

Task 1 – Week 01

08-02-2025

Prepared by:
Adel Hammas
242001104

Literary Criticism 3



(RSC813-3)

المهمة الأولى: نقد الإطار النظري الرسالة

اختيار رسالة دكتوراه في مجال تخصصك، نقد الإطار النظري
للدراسة المختارة، والتعليق على مدى ملائمتة وشموليته

Durham E-Theses

The determinants of environmental policy and diplomacy; An empirical investigation of participation in environmental treaties and the influence of domestic groups

BELLELLI, FRANCESCO,SAVERIO

How to cite:

BELLELLI, FRANCESCO,SAVERIO (2019) *The determinants of environmental policy and diplomacy; An empirical investigation of participation in environmental treaties and the influence of domestic groups*, Durham theses, Durham University. Available at Durham E-Theses Online:
<http://etheses.dur.ac.uk/13328/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Please consult the [full Durham E-Theses policy](#) for further details.

رسالة الدكتوراة

- Research paper published Derham University.
- Published in: 12/10/2019

• By:
Francesdo Saviero Bellelli.

- Research Title :
The determinants of environmental policy and diplomacy An empirical investigation of participation in environmental treaties and the influence of domestic pressure groups

نقد الإطار النظري للرسالة

الموضوع

01

عنوان الرسالة: محددات التشريعات البيئية والدبلوماسية: دراسة تجريبية حول المشاركة في المعاهدات البيئية وتأثير ضغوطات المجموعات المحلية.

يعد العنوان جيداً وشاملاً حيث تم ذكر جميع المتغيرات وكيفية قياسها أو العمل على تحليلها، وهي التشريعات والدبلوماسية البيئية ويقوم الباحث بدراسة محدداتها من خلال دراسة المعاهدات البيئية وضغوطات المجموعات المحلية.

كما قام الباحث بوضع صفحة كاملة مخصصة لذكر مستخلص الرسالة وهو ما يعد بالأمر الجيد.

قام الباحث بوضع جدول محتويات شامل في الرسالة كما هو موضح في الصور التالية.

جدول المحتويات

Contents	
List of Figures	v
List of Tables	vi
Declaration & Copyright	viii
Acknowledgements	ix
1 Introduction	1
2 Research questions and motivation	7
2.1 Scope and relevance of environmental agreements	8
2.1.1 Environmental problems and environmental policy tools	8
2.1.2 Main research questions	11
2.1.3 Why does it matter?	14
2.2 Contributions	18
2.2.1 A new data set on ratifications	18
2.2.2 A refined methodological approach	21
2.2.3 The gap in the literature	23
2.2.4 Applications of the results	25
3 Review of the empirical literature	27
3.1 What did we learn about ratification?	28
3.1.1 Political system	28
3.1.2 Economic factors	32
3.1.3 Treaty design	37
3.1.4 International interactions	39
3.1.5 Results on lobbying and the quality of institutions	45
3.1.6 Conclusion	49

Abstract	
Why do countries join environmental agreements? What determines the success or failure of an environmental agreement? In this thesis we look at the determinants of participation in environmental agreements, paying special attention to the role played by domestic interest groups and the quality of institutions. To answer our research questions, we assembled the largest participation data set in the literature. This data set contains both global and regional agreements. Unlike previous data sets, it identifies the potential members of every treaty. This allows us to correct the identification bias subsisting in previous works. In this thesis we use a multilevel survival model to study the determinants of participation in environmental agreements. Our methodological approach introduces a number of improvements over previous empirical works, in particular with reference to the treatment of unobserved heterogeneity. It is also the first time a Bayesian technique (MCMC) is used in the estimation of participation models. We expand the traditional framework of analysis with a study of the implementation stage of treaties. In this respect, we study five different variables that capture how a country fares in terms of environmental policies. It is the first time a study of participation is conducted jointly with the analysis of domestic policies. This framework yields interesting conclusions on the determinants of international cooperation and their final impact on environmental commitments. Our findings show that environmental lobbying has a positive effect on participation in environmental agreements, while the effect of industrial lobbying is statistically insignificant. This unexpected result is robust to changes in specification and proxies used. We reveal that similar results for industrial lobbying had been obtained in previous empirical studies. However, this relationship has never been investigated in detail. We advance an explanation based on the lobbying preferences of environmental and industrial interest groups. The explanation is tested on domestic policies; the results show that a dichotomy exists in the way environmental and industrial pressure is exerted. Environmental influence focuses on treaty participation choices and other normative governmental measures. On the contrary, industrial lobbies prefer to target the implementation stage of environmental agreements, especially the measures that are more rewarding in economic terms. We also find evidence that institutions play a vital role in fostering participation in environmental agreements, and that interest groups tend to be more influential when the quality of institutions is lower. The study draws a number of policy suggestions. We stress the capacity of regional agreements to deliver higher participation rates than global agreements. We also highlight the importance of securing the participation of key players in the initial years to promote adherence to the agreement. Finally, we illustrate how our model can be used to generate probabilities of joining environmental agreements. The content of this thesis is relevant to treaty negotiators and any entity that has an economic or private interest in environmental agreements.	

المستخلص

أيضاً، قام الباحث بوضع جدول أو فهرس الصور والجداول وهو ما يعد عنصر مهم وأساسي في رسائل الدكتوراة والماجستير.

فهرس
الجداول

List of Tables	
2.1 Top five and bottom five ratifiers by ratification rate	17
2.2 Ratification data sets	18
3.1 Cross-sectional studies	51
3.2 Survival analysis for single treaties	61
3.3 Pooled survival analysis	67
5.1 Definitions and sources	131
5.2 Correlation matrix for ratification variables — post 1990	137
5.3 Summary statistics — post 1990	140
6.1 Main results on ratification	143
6.2 Correlation matrix for country variables in model 1	145
6.3 Industrial lobbying	150
6.4 Correlation matrix for industrial lobbying proxies	151
6.5 Industrial lobbying in the empirical literature	153
6.6 Convergence statistics for model 1	156
6.7 Convergence from different starting points	161
6.8 Robustness checks	163
6.9 Correlation matrix for proxies in robustness checks	165
6.10 Simulated probabilities for two hypothetical environmental treaties	176
6.11 Simulated probabilities and ratification status for the Minamata Convention on mercury	178
7.1 Definitions and sources	195
7.2 Summary statistics	202
7.3 Lobbying on domestic policies	204
A.1 Country information	250
B.1 Treaty information	261

List of Figures	
1.1 Number of environmental treaties ratified	3
2.1 Number of new agreements by year	10
2.2 Annual number of ratifications	11
2.3 Ratification rate of the environmental treaties in the data set	15
2.4 Top five and bottom five ratifiers by number of ratifications	16
2.5 Countries in the data set	20
4.1 A model of environmental agreements in three stages	94
5.1 Number of ratifiers	103
5.2 Ratification rate	104
5.3 Kaplan-Meier survival estimates	108
5.4 Censoring in ratification data	110
5.5 Kernel density estimates of duration for the countries that ratified	112
5.6 Transforming ratification data into a binary format	123
5.7 Potential ratifications	126
5.8 Ratification of regional and global agreements	135
6.1 Marginal posterior distributions	158
6.2 Parameter traces for model 1	160
6.3 Comparison of the baseline hazard of model 1 with a non-parametric definition	166
6.4 P-P plot for the distribution of the treaty and country effect	168
6.5 Survival functions for the environmental agreements	169
6.6 Caterpillar plots for the treaty and country effects	172
6.7 Comparison of the hazard of ratification for three countries	175
7.1 Distribution of Fossil Support	192
7.2 Distribution of Environmental	193
8.1 Ratification rates across the world	212

فهرس
الرسومات
التوضيحية

Declaration & Copyright

I confirm that no part of the material presented in this thesis has previously been submitted for a degree in this or any other university. In all cases the work of others has been fully acknowledged.

The copyright of this thesis lies with the author. No quotation from it should be published without prior written consent, and information derived from it should be acknowledged.

Copyright: *Francesco S. Bellelli, 2019* ©

الحقوق الملكية والعبارة التصريحية هي أيضاً
أحد العناصر المهمة في البحوث العلمية وقام
الكاتب بوضعها بعد استعراض فهارس
المحتويات والرسوم التوضيحية والجداول

Acknowledgements

My sincere gratitude goes to Prof. Scarpa and Dr. Aftab for the opportunity to study a PhD at Durham. It was an immensely enriching experience. I feel greatly indebted for their understanding in the hard moments, and for their guidance and precious advising all along these three years. The quality of their supervision was impressive; I could have not hoped for a better supervisory team.

I would also like to express my heartfelt thanks to my parents. Without their support this PhD would have not been possible. I still believe they do not really know what I have been doing in the past years, except that it took a rather lengthy amount of time, and that it involved an even lengthier thesis. They probably wished the master thesis had sated my academic appetite, nonetheless they lovingly supported me in all my endeavours and allowed me to have the best possible education. Their support has been unwavering all along my life. For this, and much more, I am grateful to them.

A special thought goes to my brother Guglielmo. His unfaltering patience and the computing power of his PC have been essential in the estimation of the most demanding models — even though, at times, I might have pushed one of the two very close to its limit. I wish to thank also the rest of my family. In particular, Federica and Guido, whose wedding happily punctuated this PhD. To them, I renew my best wishes.

Last but not least, I would like to thank Lily, who I have met in the first year in Durham. Her job, and this thesis, forced us into a long-distance relationship with 8 hours of time gap. Despite being on the other side of the earth, her love has been a constant source of encouragement and helped me face the tribulations of the last three years. Every fleeting moment spent together sparkled the enthusiasm required to finish this research project.

وضع الباحث أيضاً الإقرار وهو أيضاً من
العناصر المهمة المتعارف عليها في البحوث
الأكاديمية والعلمية

• كتب الباحث رسالته في حوالي 324 صفحة وهو ما يعتبر مناسب جداً في مجال البحوث الأكاديمية والعلمية.

• قسم رسالته إلى 8 فصول كالتالي:

1. مقدمة
2. أسئلة ومحفزات البحث.
3. المراجعة الأدبية.
4. الإطار النظري لتحليل المحددات والمتغيرات.
5. المنهجية والبيانات.
6. النتائج.
7. تحليلات ودراسات إضافية.
8. الخاتمة.

الخاتمة

اختتم الباحث رسالته بوضع سيرة ذاتية مبسطة عن نفسه بالإضافة إلى الملاحق.

وبهذا، يعد الإطار النظري العام للرسالة مناسب وملائم جداً وشامل لكافة العناصر الأساسية والمطلوبة في مجال البحوث الأكاديمية والعلمية.



مجموعة جامعة
الجميع الذكية
للتعليم القابضة

MIDOCEAN
UNIVERSITY



Thank You

