measures to 'pull the leash' of the Commission. This was actually the case in the negotiations around the Cartagena Protocol on Biosafety, but not with respect to marine biodiversity. The hypothesis H1 is confirmed: under high ESU principals draw fuzzy contracts; no specific attributions were conferred to the Commission, although member states such as Austria, Spain and Finland have actually spoken in the name of the EU, in addition to Commission representatives.

Given the broad scope of the matter addressed by the Jakarta Mandate, players have no option but to engage in further negotiations and to afford the related transaction costs. This happens because the high level of ESU impedes the definition of compensation mechanisms, monitoring (as indicators are not clearly defined), specific obligations and payoffs. Different from the agreement on straddling fish stocks, this agreement is not segmented, but continues to be addressed as a whole. Official reports and press bulletins show that the conference recognized the need to address certain issues in the next meeting (COP-3, Buenos Aires), but does not

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

produce any agreement open to signature and ratification. The agreement on Marine and Coastal Biodiversity (MCB) continues to be re-visited through serial transactions, instead of parallel negotiations, until players establish clear definitions that allow the agreement to be divided into more specific areas. The division of tasks into regional groups does not aim at narrowing the way to implementation, as each group brings pre-proposals and positions to the coming meetings.

When competences are not clearly distributed between Council and Commission *recognition* of the EU as a global actor might be at stake, as third parties might find too risky to deal with an actor that actually does not have authority to negotiate. On the other hand, under high ESU as it is the case here, players know that hey will not leave the bargain with specific instruments that can be implemented in the short run. Put shortly, recognition may be compromised, but at the same time third parts have more channels to approach the EU (either through member states or through the Commission) in order to define positions and to build certain compromise to the next rounds.

However, if the MSs actually "pull the leash" of the Commission, or make contradictory statements, autonomy is undermined and EU actorness as a whole is compromised. This case suggests that, under high ESU, a fuzzy mandate does not necessarily confer flexibility to the EU;fuzzy mandates require more coordination between Commission and member states, otherwise actorness is compromised, which disconfirms hypothesis L2c (*flexibility under ESU* → *actorness*). If coordination takes place on a continuous basis, EU actorness is not enhanced (because recognition is not enhanced and authority does not formally exist), but the EU remains on stage as a player that may have a strategic role for third parts in future negotiations.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CHAPTER 8

CONCLUSIONS

1. Overview

The participation of the EU in multilateral environmental agreements has increased significantly over the last twenty years. Such participation derives, *inter alia*, from a series of mechanisms defined in the Community's legal-institutional framework that enable the EU to act and speak on behalf of the member states in areas where it does not have exclusive competence. EU participation in international politics has been of particularly importance to specialists in International Relations because of the ways in which 'new actors' challenge fundamental assumptions about the inter-state system.

This thesis approaches the mixed participation of the EU and its member states in fisheries in the negotiation of global agreements on living marine resources; it seeks to analyze the determinants of competence distribution between states and the Commission, as expressed in the mandate granted to the latter. A second question refers to how, and to what extent, the contract established between Community institutions contributes to EU actorness – authority, autonomy, cohesion and coherence – in multilateral negotiations, and to their outcomes, that is, the provisions spelled out by the agreement.

Issues related to 'sustainable development' that rest on how to limit the use of common goods have engendered a lot of debate in both academic and political realms. Earlier experiences concerning the limits of exploitation of marine living resources, as well as policy recommendations based on fishery economic models, indicate that neither state control nor the market (privatization) alone are likely to succeed in providing the conditions under which individuals will engage in a long-term sustainable use of marine resource systems. Institutions may offer some alternatives by providing mechanisms to solve collective action problems, therefore circumventing the obstacles to cooperation.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

How do groups with common interests overcome adverse incentives stemming from self interest and lack of information to coordinate their behavior? This thesis approaches these questions by analyzing cooperation under varying degrees of environmental scientific uncertainty (ESU) – in other words, in terms of availability of scientific evidence. How can actors be persuaded to focus their efforts to attain collective objectives instead of pursuing personal goals? This puzzle is transposed to the European Union (EU) and its capacity (if this is present) of playing a leading role in the negotiation of multilateral agreements' provisions.

The evolution of the EU as a political system cannot be captured by the bi-dimensional deepening and enlarging processes.[141] Treaty revisions do not offer an accurate idea of the dynamics of integration; these transformations did not follow a linear path, as demonstrated by the several episodes of "integration and disintegration"[142] that have taken place since the Treaty of Rome. As the Community's bureaucratic apparatus developed, decision-making and policy-definition became increasingly complex. For a number of issue areas it soon became clear that policy adjustment of EC/EU members was not enough, and that the cooperation of third parts was needed. Environmental politics is a typical example, as the natural resources do not respect political boundaries and states' sovereignty claims. Participation in world affairs followed the Community's internal transformations; institutional mechanisms allowing for the participation of the EC in international organizations and multilateral *fora* became more frequent and necessary. In a highly interdependent context marked by a rising number of global transdiciplinary issues – especially, and with increasing pace, since the 1990s, flexibility proved a key factor in the ongoing development of EU actorness vis-à-vis third parts. Nevertheless, the traditional supranationalism-intergovernmentalism dichotomy did not allow for a more dynamic analysis of the increasingly complexity of the EU.

This work approaches the under-explored political dimension of mixed agreements (MAs) through the lenses of rational choice institutionalism (RCI), with the support of P-A theories. It is assumed that the agent is less risk averse than the principal; the possibility of agency loss increases with ESU and constrains delegation in several ways. The comparative case-study analysis suggests that the Council's risk-averse attitude partially offsets the benefits of transferring extensive competences to the agent; the same result has been obtained in studies

[141] Scharpf (2001).
[142] Olsen (2000).

using game theory and numerical methods to deal with bargaining situations of multiple equilibria under uncertainty.[143]

2. Institutional analysis

Institutions are crucial to mitigating global environmental problems because of their complexity and scale: decisions taken by a small number of players (states) are ineffective; programs that do not take different contexts into account may have negative impact on other realms. When two actors have perfectly opposing preferences institutions might have little significance. On the other extreme, if these two actors are perfectly aligned there is harmony; institutions in this case are needless because, 'paradoxically', cooperation only takes place when divergence and conflict are present. The question is not whether institutions matter; they clearly do because, most part of the time, actors' preferences lie somewhere between the two extremes, and this is why institutions matter; the problem with this assertion is that it is rather intuitive, and does not generate cumulative knowledge. More interesting is to investigate under which conditions, and to what extent, institutions matter; under which conditions certain institutional forms are preferred to others; and to what extent institutions established at a low political level may determine institutional decisions at a higher level. Institutionalist literature shows that actors' preferences influence institutional design,[144] and that institutions influence behavior by either rewarding certain practices and condemning others through economic or ethical incentives and sanctions; constructivist strands shows how actors and institutions are mutually constitutive.[145] This thesis analyzes how EC institutions may influence the choice for and the design of other institutions by addressing both EU and international levels.

Transposing the statements made above to the thesis' puzzle: mixity[146] influences EU actorness and, to a certain extent, the outcomes of global negotiations. The practice of establishing MAs has direct implications on the relative gains of the EU + its MSs at international level(s). Relative gains, in turn, depend not only on the number of actors that take part in the bargain, but on the number of major, or critical players. Mixity enables MSs to solve their collective action problem regarding external representation, which is how to become one of the major players and have a more prominent insertion in the contemporary international system.

[143] Burtraw (1993).
[144] Moravcsik (1998); Moravcsik & Nicolaïdis (1999).
[145] Ruggie (1998); Checkel (2000).
[146] The availability and reliability of the environmental scientific information (ESU) influences mixity.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

'Truly global issues'[147] like the ones represented by the selected cases are highly complex. The goal is to strike a stable cooperative outcome, taking into account the fact that many solutions may be possible (multiple equilibria). Institutions are crucial because they set "constructed focal points that make particular cooperative outcomes prominent."[148] Having compared the three cases Diermeier and Krebiehl's model can now be completed:

Table 17: Institutional theory and theory of institutions in the light of the empirical cases

<table>
<tr><td colspan="6">A. Behavioral postulate: Rational Choice</td></tr>
<tr><td colspan="6">B. Embedded institutional analyses</td></tr>
<tr><td colspan="2">1.Behavioral postulate (fixed)</td><td colspan="2">Rational choice</td><td>Rational choice</td><td>Rational choice</td></tr>
<tr><td colspan="2">2.Institutions
(game form)</td><td colspan="2">Set by the treaty
Certainty</td><td>Consultation, QMV
Low uncertainty</td><td>Consultation, QMV
High uncertainty</td></tr>
<tr><td colspan="2">3.Propositions
Allocation of competence
Characteristic of the mandate (contract) (DV)</td><td colspan="2">Delegation
Clear</td><td>Mixed
Relat. clear mandate</td><td>Mixed
Fuzzy mandate</td></tr>
<tr><td colspan="2">4. Empirics</td><td colspan="2">Case 1
Fishing Vessels - FAO</td><td>Case 2
Straddling fish stocks - UNCLOS</td><td>Case 3
Jakarta Mandate - CBD</td></tr>
<tr><td colspan="6">C. Second order institutions (defined in B.)</td></tr>
<tr><td colspan="2"></td><td colspan="2">Comparison cases 1 e 2</td><td colspan="2">Comparison cases 2 e 3</td></tr>
<tr><td colspan="2">Mandate (IV1)</td><td>Non-Mixed</td><td>Mixed</td><td>Mixed</td><td>Mixed</td></tr>
<tr><td colspan="2">Information (IV2)</td><td>Certain</td><td>Uncertain (low)</td><td>Uncertain (low)</td><td>Uncertain (high)</td></tr>
<tr><td colspan="6">D. Propositions about institutional choice (behavior and outcomes)</td></tr>
<tr><td colspan="3"></td><td>Case 1</td><td>Case 2</td><td>Case 3</td></tr>
<tr><td colspan="3">EU actorness (DV1)</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td rowspan="5">Negotiation's outcome (final agreement) (DV2)</td><td rowspan="5">criteria</td><td>Clarity</td><td>Yes</td><td>Yes (less than in 1)</td><td>No</td></tr>
<tr><td>Duration/renegot.</td><td>No reneg.</td><td>Renegotiation at regional level</td><td>Renegotiation at global level</td></tr>
<tr><td>Form</td><td>Definitive</td><td>Definitive at global level, renegotiated at regional level</td><td>Indef (to be molded)</td></tr>
<tr><td>Stability (flexibility/ resilience)</td><td>Rigid</td><td>Flex</td><td>Flex</td></tr>
<tr><td>Distribut. provisions</td><td>No</td><td>Yes</td><td>No (to be defined)</td></tr>
<tr><td colspan="2"></td><td>Sanctions</td><td>yes</td><td>In further agreements</td><td>No</td></tr>
<tr><td colspan="6">E. Empirical implications and tests</td></tr>
<tr><td colspan="6">Provide frameworks that link the external role of the EU with its institutional development
Tests / suggestions for further studies: namely comparison with EU-27
Extend knowledge in decision-making under scientific environmental uncertainty (eg., deep sea bed)</td></tr>
</table>

[147] Najam, Papa, Taiyab (2006).
[148] Keohane & Martin (1995), p. 45.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

2.1 Environmental Scientific Uncertainty (ESU)

ESU highlights the difficulties of applying standard economic approaches to the valuation of issues such as biological diversity, and raises long-neglected issues in neoclassical utility theory about what constitutes "utility". It is a critical variable because it changes the dynamics of the decision-making process by affecting the cost benefit analysis that the players make prior to the bargain – which defines their preferences,[149] and over the negotiation process – that is, their strategies.

The management of the global commons involves solving coordination problems – this is why they need institutions to move from the status quo. Certain players will have to move more than others: their preferences will be less reflected in the provisions of the agreement outcome of the negotiations.

The three empirical cases involve different coordination problems; such diversity leads to variation with respect to the 'nature' of the transaction, and its costs. Actors are utility-maximizers and efficiency-driven: in a bargaining process they balance the potential payoffs of seeking a final agreement closer to their preferences against the transaction costs of trying to "customize" the agreement. Environmental scientific uncertainty (ESU) is critical because of its impact on transaction costs.

Another point that deserves careful attention is the distinction between data availability – therefore, ESU – and the level of consensus among the negotiating participants. In global agreements with a wide number of participants, or that deal with broad transboundary issues, high levels of ESU imply low level of consensus. This situation corresponds to quadrant (IV) in the diagram below. *Provided that players are willing to move from the status quo*, two alternatives are possible: a) to produce robust evidence that enables actors to measure their preferences and to compare them with other players'; and b) to split the agenda in order to: b_1) reduce the number of players, or b_2) reduce the number of issues tackled, thus leading to less diverse preferences.

[149] Taken as given according to rational choice approaches.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

There are cases, however, in which players cannot come to terms with a satisfactory solution despite the amount of evidence, as shown in quadrant (III). The lack of consensus may be due to the diversity of preferences: in this situation the players have firmly established preferences, but are incapable of (or unwilling to) changing their positions. Negotiation of trade tariffs may well fit into this example. The same pattern is observed within the IPCCC framework, when states need to agree on the reduction of emissions of gases related to the greenhouse effect. Splitting the agenda or reducing the number of players are also possible strategies.

Significant agreement may also be established on the basis of limited evidence (quadrant II). High levels of ESU, however, prevent the agreement from being completed, as the parties involved cannot decide on rules regarding measurable goals, compensation, sanctions. Under these conditions they can commit to create supplementary institutions and bureaucratic apparatus such as scientific committees, courts, among others, to further develop the negotiations. They may also set a date to revise the terms of the agreement.

Finally, quadrant (I) reflects a situation of low ESU and a high level of consensus. In this case players are close to equilibrium; the costs of renegotiating the agreement (in order to maximize utility) are higher than the potential payoff of a more detailed contract, and players conclude the terms of the agreement. It is worth mentioning that the context, as Frieden puts, may play a critical role: external threats (as in the Canada – Spain dispute mentioned in chapter four), scarcity, and irreversibility are factors that drive players towards a consensus.

Table 18: Consensus *vs.* ESU

Level of agreement or consensus		
	(I) High agreement Much evidence	**(II)** High agreement Limited evidence
	(III) Low agreement Much evidence	**(IV)** Low agreement Limited evidence
	Level of ESU (low) (high)	

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

3. Case analysis

3.1 Case (A): The Vessels Agreement

The first case represents a situation of low ESU; either data are available or can be collected by existing techniques but they must be compiled, standardized and monitored. By doing so, cases of IUU become more evident – that is, free-riding and predatory behavior become more risky. Put briefly, there are no major problems in establishing indicators, and they can be brought together in a coherent manner. Given the relative specificity of the matter addressed by the agreement,[150] players might accept to sacrifice an outcome closer to their preferences if transaction costs are reduced. Put differently, players will prefer to establish a detailed contract containing rules of behavior and clearly defined duties (the agreement) by engaging in one single contract, which can be implemented in the short run.

Under exclusive competence third parties are most likely to *recognize* the EU as an actor; in certain circumstances they may perceive heterogeneity of preferences with the EU, and focus the negotiations on one or few member states. In the case of the Vessels Agreement, higher *authority* leads to higher actorness, because the EU has already triggered the coordination process within its institutional framework. As a consequence, it is capable of coming up with a *cohesive* position, and of setting standards (or trends) at the international level. Further investigation is necessary to assess EC's *autonomy* in this case. Exclusive competence favors *autonomy*, but does not preclude interaction between Commission and Council. This dimension could be better assessed by verifying under which conditions the EC has been able to advance proposals beyond the lowest common denominator. The findings regarding actorness confirm the hypothesis L2b (*authority* → *actorness*).

The outcome of the global negotiations – the agreement itself – has a clear scope, and well-defined membership rules. The general obligation of flag states – to ensure that their vessels do not adopt a free-riding, thus predatory, behavior are explicated, as well as the requirements the vessel must fulfill, and the information the flag state must report to the FAO. One multilateral

[150] The object of regulation are the vessels. Albeit containing a number of provisions, the agreement has a much narrower scope as compare to the other two cases.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

contract is capable of defining explicit obligations, establishing sanctions and setting dispute resolution mechanisms; it is unnecessary to engage in further transaction costs.

3.2 Case (B): Fish Stocks Agreement

According to the parameters set in chapter two, the level of ESU is classified as low, albeit higher when compared to case (A). Low ESU does not imply that information is flawless; in fact a paper prepared at the request of South Pacific countries for the conference clarifies that the biological information highly migratory species and their present and potential stocks status is sometimes poor, except for whales, tunas and species of major commercial interest. The same document admits that the "biological distinction between straddling fish stocks and highly migratory fish stocks is not always clear."[151] Despite their limitations, the most commonly used indices of sustainability, coupled with a precautionary approach (put forth by the EC) are capable of generating indicators to determined sustainable levels of fish production. It is worth stressing that the methods used to estimate the population size and carrying capacity of the stocks can be questioned by research centers and stakeholders' representatives. These challenges to currently-adopted techniques are not the expression of high ESU, as they do not lack of model structure, ambiguous system boundaries or definitions, or significant processes or relationships that have not been considered.

The Fish Stocks Agreement shows that, despite the fact that the EC did not have exclusive competence – that is, the Commission did not exercise full authority[152] – third parties recognized the EC as the player responsible for negotiating the provisions of the agreement on behalf of the Community and the MSs.

The continuous cooperation between MSs and the Commission were pivotal to the role played by the EC in the international realm and, in practice, was more important than formal authority in advancing important elements of the agreement such as: the unity of the stock, the precautionary principle and the necessity of re-addressing the agenda in the RFOs' framework. A factor that increased cohesion and, in turn, recognition of the EC as a player, were the disagreements with Canada regarding the country's freighters beyond the EEZ. The issues

[151] Document A/CONF.164/INF/4 of 15/06/1993. Available at http://daccessdds.un.org/doc/UNDOC/GEN/N93/349/45/PDF/N9334945.pdf?OpenElement Access on 12/12/2008.
[152] According to the definition provided by Jupille and Caporaso, cited early in chapter two.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

raised initially by Canadian and Spanish authority allowed for an articulation of European interests on fishery matters, which finished with the prevalence of distant water fishing states in spite of the coastal states. It is worth mentioning that such preferences overlapped, and that they did not constitute a zero sum game between the two groups of states. *Recognition* was also significant, although the EU representation was not clearly perceived when the particular needs of developing states were on the agenda.

The role of the EU in the management of marine living resources at the regional level has been of increasing importance in particular due to a series of bilateral agreements derived from multilateral frameworks and to the participation of the EC in Regional Fisheries Organizations (RFOs). The RFOs, where the EU is a full member, have been able to review the coverage of area and species, to review funding and to define areas of collaborative programs between the EU and non-member states that share such resources. The analysis of chapter five suggests that, the stronger the presence of the EU in RFOs, the more capable it will be to set standards and gather information for monitoring and future assessment of current policy measures, most notably in organizations where other western countries are present.

The second case represents a situation of relatively low ESU, though higher if compared to (A). It is worth recalling the fact that, despite the margin of error of the indices used to define the limits of sustainable fisheries, conceptual frameworks have been established, and the indices can actually be measured and compared. The main problem here is to regulate the access to the resource by laying down rules regarding: a) the access to the areas where the stocks are found; b) the fishing practice.[153] Such rules vary according to the species and to the fishing area. Given the diversity of the world's sea areas, it is not possible to devise one specific agreement that meets the preferences of the actors. In a nutshell, despite the low ESU, no equilibrium is possible. In this situation, players will be willing to engage in further negotiations in order to leave a situation of much evidence and low level of consensus. In this case to afford further transaction costs proves interesting because players can draft more specific agreements.

The strategy defended by the EC was to include in the agreement provisions that allowed for subsequent parallel transactions. This segmentation was done according to the species (e.g.,

[153] Gears, fishing seasons, maximum catch per vessel, among other limits.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

tuna) or sea area. The agreement needs to be further developed, which calls for further negotiations at a "lower" level.

Under mixity with clearly defined competences, third parties still recognized the EC as the official negotiator. If initially its position reflected the different preferences of coastal fishing vs. high seas fishing nations, the issue with Canada proved that the EC could achieve higher levels of cohesion. The EC was successful in shaping the forum where further negotiations would take place. Thus, the EC played an important role in the definition of the RFOs' membership rules.[154] In fact, its performance in most of the RFOs shows that EC participation confers more credibility to the organization.

The outcome of the global negotiations does not lay down specific states' obligations, apart from committing to the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks. In fact one multilateral contract is not capable of defining explicit obligations. Further negotiations – and further agreements – are necessary before the implementation.

3.3 Case (C): Jakarta Mandate

The third case represents a situation of high ESU: in addition to the many definitions of biodiversity, there is no consensus as regards to a methodology to assess it. Thus, the fact that there are non-market values associated with the resource renders its evaluation dependent on subjective (interpretative) methods[155], which in turn vary accross the world. Put shortly: the Jakarta Mandate on Marine Biodiversity is a case of high ESU and low level of consensus.

Commnity legislation to approach biodiversity exists since the early 1980s; nevertheless, it tackls only specific aspects of the problem (such as endangered species, or preserved areas), which are implemented by member states. A biodiversity strategic plan is recent in the EU instituitional framework. With respect to marine biodiversity, there are tensions between the

[154] As described in chapter five, membership in FAO RFOs is in most cases open to all FAO member states, as stated in the FAO constitution and recalled in the Fish Stocks Agreement. The Conference or Council may establish commissions, the membership of which shall be open to all Member Nations and Associate Members, or regional commissions open to all Member Nations and Associate Members whose territories are situated wholly or in part in one or more regions, to *advise* on the formulation and implementation of policy and to coordinate the implementation of policy. http://www.fao.org Last accessed on 20/01/2009.
[155] See chapters 4 and 7.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

CFP, the conservation of the stocks and the preservation of sound levels of biodiversity withing and among fish populations. The involvement of DG fisheries in biodiversity matters is recent; interviews with commission officials and NGOs representatives identify a stronger compromise of the DG since 2002, when a comprehensive approach started to be defined. The maritime strategy was pointed as a headway in the inclusion of fishery-related aspects (mainly environmental concerns) in the CFP. However, although awareness regarding the sustainability of the stocks has increased, the quota system is still a major impediment to the establishment if sound fisheries policies; small organized groups still manage to pressure national ministers, and have considerable influence in the Council. Issues such as quota exemptions and quota hopping will still be on the agenda for a long time. With respect to marine biodiversity, exchange of information on fish populations between member states and commission has increased. Other actors such as the Evironment Agency and non member states (most notably Norway) have participated more actively in these discussions. The Commission plays a more important role, but could not have extend its formal authority over biodiversity issues, and competences remain distributed in an unclear way (hypothesis high ESU → fuzzy contract).

In multilateral negotiations, both the the Commission and member states are represented: as seen in the press records (and from interviews) both actors managed to articulate thei position. Although no specific statements could be made due to the high level of ESU, Commission and member states managed to pass one coherent (albeit broad) message. At the global level, the main cleavage appears to be between developing countries, the owners of potential 'sources' of biodiversity contained in the wide variety of living natural resources within their territory and developed countries, who own the resources to exploit such potential. This cleavage is demonstrated by the fact that the transference of technology, equitable sharing of the benefits stemming from genetic resources and property rights have advanced in a modest way.

High levels of ESU impede the definition of compensation and monitoring mechanisms. The agreement will continue to be negotiated in subsequent meetings. Contrary to the fish stocks' agreemnt, there is no transference to regional instances for the moment. Groups of countries (Asia, Latin American, OECD, etc) have preparatory meetings in order to define points of contact and o establish common views on certain matters, but negotiations take place in the global level. The EU, albeit not exercising formal competence, was recognized by third players as a 'legitimate negotiator', although it was unclear whether they would be capable of

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

advancing more controversial proposals when negotiations become more specific. [156]The comparative analysis shows that, low levels of ESU, critical players will push for agreements containing specific provision, sanction mechanisms and well-established rules of behavior. The information available is already enough to draw "implementable" agreements, so players do not have any interest in engaging on further negotiations. Future bargains will not pay, as their costs will exceed the marginal gains the negotiator may obtain. This is what happens with the vessels' agreement. In the second case players were left with two options: they may either push for a definitive agreement (as in the first case) and avoid further negotiation costs, or they may pursue higher payoffs in future bargains. The empirical analysis shows that in this case, given the regional differences regarding marine ecosystems, the EU pushed to continue to address these agreements through RFOs. This movement has two advantages: it preserves member states' "sovereignty" over specific issues, while the "EU" remains strong as an international actor. For example, north sea fisheries and Mediterranean fisheries are quite different in terms of fleet and species. Thus, northern states do not have specific interests in the Mediterranean, and vice versa. By moving negotiations to a regional arena, the Commission will still participate in the negotiations, but in practical terms it will represent the vision of a group of member states. In the table presented below, the option "definitive agreement" proves less interesting to states and Community. In the third case (Jakarta Mandate on Marine Biodiversity), the EU pushed for an initial commitment, which will continue to be addressed in further conferences. Specific or controversial positions related to financial mechanisms and property rights could not be addressed in the conference. The results described in this paragraph are summarized below:

[156] Interview, third state representative. August 2009.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Table 19 - Possible outcomes (L2)

Case	Competence	Uncert.	EC strategy	Global Agreement - characteristics
				(final outcome of the negotiations)
A	EC exclusive	Low	Pushes for definitive agreement objective: lay down clear rules and avoid renegotiation costs	Clear provisions, specific goals, dispute resolution mechanisms more rigidity
B	Mixed	Low	Pushes for definitive agreement objective: lay down clear rules and avoid renegotiation costs if renegotiation costs > diversity of interests	Clear provisions, specific goals, dispute resolution mechanisms more rigidity + escape clauses ('flexibility provisions')
			Pushes for renegotiation in other arenas (RFOs[157]) objective: pursue more specific interests in for a of narrower scope and/or fewer players	Provisions are clear, but mainly with respect to further negotiations - that is, they divide and redistribute the agenda creates specific institutions or attribute powers to specific existing ones
C	Mixed	High	Pushes for an initial commitment, to be addressed as a whole in further negotiations	Vague more flexibility creates comprehensive institutions

4. Conclusions

The ultimate goal of the EU Common Fisheries Policy (CFP) is to make member states adopt sustainable harvesting practices. Although all actors involved want to ensure fish stocks are available in the future, the Council is more short-term oriented, as member states suffer the prssure imposed by fisheries' organizations. The Commission, by contrast, has a longer time horizon, as it is not subjected to the political pressured exerted by specific constituencies. The CFP also has an external dimension, because many fish stocks are common pool resources, which are shared with non-member states. The maintenance of the stocks implies that most stakeholders renounce to short term payoffs. In order to achieve such objectives and to avoid a 'tragedy of the common fishery resources', the EU needs to regulate fishing activities not only within its exclusive economic zone (EEZ)[158] but also in international and third-countries' waters.

[157] Regional Fisheries Organizations
[158] That is, the EEZ of its member states, shall it exist.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

The starting assumption is that the Council/principal is aware that it cannot achieve its (external) objectives without the Commission. This assumption rules out the possibility of not transferring powers to the agent. That is, the status quo is not a desired outcome. In the three empirical situations, MSs in the Council know that important multilateral regimes have to be established with non EU countries; all the actors want to move from the *status quo*. As rational actors, Council and Commission enter in a contractual relationship through which the latter may represent to some extent the interest of the member states. The preferences are taken for granted: the Commission, being less risk averse than the Council, will seek to expand its mandate, therefore representing the EU (and in turn the MSs) in the international realm. The two-paired comparative analysis on the shift of competences in situations with different levels of scientific uncertainty confirms that at the Community level (L1), the higher the uncertainty, the more likely it is for the Commission to initiate the legislative process by proposing a fuzzy mandate, where Community and member states competences are not clearly specified.

Under uncertainty the Commission will not seek to maximize its competences (by proposing a wide mandate) because in this situation the Council will refuse or amend the proposal regardless its costs. Thus, the higher the uncertainty the more likely it is for the Council to agree on an unclear contract. The possibility of unintended consequences is high under environmental uncertainty due to the lack of data to ground decisions and to justify them in the domestic realm and because of the longer time frame. It is never enough to remind that the distribution of possible outcomes is not known; when risk cannot be assessed (by MS in the Council) principals tend to become more risk averse. To propose an unclear contract is an institutional response that fits both principal and agent, since it allows for the situation to be re-addressed in the future. To sum up: the higher the uncertainty, the lower is the relative cost of renegotiation, the more unclear is the contract.

With respect to the international level (L2), the comparison between cases (A[159]) and (B[160]) suggests that EU *actorness* is not necessarily a function of exclusive Community competence. The EU has succeeded in addressing agreements related to highly migratory stocks, which is a case of mixed competence. Because of the several ocean areas and the various species concerned, it is not possible to design a global agreement that is immediately operational, or

[159] Vessels' Agreement.
[160] Straddling Fish Stocks Agreement.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

feasible to implement. Initially, critical players will be willing to incur renegotiation costs in order to yield higher payoffs in the future, which in turn will be derived from more 'customised' agreements when the preferences of the actors will be less heterogeneous. Such homogeneity is achieved by reducing the number of players, either on a geographic or functional basis. In concrete terms, in a first moment a less specific agreement is designed. This agreement (b) will lead to a number of smaller-scale agreements (b'). Once these smaller-scale agreements are designed the relative costs of renegotiation become higher, in a situation similar to (a). If critical players are satisfied with the payoffs stemming from b'_1, b'_2, … b'_n, they will push for specific provisions that allow for implementation the sooner possible. This has been the strategy adopted by the EU: when negotiating (b), the Commission has sought to transfer subsequent negotiations in regional fisheries organizations (RFOs) according to the geographical area. The success of the EU in (b) shows that mixity *per se*, albeit reducing authority, does not compromise *actorness*.

The comparison between cases (b) and (c[161]) suggests that ESU has a negative effect on *actorness*, not only in terms of authority, but also with regard to autonomy and cohesion. In (c), renegotiation costs remain low even after repeated bargains. Critical players then seek to re-address the agreement along several future events, which leads to c', c'', … c^{n}'. However, it is possible that, at a certain time – let's say, at (c''') – preferences become more homogeneous and/or environmental uncertainty is lower regarding some points of the agenda. These topics may be addressed separately, thereby originating a much more specific agreement (c_1''', … c_n''''). The Jakarta Mandate is still far from full implementation. Nevertheless, the complexity concerning marine biodiversity does not prevent a specific agreement from being established, while other provisions of the mandate continue open to (re)negotiation. To give an example: drawing on the Jakarta Mandate, some stakeholders may design an agreement on 'marine genetic research for the development of pharmaceutical products.' In other words, highly specific topics tend to involve fewer stakeholders. Each actor will have its optimal outcome, but differences can be overcome as sanctions and incentives can induce a certain behavior, side payments can be negotiated, and so on. Although stakeholders have different preferences, a "final" and highly specific agreement can be reached, while the rest of the mandate remains addressed as a whole. It is possible that (c) will continue to be renegotiated until uncertainty diminishes, or until an external shock (an severe environmental disaster, for example) creates

[161] Jakarta Mandate on Marine Biodiversity.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

externalities that raise renegotiation costs or render the status quo even less desirable. Finally, there is the possibility that at some stage (c^{n}'), all the players may have met their preferences by devising specific agreements (c_{n} ^{n}'). At this point, the remaining (c^{n}') is abandoned because there are no incentives to keep incurring in negotiation costs.

The quest for sustainable development requires integrating economic, social, ethical, political and ecological factors. It requires the simultaneous consideration of various political levels and the relations between them. The cases addressed in this thesis indicate that the more flexible institutions prove critical to increasing EU actorness at the international level. Exclusive competence is not a necessary condition for actorness. The coordination between MSs and the Commission, on the other hand, proves of utmost importance regardless of the terms of the contract established between principal and agent.

The development of an increasing number of institutions complex environmental issues being negotiated in a global level highlights the importance of assessing the level of ESU. As put by Benjamin Halpern, "explicit treatments of uncertainty in model parameters led to different management and conservation decisions than when uncertainty is ignored, illustrating why such considerations are more than just academic."[162] The negotiation of biodiversity regimes, for example, calls for the development of more flexible structures and modes of governance capable of adapting to, and dealing with, varying degrees of environmental uncertainty.

[162] From the National center for Ecological Analysis and Synthesis (2006), p. 3.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

REFERENCES

(1973). New Directions in the Law of the Sea – Collected Papers. New York, The British Institute of International and Comparative Law.

(1983). The Law of the Sea. New York, United Nations Publications.

(1995). "Agreement to Promote Compliance With International Conservation and Management of Fishing Vessels on the High Seas." Retrieved 20/12/2005, 2005, from http://www.fao.org/DOCREP/MEETING/003/X3130m/X3130E00.HTM#Top%20Of%20Page.

(2002). "UNITED NATIONS CONVENTION ON THE LAW OF THE SEA – 20TH ANNIVERSARY." 2005.

Alcock, F. (2002). "Bargaining, Uncertainty and Property Rights in Fisheries." World Politics **54**: 437-461.

Andrea;, B., M. Chesney, et al. (2003). "The Impact of Possible Climate Change Catastrophes on Global Warming Policy." Energy Policy **31**(8): 691-701.

Arnason, R. (1990). Minimum Information management in fisheries. Canadian Journal of Economics **23**(3):630-53.

Baranzin, A., M. Chesney, et al. (2003). "The Impact of Possible Climate Change Catastrophes on Global Warming Policy." Energy Policy **31**(8): 691-701.

Barbier, E. (2000). "Biodiversity, Trade and International Agreements." Journal of Economic Studies **27**(1/2): 55-74.

Beaumont, N. J., M. C. Austen, et al. (2007). "Identification, definition and quantification of goods and services provided by marine biodiversity: Implications for the ecosystem approach." Marine Pollution Bulletin **54**(3): 253-265.

Beaumont, N. J., M. C. Austen, et al. (2008). "Economic valuation for the conservation of marine biodiversity." Marine Pollution Bulletin **56**(3): 386-396.

Bell, S. and S. Morse (1999). Sustainability Indicators: Measuring the Immeasurable? London, Earthscan.

Benedict, R. (1993). Perspectives of a Negotiation Practitioner. International Environmental Negotiation. G. Sjostedt. Newbury Park (CA), SAGE Publications Inc**:** 189-216.

Bernstein, S. and B. Cashore (2000). "Globalization, Four Paths of Internationalization and Domestic Policy Change: The Case of EcoForestry in British Columbia, Canada." Canadian Journal of Political Science **XXXIII**(March): 67-99.

Bjordal, T., D. Gordon, et al. (2004). "International Management Strategies for a Straddling Stock: A Bio-Economic Simulation Model of the Norwegian Spring-Spawning Herring

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Fishery." Environmental and Resource Economics **29**: 435-457.

Björklund, M. (2001). "Responsibility in the EC for Mixed Agreements - Should Non-Member Parties Care?" Nordic Journal of International Law **70**: 373-402.

Blackwell, C., T. Grijalva, et al. (2008). An Experimental Investigation of Choice Under Hard Uncertainty. Environmental Economics, Experimental Methods T. Cherry, S. Kroll and J. Shogren. London, New York, Routledge.

Borghesi, S. (2001). Essays on Environmental Economics. Economics. Florence, European University Institute. **PhD:** 136.

Bretherton, C. and J. Vogler (1999). The European Union as a Global Actor. London and New York, Routledge.

Brock, W. and A. Xepapadeas (2002) "Regulating Nonlinear Environmental Systems under Knightian Uncertainty." Wisconsin Madison - Social Systems Research Institute Working Papers **Volume**, DOI:

Brock, W. and A. Xepapadeas (2003). "Valuing Biodiversity from an Economic Perspective: A Unified Economic, Ecological and Genetic Approach." American Economic Review **93**(5): 1597-1614.

Bubb, P., M. Jenkins, et al. (2005). "Biodiversity Indicators for National Use: Experience and Guidance." Retrieved 20/04/2006, 2006, from http://www.unep-wcmc.org/resources/publications/binu.

Burgman, M. (2005). Risks and Decisions for Conservation and Environmental Management. Cambridge, Cambridge University Press.

Burtraw, D. (1993). "Bargaining With Noisy Delegation." RAND Journal of Economics **24**(1): 40-57.

Buzan, B. (1981). "Negotiating by Consensus: Developments in Technique at the United Nations Conference on the Law of the Sea." The American Journal of International Law **75**(2): 324-348.

Calvert, R. L., McCubbins, Mathew D., and Weingast, Barry R. (1989). "A theory of political control and agency discretion." American Journal of Political Science **33**(3): 588-611.

Christy Jr., F. T. (1977). "Transitions in the Management and Distribution of International Fisheries." International Organization **31**(2): 235-265.

Conceiçao-Heldt, E. (2004). The Common Fisheries Policy of the European Union. New York, London, Routledge.

Conceiçao-Heldt, E. (2006). Integrative and Distributive Bargaining Situations in the European Union: What Difference Does it Make? Negotiation Journal.

Corten, A. (1996). "The Widening Gap Between Fisheries Biology and Fisheries Management in the European Union " Fisheries Research **27**: 1-15.

Costanza, R. e. a. (1997). "The value of the world's ecosystem services and natural capital." Nature **387**(253-260).

Crow White, B. E. K., Steven Gaines, David A. Siegel, Christopher Costello, (2008). "Marine reserve effects on fishery profit." Ecology Letters **11**(4): 370-379.

Czada, A., A. Héritier, et al., Eds. (1998). Institutions and Political Choice. Amsterdam, VU University Press.

Dagget, A. P. (1934). "The Regulation of Maritime Fisheries by Treaty." World Politics **54**: 437-461.

De Clerqc, M. (2002). Negotiating Environmental Agreements in Europe : critical factors for success. Chelteham, UK; Northampton, MA, Edward Elgar Publishing.

Degenhardt, H. W. (1985). Maritime affairs--a World Handbook : a Reference Guide to Maritime Organizations, Conventions, and Disputes, and to the International Politics of the Sea. Harlow, Essex (UK), Longman Group.

Diermeier, D. and K. Krehbiel (2003). "Institutionalism as a Methodology." Journal of Theoretical Politics **15**(2): 123-144.

Dinar, A., J. Albiac, et al., Eds. (2008). Game Theory and Policy Making in Natural Resources and the Environment London - New York, Routledge.

Doleys, T. (2009). "Incomplete Contracting, Commission Discretion and the Origins of EU Merger Control." Journal of Common Market Studies **47**(3): 483-506.

Dolmans, M. (1985). Problems of Mixed Agreements. The Hague, Asser Institute.

Elgström, O. and C. Jonsson (2000). "Introduction: Negotiation and Policy-Making in the European Union – processes, system and order." Journal of European Public Policy **7**(Special issue): 673-683.

Elgström, O. and C. Jonsson (2000). "Negotiation in the European Union: Bargaining or problem-solving?" Journal of European Public Policy **7**(Special issue): 684-704.

Engel, C. and A. Héritier, Eds. (2003). Linking Politics and Law Baden-Baden, Nomos.

EUROPEAN COMMISSION, E. (2007). Atitudes of Europeans Towards the Issue of Biodiversity. Flas Eurobarometer**:** 219.

EUROPEAN COMMISSION (1998). A European Community Biodiversity Strategy.

EUROPEAN COMMISSION, (2004). Proposal for a Council Regulation establishing a Community Fisheries Control Agency and amending Regulation (EC) No 2847/93 establishing

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

a control system applicable to the Common Fisheries Policy {SEC(2004) 448}.

EUROPEAN COMMISSION (1995). Communication from the Commission to the Council on the signature of the Agreement for the Implementation of the Provisions Of The United Nations Convention On The Law Of The Sea of 10th December 1982 relating to the conservation and management of straddling stocks and highly migratory fish stocks. **COM (1995) 591**.

EUROPEAN COMMISSION (1996). Proposal for a Council decision on the ratification by the European Community of the agreement for the implementation of the provisions of the united nations convention on the law of the sea of 10 December 1982 relating to the conservation and management of straddling stocks (fish which are found both inside and outside exclusive economic zones) and highly migratory fish stocks. E. Commission. **1996/0238/CNS**.

EUROPEAN COUNCIL (1998). Council Decision on the ratification by the European Community of teh Agreement for the Implementation of the Provisions of the UNCLOS of 10 December 1982 Relating to the Conservation and Management of Straddling Stocks and Highly Migratory Fish Stocks. C. o. t. E. Union. Official Journal of the European Communities, European Community. **98/414/EC**.

FAO (1993). Marine Fisheries and the Law of the Sea: a Decade of Change. Fisheries. Department. Rome, FAO**:** 66.

FAO (1995). Agreement to Promote Compliance With International Conservation and Management of Fishing Vessels on the High Seas. FAO. Rome, FAO. **Resolution 15/93**

Faucheux, S. and G. Froger (1995). "Decision-making under environmental uncertainty." Ecological Economics **15**(1): 29-42.

Farrell, M., B. Hettne, et al., Eds. (2005). Global Politics of Regionalism - Theory and Practice. London, Ann Arbor, Pluto Press.

Faure, G.-O. R., Jeffrey (1993). Organizing Concepts and Questions. International Environmental Negotiations. G. Sjostedt. Newbury Park (CA), SAGE Publications Inc.**:** 17-26.

Finnemore, M. and K. Sikkink (1988). "International Norm Dynamics and Political Change." International Organization **52**(4): 887-917.

Fiorina, M. and R. Noll (1978). "Voters, Legislators and Bureaucracy: Institutional Design in the Public Sector." The American Economic Review **68**(2): 256-260.

Flaesch-Mougin, C., D. Charles-Le Bihan, et al. (2003). La Politique Européenne de La Pêche: Vers un Développement Durable? Rennes, Éditions Apogée.

Fouilleux, E., J. De Maillard, et al. (2005). "Technical or Political? The Working Groups of the EU Council of Ministers." Journal of European Public Policy **12**(4): 609-623.

Franchino, F. (2004). "Delegating Powers in the European Community." British Journal of Political Science **34**(269-293).

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Franchino, F. and A. Rahming (2003). "Biased Ministers, Inefficiency, and Control in Distributive Policies - An Application to the EU Fisheries." European Union Politics **4**(1): 11-36.

Frankfort-Nachmias, C. and D. Nachmias (1992 c). Research Methods in the Social Sciences. New York, St. Martin's Press.

Frid, R. (1995). The Relations Between the EC and International Organizations: Legal Theory and Practice. The Hague, Boston, Kluwer Law International.

Funtowicz, S. and J. Ravetz (1990). Uncertainty and Quality in Science for Policy. Dordecht, The Netherlands, Kluwer Academic Publishers.

Garrett, G. (1995). "Internationalization, Institutions, and Political Change." International Organization **49**(4): 627-655.

Garrett, G. and G. Tsebelis (1996). "An Institutional Critique of Intergovernmentalism." International Organization **50**(2): 269-299.

Goldstein, J. and R. O. Keohane, Eds. (1993). Ideas and Foreign Policy: Beliefs, Institutions, and Political Change Ithaca, Cornell University Press.

Gourevitch, P. (1978). "The Second Image Reversed: The International Sources of Domestic Politics." International Organization **32**(4): 881-912.

Gowdy, J. M. (1997). "The Value of Biodiversity: Markets, Society, and Ecosystems." Land Economics **73**(1): 25-41.

Guston, D. H. (2000). Between Politics and Science. Cambridge, Cambridge University Press.

Hall, P. and R. Taylor (1996). Political Science and the Three New Institutionalisms. Köln.

Halpern, B. et al. (2006) Accounting for Uncertainty in Marine Reserve Design. Ecology Letters **Volume**, 2-11 DOI: 10.1111/j.1461-0248.2005.00827.x

Hang Pham Do, K. (2003). International Fisheries Agreements: the Feasibility and Impacts of Partial Cooperation. H. Folmer, Tilburg University.

Hanley, N., J. F. Shogren, et al. (2007). Environmental Economics: In Theory and Practice. Basingstoke, Palgrave Macmillan.

Harrison, N. and G. Bryner, Eds. (2004). Science and Politics in the International Environment. Oxford, Rowman & Littlefield Publishers, Inc.

Hart, O. and J. Moore (1988). "Incomplete Contracts and Renegotiation." Econometrica **56**(4): 755-785.

Hayashi, M. (1999). The Straddling and Highly Migratory Fish Stocks Agreement. Developments i International Fisheries Law. E. Hey. The Hague, Kluwer Law International.

Hedley, C. (2002). "The European Community and the United nations Fish Stocks Agreement." International Fisferies Bulletin(1).

Heisenberg, D. (2005). "The Institution of 'consensus' in the European Union: Formal versus Informal Decision-Making in the Council." European Journal of Political Research **44**: 65-90.

Hennis, M. (2001). "Europeanization and Globalization: The Missing Link." Journal of Common Market Studies **39**(5): 829-850.

Héritier, A. (1999). Policy-Making and Diversity in Europe - Escape from Deadlock. Cambridge, New York, Melbourne, Cambridge University Press.

Héritier, A., Ed. (2002). Common Goods: Reinventing European and International Governance. Lanham, Md, Rowman & Littlefield.

Héritier, A., M. Stolleis, et al., Eds. (2004). European and International Regulation after the Nation State. Common Goods: Law, Politics and Economics. Baden-Baden, Nomos Verlagsgesellschaft.

Hey, E. (1997). The European Community, the Law of the Sea and Accountability: An Ever Changing and Challenging Relationship. Aspects of Statehood and Institutionalism in Contemporary Europe. M. Evans. Brookfiel, VT, Dartmouth Publishing Company**:** 277-300.

Héritier, A. (2007). Explaining Institutional Change in Europe. New York, NY, Ocford University Press.

Hilborn, R. and J. Sibert (1988). "Is International Management of Tuna Necessary?" Marine Policy: 31-39.

Hill, C. (1993). "The Capability-Expectations Gap, or Conceptualizing Europe's International Role." Journal of Common Market Studies **31**(3): 305-328.

Hooghe, L. (1997) "Serving 'Europe' - Political Orientations of Senior Commission Officials." In European Union studies Association (EUSA) Biennial Conference, May 29-June1 1997, Seattle, WA.

Hubbell, S. P. (2001). The Unified Neutral Theory of Biodiversity and Biogeography Princeton, Princeton University Press.

Irvine, J. (2009). "The Successful Completion of Public Policy: Lessons Learned While Developing Canada's Wild Salmon Policy." Environmental Science and Policy **12**: 140-148.

Jordan, A. and T. O'Riordan (1995). Institutional Adaptation to Global Environmental Change (II): Core Elements of an 'Institutional' Theory. CSERGE Working Paper.

Jordan, A. and T. O'Riordan (2004). An ever-more sustainable union? Integrating Economy, Society and Environment in a Rapidly Enlarging Europe. Contemporary Issues and Debates in

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

EU policy : the European Union and International Relations. V. KOUTRAKOU. Manchester, New York, Manchester University Press.

Jupille, J. (1999). "The European Union and International Outcomes." Interational Organization **53**(2): 409-425.

Jupille, J. and J. Caporaso (1998). The European Union and Environmental Politics. The European Union in the World Community. C. Rhodes. Boulder, London, Lynne Rienner Publishers.

Jupille, J. and J. Caporaso (1999). "Institutionalism and the European Union: Beyond International Relations and Comparative Politics." Annual Review of Political Science **2**: 429-444.

Kahler, M. (1998). "Rationality in International Relations." International Organization **52**(4): 919-941.

Karagiannakos, A. (1996). "Total Allowable Catch (TAC) and Quota Management System in the European Union." Marine Policy **20**(3): 235-248.

Karagiannis, Y. (2007). Economic Theories and the Science of Inter-Branch Relations. RSACS Working papers. Florence, EUI.

Karloss, S. (1997). Managing Common Resources in Local and Global Systems: Applying Theory across Scales. Linkoeping, EPOS.

Kassim, H. and A. Menon (2003). "The Principal-Agent Approach and the Study of the European Union." Journal of European Public Policy **10**(1): 121-139.

Katznelson, I. and B. Weingast (2005). Intersections Between Historical and Rational Choice Institutionalism. Preferences and Situations: Points of Intersection Between Historical and Rational Choice Institutionalism. I. Katznelson and B. Weingast. New York, Russell Sage Foundation.

Keohane, R. (1982). "The Demand for International Regimes." International Organization **36**: 325-56.

Keohane, R. and L. Martin (1995). "The Promise of Institutionalist Theory." International Security **20**(1): 39-51.

Keohane, R. and J. NYE (1977). Power and Interdependence. Boston, Toronto, Little, Brown and Company.

Knight, F. (1971). Risk, Uncertainty and Profit Chicago, University of Chicago Press.

Kolliker, A. (2002). The Impact of Flexibility on the Dynamics of European Unification. Political and Social Sciences. Florence, European University Institute. **PhD:** 334.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Koremenos, B. and D. Snidal (2001). "The Rational Design of International Institutions." International Organization **55**(4): 761-799.

Krahmann, E. (2003). Multilevel Neyworks in European Foreign Policy. Aldershot, Burlington (VT), Ashgate Publishing Co.

Kremenyuk, V. and W. Lang (1993). The Political, Diplomatic, and Legal Background. International Environmental Negotiation. G. Sjostedt. Newbury Park (CA), SAGE Publications Inc.**:** 3-16.

Kucik, J. and E. Reinhardt (2008). "Does Flexibility Promote Cooperation? An Application to the Global Trade Regime." International Organization **62**(Summer): 477-505.

Leal-Arcas, R. (2001). "The European Union and Mixed Agreements." European Foreign Affairs Review **6**: 483-513.

Leal-Arcas, R. (2004) "The EC in the WTO: The Three-Level Game of Decision-Making. What Multilateralism can Learn from Regionalism." European Integration on line Papers **Volume**, 1-39 DOI:

Lequesne, C. (2001). L'Europe Bleue: à Quoi Sert une Politique Comune de la Pêche? Paris, Presses de Sciences-Po.

Lille, N. (2004). "Global Collective Bargaining on Flag of Convenience Shipping." British Journal of Industrial Relations **1**(42): 47-67.

Loasby, L. B. (1999). Knowledge, Institutions and Evolution in Economics. London, Routledge.

Mach, J. and J. P. Olsen (1984). "The New institutionalism: Organizational Factors in Political Life." The American Political Science Review **78**(3): 734-749.

Macleod, I., D. Hendry, et al. (1996). The External Relations of the European communities : a manual of law and practice. New York, Oxford University Press.

Maffei, M., L. Pineschi, et al., Eds. (1996). Participation in World Treaties on the Protection of the Environment. A Collection of Data. International Environmental Law & Policy Series. London, The Hague, Boston, Kluwer Law International.

Manzini, P. and M. Mariotti (2006). "Two-Stage Bargaining Solutions." Department of Economics, Queen Mary University of London(572).

Mardle, D. and e. al. (2002). "Objectives of Fisheries Management: case studies from the UK, France, Spain and Denmark." Marine Policy **26**: 415-428.

McCormick, J. (1999). Environmental Policy. Developments in the European Union. L. D.

CRAM, Desmond; Nugent, Neil. New York, St. Martin's Press**:** 193-210.

McGoldrick, D. (1997). International Relations of the European Union. London, New York, Longman.

Meunier, S. and K. Nicolaidis (1999). "Who Speaks for Europe? The Delegation of Trade Authority in the EU." Journal of Common Market Studies **37**(3): 477-501.

Miller, G. (2005). "The Political Evolution of Principal-Agent Models." Annual Review of Political Science **8**: 203.

Moe, T. (1984). "The New Economics of Organization." American Journal of Political Science **28**(4): 739-777.

Molenaar, E. J. (2003). "Participation, Allocation and Unregulated Fishing: The Practice of Regional Fisheries Management Organisations." The International Journal of Marine and Coastal Law **18**: 457-480.

Moravcsik, A. (1997). "Taking Preferences Seriously: A Liberal Theory of International Politics." International Organization **51**(4): 513-553.

Moravcsik, A. and K. Nicolaïdis (1999). "Explaining the Treaty of Amsterdam: Interests, Influence, Institutions." Journal of Common Market Studies **37**(1): 59-85.

Meyer, M., T. Olsen, et al. (1996). "Limited Intertemporal Commitment and Job Design." Journal of Economic Behavior & Organization **31**: 401-407.

Neuahl, N. (1998). Mixed Agreements: Analysis of the Phenomenon and Their Legal Significance. Law. Florence, European University Institute. **PhD**.

Nielson, D. L. and M. J. Tierney (2003). "Delegation to International Organizations: Agency Theory and World Bank Environmental Reform." International Organization **57**: 241-276.

Nordquist, M. H. (1985). United Nations Convention On The Law Of The Sea 1982 – A Commentary. Dordrecht, Boston, Lancaster, Kluwer Academic Publishers.

O'Connell, D. P. (1984). The International Law of the Sea. Oxford, Clarendon Press.

OECD (1996). Investing in Biological Diversity. International Conference on Incentive Measures for the Conservation and the Sustainable Use of Biological Diversity, Cairns, Australia, OECD.

OECD (1997). Towards Sustainable Fisheries: Country Reports. Towards Sustainable Fisheries. Paris, OECD.

OECD (2002). Handbook of Biodiversity Valuation - A Guide for Policy-Makers. Paris, OECD.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

OECD (2004). Measuring Sustainable Development: Integrated Economic, Environmental and Social Frameworks. Paris, OECD.

Olsen, J. P. (1998). Political Science and Organization Theory. Parallel Agendas but Mutual Disregard. Instituions and Political Choice: on the Limitis of Rationality. A. H. Czada, A.; Keman H. Amsterdam, VU University Press**:** 298.

Olson, M. (1965). The Logic of Collective Action: Public Goods and the Theory of Groups. Cambridge, Massachusetts, Harvard University Press.

Ostrom, E. (1990). Governing the Commons: the Evoution of Institutions for Collective Action. New York, Cambridge University Press.

Pollack, M. (1999) "Delegation, Agency and Agenda Setting in the Treaty of Amsterdam." European Integration Online Papers.

Pollack, M. (2001). "International Relations Theory and European Integration." Journal of Common Market Studies **39**(2): 221-244.

Purvis, A. and A. Hector (2000) Getting the measure of biodiversity. Nature: 212-219

Raustiala, K. (1997). "Domestic institutions and International Regulatory Cooperation. Comparative Responses to the Convention on Biological Diversity." World Politics **49**(4): 482-509.

Raustiala, K. and D. G. Victor (2004). "The Regime Complex for Plant Genetic Resources." International Organization **58**: 277-309.

Rhinard, M. and M. Kaeding (2006). "The International Bargaining Power of the European Union in 'Mixed' Competence Negotiations: The Case of the 2000 Cartagena Protocol on Biosafety." JCMS: Journal of Common Market Studies **44**(5): 1023-1050.

Rosas, A. (1998). Mixed Union - Mixed Agreements. International Law Aspects of the European Union. M. Koskenniemi. The Hague, Kluwer International.

Satria, A., Y. Matsuda, et al. (2006). "Contractual Solution to the Tragedy of Property Right in Coastal Fisheries." Marine Policy **30**: 226-236.

Scheiber, H. (2000). Law of the Sea – The Common Heritage and Emerging Challenges. The Hague, London, Boston, Martinus Nijhoff Publishers.

Schmidt, S. (2000). "Only an Agenda Setter? The European Commission's Power over the Council of Ministers." European Union Politics **1**: 37-61.
Schwok, R. (2005). Théories de l'Intégration Européenne. Paris, Editions Montchrestien.

Sebenius, J. (1993). The Law of the Sea Conference: Lessons for Negotiations to Control Global Warming. International Environmental Negotiation. G. Sjostedt. Newbury Park (CA), SAGE Publications Inc**:** 189-216.

Senior Nello, S. (2005). The European Union: Economics, Policies and History. Berkshire, McGraw-Hill Education.

Singleton, S. (1999). "Common Problems, Collective Action and Efficiency. Past and Present Institutions." Journal of Theoretical Politics **11**(3): 367-391.

Smagadi, A. (2006). The Utilization of Natural Plant Genetic Resources and Benefit-Sharing for the Production and Legal Protection of Medicines; the Impact of the Implementation of the Convention on Biological Diversity. Law. Florence, European University Institute. **PhD**.

Sparre, P. and S. C. Venema (1998). Introduction to tropical fish stock assessment - Part 1: Manual,Rome, FAO**:** 407.

Stoianoff, N. P. (2004). Accessing Biological Resources: Complying with the Convention on Biological Biodiversity. The Hague/London/New York, Kluwer Law International.

Swanson, T. and S. Johnston (1999). Global Environmental Problems and International Environmental Agreements. Cheltenham,UK; Massachusetts, Edward Elgar Publishing Ltd.

Thatcher, M. (2002). "Theory and Practice of Delegation to Non-Majoritarian Institutions." West European Politics **25**.

Thomson, R. and M. Hosli (2006). "Who Has Power in the EU? The Commission, Council and Parliament in Legislative Decision-making." Journal of Common Market Studies **44**(2): 391-417.

Underdal, A. (1980). The Politics of the International Fisheries Management. Oslo, Universitetsforlaget.

UNEP-WCMC (2005). "Biodiversity Indicators for National Use. Experience and Guidance."

United Nations (1995). The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of December 1982 Relating to the Conservation and Management of Straddling ish Stocks and Highly Migratory Fish Stocks. U. Nations. http://www.un.org/Dept/los/convention_agreements/convention_overview_fish_stocks.htm.

United Nations General Assembly (1997). Implementation of the Conference on Biological Diversity. 19th special session - Overall Review and Appraisal of the Implementation sof the Agenda 21, New York, United Nations.

Vogel, M. P. (1999). Environmental Kuznets Curves: A Study on the Economic Theory and Political Economy of Environmental Quality Improvements in the Course of Economic Growth. Berlin - New York, Springer.

Vogler, J. (1999). "The European Union as an Actor in International Environmental Politics." Environmental Politics **8**(3): 24-48.

Vogler, J. (2000). The Global Commons : Environmental and Technological Governance. New York, John Wiley & Sons.

Vogler, J. (2004). "Taking Institutions Seriously: How Regime Analysis can be Relevant to Multilevel Environmental Governance." Global Environmental Politics **3**(2).

Von Homeyer, I. (2002). Institutional Change and Governance in the European Union: The Case of Biotechnology Regulation. Dept. Political and Social Sciences. Florence, European University Institute. **PhD**.

Walker, J. M., R. Gardner, et al. (2000). "Collective Choice in the Commons: Experimental Results on Proposed Allocation Rules and Votes." International Organization **110**(460): 212-234.

Wallace, H. (2001). "The Changing Politics of the European Union: An Overview." Journal of Common Market Studies **39**(4): 581-594.

Wesseler, J. and E. International Conference on Risk and Uncertainty in Environmental and Resource (2002). Risk and uncertainty in environmental and natural resource economics, Northampton, MA, Edward Elgar Publishing.

Whitehead, J. C. (1993). "Total Economic Values for Coastal and Marine Wildlife: Specification, Validity, and valuation Issues." Marine Resource Economics **8**: 119-132.

World Bank (2005). World Bank Sustainable Development Reference Guide. W. BANK, World Bank.

Young, O. (1975). Bargaining: formal theories of negotiation. Urbana, Chicago, London, University of Illinois Press.

Young, O. (1991). "Political Leadership and Regime Formation: On the Development of Institutions in International Society." International Organization **45**(3): 281-308.

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665

Coutto, Tatiana (2010), The EU as an Actor in International Environmental Negotiations: The Role of the Mixity Principle in Fishery Agreements
European University Institute DOI: 10.2870/17665