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The Logic of Preferential Trade Agreements
An Empirical Analysis of the Consequences of a New Economic Order

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*A Abbu, à Mama, à Meera,
à Usama*

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List of Acronyms

ACE	<i>Accord sur la coopération environnementale</i>
AFTA	<i>ASEAN Free Trade Area</i>
ALENA	<i>Accord de libre-échange Nord-Américain</i>
AME	<i>Accords multilatéraux environnementaux</i>
ANZCERTA	<i>Australia-New Zealand Closer Economic Relations Trade Agreement</i>
ASEAN	<i>Association of Southeast Asian Nations</i>
BITs	<i>Bilateral Investment Treaties</i>
CACM	<i>Central American Common Market</i>
CAFTA-DR	<i>Dominican Republic-Central America FTA</i>
CAN	<i>Andean Community</i>
CARICOM	<i>Caribbean Community and Common Market</i>
CARIFORUM	<i>Caribbean Forum of African, Caribbean and Pacific States</i>
CEDEAO	<i>Communauté économique des États de L'Afrique de l'Ouest</i>
CEEC	<i>Central and Eastern European Countries</i>
CEFTA	<i>Central European Free Trade Area</i>
CEPGL	<i>Communauté économique des Pays des Grands Lacs</i>
CEPII	<i>Centre d'études Prospectives et d'Informations Internationales</i>
CIS	<i>Commonwealth of Independent States</i>
CITES	<i>Convention on International Trade in Endangered Species</i>
CM	<i>Capital Mobility</i>
CMEA	<i>Council for Mutual Economic Assistance</i>
CMs	<i>Common Markets</i>

COMESA	<i>Common Market for Eastern and Southern Africa</i>
COW	<i>Correlates of War</i>
CP	<i>Competition Policy</i>
CUs	<i>Customs Unions</i>
CUSFTA	<i>Canada-United States Free Trade Agreement</i>
DESTA	<i>Design of Trade Agreements</i>
DSMs	<i>Dispute Settlement Mechanisms</i>
EAEC	<i>Eurasian Economic Community</i>
EC	<i>European Commission</i>
ECCAS	<i>Economic Community of Central African States</i>
ECOWAS	<i>Economic Community of West African States</i>
EEA	<i>European Economic Area</i>
EEC	<i>European Economic Community</i>
EFTA	<i>European Free Trade Agreement</i>
EPA	<i>Economic Partnership Agreement</i>
ES	<i>Environmental Standards</i>
EU	<i>European Union</i>
EUs	<i>Economic Unions</i>
FDI	<i>Foreign Direct Investment</i>
FTAs	<i>Free Trade Agreements</i>
FYROM	<i>Former Yugoslavian Republic of Macedonia</i>
GATS	<i>General Agreement on Trade in Services</i>
GATT	<i>General Agreement on Tariffs and Trade</i>
GCC	<i>Gulf Cooperation Council</i>
GDELTA	<i>Global Data on Events, Location and Tone</i>
GDP	<i>Gross Domestic Product</i>
GMM	<i>Generalized Method of Moments</i>
GMM-SYS	<i>GMM-System Estimator</i>
GPTAD	<i>Global Preferential Trade Agreements Database</i>
GSP	<i>Generalized System of Preferences</i>

GSTP	<i>Global System of Trade Preferences</i>
HOS	<i>Heckscher-Ohlin-Samuelson</i>
ICSID	<i>International Centre for Settlement of Investment Disputes</i>
IDEA	<i>Integrated Data for Events Analysis</i>
IGOs	<i>Intergovernmental Organizations</i>
IMF	<i>International Monetary Fund</i>
IOs	<i>International Organizations</i>
IPRs	<i>Intellectual Property Rights</i>
ITO	<i>International Trade Organization</i>
LAIA	<i>Latin American Integration Agreement</i>
LDCs	<i>Least Developed Countries</i>
LE	<i>Legally Enforceable</i>
LM	<i>Labor Mobility</i>
MEAs	<i>Multilateral Environmental Agreements</i>
MERCOSUR	<i>Southern Common Market</i>
MFN	<i>Most-Favoured Nation</i>
MIDs	<i>Militarized Interstate Disputes</i>
MNEs	<i>Multinational Enterprises</i>
MOFCOM	<i>Ministry Of Commerce (China)</i>
MRU	<i>Mano River Union</i>
NAAEC	<i>North American Agreement on Environmental Cooperation</i>
NAFTA	<i>North American Free Trade Agreement</i>
OCT	<i>Overseas Countries and Territories</i>
OECD	<i>Organisation for Economic Co-Operation and Development</i>
OGM	<i>Organismes Génétiquement Modifiés</i>
OIC	<i>Organisation Internationale Du Commerce</i>
OLS	<i>Ordinary Least Squares</i>
OMC	<i>Organisation mondiale du commerce</i>
PAFTA	<i>Pan-Arab Free Trade Area</i>
PATCRA	<i>Papua New Guinea-Australia Trade and Commercial Relations Agreement</i>

PIB	<i>Produit Intérieur Brut</i>
PICTA	<i>Pacific Island Countries Trade Agreement</i>
PME	<i>Petite et Moyenne Entreprise</i>
PMP	<i>Predominant Method of Production</i>
PSA	<i>Partial Scope Agreement</i>
PTAs	<i>Preferential Trade Agreements</i>
PTN	<i>Protocol on Trade Negotiations</i>
PWT	<i>Penn World Tables</i>
RIAs	<i>Regional Integration Agreements</i>
ROW	<i>Rest of the World</i>
RTAs	<i>Regional Trade Agreements</i>
SAARC	<i>South Asian Association for Regional Cooperation</i>
SACU	<i>Southern Africa Customs Union</i>
SADC	<i>Southern African Development Community</i>
SAFTA	<i>South Asian Free Trade Area</i>
SAPTA	<i>South Asian Preferential Trade Agreement</i>
SMEs	<i>Small and Medium Enterprises</i>
SPARTECA	<i>South Pacific Regional Trade and Economic Cooperation Agreement</i>
SPS	<i>Sanitary and Phytosanitary</i>
TAFTA	<i>Trans-Atlantic Free Trade Agreement</i>
TRIMS	<i>Trade-Related Investment Measures</i>
TRIPS	<i>Trade-Related Aspects of Intellectual Property Rights</i>
TTIP	<i>Transatlantic Trade and Investment Partnership</i>
UE	<i>Union Européenne</i>
UK	<i>United Kingdom</i>
UN	<i>United Nations</i>
UNCITRAL	<i>United Nations Commission on International Trade Law</i>
UNCTAD	<i>United Nations Conference on Trade and Development</i>
UNFCCC	<i>United Nations Framework Convention on Climate Change</i>
US	<i>United States</i>

USA	<i>United States of America</i>
VRA	<i>Virtual Research Associates</i>
WAEMU	<i>West African Economic and Monetary Union</i>
WEIS	<i>World Event Interaction Survey</i>
WTO	<i>World Trade Organization</i>

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French language summary

Résumé en Français

La logique des accords de commerce préférentiels

Une analyse empirique des conséquences d'un nouvel ordre économique mondial

Les accords de commerce préférentiels (en anglais Preferential Trade Agreements: PTAs) tendent récemment à se multiplier, non seulement au niveau régional, mais également bilatéral. Ils sont devenus un axe majeur dans la coopération économique internationale et marquent un retour de la politique commerciale conduite par les Etats. Il faut par ailleurs souligner qu'ils sont de plus en plus ambitieux, quant aux domaines couverts mais aussi quant aux mécanismes institutionnels qu'ils prévoient. On peut distinguer deux vagues dans ce processus d'extension des accords de commerce préférentiels. La première vague qui débute à la fin des années 1950 et se poursuit tout au long des années 1960 correspond au schéma classique d'union douanière ou de zone de libre échange et ne concerne que l'Europe occidentale. L'objectif était essentiellement d'accorder des préférences tarifaires (en l'occurrence de supprimer les droits de douane) au sein d'un groupe de pays formant un ensemble régional, sans pour autant étendre ces avantages au reste du monde. Ce n'était

bien sûr qu'une étape initiale qui devait être suivie par un long processus allant bien au-delà de réductions tarifaires et visant à adopter des politiques communes dans de nombreux domaines.

Pour les accords plus récents, les réductions tarifaires classiques ne sont plus un enjeu important en raison des acquis des négociations multilatérales qui se sont déroulées dans le cadre du GATT, devenu OMC.

Par ailleurs, à la différence des premiers accords qui étaient conclus entre pays d'une même région et de niveaux de développement comparables, les accords récents, en pleine expansion, tissent des réseaux de pays appartenant à des régions différentes et souvent de niveaux de développement inégaux. Ils sont généralement bilatéraux ou plurilatéraux¹. Les parties à ces accords peuvent être de tailles très dissemblables et peuvent se ranger dans les catégories Nord/Nord, Nord/Sud et Sud/Sud. En outre, ces accords portent de plus en plus sur des domaines très variés et nouveaux, et comportent un cadre juridique complet prévoyant des mécanismes de règlement des différends plus ou moins contraignants.

Pourquoi la multiplication des accords de commerce préférentiels introduit-elle une nouvelle logique?

La conférence de Bretton Woods en 1944 dont le but principal a été de mettre en place de nouvelles institutions monétaires et financières, a également lancé des plans devant faire l'objet de négociations dans des conférences ultérieures, l'ensemble formant les piliers d'un nouvel ordre économique international. L'Organisation Internationale du Commerce (OIC) prévue par les négociations du traité de La Havane en 1947 reposait sur un principe fondateur de non-discrimination dans les relations commerciales et privilégiait le multilatéralisme comme méthode de négociation. Le traité instituant l'OIC n'a jamais été ratifié, en raison du refus du congrès américain qui redoutait une perte de souveraineté. Néanmoins cet échec de la charte de La Havane eut des conséquences limitées du fait

¹ les accords plurilatéraux sont conclus entre plus de deux pays (ou blocs régionaux) et sont transrégionaux. Il ne faut pas les confondre avec les accords multilatéraux qui concernent l'ensemble des pays membres de l'OMC.

qu'elle avait été précédée quelques semaines auparavant par l'accord signé à Genève sous le nom de GATT (en français: Accord Général sur les Tarifs Douaniers et le Commerce). Il est important cependant de souligner, pour éclairer le sujet, que les ambitions du GATT étaient beaucoup plus limitées que celles de l'OIC. De ce fait, des domaines très importants pouvant faire l'objet d'une libéralisation des relations économiques internationales restaient en dehors du champ du GATT. Bien que l'élargissement du mandat du GATT soit resté de façon constante à l'agenda des négociations ultérieures, un champ très large restait ouvert pour des négociations entre pays, en dehors de ce cadre institutionnel. La transformation du GATT en Organisation Mondiale du Commerce en 1995 avait pour objet de combler ce vide, mais comme cela va faire l'objet d'une discussion détaillée, de vastes domaines de négociation devaient rester en dehors du mandat de l'OMC, laissant un espace pour la négociation d'accords préférentiels, bien au-delà de ce qui avait été prévu par l'article XXIV du GATT (Bhagwati, 2008).

L'ambition de la thèse a été de rendre compte de ce phénomène majeur, dans divers aspects qui font l'objet d'autant de chapitres.

Cette multiplication des accords de libre échange marque-t-elle la fin du multilatéralisme et un déclin du rôle de l'OMC?

Faut-il alors craindre des effets négatifs sur le développement futur du commerce international, avec des conséquences négatives en termes de bien-être? Cela fait l'objet d'un premier chapitre.

Les institutions multilatérales de l'après-guerre avaient aussi un objectif politique de reconstruction d'une société internationale fondée sur la coopération et proposant des mécanismes de résolution des conflits. Leur déclin marque-t-il un retour à des formes de confrontation entre Etats? Quelle est la contribution des accords de commerce préférentiels au renforcement des mécanismes politiques de prévention ou de résolution des conflits? Cela fait l'objet du deuxième chapitre.

Parmi les domaines essentiels des relations économiques internationales qui échappent en grande partie à la juridiction de l'OMC, il y a les règles qui s'appliquent en matière d'investissement direct international (en anglais FDI). Elles peuvent faire l'objet de "*codes d'investissement*" séparés et unilatéraux, mais de plus en plus, elles deviennent des chapitres essentiels dans les accords de libre échange, en particulier pour ceux qui font encore actuellement l'objet de négociations. Il était donc important d'examiner empiriquement l'effet de ces accords sur le développement des investissements directs, selon le type de clauses adoptés dans ces accords. Le chapitre 3 propose un approfondissement de ces analyses.

Quant au chapitre 4, il se penche sur une dimension nouvelle mais très importante. Devant les difficultés pour faire progresser les négociations multilatérales visant à l'adoption d'objectifs environnementaux ambitieux, nombre de pays se tournent vers des négociations séparées qui permettent d'avancer, certes à petits pas, mais en proposant des solutions concrètes.

Il n'est donc pas surprenant que de plus en plus d'accords de commerce préférentiels intègrent des chapitres consacrés à l'environnement et prévoient des mécanismes plus ou moins contraignants pour mettre en place des avancées environnementales. Il était donc important de consacrer un chapitre à identifier les raisons qui poussent les Etats à inclure ce domaine dans les accords commerciaux dans lesquels ils s'engagent.

L'ensemble de la thèse revendique une unité de méthode. Les accords de commerce préférentiels ne sont pas considérés comme des objets de recherche homogènes, indifférenciés, mais leurs différences sont au contraire mises en avant pour en analyser les effets et pour en comprendre la logique. Il s'agit d'entrer dans le détail des mécanismes juridiques qu'ils constituent, dans le détail de leur caractère plus ou moins contraignant, mais aussi d'examiner l'étendue des domaines qu'ils couvrent, en particulier lorsque ces domaines échappent à la juridiction de l'OMC.

Les accords de commerce préférentiels posent à cet égard d'importantes questions relatives à la souveraineté des Etats. Rappelons que le projet ambitieux d'Organisation

Internationale du Commerce avait précisément échoué en raison de réticences, américaines en la circonstance, à renoncer à la souveraineté en matière commerciale et plus généralement économique.

Les Etats sont jaloux de leur compétences nationales. Ils veulent préserver leurs prérogatives et ne sont pas prêts à voir leur souveraineté entamée par des traités qui ne leur apportent pas d'importants avantages en compensation.

Par ailleurs la souveraineté des Etats a été consacrée par la Charte des Nations Unis (art.2.7)

« Aucune disposition de la présente charte n'autorise les Nations unies à intervenir dans les affaires qui relèvent essentiellement de la compétence nationale d'un État ».

Il en résulte qu'en règle générale le droit international dispose de peu de moyens pour contraindre par la force les Etats qui refusent de respecter leurs engagements. En matière économique ou commerciale notamment, les moyens de coercition sont faibles (Guzman, 2005). Les sanctions restent une option, mais leur mise en œuvre dans un cadre multilatéral reste délicate.

La question s'est donc posée de savoir si des accords séparés n'offrent pas des avantages lorsque des Etats envisagent des renoncements de souveraineté en échange d'avantages économiques ou dans le but de renforcer leurs alliances.

L'inconvénient majeur de renoncements de souveraineté dans un cadre multilatéral est qu'ils doivent être consentis *erga omnes*, à la différence d'accords séparés pour lesquels la négociation bilatérale laisse une marge de contrôle importante et où les partenaires concernés ont été choisis (Krugman, 1993).

En tant qu'alternative aux engagements multilatéraux, les accords de commerce préférentiels doivent proposer un cadre institutionnel ou juridique de nature à mettre en place des mécanismes de règlement des différends. A cet égard, tous les accords de commerce préférentiels ne prévoient pas le même degré de contrainte juridique. Ils sont

divers et peuvent aller de déclarations de principe jusqu'à la mise en place d'instances juridictionnelles chargées de faire respecter les engagements. L'Union Européenne, mais aussi Le Marché commun de l'Afrique orientale et australe (en anglais COMESA - *Common Market for Eastern and Southern Africa*), par exemple, relèvent de cette dernière catégorie. D'autres prévoient des procédures d'arbitrage (ALENA, accord UE-Mexique, Etats Unis-Australie...) qui constituent un niveau intermédiaire de contrainte juridique et enfin certains accords se contentent de procédures de règlement politico-diplomatiques, tels que l'ASEAN à l'origine (spécifiquement l'AFTA-ASEAN Free Trade Area).

La question des motifs qui conduisent les Etats à retenir, dans la négociation d'un accord de commerce préférentiel, l'un de ces trois niveaux de contrainte juridique est d'une grande importance. Elle résulte d'un arbitrage entre efficacité des mécanismes d'intégration économique, avec les gains économiques associés, et la perte de souveraineté, avec des conséquences politiques difficilement prévisibles. Il est évident que le résultat de cet arbitrage dépend étroitement des caractéristiques des Etats parties à la négociation, telles que la taille, les différences de niveau de développement, la proximité culturelle, les facteurs historiques...

Des études sociologiques, s'appuyant sur l'approche fondatrice de Karl Deutsch (1953), ont souligné la dimension de "*communication sociale*" attachée à ce processus d'interaction entre Etats et son rôle dans la construction des institutions (voir par exemple Bourricaud, 1992). Cette approche fait l'objet d'une discussion ci-dessous sous le titre "La politique du commerce et les institutions" et est reprise dans le chapitre 2 de la thèse.

C'est de fait une question empirique essentielle d'identifier les déterminants de cette dimension majeure des accords de commerce préférentiels. Il faut à cet égard souligner à nouveau que les relations internationales restent fondamentalement conditionnées par la faiblesse intrinsèque des règles de droit internationales. La question de l'absence ou de la faiblesse des mécanismes juridiques de coercition au niveau international est déterminante dans le choix des voies et moyens qui peuvent conduire à renforcer le cadre institutionnel de la politique commerciale (Guzman, 2005).

La conclusion d'accords sur la scène internationale comporte des risques en raison de l'absence le plus souvent de moyens de coercition. Néanmoins le refus de respecter ses engagements juridiques a pour un Etat un coût en termes de réputation (Guzman, 2002). En acceptant de s'engager dans un cadre juridique supposé contraignant, les Etats recherchent une crédibilité dont ils espèrent retirer des bénéfices pour l'avenir.

Les institutionnalistes soulignent que les Etats choisissent de s'engager dans des accords de commerce préférentiels pour signaler leur engagement en faveur de la libéralisation (Hicks et Kim, 2012) et de politiques économiques prévisibles (Büthe et Milner, 2008).

Cette question de la crédibilité a d'importantes implications qui font l'objet d'une analyse, notamment au travers du choix des mécanismes juridiques incorporés dans les accords de commerce préférentiels, et est au cœur du phénomène de multiplication des accords préférentiels.

De fait les accords préférentiels ont proliféré en dépit des avancées significatives des différents "*rounds*" de négociation dans le cadre du GATT, puis de l'OMC.

Le GATT/OMC a été globalement un succès en matière de réduction multilatérale des droits de douane, mais les progrès ont été lents et étroitement cantonnés aux seuls domaines concédés à ce cadre multilatéral.

En conséquence, les pays, tout en étant membres de l'OMC, mais déçus par la lenteur des avancées, ont conclu des accords de commerce préférentiels pour étendre les domaines de concessions réciproques (Mansfield et Reinhardt, 2004). Les accords préférentiels apportent des réponses immédiates, là où l'approche multilatérale se heurte à des blocages. Ils permettent d'engager un processus d'intégration plus approfondi, qui ne se limite pas aux seuls tarifs douaniers. Ils mettent sur la table des questions de politiques commerciales telles que les procédures douanières, les taxes à l'exportation, les barrières techniques, normes et réglementations. Ils peuvent également étendre les négociations à la politique de concurrence, à la réglementation environnementale, à la sûreté nucléaire, à la

propriété intellectuelle et même instituer un dialogue politique (Anderson et van Wincoop, 2004).

En dehors de la question des mécanismes juridiques qui permettent d'aller plus loin que l'OMC, il y a donc la question de l'étendue des domaines sur lesquels portent ces accords.

Tous ces domaines de négociation peuvent être rangés en deux catégories proposées par Horn, Mavroidis et Sapir (2010), OMC⁺ et OMC^x.

OMC⁺ se rapporte à l'ensemble de clauses portant sur des domaines qui relèvent par ailleurs de la compétence de l'Organisation Mondiale du Commerce. Il s'agit alors, dans le cadre d'un accord préférentiel, d'approfondir les engagements pris dans le cadre multilatéral. L'exemple le plus fréquent est celui d'un abaissement tarifaire plus important que celui réalisé dans le cadre de l'OMC, dans l'industrie, l'agriculture ou les services.

OMC^x regroupe tous les domaines, dits non-conventionnels, qui sortent de la compétence de l'OMC, tels par exemple que la mobilité des travailleurs et les standards environnementaux.

La thèse propose d'approfondir cette analyse des différences qualitatives entre accords préférentiels en s'appuyant sur cette distinction et en examinant particulièrement le détail des domaines de négociations qui relèvent de OMC^x.

La conclusion d'accords préférentiels s'est faite en parallèle au déroulement des négociations de l'OMC. L'évolution de ces deux types d'institutions a focalisé l'attention de la recherche, mais aussi des responsables de la politique économique. Quels sont les effets sur le commerce, et finalement sur le bien-être des accords préférentiels (Baldwin, 2008; Bhagwati, 1996a; 2008)?

Quelles sont les interactions entre les deux processus?

Accords de commerce préférentiels ou multilatéralisme (un débat académique)

Dans la recherche en économie internationale, une doctrine dominante s'est imposée dans l'immédiate après-guerre. Cela faisait partie d'un débat plus large qui avait conduit à écarter tous les doutes sur la supériorité du libre-échange. Le multilatéralisme était l'opposé de pratiques discriminatoires qui avaient prévalu dans l'entre-deux-guerres. La Préférence Impériale établie par la Grande Bretagne en 1932 avait été une réponse à la montée du protectionnisme aux Etats-Unis, avec le Smoot-Halley tariff de 1930. Ces épisodes sont considérés comme le point de départ d'un éclatement de l'économie mondiale en blocs, conduisant à un effondrement complet du commerce international (Kindleberger, 1989).

Ces événements dramatiques ont été considérés comme une preuve de la supériorité du libre-échange universel sur les pratiques discriminatoires, telles qu'elles existaient pour une bonne partie au 19ème siècle, et plus tard, dans les années 1930.

Les pratiques discriminatoires, et donc les accords préférentiels, ont été la cible de toutes les critiques. L'application de la clause de la Nation la plus favorisée, pourtant souvent pratiquée vers la fin du 19ème siècle, ne paraissait même pas suffisante. Il fallait imposer une discipline commune pour bannir toute pratique discriminatoire. L'exception prévue par l'article XXIV du GATT était justifiée par des motifs purement politiques et ne reposait sur aucun fondement de rationalité économique (Machlup, 1977). Néanmoins les défenseurs les plus acharnés du libre-échange devaient admettre, au vu de l'état du Monde après la guerre, qu'une libéralisation ne pouvait être que progressive, pour prendre en compte les graves déséquilibres de compétitivité entre nations. C'était faire une concession à une longue tradition de justification du protectionnisme temporaire, tel que défendu par F. List.

En mettant en œuvre l'Union Douanière Allemande (Zollverein) en 1834, List initiait l'union douanière comme forme achevée d'accord de commerce préférentiel.

Néanmoins, après la seconde guerre mondiale, plus personne, ou presque, ne considérait que les accords préférentiels étaient une voie pouvant conduire au but recherché qui était d'atteindre progressivement le but de libéralisation complète des échanges. Sur le plan théorique personne n'osait contester la supériorité du multilatéralisme.

Cependant, comme c'est toujours le cas en matière de politique commerciale, la théorie et la pratique ne s'accordaient pas. De manière très habituelle, les gouvernements qui défendent l'intérêt national, écartaient le point de vue des *"théoriciens"*. La période de l'après seconde guerre mondiale est toutefois à cet égard une exception. La mise en avant de l'intérêt national est moralement dévaluée et le multilatéralisme marque l'adhésion au bien commun. Ce renforcement de la loi internationale et d'institutions supra-nationales se faisait au détriment de la souveraineté (Koremenos et al., 2001).

On peut facilement comprendre, dans ce contexte, que les accords préférentiels aient été juste tolérés, lorsqu'ils étaient motivés par des raisons politiques, essentiellement géostratégiques.

L'essor des accords de commerce préférentiels à partir des années 1990 est probablement le signe d'une désillusion sur les vertus du multilatéralisme. L'origine de cette désillusion remonte aux années 1970, quand il est apparu clairement que le multilatéralisme était incapable de corriger les déséquilibres croissants entre nations, en particulier entre pays développés et pays en voie de développement.

Gunnar Myrdal et Raul Prebisch qui avaient été des *"défenseurs zélés"* du multilatéralisme et s'étaient engagés dans les institutions de la reconstruction (respectivement à la Commission Economique pour l'Europe des Nations Unies et à la commission analogue pour l'Amérique Latine) ont commencé à émettre des doutes qui les ont fait qualifier de *"bureaucrates dissidents"*. Ce commencement de remise en cause a conduit à la très importante déclaration des Nations Unies du 1^{er} mai 1974 sur *"l'Etablissement d'un Nouvel Ordre Economique International"*. Elle marque un tournant à partir duquel la défense de l'intérêt national retrouve sa légitimité. A partir de cette date, les Etats vont pouvoir prendre en considération le choix de s'engager dans des accords préférentiels. La

discrimination, telle qu'elle avait été défendue par F. List, va être considérée comme une pratique acceptable, reposant de plus sur des arguments économiques. Plus récemment, J. Stiglitz, faisant référence à la défiance qui se manifeste de plus en plus vis à vis de la "globalisation", visait en fait le multilatéralisme.

"Les bureaucrates internationaux, ces symboles de l'ordre économique mondial, sont attaqués de toutes parts (...) Pratiquement chaque réunion importante du Fond Monétaire International, de la Banque Mondiale et de l'Organisation Mondiale du Commerce est le théâtre d'affrontements agités".

Le débat académique lui même, sur les mérites respectifs du multilatéralisme et des accords préférentiels, s'est cristallisé autour de l'opposition entre deux grandes figures partageant pourtant le même objectif en faveur du bien-être, Jagdish Bhagwati et Richard Baldwin.

Les défenseurs des accords de commerce préférentiels (Baldwin, 1998), en réplique aux arguments des multilatéralistes (Bhagwati, 1996a), avancent que les accords préférentiels sont un outil alternatif qui offre une voie plus rapide et plus efficace pour libéraliser les échanges et sont donc des instruments de politique économique dont l'utilisation est justifiée pour atteindre progressivement le libre-échange, un but partagé avec les multilatéralistes.

De leur côté, les défenseurs du multilatéralisme répètent l'argument classique selon lequel les accords de commerce préférentiels provoquent la substitution entre des productions plus efficaces (de pays extérieurs à l'accord) et des productions moins efficaces de partenaires à l'accord. Leur argument majeur est surtout que la conclusion de tels accords (et leur multiplication) fait disparaître toute incitation à progresser sur le front multilatéral (Krishna, 1998; Levy, 1997).

Bhagwati (1991) a lancé le débat en introduisant une distinction entre analyse statique et analyse dynamique. L'analyse statique suit le schéma classique proposé par Meade et Viner et fondé sur les concepts de "création de trafic et détournement de trafic". Création

et détournement de trafic peuvent avoir un impact sur les termes de l'échange¹. Un accord préférentiel est susceptible d'améliorer les termes de l'échange pour les pays participants et détériorer ceux des autres pays.

Une demande plus faible pour les biens importés en provenance des pays non membres de l'accord peut conduire à une diminution des prix à l'exportation de ces pays. Au surplus, l'intensification du commerce entre pays parties à un accord peut conduire à une moindre disponibilité de certains biens dont le prix à l'importation va augmenter pour les autres pays.

Le critère très simple de J. Viner, calculant le solde net entre création de trafic et détournement de trafic, ne prenait pas en compte les effets des variations de quantités sur les prix et donc sur les termes de l'échange.

Les résultats ambigus de l'approche de J. Viner ont conduit les chercheurs à examiner plus en détail les critères qui vont permettre d'évaluer plus précisément création de trafic et détournement de trafic, et donc d'en tirer des conclusions en termes de bien-être. Les implications en matière de politique économique de l'approche à la Viner ont donné lieu à de très nombreux débats (par exemple Wonnacott et Lutz, 1989; Krugman, 1991a). Ces travaux ont apporté des éclaircissements sur les mécanismes qui déterminent les effets des accords préférentiels. Ils ont permis de souligner que les accords conclus entre pays géographiquement proches et avec déjà des flux de commerce croisés très importants, ceux que l'on définit comme des "*partenaires commerciaux naturels*", seront créateurs d'échanges nets et bénéficieront aux pays concernés.

Ces analyses, fondées sur la notion de partenaire commercial naturel, n'ont pas recueilli l'assentiment de Bhagwati et Panagariya (1996a) qui démontrent que le critère du volume des échanges croisés, préalablement à l'accord et le critère des coûts de transport (proximité géographique) sont analysés dans un contexte non pertinent. Ils soulignent que le volume de création de trafic n'est pas symétrique. Par exemple Les Etats-Unis sont le

¹ Dans ce débat, les termes de l'échange se comprennent comme le ratio des prix à l'exportation sur les prix à l'importation.

partenaire le plus important pour le Mexique, mais l'inverse n'est pas vrai. Ce qui importe de leur point de vue, c'est d'être en mesure de prévoir les détournements de trafic. Ils montrent sous certaines conditions qu'une réduction progressive du niveau de protection entre partenaires à l'accord va tout d'abord augmenter le bien-être, mais ensuite peut le réduire jusqu'à un point inférieur à la situation initiale. Ils montrent également qu'une forte intensité préalable des échanges peut conduire, en cas d'accord préférentiel, à une perte très significative en raison des effets redistributifs liés à la baisse des droits de douane. Panagariya (1997) a estimé que la participation à l'ALENA a entraîné, pour le Mexique, une perte de 3,26 milliards de dollars US.

Si tous les économistes s'accordent en général sur le fait que le développement des échanges commerciaux contribue au bien-être, ils divergent sur la question du rôle que peuvent jouer les accords préférentiels pour contribuer au développement des échanges.

Bhagwati et Panagariya s'opposent vigoureusement à tout accord préférentiel, même régional. Levy (1997) apporte une démonstration, dans le cadre d'un modèle dérivé d'Heckscher-Ohlin introduisant un électeur médian, suggérant que la conclusion d'accords préférentiels va finalement saper le soutien au multilatéralisme.

Baldwin ne partage pas cet avis. Il considère que les accords préférentiels, en particulier régionaux, sont complémentaires du multilatéralisme et en tous cas ne seront pas remis en cause. Ils font partie intégrante du système de relations économiques internationales. Il soutient que ces accords contribuent au but ultime en faisant des blocs constitués par les accords préférentiels de nouveaux acteurs du processus de multilatéralisation. Il suggère que l'OMC devrait essayer de canaliser ce processus, plutôt que de s'y opposer ou de l'ignorer.

Il est à l'origine de la théorie, dite des "*dominos*" (Baldwin,1993), qui souligne que l'adoption d'accords de commerce préférentiels est à l'origine d'un processus de réaction cumulative qui conduit à généraliser les concessions tarifaires.

Winters (1996) passe en revue les arguments en faveur et contre les accords préférentiels. Il trouve des arguments fondés et des preuves historiques à l'appui de chacun des deux courants.

L'impossibilité de départager les deux parties d'un débat posé dans des termes aussi généraux amène à conclure que la question doit d'abord être tranchée empiriquement, ce que fait le chapitre 1.

Elle conduit aussi à souligner que les accords préférentiels ne peuvent pas être considérés comme étant tous semblables, que leur soubassement juridique, que l'étendue des domaines qu'ils couvrent, sont autant de facteurs qui peuvent jouer dans un sens ou dans un autre.

On retire finalement de ces débats qu'il est essentiel de renouveler la méthodologie, pour tenir compte de la diversité des clauses contenues dans les accords, ce que propose le chapitre 1.

La politique du commerce et les institutions

L'histoire des traités commerciaux est très ancienne et se rapporte à une époque où les Etats étaient fréquemment en guerre pour tenter d'imposer leur suprématie politique et économique. La doctrine connue sous le nom de mercantilisme ne sépare pas l'économique du politique, et même subordonne l'économique aux objectifs politiques. Le mercantilisme a été perçu comme une doctrine de la guerre commerciale, pouvant conduire à la guerre tout court.

La réaction libérale à partir du milieu du 18ème siècle, en particulier avec les physiocrates et A. Smith, peut s'interpréter d'une certaine façon comme une tentative de soustraire l'économique de cette subordination au politique.

Il existe néanmoins une longue tradition d'hommes d'Etat, de philosophes et de penseurs politiques qui envisagent une solution dans laquelle les objectifs politiques et les objectifs économiques ne seraient pas considérés comme antagonistes. Ils ont lancé divers projets

de "*paix perpétuelle*" fondée sur le développement des liens commerciaux, au travers de traités contribuant à la formation d'institutions internationales.

Une des premières figures politiques méritant d'être mentionnée est probablement Maximilien de Béthune, connu sous le nom de Sully (1559-1641). En tant que premier ministre du roi de France, Henri IV, il aurait pu être considéré comme un de ces mercantilistes.

Cependant, il a toujours eu en tête l'établissement de la paix à travers la conclusion de traités de commerce, comme il l'a fait en contribuant à la conclusion d'un traité de commerce entre la France et la Sublime Porte (l'Empire Ottoman) en 1615. Son plan connu sous l'expression de "*grand dessein*" avait même une ambition encore plus grande qui était de promouvoir la paix et le commerce entre pays européens (Sully, 1970 [1638]). Il n'est pas possible de nommer tout ceux qui se sont inscrits dans cette tradition. Bien sûr Montesquieu, plaidant que "*l'effet naturel du commerce est d'amener la paix*", en est un des représentants importants (Montesquieu, 1989 [1748]). L'abbé de Saint-Pierre, avec son projet de "*paix perpétuelle*" a été un des inspirateurs de deux philosophes importants, Jean-Jacques Rousseau (1761) et Emmanuel Kant. L'écrit de ce dernier, "*Vers la paix perpétuelle*" (1991 [1795]) a été récemment abondamment utilisé par les économistes, les spécialistes de sciences politiques et de relations internationales (cela est évoqué dans le chapitre 2). Avant Kant, l'économiste anglais, Jeremy Bentham avait élaboré un plan similaire (Bentham, 1789). Machlup (1977) reprend une discussion très détaillée de ces auteurs.

Au 19ème siècle, ce débat a été occulté par le triomphe de la doctrine du "*laissez-faire*" et par la démonstration de la supériorité du libre-échange. Les traités de commerce, par définition discriminatoires, perdaient de leur intérêt à partir du moment où le libre-échange universel était supposé maximiser le bien-être. La décision du Royaume-Uni d'abolir les lois sur les blés et d'adopter progressivement un libre-échange unilatéral a en quelque sorte démodé les pratiques discriminatoires. C'est à cette époque que la fameuse "*clause de la nation la plus favorisée*" a été défendue comme un instrument permettant, dans les traités de commerce, de généraliser le libre-échange de façon multilatérale.

Dans la doctrine établie, le politique s'est retrouvé en position subordonnée. Cependant cette pensée dominante a été contestée par ceux qui soutenaient qu'elle n'était là que pour justifier finalement la domination britannique sur le reste du monde (ce que l'on appelait la tyrannie de John Bull). Parmi les plus actifs opposants de cette approche libérale se trouvait F. List qui, de retour d'un séjour aux Etats-Unis, où il avait rencontré les milieux protectionnistes inspirés par Alexander Hamilton, avait proposé son fameux argument de la protection de l'industrie naissante qui remettait vigoureusement en cause la doctrine du libre-échange. John Stuart-Mill avait du reconnaître la pertinence de cet argument et admettre finalement qu'il justifiait des accords commerciaux préférentiels (sans application de la clause de la nation la plus favorisée, bien entendu). Cela laissait le champ libre à des institutions commerciales motivées par des objectifs politiques, tels que l'Union Douanière Allemande (Zollverein) mise en œuvre par F. List, comme un premier pas vers l'unification politique allemande et la constitution d'un contrepoids à la domination britannique.

Au cours de ce survol du débat entre approche mercantiliste et approche du "laissez-faire", se terminant par un retour en force de la priorité donnée à l'intérêt national, un parallèle évident se dessine avec la période moderne au cours de laquelle l'esprit du GATT a dominé pour un temps, puis s'est vu progressivement contesté pour l'absence de réponse qu'il apportait au développement inégal et à l'hégémonie politique des puissances dominantes, empiétant les intérêts nationaux.

Dans ce débat contemporain, Albert Hirschman a une place centrale. Dans son ouvrage publié en 1945, qui a exercé une influence profonde, il fait entendre une voix discordante en parlant du *"Pouvoir National et [de la] Structure du Commerce International"*. Il se réfère à un livre publié par R.G. Hawtrey en 1930, intitulé *"les Aspects Economiques de la Souveraineté"* (Hawtrey, 1952 [1930]), mais après la fin de la seconde guerre mondiale, lorsque tous les intellectuels sont invités à se rallier à un objectif commun de nations coopérant dans le but d'atteindre le libre-échange, source ultime du bien-être, il fait entendre une voix dissonante, contre le paradigme libéral.

Il n'ignore pas que *"le commerce international est (aussi) un instrument du pouvoir national"*. Il est à l'origine d'un courant de pensée que l'on allait nommer *"réalisme"*. Il rappelle que la question du bien-être, qui est la préoccupation principale des économistes, n'est pas la seule à prendre en considération. Il faut aussi prendre en compte ce qu'il appelle l'économie de la puissance. Inutile de dire qu'Hirschman ramène de cette façon les relations économiques internationales dans la sphère de l'économie politique.

C'est une amnésie étrange que les libéraux, qui se réclament d'Adam Smith, aient semblé ignorer ce passage très clair du livre 4 de la Richesse des Nations, dans le chapitre 2 qui s'intitule *"Des systèmes d'Economie Politique"*, où il nous dit que *"la défense est d'une bien plus grande importance que l'opulence"* (Smith, 1776). Il justifie par là les très protectionnistes *"Actes de Navigation"* qui se sont succédés depuis 1651 et se range manifestement davantage dans le camp des réalistes que des libéraux.

Quoi qu'en pensent les défenseurs de l'économie du bien-être, l'économie de la puissance ne peut pas être ignorée.

Comme cela a souvent été souligné dans des approches d'économie politique, les décideurs économiques ne font pas des choix de politique étrangère en faisant abstraction du contexte politique intérieur. Des incitations de politique purement domestiques peuvent influencer de façon déterminante leur décision de s'engager dans un accord de commerce préférentiel (Kastner et Kim, 2008). Les groupes de pression (dotés implicitement de droits de veto) jouent un rôle capital dans la conclusion d'accords préférentiels. Grossman et Helpman (1995), par exemple, ont proposé un modèle théorique qui prend en compte le processus de négociation qui est décomposé en deux étapes. La première étape conduit, sous l'effet des pressions des intérêts concurrents, les gouvernements des pays qui négocient, à définir les options proposées; la seconde étape est marquée par un marchandage dont le succès dépend étroitement du caractère démocratique ou autocratique des régimes politiques qui négocient.

L'analyse de Karl Deutsch évoquée plus haut souligne que la base des institutions repose sur la communication et la coopération aussi bien dans le domaine politique que social ou

économique. Un gouvernement acceptera rarement de s'engager dans un arrangement commercial avec un adversaire. A l'inverse les accords commerciaux seront plus facilement conclus entre pays qui ont de bonnes relations politiques, économiques et militaires.

Ainsi dans une interview accordée par le vice-ministre du commerce de la République Populaire de Chine, ce dernier M. Yi Xiao-Zhun a suggéré la liste de critères suivants, pour décider d'entrer en négociation d'un accord de commerce.

- En premier, le partenaire a de bonnes relations politiques et diplomatiques avec la Chine;
- En second, le partenaire a des structures économiques et des structures d'exportation qui sont complémentaires avec celles de la Chine;
- En troisième, le partenaire a un marché domestique important ou sert de porte d'entrée dans un ensemble régional;
- Quatrièmement, le partenaire partage avec la Chine l'intention de construire un accord de libre-échange.¹

(noter l'ordre de présentation de ces critères)

De fait, les accords économiques internationaux ne doivent pas être considérés uniquement comme des instruments de réduction des obstacles aux frontières. Comme cela vient d'être souligné, ils doivent être également considérés comme des arrangements institutionnels mis en place par les Etats dans le but de poursuivre des objectifs stratégiques de politique étrangère et notamment de coopération internationale. La politique commerciale de la Communauté Européenne a un fort contenu politique et la conclusion d'accords de commerce préférentiels en est un instrument (Messerlin, 2001).

¹ Yi Xiaozhun, "China's Four Criterion in Selecting FTA Partners", 29 mai 2007, disponible sur <http://finance.sina.com.cn/roll/20070529/20571438980.shtml>

Enjeux méthodologiques pour analyser l'impact des Accords de Commerce Préférentiels

La recherche se penche habituellement sur l'analyse des effets des accords commerciaux sur le commerce bilatéral, sur l'investissement direct ou sur la coopération internationale en considérant les accords comme appartenant à une catégorie homogène (Blomstrom et Kokko, 1997; Jaumotte, 2004; Büthe et Milner, 2008; 2010). Cependant, les travaux récents ont commencé à classer les accords dans des catégories distinctes reprises des travaux fondateurs de Balassa, tels que zone de libre-échange, union douanière, marché commun et union économique, pour prendre en compte l'hétérogénéité entre ces différents accords (Ghosh and Yamarik, 2004; Magee, 2008; Vicard, 2009). L'hypothèse implicite est que tous ces accords ne sont pas équivalents et qu'il n'est pas possible d'ignorer ces différences. Un examen détaillé montre que l'étendue des domaines pris en compte et les mécanismes juridiques qui en assurent la mise en œuvre peuvent différer considérablement. Li (2000) montre par exemple que l'accord dit CUSFTA (Accord de Libre-Echange Canada Etats-Unis) et l'AELE appartiennent tous les deux à la catégorie des zones de libre-échange, mais leurs caractéristiques sont extrêmement différentes. Le premier est étroit et flexible, alors que le second est très complet. Identifier leurs effets sur le commerce nécessite une méthodologie qui prend en compte ces différences.

Horn, Mavroidis et Sapir (2010) ont analysé de manière approfondie la couverture, en termes de domaines, et le niveau de contrainte juridique des accords conclus par les Etats-Unis et l'Union-Européenne avec des pays tiers. Leur étude porte sur 14 accords conclus par les Etats-Unis et 14 accords conclus par l'Union Européenne. Ils identifient 52 domaines distincts qu'ils classent en deux groupes, à savoir OMC⁺ et OMC^x (voir tableau 1, ci-dessous)).

Les clauses du type OMC⁺ sont celles qui entrent dans le champ de compétence de l'OMC et pour lesquelles les Etats ont par ailleurs des engagements dans le cadre des accords multilatéraux, tandis que les clauses du type OMC^x se rapportent à des domaines qui sortent du mandat de l'OMC.

La notion de contrainte juridique, qui est la seconde dimension des accords de commerce préférentiels, a aussi des conséquences sur les flux commerciaux et pour atténuer les conflits. Il est par conséquent essentiel, là encore, de prendre en compte l'hétérogénéité des dispositifs juridiques constituant les accords préférentiels. De même que ces accords varient quant à l'étendue des domaines couverts, ils diffèrent également quant au caractère plus ou moins contraignant de leurs dispositifs juridiques (Jo et Namgung, 2012) et (Chase et al., 2013).

Pour prendre en compte quantitativement ces deux dimensions de l'hétérogénéité, il a été nécessaire d'utiliser des méthodes économétriques adaptées.

Tableau 1: Liste des domaines susceptibles d'être négociés dans les accords

Clauses du type OMC⁺	Clauses du type OMC^x	
Biens industriels	Anti-corrupcion	Santé
Biens agricoles	Politique de la	Droits de l'homme
Administration douanière	Régl. environnementale	Immigration illégale
Taxes à l'exportation	Propriété intellectuelle	Stupéfiants
Règles sanitaires et	Régl. investissement	Coopération industrielle
Commerce des entreprises	Législation du travail	Société de l'information
Barrières techniques	Mobilité du capital	Mines
Mesures de compensation	Protection du	Blanchiment d'argent
Anti-dumping	Protection des données	Sécurité nucléaire
Aides d'Etat	Agriculture	Dialogue politique
Marchés publics	Rapprochement des	Administration publique
TRIMS	Audiovisuel	Coopération régionale
GATS	Protection civile	Recherche et technologie
TRIPS	Politiques d'innovation	PME
	Coopération culturelle	Politiques sociales
	Dialogue sur la pol.	Statistiques
	Education et formation	Fiscalité
	Energie	T
	Assistance financière	Visa et droit d'asile

Source : Horn et al. (2010)

Dans le chapitre 1, les effets sur le commerce des accords préférentiels de libre-échange ont été analysés à l'aide d'un modèle gravitationnel en données de panel. L'auto-sélection et l'hétérogénéité inobservable ont été prises en compte par des effets fixes par paires de pays.

Dans le chapitre 2, un modèle probit bivarié a été utilisé pour analyser les effets de différents niveaux de contrainte dans les mécanismes juridiques sur la probabilité de guerre découlant des sanctions économiques prévues par les accords.

Dans le chapitre 3, la méthode GMM (Generalized Methods of Moments) a été utilisée pour identifier les effets des différentes clauses relatives aux investissements, aux relations bilatérales, politiques et économiques, sur les flux bilatéraux d'investissement direct international.

Dans le chapitre 4, des modèles de type probit ordonné et probit binaire ont été utilisés pour expliquer la présence de clauses environnementales plus ou moins contraignantes juridiquement, dans les accords de libre-échange.

Principaux résultats

Les quatre chapitres de cette thèse peuvent se comprendre indépendamment, cependant ils partagent une logique commune. Ils examinent les caractéristiques de tous les accords interétatiques qui ne sont pas conclus dans un cadre multilatéral, dans leurs diverses dimensions. La plupart d'entre eux relèvent de la catégorie dite des accords de commerce préférentiels, bien qu'ils puissent englober des domaines qui vont bien au-delà.

Comme cela a été souligné tout au long de ce travail, le phénomène de multiplication de ces accords ne peut pas s'interpréter comme une sorte d'exception au multilatéralisme. Il est vrai qu'au départ ils ont pu n'être que tolérés (art. XXIV du GATT), mais l'expérience récente montre qu'ils sont désormais à l'initiative pour promouvoir la coopération internationale, économique et politique, mais aussi comme instrument de confrontation entre grandes puissances.

Une longue bataille d'arrière garde a été conduite par des théoriciens, supposés orthodoxes, qui défendent l'héritage d'une longue lignée allant de David Ricardo à l'élégant appareillage du théorème HOS. Cette recherche académique a mis en avant une question très importante qui est celle des bénéfices en termes de bien-être que l'on peut attendre d'un développement du commerce international. Des milliers d'articles ont été écrits dans cette perspective, la plupart concluant à la supériorité du libre-échange universel atteint progressivement grâce à l'élimination de la discrimination dans l'échange et par la négociation multilatérale. Malheureusement, ils étaient trop souvent fondés sur des hypothèses irréalistes et ne pouvaient convaincre au-delà du cercle étroit des théoriciens spécialistes. Le cœur du problème réside dans l'incapacité de ces théoriciens à véritablement accepter que le monde réel n'est pas celui de la libre concurrence, où l'optimum est atteint automatiquement. Les nouveaux courants en économie internationale sont déterminés à relever le défi de la concurrence imparfaite, là où tout est plus complexe, mais surtout là où l'inégalité du pouvoir devient la règle, qu'il s'agisse des relations entre firmes, des relations entre Etats et même des relations entre Etats et firmes.

Cette complexité signifie qu'aucune démonstration tranchée, sur la supériorité du multilatéralisme sur le bilatéralisme, ne peut être faite. Il y a à l'évidence un vaste champ ouvert pour la recherche empirique si l'on veut avoir une vision réaliste sur ces questions. Telle est la justification de l'approche qui a été retenue. De toutes façons, une approche réaliste ne peut pas se concentrer sur ce que les Etats devraient faire et ignorer ce qu'ils font de façon constante. La multiplication des accords de libre-échange fait désormais partie des relations entre Etats, quand bien même il serait démontré que cela viole des théorèmes de la théorie du bien-être. Une compréhension en profondeur de la logique des accords de commerce préférentiels suppose qu'au delà de l'économie du bien-être, l'économie de la puissance soit véritablement prise en compte, comme le défendait A.O. Hirschman.

Dans le chapitre 1, la question tant de fois débattue des gains de bien-être obtenus respectivement par le multilatéralisme et par les accords discriminatoires est réexaminée. Comme cela a été souligné, c'est une question qu'il convient de trancher empiriquement.

Ce travail s'est efforcé d'aller plus loin en termes de méthodologie, pour prendre en compte avec plus de précision les phénomènes complexes qui découlent de l'hétérogénéité entre tous les types d'accords. Tous les accords de commerce préférentiels ne peuvent pas être pris comme autant d'observations dans un même ensemble de données utilisées dans un modèle économétrique. La valeur ajoutée de ce chapitre est d'entrer dans le détail du contenu de chaque accord, pour distinguer, entre autres, le degré de contrainte juridique et l'étendue des domaines couverts qui vont parfois bien au-delà de la seule libéralisation du commerce. L'ambition est de s'appuyer sur les avancées récentes en économétrie des variables qualitatives, pour atteindre des résultats plus convaincants.

Cette approche plus détaillée donne des résultats dépourvus d'ambiguïté. Contrairement aux mises en garde répétées des théoriciens conduits par J. Bhagwati, il n'apparaît aucunement établi que les accords de commerce préférentiels ont un impact négatif sur le commerce, le montant des flux commerciaux étant par ailleurs implicitement censés refléter le niveau de bien-être. Cependant, l'avantage de la méthode adoptée a été de montrer que certaines clauses de ces accords n'ont pas d'impact significatif sur le commerce.

En ce qui concerne la structure juridique de ces accords, il est montré que le degré de contrainte dans l'application des accords est un facteur important, les accords les plus contraignants ayant un impact plus favorable sur le développement du commerce que ne l'ont des arrangements plus souples.

En ce qui concerne l'étendue des domaines couverts par les accords, l'analyse a montré que la plupart des domaines négociés ont un impact positif et hétérogène sur le commerce, renforçant la robustesse des résultats antérieurs. Cette approche détaillée a permis aussi d'identifier des domaines spécifiques de négociations pour lesquels l'effet positif n'est pas confirmé, tel est le cas des clauses relatives à la politique de la concurrence et à la mobilité du capital. Il est important de souligner dans ce contexte que, contrairement aux idées reçues, l'adoption de clauses environnementales a un impact positif significatif sur le commerce. Ces résultats ont manifestement des implications importantes en matière de

politiques économiques et devraient influencer les gouvernements et les opinions publiques dans les débats sur les accords préférentiels de libre-échange.

Le chapitre 2 a un but ambitieux. Il cherche à aller plus loin que le débat traditionnel se concentrant sur la question du bien-être. Il faut bien admettre qu'en signant des accords, les gouvernements ont aussi, et même principalement, des objectifs politiques, complètement distincts et peut-être antagonistes aux objectifs de bien-être. Ces objectifs politiques résultent du fait que les pays, qui restent par principe souverains, sont confrontés à des dilemmes stratégiques, aux inégalités de puissance entre nations, qui portent atteinte de facto à leur souveraineté. La poursuite de l'intérêt national, qui reste le but ultime des gouvernements, a sa propre logique, faite d'alliances et de confrontations. Il est donc important d'étudier cette face cachée des accords commerciaux. Il faut admettre qu'ils sont également des instruments de la puissance.

Il est inutile d'insister sur le fait qu'une approche empirique, prenant en compte la complexité et l'hétérogénéité entre accords, est plus appropriée pour conduire cette analyse que des recherches moins détaillées reposant sur l'hypothèse que tous les accords sont semblables. La question est donc de savoir si les accords de commerce préférentiels sont de bons instruments pour prévenir les conflits, pour contribuer à la sécurité et pour poursuivre des objectifs de politique étrangère.

La méthodologie adoptée dans ce chapitre a été d'identifier empiriquement la relation entre la conclusion d'accords de commerce préférentiels et la survenance de conflits et éventuellement de conflits militaires.

Comme on s'y attendait, les résultats mettent en évidence des interactions complexes entre l'architecture juridique des accords et la propension des Etats à s'engager dans des différends, des sanctions et, de façon ultime, dans des conflits militaires. Contrairement à l'opinion défendue habituellement par les "*réalistes*", il apparaît que les mécanismes institutionnels inclus dans les accords de commerce préférentiels (mécanismes de règlement des différends) jouent un rôle incitatif pour prévenir l'escalade des conflits. Les résultats économétriques montrent que le niveau intermédiaire de contrainte juridique

(arbitrage non contraignant) est efficace pour résoudre les différends et pour éviter les conflits militaires. Néanmoins ils ne vont pas jusqu'à confirmer le point de vue des "*libéraux*" qui pensent que les règles de droit doivent toujours être mises en avant pour prévenir les conflits violents. Un résultat important de ce chapitre a été de montrer que les accords de commerce préférentiels avec une architecture juridique très complète et contraignante n'ont aucun impact sur la prévention des conflits militaires (à la différence des mécanismes de règlement des différends de type intermédiaire, évoqués plus haut).

Le troisième chapitre analyse les effets des clauses relatives à l'investissement direct, négociés dans les accords préférentiels de libre-échange, sur les flux d'investissement eux-mêmes. Il est vrai que tous les accords préférentiels ne comportent pas de telles clauses visant à réguler les investissements étrangers et à protéger les droits des investisseurs. Pour ceux qui en comportent, le niveau de légalisme et de contrainte juridique est susceptible de varier. La question qui se posait était donc d'identifier l'influence de la forme juridique des accords de commerce préférentiels, en particulier lorsqu'ils comportent des chapitres consacrés à l'investissement, sur le développement de l'investissement direct international lui-même. La méthodologie adoptée a en commun avec les autres chapitres de souligner les différences qualitatives entre accords de commerce préférentiels. Des résultats importants et significatifs ont été obtenus. Il apparaît en effet que les mécanismes juridiques les plus contraignants sont ceux qui contribuent positivement au développement de l'investissement direct international. A l'inverse de simples déclarations d'intentions en vue de promouvoir l'investissement direct sont sans impact. Un autre résultat important a été de montrer que les clauses contraignantes relatives à l'investissement direct sont significativement conditionnées par la qualité des institutions du pays d'accueil des investissements, et plus généralement par le niveau de démocratie. De tels résultats ne sont évidemment pas contraires à l'intuition, mais ce chapitre, par sa méthodologie plus approfondie, est susceptible d'éclairer le débat sur les relations ambiguës entre démocratie et investissement direct international.

Le dernier chapitre s'est aventuré sur un terrain où beaucoup de choses restent à faire. La prise de conscience des enjeux environnementaux s'invite de plus en plus dans la politique

internationale, mais doit faire face à de nombreux obstacles. Inutile de dire que de nombreux espoirs qui avaient été fondés dans les forums internationaux multilatéraux ont été déçus. Un nouveau sujet est donc apparu, rappelant de façon ironique le débat sur la meilleure façon d'atteindre le but du libre-échange, sur les voies à suivre pour réaliser une croissance soutenable fondée sur la préservation de l'environnement. L'incorporation récente dans les accords de commerce préférentiels de chapitres consacrés à l'environnement, suggère que cette voie parallèle est considérée sérieusement comme une alternative, ou au moins comme complémentaire, aux négociations multilatérales. Ce chapitre identifie donc les caractéristiques des pays qui poussent les négociateurs à élargir le champ des accords aux questions environnementales qui les concernent directement. Le résultat le plus important a été de montrer que dans les accords de type Nord/Sud la forme juridique dominante est celle de clauses imposant un niveau moyen de contrainte (arbitrage), alors que dans les accords de type Nord/Nord un fort niveau de contrainte juridique est dominant. L'interprétation de ces résultats est sans doute intéressante pour éclairer le blocage des négociations multilatérales en raison de la forte opposition d'intérêts entre pays développés et pays en voie de développement dans le domaine de l'environnement. Il apparaît donc, une fois de plus, que les accords de commerce préférentiels peuvent s'avérer efficaces pour atteindre des objectifs importants, là où la voie multilatérale n'a pas encore réussi à produire des résultats suffisants.

En conclusion de ce travail, il faut souligner que le bilan des avancées récentes réalisées par la voie multilatérale ou par les accords préférentiels est sans doute en faveur de cette seconde voie. Les accords préférentiels ne sont pas contraires à l'objectif de développement du commerce, comme on le supposait autrefois. Ils ne peuvent pas être écartés comme moyen de promouvoir la coopération entre Etats. Sur la question de la souveraineté, ils apparaissent souvent comme un compromis acceptable, puisqu'ils ne sont finalement adoptés que s'ils ne sont pas contraires à l'intérêt national. L'idée d'une loi internationale contraignante, telle qu'elle avait été imaginée pour les Nations-Unies ou pour ce qui allait devenir l'Organisation Mondiale du Commerce, a probablement régressé depuis l'après seconde guerre mondiale. Le rôle de plus en plus important des accords préférentiels n'est sans doute pas sans lien avec les profonds changements dans les

relations politiques internationales, qui ne découlent plus aussi clairement d'une structure organisée autour de l'hégémonie américaine. En l'absence d'un leadership incontesté, il ne reste pas beaucoup d'espace pour des institutions multilatérales efficaces, même si les débats entre économistes ont pu conduire à les considérer comme préférables.

Bien sûr, personne ne conteste la pertinence du plaidoyer de Jagdish Bhagwati en faveur d'un monde dans lequel le bien-être serait l'unique référence pour des économistes attachés aux comportements rationnels. Personne ne peut contester les avancées analytiques de ce courant de pensée; mais il faut bien admettre que ce courant reflète une tentative d'établir un ordre économique mondial dans lequel le politique serait subordonné à la rationalité économique. Le monde a changé et le politique, à supposer qu'il ait jamais disparu, est à nouveau sur le devant de la scène.

La multiplication des accords de commerce préférentiels n'est pas uniquement le résultat d'une approche pragmatique pour atteindre des objectifs économiques, c'est aussi le résultat de bouleversements importants de l'ordre économique et politique international, ordre dans lequel la politique commerciale recouvre sa légitimité, en tant qu'attribut essentiel de la souveraineté.

Comment rendre compte du fait que la Chine a récemment négocié plus de 30 accords de commerce préférentiels avec des partenaires potentiels dans toutes les régions du monde? N'est-ce pas là le signe d'une transformation profonde de l'ordre économique et politique mondial?

La difficile négociation d'un accord transatlantique entre les Etats-Unis et l'Union Européenne (TAFTA) a-t-elle seulement pour objet d'accroître l'efficacité des structures économiques des pays concernés ou vise-t-elle aussi à tenter de maintenir ou de restaurer un équilibre entre puissances dominantes?

Les accords de commerce préférentiels ne sont peut-être que le signe d'une nouvelle logique dans les relations économiques et politiques internationales.

General Introduction

The world is recently experiencing a fast and unprecedented growth of Preferential Trade Agreements (PTAs)¹, regional but also bilateral. PTAs have become a prominent feature in international economic cooperation and occupy a central role in governments' trade policy. Equally, they are increasing in scope and institutionalization. Two phases in this process of proliferation have been identified². The earlier wave (starting in the late 1950s and 1960s, in Western Europe) drove continental integration, leading to the formation of European Economic Community (EEC) in 1957 and European Free Trade Agreement (EFTA) in 1960. In this wave, PTAs were initially concerned to grant preferences by cuts in tariffs in the form of custom union and later free trade areas, although regional agreements engaged a long process to build common policies, going far beyond cuts in tariffs.

Considering arrangements that are proliferating recently, cuts in tariffs are not anymore an important issue, considering the success of multilateral negotiations to drastically reduce conventional barriers to trade. Whereas the agreements in the earlier wave were concluded at the regional level and mostly among similar economies, the continuing exponential expansion of preferential agreements under the new wave involves a wide network of participants not only at the regional level but also at the bilateral level or plurilateral³. They encompass countries of different economic sizes (Bergstrand et al., 2010) and economic development levels – including so-called “North-North”, “North-South” and “South-South” countries. Moreover, PTAs in this new wave experience negotiations in

¹ PTAs are understood as encompassing all five categories of discriminatory arrangements classified by WTO (partial scope agreements, free trade agreements, custom unions, common markets and economic unions). See also Balassa (1961).

² See World Trade Report, 2011.

³ Plurilateral agreements involve more than two countries (or regional blocs) and are transregional. It should not be confused with multilateral agreements involving all member countries of WTO.

broader policy areas as well as the establishment of Dispute Settlement Mechanisms constituting different levels of legal obligations.

Why the spreading of PTAs introduce a new logic

The Bretton Woods conference in 1944, besides negotiations on monetary and financial issues, launched plans to be negotiated in following conferences, to form a complete set of international economic institutions that would form the pillars of a new international economic order. International Trade Organization negotiated in Havana in 1947 aimed at establishing multilateralism and non-discrimination as a general principle in trading relations. ITO failed due to lack of approval by US congress, afraid to lose sovereignty. The consequences of this failure were in fact limited since a preliminary treaty had been signed in Geneva a few weeks before, to be known as the General Agreement on Tariffs and Trade (GATT). Yet the ambition of GATT was much more limited than ITO which meant that essential issues to liberalize international economic relations were to remain out of the scope of this treaty. Even though the enlargement of GATT mandate would remain on the agenda of subsequent negotiations, there was a large territory open for negotiations outside of this institutional framework. The 1995 establishment of the World Trade Organization was supposed to fill this gap, but, as it will be pervasively discussed below, important domains were to remain out of the mandate of the Geneva organization, thus leaving space for preferential trade agreements (PTAs) going far beyond what had been envisaged by article XXIV of GATT (Bhagwati, 2008).

The goal of this dissertation is to account for this major phenomenon, in various aspects which will be discussed in the following chapters.

Can we conclude that this spreading of free-trade agreements is driving to the end of multilateralism and to a decline of the role of WTO?

Should we be afraid of possible negative effects on the future development of international trade, with negative consequences on welfare? The *first chapter* will be dedicated to this issue.

Post World War II multilateral institutions had also a political objective of reconstruction of an international community based on cooperation and providing mechanisms to reduce conflicts. Does the decline of these institutions leads to a comeback of forms of confrontation between states? What is the contribution of preferential trade agreements to reinforce political mechanisms preventing or resolving conflicts? These questions will be addressed in the *second chapter*.

An essential domain of international economic relations, which for the largest part does not fall under WTO jurisdiction, is the set of rules which apply to foreign direct investment (FDI). They can be embodied in *investment codes* (enacted unilaterally), but more and more frequently they are part of free trade agreements, as separate chapters, especially for those which are presently under negotiations. It was therefore important to propose an empirical investigation of the effects of these accords on the development of FDI, according to the type of clause adopted in PTAs. *Chapter 3* will propose results in this domain.

As for *chapter 4*, it will try to tackle a new and important dimension of PTAs. Facing the stalemate of multilateral negotiations trying to attain ambitious goals, many countries explore alternative routes, with separate agreements that secure more modest results but provide operational results. It is not a surprise, therefore, that more and more frequently, preferential trade agreements include chapters dedicated to environmental issues and embody legal mechanisms to enforce the achievement of defined objectives. It was therefore important to dedicate a chapter to try to understand why states tend to incorporate environment in the PTAs they negotiate.

The whole dissertation claims a methodological unity. Free trade agreements are not considered as homogeneous objects of investigation, but on the contrary their differences are put forward to try to analyze their effects and to understand their logic. It will be necessary to distinguish them in terms of legal design, enforceability, but also to capture in details the width of their coverage, especially for subjects which are not falling under WTO jurisdiction. Preferential trade agreements evidently go far beyond what had been envisaged by GATT and even WTO.

Going beyond GATT had nevertheless sovereignty implications. It was precisely for this reason that the more ambitious project of ITO failed. So it was likely that new instruments of economic negotiations would have to face this issue.

States strive to preserve their *domestic jurisdiction*. They want to be immune from constraints imposed by an international order infringing their sovereignty. Kim and Howell (1973) provide a more technical and legal definition; in substance domestic jurisdiction of a state comprises those matters in which it can act without regulation by international law. Enacting domestic jurisdiction is central to the concept of sovereignty. Since, in international law, the principle of non-intervention is included, the reliance on international law to provide reparation in the event of a violation is implausible, rendering it weak (Guzman, 2005). Specifically, Article 2.7 of the United Nations Charter states:

"Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter".

Indeed, international economic integration, despite its great advantage from an efficiency point of view, is antagonistic with the preservation of domestic jurisdictions, where the states strive to uphold their national sovereignty.

Ever since the failure of International Trade Organization (ITO), the issue of sovereignty was a central preoccupation of states engaged in multilateral negotiations. The drawback of multilateralism was that concessions had to be granted *erga omnes* and therefore imply a maximum loss of sovereignty. The concept of sovereignty is vague and disputed. However, broadly speaking the conception of sovereignty includes the existence of a supreme authority and rightful status within a territory. Jackson (2003) documents the remarks of Richard N. Haas, a United States government official, regarding the characteristics of state sovereignty: First, a sovereign state is one that enjoys supreme political and legal authority as well as monopoly over the legitimate use of force within its territory. Second, it is capable of regulating movements within its borders. Third, it can

make its foreign policy choices freely. Finally, it is recognized by other governments as an independent entity entitled to freedom from external intervention.

Considering the reluctance of states to engage in multilateral arrangements that infringe their sovereignty, the question remained open for an alternative option of separate agreements, not knowing whether it will prove more efficient to preserve sovereignty.

Like multilateral trade integration, the conclusion of PTAs raises sovereignty concerns to the states. Nevertheless, these concerns are specific to the level of legal constraints ascertained in these agreements. Governments face a challenge of balancing market openness with regulatory mechanism and institutions. The legal dimension is deemed necessary for economic integration process by Jan Tinbergen¹ who termed it as “*positive integration*”. Further, as opposed to multilateral negotiations, governments control their loss of sovereignty while forming institutions or while negotiating accords embodying wider provisions in order to increase economic activity. Their bargaining power is higher than within multilateral negotiations (Krugman, 1993). Moreover, negotiators may be demanding a legal cover to the agreement, if this legal cover is not at their disadvantage (Grieco, 1997). However, all PTAs are not identical; they entail differing scope and institutionalization. The word “institutionalization” refers to the legal depth and the level of governance for regulation. Discussing the merits of trade agreements, Duina and Morano-Foadi (2011) provide a comprehensive definition of institutionalization specific to PTAs. They define it as:

“The ‘extent’ of institutionalisation in RTAs can be measured in terms of the presence or absence of a rich body of law, clearly articulated and permanent principles for the resolution of disputes (including guidelines for the functioning of courts or tribunals), decision-making and decision-monitoring organs charged with significant mandates, a body of judicial decisions that grows over time, rules setting out supranational mechanisms (and organisations) for governance, and established networks of actors (interest groups, lobbyists, etc.) outside the formal structure of

¹ Tinbergen (1954)

RTAs lobbying and interacting in formal and informal (but established) ways with the official bodies and actors of RTAs”

Duina and Morano-Foadi (2011)

International institutions are procedural norms and rules pertaining to the international system, concerning actors and their activities (Duffield, 2007). Institutions can be formal, encompassing a central role for formal rules or laws enacted and effectively enforced by a hierarchical authority (Yarbrough and Yarbrough, 1987), and informal (Hodgson, 2006).

Therefore, institutionalization refers to the presence of rule of law in PTAs. Moreover it is clear from the above definition that PTAs may encompass different levels of institutionalization. The instruments to introduce legalization in PTAs are known as Dispute Settlement Mechanisms (DSMs), which are often referred as *legal design* of PTAs. Dispute settlement mechanisms are incorporated by the negotiators to provide for the resolution of disagreement related to the scope or functioning of PTAs. As it will be discussed in the following chapters, states are found to be increasingly incorporating DSMs in PTAs to which they are party. However, not all DSMs are endowed with the same degree of autonomy and legal authority (Haftel, 2013; Jo and Namgung, 2012) and vary widely along several dimensions.

Indeed, some PTAs encompass mechanisms of standing tribunals (*highly legalistic*) such as European Union (EU) and Common Market for Eastern and Southern Africa (COMESA). Others are endowed with binding third party review (*medium level of legalism*) that allow for ad hoc panels such as North American Free Trade Agreement (NAFTA), and various bilateral agreements (for example EC – Mexico, US – Australia...). Some PTAs contain non-binding third-party review process (*low level of legalism*) or

provide for political/diplomatic settlement of disputes (Chase et al., 2013) such as the regional arrangement between ASEAN countries i.e. ASEAN Free Trade Area (AFTA)¹.

The question of the motives to agree, in a PTA negotiation, on one of those three levels of legalism, from soft law to hard law (Abbott and Snidal, 2000), is of course very important. It has to do with the trade-off between more efficient mechanism of integration with important economic gains and loss of sovereignty, with political consequences difficult to foresee. It is easily understandable that the outcome of this trade-off is highly contingent to individual characteristics of negotiating states, such as relative size, differences in level of development, cultural proximity, historical factors...

Sociological studies, building on the forerunner approach of Karl Deutsch (1953), pointed out the dimension of social communication in the process of interstate interaction and the determining role of this social communication in the building of institutions (see for instance Bourricaud, 1992). This approach will be further discussed below in “*the politics of trade institutions*” and also in chapter 2.

It means that it is an important empirical issue to identify the determinants of this crucial and neglected dimension of PTAs.

Moreover, the choice of hard law in PTAs would not have the same implications, and maybe not the same meaning, as that of domestic contracts. The domestic contracts, with institutional mechanisms, operate within a state. In these contracts, the breaching party compensates the aggrieved party. In international relations, no matter the development and density of international law, there still remains the fundamental question of the ultimate enforceability of international agreements.

In the words of Guzman (2005)

¹ However ASEAN countries have agreed to deepen legal cooperation between them and placed the mechanism of third-party binding review in 2004 known as ASEAN Protocol on Enhanced Dispute Settlement Mechanism. See <http://www.asean.org/news/item/asean-protocol-on-enhanced-dispute-settlement-mechanism>.

“The standard enforcement tools of international law are, of course, a great deal weaker than those present in domestic systems. In particular, states cannot rely on a system of coercive enforcement to ensure an efficient level of damages. The enforcement mechanisms are sufficiently weak that, as far as I am aware, no commentator argues that enforcement measures in international law are sufficient to secure optimal levels of compliance”.

Therefore, the risks persist on the part of states when contracting in the international arena. Nevertheless, despite the lack of enforcement measures, there is a cost associated with the renegation of commitments on legalistic DSMs, which is essentially a reputational one (Guzman, 2002). States may find it useful to incorporate in PTAs legalistic mechanisms in order to gain credibility and thus mitigating the so-called time inconsistency problem. Institutionalists emphasize that states form PTAs to signal credibility of commitment to trade liberalization (Hicks and Kim, 2012) and predictable economic policies (Büthe and Milner, 2008). These measures add value to the agreements only if they bind the parties more effectively.

Building reputation is important for states. What is the impact of this dimension on the propensity for states to agree on the given level of institutionalization or legalism when they negotiate PTAs is a difficult question. But whatever may be empirically observed, the credibility dimension cannot be neglected.

Indeed, Preferential Trade Agreements (PTAs) proliferated despite the advancements in various rounds under General Agreement on Tariffs and Trade (GATT) and later in the WTO framework. GATT/WTO has been a success in cutting tariff barriers multilaterally but the progress was very slow and the scope was narrow. Consequently, countries, notwithstanding their membership of GATT/WTO, concluded PTAs in frustration to the slow progress in GATT/WTO (Mansfield and Reinhardt, 2003) and the growing need by the countries to expand further the scope of policy areas in the negotiations (Carpenter, 2009). PTAs can provide immediate responses where the slow path of multilateral negotiations

does not offer opportunities. Specifically, recent PTAs engaged a deeper integration process that involves not only the negotiations on tariff cuts, but also other policy areas such as customs administration, removal of export taxes, technical barriers to trade such as standards and regulatory systems, competition policy, environmental laws, intellectual property rights, nuclear safety, political dialogue, etc, also known as “*behind the border issues*” (Kahler, 1995; Anderson and van Wincoop, 2004).

These areas of negotiations and many others, may be divided in two categories, WTO-Plus (WTO⁺) or (WTO^X) (see Horn et al., 2010). WTO-Plus issues can be defined as provisions of PTAs that come under the current obligations and rules of WTO, where the parties deepen the commitments they have already made at the multilateral level (GATT/WTO). The most frequent example is further reduction of barriers to trade in industry, agriculture and services beyond what is already committed in the context of WTO. WTO^X refers to (non-conventional) policy areas that are not covered and enforced in WTO agreements¹, for example labor mobility and environmental standards.

The basic objective of GATT was indeed the dismantling of tariff barriers and to create trade rules. Under the auspices of GATT, the world economy experienced a gradual process of liberalization. However, the advancement was disappointing in establishing enforceable mechanisms till Uruguay Round agreement creating World Trade Organization (WTO). The formation of WTO provides the forum for the settlement of policy disputes and enforcement of provisions through ad hoc panels. Ascertaining the same objectives of increased scope and mechanisms for dispute settlement, PTAs are increasing not only in numbers, but in complexity, diversity and legalization. Indeed, the conclusion of PTAs moved in tandem with the negotiations ongoing under the mandate of WTO. The evolution of both types of institutions in the world trading system attracted the attention of academicians and policy makers to a large scale. Indeed, both groups (opponents and proponents of PTAs) took interest in analyzing the trade and welfare effects of PTAs (Baldwin, 2009; Bhagwati and Panagariya, 1996a; Bhagwati, 2008).

¹ See Horn et al. (2010) for a complete discussion on the anatomy of preferential trading agreements and the important concepts of WTO⁺ and WTO^X.

Indeed, the normative approach to analyzing PTAs (i.e. evaluating the welfare-effects) launched a debate on the merits of PTAs (Bagwell and Staiger, 2001; Bhagwati, 1993; Bhagwati and Panagariya, 1996b; Baldwin, 2009...). To the old concerns relating to welfare effects, captured in Jacob Viner (1950)'s seminal "*static*" concepts of trade creation and trade diversion, the current debate has added what Jagdish Bhagwati (1993) calls the "*dynamic*" time-path issue¹ concerning the interplay between PTAs and the process of multilateral negotiations.

PTAs versus multilateralism (an academic debate)

Among academic circles, multilateralism emerged as an overwhelmingly dominant doctrine in the immediate post World War II period. It was part of a wider debate in which any doubts on the superiority of free trade has been discarded. Multilateralism was the opposite of discriminatory practices that prevailed in the inter-war period. Imperial Preference, established by Great Britain in 1932, as a response to the rise of protectionism in the USA (Smoot-Halley tariff in 1930) was pointed out as the starting point of the split of world trade into blocs driving ultimately to a complete collapse (Kindleberger, 1989). These dramatic events were considered as an empirical evidence of the superiority of universal free trade over discriminatory practices as they existed in the 19th century, and later in the inter-war period. The knot of the problem was discrimination. Promoting the application of the most favored nation (MFN) clause was not just enough. A common discipline had to be imposed to ban discriminatory practices. Exception of article XXIV of GATT was made more for political reasons rather than grounded on economic rationale (Machlup, 1977). Still, even the most extreme defenders of free trade had to admit, considering the state of world economy after the war, that complete liberalization had to be achieved progressively to take into account imbalances of competitiveness among nations. This was a concession to a long tradition of justification of temporary protectionism advocated by F. List, justifying the creation of the German Custom Union (Zollverein) in 1834. This treaty was probably the first full-fledged Custom Union and a

¹ See Baldwin (2010) and Krishna (2012) for comprehensive surveys.

major example of preferential trade agreement. Still, nobody considered after World War II that discriminatory practices were the best way to achieve progressively the ultimate goal of free trade. On theoretical grounds, nobody seriously challenged the superiority of multilateralism. Nevertheless, as always in matters of commercial policy, theory and practice were at odds. Usually, governments, defending national interest tended always to disregard the point of view of theorists. Post World War II period was, however, a kind of exception where defense of national interest was morally devalued as opposed to common interest. Multilateralism was not just an economic doctrine, it was a spirit. Of course, this approach of multilateralism had to go together with a strengthening of International Law and eventually of supranational institutions, potentially infringing on sovereignty. (Koremenos et al., 2001).

It is easy to understand, in this context that preferential agreements were just tolerated, when motivated by political objectives, essentially related to geo-strategic issues. The surge of PTAs from the 1990s is probably a sign of disillusion with multilateralism. The origin of this disillusion goes back to the 1970s when it became clear that multilateralism was unable to fight growing imbalances among nations, especially in between developed and developing countries. Gunnar Myrdal and Raul Prebisch who had been zealous promoters of multilateralism and engaged in the institutions of reconstruction (UN Economic Commission for Europe and UN Economic Commission for Latin America) began to doubt and became “*defiant bureaucrats*”. This led to the turning point of UN Resolution of May 1, 1974 known as “*Declaration on the Establishment of a New International Economic Order*”. From that point, national interest began to recover its legitimacy. Consequently, states could consider alternative ways such as preferential trade agreements. Discrimination, as advocated by F. List, became an acceptable practice and grounded on economic arguments. More recently J. Stiglitz (2002), by referring to discontents of globalization had in mind the same defiant attitude towards multilateralism.

“International bureaucrats—the faceless symbols of the world economic order—are under attack everywhere. . . . Virtually every major meeting of the International

Monetary Fund, the World Bank and the World Trade Organization is now the scene of conflict and turmoil”

The academic debate itself on the respective merits of multilateralism and preferential agreements developed on the opposition of two leaders, both sharing a common view on the importance of welfare outcomes, Jagdish Bhagwati and Richard Baldwin.

The proponents of PTAs (Baldwin, 2006) argue in defense against multilateralists (Bhagwati and Panagariya, 1996a), that preferential arrangements are an alternative tool in providing a faster and more efficient way of liberalizing trade and thus, are justified as policy instruments in achieving free trade which is indeed, a common goal with multilateralism. On the other hand, multilateralists argue classically that PTAs are harmful because they shift the production from more efficient (non-member) producer to less efficient member of PTA and moreover, they point out that once adopted, the PTAs may suppress all incentives to make progress on the multilateral front (Krishna, 1998; Levy, 1997).

Bhagwati (1991) launched the debate by introducing a distinction between *static* and *dynamic* analyses.

The static analysis follows the classic Meade-Viner tradition ascertaining the concept of “*trade creation and trade diversion*”. Trade creation and trade diversion could have impact on terms of trade¹. A preferential trade agreement is likely to improve the terms-of-trade for its members and deteriorate those of non-members. Lower demand of commodities imported from non-member countries may lead to lower export prices of non-member country. In addition, increased trade arising from trade creation among PTA partners may lead to a decline in the availability of products to non-member countries, thus raising the price for non-member country. The very simple criterion of J. Viner, computing the net balance of trade creation minus trade diversion was not taking into

¹ In this debate terms of trade is understood as the ratio between export prices and import prices. Implicitly, discussing the issue of the terms of trade introduce imperfect competition considerations.

account effects of variation of quantities supplied on prices and therefore on the terms of trade.

The ambiguous results of the Vinerian analysis have led researchers to put a deeper insight into the criteria which settles whether a PTA is trade-creating or trade-diverting, and ultimately welfare increasing or decreasing. The policy implications of the Vinerian theory have been analyzed in number by researchers, for example (Wonnacott and Lutz, 1989; Krugman, 1991b) to name a few. These works provided the insight to various conditions that would determine the effects of PTAs. They pointed out that if the member countries of a PTA are geographically proximate as well as conducting trade intensively with each other, they are said to be “*natural trading partners*” and the PTA among them would be overall trade-creating. Inherent is the logic that trade-creation effect, due to geographical proximity and large volumes of trade (prior to PTA), would outweigh the costs incurred by potential trade-diversion, making the trade arrangement beneficial to the countries involved.

Contrary to the arguments put forward in favor of the natural trading partner hypothesis, Bhagwati and Panagariya (1996a) demonstrate that the volume of the trade criterion (pre-PTA trade volume) and transport cost criterion (geographical proximity) are analyzed in a false context and misunderstood. They argue that the volume of the trade creation is not symmetric. For example, United States is the largest trading partner of Mexico but the reverse is not true. Further, they put forward that what is necessary to know is the likelihood of trade diversion. Analyzing the model, based on Meade (1955) they show that each member country specializes in a different product when all products are imperfect substitutes; the steady reduction of tariffs preferentially by one country on another will first improve its welfare and then progressively reduce it at some stage, implying PTA could reduce welfare at the level below the starting point. Moreover, they went on further to show that a high initial trade volume can provoke a significant loss to a member country because of “*tariff revenue redistribution*”. For example, Panagariya (1999) did estimate welfare implications for Mexico with the conclusion of NAFTA. He came out with the figure of \$3.26 billion tariff loss to Mexico.

There is a consensus among economists that global free trade is a desirable goal on the grounds of economic welfare, they disagree in the role that preferential trade agreements play in seeking to achieve this objective.

Bhagwati and Panagariya (1996a) strongly oppose even regional trade agreements, according to their point of view, PTAs act as stumbling blocks and are thus a threat to global free trade. Instead, they actively advocate a multilateral approach to trade liberalization. Krishna (1998) constructs an oligopolistic competition model and shows that in the presence of lobbying by concentrated interest groups, the trade diverting PTAs have always been politically motivated. Moreover, in the aftermath of PTAs, the domestic political incentives are altered in a way so that multilateral trade liberalization is rendered infeasible (as there are reduced incentives) although it was probably politically feasible before the conclusion of PTA. The same idea is shared by Levy (1997) who demonstrates, using a median-voter model and Heckscher-Ohlin framework with differentiated products and variety gains, that formation of PTA undermines the support for multilateralism. The argument put forward by this author is that closer the capital-labor ratios of countries, the more the variety gains they offer, the more popular the agreements are likely to be, the more they are likely to damage multilateral negotiations. Krugman (1993) identifies one of the reasons for the success of PTAs. He points out that it is less complicated in dealing with varied and complex issues in bilateral/regional setting than in multilaterally.

Baldwin (2006) has an opposite view. He regards regionalism as complementary to multilateralism and is of the view that regionalism is here to stay in today's world and should be taken as a fact of life. He argues that PTAs do contribute to the ultimate goal of global free trade and that the way forward to achieve free trade is through the multilateralization of regionalism and PTAs. In this detailed and informative paper, he discusses that WTO should adopt steps in order to shape the PTAs so that the global free trade is attained. He named it as *taming the tangle*.

He originally developed the so-called "*domino theory*" (Baldwin, 1993) to underline that adoption of a PTA initiate a cumulative reaction process that may end up in a spreading of tariff concessions.

He constructs a simple political economy model where each country has two sectors: a differentiated products sector marked by increasing returns and imperfect competition and a perfectly competitive constant returns sector. In this setting, the government is confronted with political pressures and its decision concerning the entrance into a regional trade agreement is the outcome of a political equilibrium that balances anti-membership and pro-membership forces. With the proposed integration, the exporters lobby in the country will be stimulated and will be engaged in political activity to be a part of agreement. If at start, the government was politically indifferent to the agreement, it will be tilted towards concluding the agreement. Here, the PTA will create the domino effect as the exporters in the excluded countries will experience tariff discrimination by the member countries and in turn they will alter the political equilibrium to join the bloc. This enlarges the regional trading bloc and regionalism spreads further.

Other contributors to this debate should be mentioned. Krugman (1991a,b) propose a model relating welfare to the number of coexisting trading blocks and concluded that a reduction of the number of blocks is not necessarily welfare enhancing. His interpretation was that a limited number of blocks can bring an opposite result of a process towards complete free trade, namely trade wars.

Winters (1996) provides an overview of the arguments for and against. He finds significant arguments and historical evidence on both sides of the debate, and draws up a few tentative conclusions, namely that regionalism may: contribute to liberalizing very restrictive trade regimes; increase the risk of less restrictive ones to break down; and be harmful if governments are influenced by sector-specific lobbying. He concludes:

“Trade diversion is good politics even if it is bad economics. I find quite convincing the view that multilateral liberalism could stall because producers get most of what they seek from regional arrangements.”

Regionalism/bilateralism could also be complementary to multilateralism as long as they make a net positive contribution to further freeing of trade and increased predictability of future market access (Blackhurst and Henderson, 1993). In this way they do contribute to the ultimate goal of global free trade, shared by multilateralism.

As described above that Bhagwati strongly advocates the multilateral approach to trade liberalization, Bhagwati and Panagariya (1996b), however, mentioned two conditions under which existence of PTAs is acceptable (1) If PTAs entail deep integration, and (2) when there is no possibility of negotiations at multilateral level.

Summarizing, the theoretical debate on trade and welfare implication of preferential trade agreements is indecisive, which leaves a large avenue for empirical research (see *chapter 1*).

Indeed, the coverage and legal mechanisms vary from one PTA to another. Therefore, each PTA is specific and serves particular objectives of the signatories. Economic benefits from particular PTA depend upon the scope and coverage of the provisions and the nature of enforcement mechanisms.

PTAs increasingly include and ratify non-traditional policy issues which have not been signed at multilateral level. For example, Doha Development Agenda had little progress on issues of labor mobility which is indeed, of interest to developing countries (Stiglitz and Charlton, 2004). Panagariya (2002) mention the concerns and opposition of developing countries to bring environmental issues into negotiating agenda at Doha Development Agenda. Whereas developed countries were in favor of their inclusion. Although, the progress is relatively modest, still countries (North-South) are negotiating these provisions on bilateral, regional and plurilateral level.

Consistent to the arguments of Harmsen and Leidy (1994), whether PTAs contribute to the overall goal of WTO (i.e. to increase trade flows), it will be useful to analyze the theoretical predictions and examine empirically the effects of those provisions falling outside of WTO mandate (i.e. WTO^X). Then it could be determined and concluded (at

least from one angle) whether PTAs have benign effect on multilateral regime under the auspices of WTO. In the presence of huge theoretical literature, on the effects of PTAs on multilateral trade negotiations, surprisingly there is lack of empirical evidence (Freund and Ornelas, 2010). Indeed, a different methodology is needed to identify PTAs according to specific provisions they entail, which will be undertaken in *chapter 1*.

The politics of Trade and institutions

There is a long history of commercial treaties especially at times where states were frequently at war for political and economic supremacy. The doctrine known as Mercantilism does not separate economics and politics and to some extent subordinate economics to political goals. In this regard, Mercantilism was perceived as a doctrine of commercial war, possibly conducing to war itself. The liberal reaction, from the 18th century, with the Physiocrats and Adam Smith, can be understood as an attempt to undermine this subordination of economics to politics. Still, there is a long tradition of statesmen, philosophers and political thinkers that had in mind a solution where politics and economics would not be considered as antagonistic. They launched various projects for “*perpetual peace*” based on the development of commercial links supported by treaties as a stepping stone of international institutions.

The first important political figure worth to be mentioned is probably Maximillien de Béthune, known as Sully (1559-1641). As prime minister to the King of France, Henry IV, he might have been considered as one of these Mercantilists¹. Still, he always had in mind means to establish peace through commercial treaties, as he did with the conclusion of a treaty between France and the Sublime Porte (Ottoman government) in 1615. His plans known as the “*Grand Dessein*” had an even higher ambition, to establish institutions to promote peace and commerce among European countries (Sully, 1970 [1638]). It is not possible to name all those that followed suit. Of course Montesquieu advocating that “*the natural effect of commerce is to bring about peace*” is an important

¹ Mercantilism is modern concept coined by the economist E. Heckscher in his famous eponym book, “Mercantilism” first published in 1931.

milestone (Montesquieu, 1991 [1748]). Probably the Abbé de Saint-Pierre, with his project for “*perpetual peace*” was an important inspirer of two important philosophers, Jean Jacques Rousseau (1761) and Immanuel Kant. The work of the latter, “Perpetual Peace: A Philosophical Sketch” (1991 [1795]) has been recently widely used by scholars in economics, politics and international relations (see *chapter 2* below). Before Kant, the English economist Jeremy Bentham elaborated a similar plan¹. For an extensive discussion of debates on this issue, see Machlup (1977).

In the early 19th century this debate was overshadowed by the triumph of the doctrine of “*laissez-faire*” and the demonstration of the superiority of complete free trade. There was no point for discriminatory treaties when universal free trade was supposed to maximize welfare. United Kingdom’s decision to abolish the Corn Laws and to move progressively towards unilateral free trade outdated discriminatory practices. It is from this period that the famous “*Most Favored Nation (MFN) Clause*” was advocated as an instrument to generalize free trade multilaterally. Politics was relegated to a subordinate position in the established doctrine. Yet this doctrine was challenged by those who claimed that it was only there to justify British domination over the rest of the world (known as the tyranny of John Bull). Among the most active opponents of this liberal approach was F. List who went back from his visit to the American protectionists (Alexander Hamilton...) and proposed his famous infant industry protection argument which severely challenged the doctrine of free trade. John. Stuart-Mill had to admit the relevance of this argument and therefore the justification for separate trade arrangements, not including the MFN clause of course.

This paved the way for commercial institutions driven by political objectives such as the famous Zollverein promoted by F. List, as a first step towards German political unification and a way to challenge British domination.

Looking at this overview of the debate from the Mercantilists, the laissez-faire approach and finally the comeback of approaches putting forward national interest, it seems that an

¹ “Plea for Universal and Perpetual Peace”, Bentham (1789).

obvious parallel can be drawn with the modern period where the spirit of GATT dominated for a time and then began to be progressively challenged on grounds of unbalanced development or political hegemony of dominant countries infringing on national interest. In this modern debate A. Hirschman is of course the dominant figure. In his influential book published in 1945 he takes a dissonant view in discussing *“National Power and the Structure of Foreign Trade”*. He refers to a book written by R. G. Hawtrey in 1930¹, but after the end of World War II, when all intellectuals were invited to join forces for a common goal of nations cooperating to attain free trade as the ultimate source of welfare, he expressed dissent towards this *“liberal”* paradigm. He does not ignore that *“foreign trade is (also) an instrument of national power”*. He initiated a modern line of thought that was to be named *“realism”*. He insisted with force that besides the economics of welfare, that was the main preoccupation of economists, there is the economics of power. This distinction suggests that the economics of welfare could be a veil to hide the controversial issue of the economics of power. Needless to say that Hirschman brings back economic relations in the sphere of political economy. It is a strange amnesia that the liberals claiming inspiration of Adam Smith seem to ignore the clear stance in Book 4 of *The Wealth of Nations*, named *“On Systems of Political Economy”* that *“Defence is of much more importance than opulence”*². His support of the very protectionist Acts of Navigation, initiated in 1651, is more realist than liberal.

Whatever may be the opinion of the promoters of the economics of welfare, the economics of power cannot be ignored.

Implications of these debates on political issues of preferential trade agreements are very important. PTAs may be instruments to increase welfare, but they are also, ultimately, ways to pursue political goals. In this regard, PTAs are not just an alternative way to achieve the goal of free trade but they are also a prudent method to open the economy, while controlling losses of sovereignty. Obviously, multilateralism, and even regional agreements involving a large number of countries, are not the appropriate method to trade

¹ R. G. Hawtrey, *The Economic Aspects of Sovereignty*, 1952 [1930].

² See *An Inquiry into the Nature and Causes of the Wealth of Nations*, book 4, chapter 2 (2009 [1776])

sovereignty against welfare. Bilateral agreements, which tend to develop in 2000's, are probably favored for these reasons.

The above literature corresponds also to a long lasting academic debate in International Relations about the link between foreign economic and security policies (Barbieri, 2002). The liberal school of thought in International Relations argues that open economic exchange reduces the prospect of interstate hostilities. Open trade fosters dependence among countries by encouraging specialization in the production of goods and services. This extensive dependence, in turn, raises the cost of conflict between the trade partners (Doyle, 1997; Stein, 1993). These arguments are central to the opportunity cost analyses since trade is mutually beneficial and war disrupts bilateral trade (Keshk et al., 2010), the prospect of higher war costs impede the use of military coercion and thus dampen conflict (Polachek, 1980; Russett and Oneal, 2001, Mansfield and Pollins, 2003). Nevertheless, evidence supporting the liberal position has not gone unchallenged. For example (Barbieri, 1996) argues, based on her findings that heightened trade can provoke hostilities between countries. The dispute arises, in particular, when the bilateral trade is asymmetric. In that case the interstate cooperation may be harmed because states fear to become dependent on trade partner (Waltz, 1979; Grieco, 1990). Further, Mansfield (1993) argues that trade is related to conflicts and military alliances, because the higher income obtained from trade enables agreement partners to spend more on defense.

This discussion parallels to another debate within the discipline of international political economy about the formation of economic integration agreements. This debate (akin to trade-conflict nexus) also contains two different analytical perspectives also called *realism* and *liberalism*. Specifically, the debate is whether economics drive politics (liberal belief) or politics drive economics (realist belief). The liberals assume economic and/or welfare interests to dominate politics, whereas the realists emphasize the distinct power of political relations to shape economic systems.

The liberal point of view emphasizes on economic motivations behind the formation of PTAs. Various economic factors are explained by them. According to them, one of the conventional reasons behind the PTA formation is to improve terms-of-trade effects for

the members, thus discouraging protectionist (and non-cooperative) unilateral trade policy on the part of members (Bagwell and Staiger, 1999). Secondly, states sign PTAs in the aftermath of increased (pre-PTA) trade in order to resolve economic disputes which may arise due to the complexity of increased exchange (Haftel, 2013) and to gain credibility (Hicks and Kim, 2012). This helps in reducing the problem of time-inconsistency where the state leaders “tie their hands”, signaling the surety of continued economic policy to investors. In other words, PTAs are signed to decrease the probability of policy reversal and establishing policy predictability in the eyes of the other members(s) (Fernández and Portes, 1998).

Nevertheless, the standard economic analysis behind the formation of PTAs ignores the fact that states and governments devise trade policy in political (international as well as domestic) context. Indeed, Wonnacott and Lutz (1989) argue that the political side is more important for trade agreements and negotiating them is a political constraint. Schiff and Winters (1998a) also emphasize the importance of political dynamics behind integration agreements. In their words:

“Politics support many other RIAs, including NAFTA, MERCOSUR, the ASEAN free trade area, and the Southern African Development Community (SADC). The economics profession is not particularly well equipped to analyze the origins of such political motives and certainly is not qualified to comment on their legitimacy.”

Indeed, the realists emphasize the political dimension of PTAs which can be separated into domestic and international political motivations.

As pointed out by political economy approaches, policymakers do not construct foreign economic policy in a domestic political vacuum. The domestic political incentives can heavily influence their decision to pursue (or not) PTAs (Kastner and Kim, 2008). In this context, the pressure groups (such as veto players) play a vital role in the conclusion of PTAs. Grossman and Helpman (1995) propose a theoretical model that takes into account the bargaining processes in two stages. First stage is that political competition between

different interests among domestic players in each country shapes the government policy choice and the second stage comes when the governments negotiate and pursue the policy of give-and-take. The success of this second stage of bargaining is highly dependent upon the regime type whether it is democratic or autocratic. In the same vein, Mansfield et al. (2002) develop the argument that democratic leaders have political incentive to conclude trade agreements. PTAs could act as signal to the median voters that the decision is made for their own welfare rather than for other special interests. The regime type formulates specific trade policy to retain government office. It will not take any step unless it will be benefitted by its action. Mansfield et al. (2008) further argue that democracies have larger selectorates as compared to autocratic regime which is supported by a small number of interest groups. The fact that democracies provide public goods to its selectorates gives incentives towards heightened integration whereas autocracies rely on private goods such as rents from protectionism that they can redistribute to small number of groups and thus they lack the impetus for economic integration.

Although domestic interests are essential to the formation of trade agreements, another dimension has to be taken into account regarding their particular design and choice of respective partners (Rebien, 2009). Therefore this dynamic trend of PTAs, goes beyond exclusively domestic political and economic considerations, derives from international political-security reasoning as well. It is becoming increasingly obvious that states seeking to formalize trading links with others often have strategic rationales that sometimes override the economic implications of such deals (Crawford and Fiorentino, 2005).

The states have inherent strategic considerations behind the formation of trade agreements such as responding to outside threats by cementing relations with their partners (Schiff and Winters, 1998b). Economic integration agreements have become an increasingly employed foreign policy tool for the states. Geopolitical concerns are considerable motivators for the states to pursue particular bilateral as well as regional PTAs that are beneficial to their respective strategic objectives. Central to this claim is Mansfield and Milner's (1999) argument that trade agreements in particular are more likely to be initiated, negotiated and concluded among formal allies than other states. They further

observe that state leaders are concerned with the possibility that signing trade agreements with a competitor or an adversary could enable that adversary to not only become wealthier but also stronger in their military capabilities (cf. for instance, the absence of initiatives to negotiate agreements between Russia and Western Europe).

Karl Deutsch¹ analysis presented above provides concepts to tackle this political dimension of PTAs. He noted the presence of communication as prerequisites of institutions generally speaking. This argument is based on the transactionalist theory, hypothesizing that the basis of institutions is the communication and cooperation across political, social and economic spheres. For PTAs, stronger the communication and good relations among states, higher the possibility of institutional establishment. Therefore, the governments may refuse to enter into any type of trading arrangement with an adversary. Conversely, governments may conclude trade agreements (especially of deep nature) with the governments with whom they have good political, economic and military relations. In an interview done in May 2007, Vice Minister Yi Xiao-Zhun of Chinese Ministry of Commerce (MOFCOM) suggested the following criterion for China to enter into trade agreements with other states (as China is pursuing rigorously the formation of trade agreements):

- *First, the partner has good political and diplomatic relationship with China;*
- *Second, the partner has complementary economic structures and trade patterns with China;*
- *Third, the partner either has substantial domestic market or serves as an FTA hub in particular region;*
- *Fourth, the partner shares common intentions on building FTAs with China.*²

(note the order of presentation of these criteria)

¹ Deutsch (1953)

² Yi Xiao-Zhun, “China’s Four Criterion in Selecting FTA Partners”, 29 May 2007, available at <http://finance.sina.com.cn/roll/20070529/20571438980.shtml>

Indeed, the International economic agreements should therefore not be regarded only as instruments of reduction of border barriers. As mentioned, they are also to be considered as institutional devices created by states in order to follow their strategic and foreign policy objectives as well as to promote the implementation of cooperative policies. For example, European Community (EC) trade policy is comprised of high proportion of political content, hence, is pursuing its foreign policy objectives through the conclusion of preferential trade agreements around the world (Messerlin, 2001).

Methodological issues to assess the impact of PTAs

Current research analyses the effects of trade agreements on bilateral trade flows¹, international cooperation and foreign direct investments (Blomstrom and Kokko, 1997; Jaumotte, 2004; Büthe and Milner, 2008; 2010), by identifying PTAs as homogenous. However, recent research moved on to distinguish PTAs according to Balassa's taxonomy such as FTAs, CUs, CMs and EUs (Ghosh and Yamarik, 2004b; Magee, 2008; Vicard, 2009) to identify heterogeneity among these arrangements. The implicit assumption is that all agreements are not equal and that this dimension cannot be neglected. However, looking deeply into these typologies, it can be figured out that scope and enforceability mechanisms vary to a large extent. Li (2000) emphasize this notion with an example comparing CUSFTA (Canada-US Free Trade Agreement) and European Free Trade Association (EFTA). Both belong to the typology of FTA but their institutional variations are enormous. The former is narrow and flexible whereas the latter is quite comprehensive. Therefore, the identification of PTAs and their impact on trade flows need a different methodology.

Horn, Mavroidis and Sapir (2010) analyze deeply the sectoral coverage and legal enforceability of limited PTAs concluded by US and EU with third countries by examining the provisions negotiated in trade agreements and identified the areas covered under the agreements along with their legal enforceability. This work performs

¹ See Cipollina and Salvatici (2010) for an excellent and comprehensive meta-analysis of empirical effects of preferential trade agreements on trade flows employing gravity models.

comprehensive analysis on individual provisions. They studied 14 US and 14 EU trade agreements and identify 52 policy areas which they classified into two distinct groups (see table 2 below). WTO⁺ provisions fall under the mandate of WTO and subject to commitments to the GATT/WTO agreements whereas WTO^X provisions currently fall outside the WTO mandate.

The notion of legal enforceability, being the second dimension of PTAs as discussed above, have also implications for trade flows and mitigating conflicts. The distinction among them is also important to account for legal heterogeneity among PTAs. Indeed, like varying scope, not all PTAs exhibit the same level of institutionalization, hence, the legalization levels. It is then important to take this variability also in order to understand the effects of PTAs.

Table 1: List of areas susceptible to be negotiated in PTAs

WTO⁺ areas	WTO^X areas	
PTA industrial goods	Anti-corruption	Health
PTA agricultural goods	Competition policy	Human rights
Customs administration	Environmental laws	Illegal immigration
Export taxes	IPRs	Illicit drugs
SPS measures	Investment measures	Industrial cooperation
State trading enterprises	Labor market regulation	Information society
Technical barriers to trade	Movement of capital	Mining
Countervailing measures	Consumer protection	Money laundering
Anti-dumping	Data protection	Nuclear safety
State aid	Agriculture	Political dialogue
Public procurement	Approximation of	Public administration
TRIMS measures	Audiovisual	Regional cooperation
GATS	Civil protection	Research and technology
TRIPS	Innovation policies	SMEs
	Cultural cooperation	Social matters
	Economic policy dialogue	Statistics
	Education and training	Taxation
	Energy	Terrorism
	Financial assistance	Visa and asylum

Source : Horn et al. (2010)

Moreover, the enforcement mechanisms of PTAs, being the second dimension of PTAs (Kahler, 1995; Grieco, 1997), are the establishment of legal framework and dispute settlement mechanisms. It is important to identify PTAs according to different institutional (legal) levels they entail. In this vein, Jo and Namgung (2012) and Chase et al., (2013) map the dispute settlement mechanisms in order to assess the legalization in PTAs.

In order to tackle quantitatively these two dimensions of heterogeneity (scope and legal design) specific econometric methods were in order.

In *chapter 1* below, the effects on trade of PTAs are analyzed by employing a gravity model in a panel setting. Self-selection and unobserved heterogeneity are taken into account by using country pair fixed effects.

In *chapter 2*, bivariate probit model is used to analyze the effects of different levels of legal mechanisms on the probability of war through the effects of the former on economic sanctions.

In *chapter 3*, the GMM (Generalized Methods of Moments) method is utilized in order to assess the effects of different investment provisions, bilateral political and economic relations, and their interaction on bilateral foreign direct investment (FDI) flows.

In *chapter 4*, the determinants of the presence of different legal levels of environmental clauses are examined using ordered probit and simple binary probit models.

Presentation of chapters

This thesis investigates the economic as well as political effects of PTAs by identifying PTAs according to different provisions (WTO^X) they entail, as well as the different legal mechanisms, incorporated by sovereign states. It is divided in four independent chapters. The first two chapters attempt to bring new empirical evidences on both essential

theoretical dimensions of trade arrangements as identified by Hirschman (1945), the *economics of welfare* and the *economics of power*. The two subsequent chapters are extensions of this two dimensional approach and are dedicated to foreign direct investment and environmental cooperation in PTAs.

In substance:

The **first chapter** of this thesis attempts to analyze the impact of the two dimensions of PTAs (i.e. scope and legal framework) on bilateral trade flows. Specifically, the trade effects of WTO^X provisions have been examined to analyze whether the introduction of different WTO^X provisions (scope) contribute to the development of bilateral trade between signatories. Four trade-related policy domains not falling under WTO mandate (i.e. WTO^X), are identified (financial capital mobility, competition policy, environmental standards and labor mobility). After a theoretical discussion of their supposed effects on trade flows, an empirical investigation identifies their effects. Since, the states are reticent to negotiate and incorporate these provisions at multilateral level, under WTO mandate, they are increasingly included in the agreements at bilateral, plurilateral and regional levels. Therefore, their analysis would also provide important information whether these PTAs contribute to the overall goal of WTO i.e. increased trade.

Secondly, different legal mechanisms (incorporation of standing tribunals, binding third-party review and non-binding third party review) have been analyzed for their effects on bilateral trade flows. The intention here is to examine whether different levels of dispute settlement mechanisms in PTAs have different effects.

In order to test the effects of both dimensions, self-selection is taken into account, since the countries self-select into the inclusion of different provisions when they negotiate PTAs. Moreover, different provisions might provide different gains to different country pairs. Self-selection is an important source of endogeneity. This chapter follows the econometric strategy of Baier and Bergstrand (2007) (in a gravity equation) to control for self-selection using panel data with country pair fixed effects.

The **second chapter** identifies an important channel through which the legal dimension of trade agreements (hence Dispute Settlement Mechanisms in PTAs) may have pacifying effects on the outbreaks of war. Dispute Settlement Mechanisms of PTAs do have strong implications for Militarized Interstate Disputes (MIDs), although not directly, but through low-level of foreign policy disputes, such as economic sanctions. Indeed, the sanctions impose politically motivated market penalties (Hafner-Burton and Montgomery, 2008) which could further escalate to war (Lektzian and Sprecher, 2007). If economic sanctions are believed to escalate to violent conflict, DSMs included in PTAs may reduce the probability of war by mitigating the escalation of economic sanctions. DSMs alleviate uncertainties about relative disparities in gains by member states. They also provide rational incentives to avoid sanctions. Theoretically, the institutionalization in PTAs (i.e. DSMs) may not have direct impact on militarized interstate disputes (Bearce, 2003) but they can prevent the escalation of sanctions disputes, which are one of the potential sources of violent conflict.

However, PTAs differ according to the level of legalism (i.e. DSMs) and the effects of DSM types preventing violence may differ. This chapter attempts to address this important question whether DSMs in PTAs do have a role in preventing the escalation of economic sanctions to violent conflicts. Moreover, which particular type of DSM is more efficient. It addresses the selection issue by using bivariate probit model and tests different types of institutional frameworks for their effects on violent conflict, originating from the threat and imposition of economic sanctions.

The **third chapter** analyzes the effects of investment provisions in PTAs on foreign direct investments (FDI). In recent PTAs, the governments show the tendency to incorporate more and more investment provisions, thus utilizing the PTA forum to boost their FDI. However, the investment provisions negotiated and agreed upon among the governments, can be distinguished in two broad types, according to the legal cover they entail. Investment provisions in PTAs may contain strong legal enforceability, in case any dispute arises between investor and the state receiving FDI. They could also contain not legally enforceable investment provisions. The reason for including more and more

investment provisions in recent PTAs is to protect the investor rights and discourage appropriation by the host government and thus gaining ex post credibility of commitments. This is due to the inefficiency of multilateral institutions in providing security and establishing the mechanisms of obligation to compensate the aggrieved state (or investor). The UN general assembly resolution in 1974 failed to provide proper protection to investors for their investments (Bhagwati, 1977). Therefore, the governments are increasingly incorporating legally enforceable investment provisions in PTAs to safeguard against potential malpractices by the host governments.

Therefore, the FDI operations take place under certain risks. These risks are domestic and international political risks. The domestic risks are associated with the domestic policies of the host governments which could provide certain incentives to the investors before the FDI takes place and reverse the policies after the investment is made. This poses a certain threat to the investors regarding the protection of investors. The democratic regimes are said to have good domestic political institutions. Moreover, international political risks do have ramifications for FDI. Indeed, a state engaged in conflict may introduce restrictive measures, make such investments less desirable by the investors of the rival state (Gartzke, et al., 2001).

This chapter then provides the impact of different types of investment provisions, domestic and international political risks on FDI. Further, the interplay of these risks is analyzed with the different types of investment provisions in boosting FDI. The model used is Generalized Method of Moments (GMM) which takes lags as instruments.

Chapter 4 analyses the determinants of the decision to include various legal levels of environmental provisions in PTAs. Indeed, according to the development levels of countries and more specifically differences in development between negotiating countries have a strong impact on the incentives to sign a particular type of environmental regulation. This chapter will provide empirical evidences of importance to the understanding of this new trend to negotiate environmental issues in PTAs rather than in multilateral negotiations, or maybe in parallel with multilateral negotiations. Econometric

models used are ordered and binary logit to assess the probability of adopting particular level of enforceable environmental standards.

Chapter I

Do Preferential Trade

Agreements contribute to the

Development of Trade?

Accounting for Heterogeneity

across Arrangements

Introduction

Article 24 of GATT had opened, maybe as an exception, the possibility of discriminatory trade arrangements. This stimulated a first wave of such preferential trade agreements, but they were predominantly regional and concerned groups of countries rather than bilateral arrangements. Recently, mainly bilateral discriminatory trade arrangements have proliferated. In 2014, more than 300 discriminatory trade arrangements are enforced. They come under the general denomination of preferential trade agreements (PTAs). Whether

notified or not to WTO, they introduce a completely new logic of trade negotiations and enlarge the scope of negotiations to areas which did not fall under WTO mandate. They have become preferred policy instruments and serve as a forum for negotiating various policy issues. They are increasingly popular not only for their trade liberalization feature, but also as the legal instruments to enforce them. With increasing legalism, they complement the institutional architecture for trade cooperation around the world.

A vast theoretical literature on the analysis of trade agreements' impact on trade and welfare has developed since the seminal works of Viner (1950) and Meade (1955). They argued that in the pursuit of regional trade integration, not every country benefits of this process, rather it could harm inefficient member countries, but worse, efficient countries which are discriminated by the arrangement. This analysis is based on the famous concept of "trade creation and trade diversion". The policy implications of the Vinerian theory have been analyzed in number by researchers, for example (Wonnacott and Lutz, 1989; Krugman, 1991a; Bhagwati, 1993; 1996) to name just a few. These works provide the insight to various conditions that would determine whether PTAs would be trade-creating or trade-diverting. It is to be noted still that their approach had the ambition to encompass the overall effect of discriminatory arrangements, both for members of the arrangement and countries remaining out of the arrangement. On top of that their preliminary approach was essentially static even though it was recognized that effects on trade would result of a dynamic process.

Subsequently, a debate evolved on the question whether free trade could be in the end achieved through bilateral trade liberalization in lieu of multilateral arrangements. Doubts were very strong on the benefits to achieve the final goal through discriminatory arrangements. These doubts were essentially based on theory. More recently, a vast empirical literature attempted to conclude on this issue. Of course, they didn't attempt to capture welfare outcomes of discriminatory arrangements¹ but focused only on the limited question of whether these arrangements were trade creating for the participants only. The

¹ A notable exception is Panagariya (1999) who estimated the welfare implications for Mexico after the conclusion of NAFTA

question on the effects for third countries (possible trade diversion) was left aside. Besides being simple, there was some rationale for this approach because if discriminatory trade agreements were not even able to create trade among participants, they could not claim, under any circumstance to be welfare increasing. So the ambition of this recent literature is more limited. Trade creation among participants of bilateral or regional agreements doesn't say anything for welfare at the world level but there is the intuition that the multiplication of these agreements could in the end achieve the goal of free trade and is therefore an alternative to multilateral negotiations.

This chapter will follow this recent trend and will try once more to determine whether preferential trade agreements have in the end a beneficial effect on trade among participants. The added value will rest on a more in-depth analysis of the characteristics of these PTAs which display widespread heterogeneity and cannot therefore be considered as a uniform category. Although sources of heterogeneity are manifold, this chapter will focus on two important sources of heterogeneity. Recent agreements are entering a new territory beyond the mandate of WTO and it has still to be investigated whether this evolution has effects comparable or contrary to those that were devised as an alternative to WTO, bearing on similar objects. It appears also important to investigate the effects on trade of legal frameworks, with varying degrees of enforceability, on the development of trade.

Such investigation follows a long line of methodologies using gravity models to analyze the trade effects of PTAs, seminally proposed by Tinbergen (1963), who showed that Commonwealth and Benelux tariff preferences had trade creating effects. Employing this model, Linneman (1966) studies French and Belgian tariff preferences. Since then, the use of gravity model became popular among trade economists due to its empirical robustness and was applied dominantly to analyze the impact of major RTAs in Europe in the start. For example two major regional trade pacts, EEC and EFTA were examined by (Aitken, 1973) who finds the two regional accords affect export flows negatively in the 1950s but positively in the 1960s. Abrams (1980) further added that a positive impact can also be attributed to EEC and EFTA during 1970s. The preferences advanced in the Council for

Mutual Economic Assistance (CMEA) were found to be trade creating (See Hewett, 1976) and between EU-15 and CEEC-4 countries (Caporale et al., 2009). These empirical works report diverging results and it was still unclear whether PTAs do increase trade. Research at this stage accounted PTAs as *homogenous*. In order to find the true and unbiased estimates, numerous methodological approaches have been developed.

Although Rose (2000) and Feenstra et al. (2001) argue that in general, PTAs are trade creating, objections on methodological grounds were raised by Anderson and van Wincoop (2003) about omitting unobserved price indices. The authors argue that the “*multilateral price resistance*” terms must be included in the gravity model to take into account the country-specific heterogeneity in order to obtain unbiased effects. To include them into an empirical model, Feenstra (2003) contributed by adding country specific effects. In addition to country specific fixed effects, year effects are also included to control for possible trend. A number of studies, afterwards, included country and time fixed effects for analysis of PTAs (Cadot et al., 2011; Urata and Okabe, 2010; Magee, 2008; Egger et al., 2011) to name a few. Ghosh and Yamarik (2004a) adopted a slightly different approach by using extreme bound analysis and show that none of the PTAs have trade creating effect. Although these studies made a significant contribution to the empirical PTA literature on their effects on trade, their conflicting results signals the failure to account for “*endogeneity bias*” and “*self-selection*” in PTAs, the issues that received imminent attention by researchers afterwards. The fact is that PTAs are not exogenous in gravity models, rather countries self-select into PTAs as a result of high pre-PTA trade levels between them potentially due to political, social or cultural harmonization between states. Not accounting for this leads to endogeneity bias, which in turn will produce inconsistent estimates.

To correct for endogeneity, Trefler (1993) and Magee (2003) employ an instrumental approach but found unstable results. In this context, two studies addressed this issue of endogeneity with great care. Using the IV approach, developed by Hausmann and Taylor (1981), Carrère (2006) analyze the trade creation and trade diversion for seven important regional trade agreements and found that intra-PTA trade is created at the expense of

outsiders (trade diversion). Another important study by Baier and Bergstrand (2007) proposed an econometric methodology, widely employed by following researchers, to address the endogeneity of PTAs. They argue that instrumental-variable approach does not rectify the endogeneity problem, but the panel approach does. Using panel data with country-pair fixed effects, they addressed endogeneity bias stemming from self-selection of country pairs into PTAs and show that previous analyses of the impact of PTAs on trade flows provide underestimated results. Once, they controlled for self-selection, they find that on average, a PTA approximately doubles bilateral trade flows after 10 years. In this context, Egger et al. (2008) have treated the endogeneity issue by resorting on structural new trade theory models. They aim to deliver an empirical model to take into account for endogeneity of PTA membership as well as trade flows containing numerous zero entries, by means of Poisson pseudo maximum likelihood estimations (PPML) with endogenous variable in the model. Although, there has been much advancement in econometric methodology to produce unbiased and consistent estimates, further research started to investigate qualitative differences among PTAs.

This chapter explores another dimension of heterogeneity. For each type of agreement, whether deep or shallow, heterogeneity can result from differences of content, such as differences in sectorial coverage of the agreement.

Economic integration can be distinguished according to varying degrees of integration among countries, along a continuum from “*shallow*” to “*deep*”. Shallow integration involves reducing or eliminating tariff barriers to trade in commodities whereas deep integration is characterized by harmonizing national policies, and is oriented towards “behind the border measures” such as laws and regulation, legalization, standards, investment flows, property rights, environmental legislation, infrastructures and allowing and encouraging cross-border labor and capital movements. While the focus of old trade theory is on the commodity trade flows, efficient reallocation of factors of production and production structures, new trade theory attempts to offer other dimensions of trade agreements and their effects accordingly. These aspects are said to be the elements of “deep integration”. Moreover, old trade theory emphasizes on traditional gains whereas

new trade theory focuses on traditional as well as non-traditional gains. The trade agreements concluded in the last decade are different in the manner that they include varying provisions other than provisions related to reduction of trade barriers. They range from tariff barriers, non-tariff barriers, to behind the border measures (such as norms, standards, property rights, infrastructure, tax codes, domestic laws and regulations ...) to multidimensional issues (such as provisions for technical/nontechnical barriers to trade, foreign direct investment, anti-dumping, government procurement, competition policy ...) to the legal framework for governing trade flows and deep integration issues (dispute settlement mechanisms). Numerous policy issues are embedded in these new forms of PTAs. As WTO noted:

“The coverage and depth of preferential treatment varies from one regional trade agreement (RTA) to another. Modern RTAs, and not exclusively those linking the most developed economies, tend to go far beyond tariff-cutting exercises. They provide for increasingly complex regulations governing intra-trade (e.g. with respect to standards, safeguard provisions, customs administration, etc.) and they often also provide for a preferential regulatory framework for mutual services trade. The most sophisticated RTAs go beyond traditional trade policy mechanisms, to include regional rules on investment, competition, environment and labor”

(World Trade Organization Website)

A new dimension of heterogeneity has been explored by Horn, Mavroidis and Sapir (2010), introducing the distinction between WTO⁺ and WTO^X clauses, to distinguish, within the content of agreements, between areas of negotiation falling under WTO mandate (e.g. tariff barriers, customs administration, technical barriers to trade, import and export restrictions etc...) or outside of WTO mandate (e.g. competition policy, labor mobility, environmental standards etc...). This helpful distinction shows the direction to deepen the analysis of the specific contents of these two categories. The issue is more important for the new areas of negotiations, coming under WTO^X, than for the more

standardized agreements focusing on WTO⁺ clauses. PTAs as an alternative to multilateral negotiations, but bearing on the same objectives have been generally recognized as beneficial to trade, (Harmsen and Leidy, 1994), even though they had been criticized initially (Baghwati, 1993). Such is not the case with the recent trend to enlarge the scope of agreements to so called WTO^X clauses. Literature is still inconclusive as to the effects of this new trend of agreements on the development of trade.

Recent research has started to tackle these issues of heterogeneity among PTAs (Orefice and Rocha, 2014; Kohl et al., 2013). Each category WTO⁺ and WTO^X is defined as a separate variable and assessed quantitatively by the number of clauses they contain. They report diverging effects on trade between the two categories. A possible negative impact on trade of WTO^X clauses is suspected. These ambiguous results could possibly be attributed to the fact that the analysis of the effects of WTO^X clauses has not been fully investigated.

In addition to the classification of provisions of PTAs into the categories of WTO⁺ and WTO^X, Horn, Mavroidis and Sapir (2010) identify the provisions whether they are “*legally enforceable*” or “*non enforceable*” by specifically focusing on legal language used in PTAs relating to dispute settlement (See Horn et al. 2010). This is to say, that “*legally enforceable*” provisions are subject to dispute settlement mechanisms. The DSMs can be activated in case of any claim of violation relating to any provision by parties to the agreement. Therefore, the additional argument put here is that varying levels of DSMs (non-binding, binding third-party review, establishment of tribunals and courts) influence the trade flows. DSMs should be regarded as separate pillar of PTAs which specify the degree of divergence from prescribed obligations (Johns, 2014) on policy areas negotiated and settled. Also Jo and Namgung (2012) asserted that DSMs influence the functioning of PTAs¹.

¹ PTAs do exhibit multidimensional effects other than trade. for example deep economic integration agreements are recognized as key avenue for promoting economic growth and reducing poverty (see Chauffour and Maur, 2010) and these DSMs address those issues as well.

Grieco (1997) identifies two dimensions of organizations; the scope of economic activity i.e. the diversified issue areas relating to tariff and non-tariff barriers and in the recent agreements, the areas like competition policy or environment, and the level of institutional authority i.e. the establishment of dispute settlement mechanisms which provide the forum, under the PTA, to resolve conflicts in case of any dispute on policy areas negotiated. Moreover, Kahler (1995) also proposes two dimensions, close to our study, the strength and scope. He argues that scope is well represented by the extent of diversity of issues-areas whereas the enforcement power and monitoring are good proxies for strength. Therefore, the intention here is to study these two dimensions and their potential effects on trade flows.

This chapter is consequently two-fold: it analyzes the mechanisms by which each individual WTO^X provisions in PTAs affect trade flows and secondly, to which extent of enforceability of PTAs (DSMs) has an impact, for each type of policy measures, on trade. In other words, the effects of different levels of institutionalization and inherent obligations on trade flows are analyzed. A proper specification of the gravity model with panel data is employed, introducing four separate dummy variables to subdivide the content of WTO^X clauses. Possible bias resulting from self-selection is specifically taken into account by using panel data with country-pair and country-and-time fixed-effects or first-differencing with country-and-time effects. As shown by Baier and Bergstrand (2007), these techniques are efficient in controlling all sources of endogeneity (measurement error, simultaneity bias and unobserved heterogeneity). Econometric approach should be able to identify the effect of each separate clause, positive or negative, on bilateral trade flows. To justify this more elaborated approach, it has also to be shown that the results obtained are significantly different from those obtained with less detailed analyses.

This chapter applies gravity model with panel data. It adopts Poisson-Pseudo Maximum Likelihood (PPML) method which allows for dealing with zero trade flows (Westerlund & Wilhelmsson, 2011; Head and Mayer, 2014). Further, it controls for multilateral resistance

terms by introducing exporter-year and importer-year fixed effects (see Anderson and van Wincoop, 2003).

Econometric approach should be able to identify the effect of each separate clause, positive or negative, on bilateral trade flows. In order to implement that, four separate dummy variables are introduced in different estimations to subdivide the content of WTO^X clauses. To justify this more elaborated procedure, it has also to be shown that the results obtained are significantly different from those obtained with less detailed analyses.

The paper proceeds as follows: Section 2 presents a brief discussion of literature on trade creating/diverting mechanisms of WTO^X provisions. Econometric methodology and results are presented in section 3. Robustness of results is analyzed in section 4 whereas section 5 concludes.

1 Impact on trade of clauses going beyond WTO mandate (WTO^X)

In this section, the detailed analysis and theoretical story about the individual WTO^X provisions will be discussed as well as examined empirically.

1.1 Content of WTO^X clauses and discussion

Although, areas included under the heading of WTO^X are very numerous and diverse, it is proposed to classify them into four main categories. Their impact on trade will be discussed below.¹

Three recent papers are of importance in this regard. Dür et al. (2014) is the most extensive study regarding the impact on trade of the heterogeneous nature of PTAs, with

¹ A study of WTO secretariat extended their work to incorporate 100 PTAs in a single database. http://www.wto.org/english/res_e/publications_e/wtr11_dataset_e.htm

the use of their own comprehensive database DESTA (Design of Trade Agreements) (Dür et al., 2014). They divided agreements into different categories according to their score, based on the number of types of provisions they contain and examined their effects on trade flows, although they did not differentiate for WTO+ or WTO^X provisions. Orefice and Rocha (2014), using WTO PTA database, analyzed separately the impact of WTO+ and WTO^X provisions on production network trade (intermediate goods trade) and found significant positive effects for both categories. Kohl et al. (2013) studied similarly the impact of WTO+ and WTO^X provisions on bilateral import flows. They draw on the provisions from Global Preferential Trade Agreements Database (GPTAD), managed by World Bank, providing facilities to extract agreements containing specific provision and found the import flows to be positively associated with WTO+ provisions but negatively with WTO^X provisions. Based on these results, they argue that WTO^X provisions, on the whole, are detrimental for trade.

Although these studies are important contributions to the empirical literature examining the impact on trade of varying nature of PTAs, the present chapter attempts to fill a gap by focusing on each individual provision listed under WTO^X (financial capital mobility, competition policy, labor mobility and environmental standards). The nature of these provisions will be detailed below.

1.1.1 Financial Capital Mobility

Financial capital mobility (to be distinguished from foreign direct investment) encompasses the ability of private funds (such as interbank lending, transactions in bonds and equities...) to move across national boundaries. It has become an important issue only in recent decades. The motivation for countries behind the inclusion of provisions relating to capital mobility comes from the fact that higher mobility provides opportunities to develop their financially dependent sectors involved in the production of goods and services. This, in turn, allows a reallocation of resources, resulting in decreased costs and increased trade.

Although, the traditional models, pioneered by Mundell (1957), conclude that when comparative advantage arises because of differences in factors endowment, capital flows are substitute to trade flows. This argument follows the intuition that a labor-abundant and at the same time capital-scarce country can increase consumption of capital intensive products by either producing them after importing capital or by importing them directly. Consequently mobility of capital is supposed to reduce trade. However, in contrast to this view, Bougheas and Falvey (2011) argue that when comparative advantage arises due to difference in technology (as opposed to differences in factors endowment), trade flows and capital mobility are, in this context, complementary (not substitute). They summed up a long discussion on the relevance of Mundell's original approach. The main drawback of Mundell's model was to neglect the role of differences of levels of technology on the orientation and nature of trade flows.

In a political economy perspective, the conventional wisdom holds that increased mobility of capital hinders domestic firms to lobby for trade protection. Therefore, capital mobility drives political support in favor of trade openness (e.g. Milner, 1988; Bhagwati, 1991). Analyzing case study of Canadian-US Auto Pact, Thomas (1997) argues that increasing capital mobility gives incentives for governments to liberalize trade.

Indeed, states are increasingly negotiating capital mobility provisions in PTAs. For example, Article 12.15 of Trans-Pacific Strategic Economic Partnership (TPSEP) states:

“Each Party shall permit all payments and transfers for current transactions and capital movements, with regard to trade in services”.

Yet, regarding the influence of the inclusion of capital mobility clauses on trade, theoretical discussion has not settled the issue and invites empirical analysis

1.1.2 Competition Policy

Competition policy incorporates the measures intended to prevent collusion among firms and to prevent individual firms from having excessive market power. Yet, it is often recognized

that competition policy can be used as a substitute to pure commercial policy with protectionist objectives. How this can be done is a complex issue, but states will always be sensitive to the danger of exposing national firms to the competition of powerful foreign firms.

The recent tendency to include, in PTAs, clauses related to national competition policies and legislation is not surprising. It can testify to the mutual willingness to apply these legislations fairly and in no way contradicting the objective of trade liberalization. It can just be a declaration of goodwill. Yet, the fact that such declarations are included in PTAs is a symptom of a possible misuse of competition legislation to pursue anti-trade practices. Such fears are supported by the debate on the so-called strategic trade policy discussed by Krugman (1986) and theoretically grounded on Spencer and Brander (1983). Parties in PTA negotiations could always be suspected to accommodate with their own legislation to support major domestic firms engaged in a technological race with foreign competitors. The way they apply their competition legislation can be interpreted as possibly menacing foreign competitors. For each country, there could be a trade-off between the defense of major domestic firms and the goal of enlarged competition, as a source of efficiency, provided by trade openness. The inclusion of clauses referring to competition policy reflects this dilemma. It is therefore difficult to predict their eventual impact on bilateral trade.

Indeed, the abuse of dominant position or monopolization hindering trade liberalization is of major concern among economists (Bilal and Olarreaga, 1998). The inclusion of competition provisions is beneficial in controlling these anti-competitive practices which undermine trade objectives of agreement. An increasing number of PTAs incorporate specific provisions to deal with such behavior.

Solano and Sennekamp (2006) study competition clauses in various trade agreements in their OECD working paper. They distinguish different types of provisions addressing non-competitive behavior and point out that countries are reluctant to negotiate competition-related provisions under the auspices of WTO, whereas they are ready to negotiate them in PTAs. Countries hesitate to abandon all capacity to conduct competition policies that could be barred by a set of multilaterally agreed non-negotiable legal rules. PTAs are preferred

because they allow exceptions, adaptation to specific cases, limitation of sectoral coverage, without contradicting the goal to liberalize trade.

EFTA-Mexico agreement, concluded in 2001, illustrates this prudent approach to integrate competition policy in the process of deepening of trade liberalization. The general principle was

“...to ensure that the gains from trade liberalization are not offset by the erection of private, anti-competitive barriers... The Parties agree that anticompetitive business conduct can hinder the fulfillment of the objectives of this Agreement... The Parties undertake to apply their respective competition laws so as to avoid that the benefits of this Agreement may be undermined or nullified by anticompetitive business conduct”.

whereas majority of bilateral PTAs signed by EC with the third countries underline the importance of competition policy such as:

“The Parties recognise the importance of free and undistorted competition in their trade relations. The Parties acknowledge that anti-competitive business practices have the potential to distort the proper functioning of markets and generally undermine the benefits of trade liberalisation. They therefore agree that the following practices restricting competition are incompatible with the proper functioning of this Agreement, in so far as they may affect trade between the Parties”

Although, empirical evidence is relatively scant, competition provisions are expected to address the negative effects of cross-border anti-competitive practices. The non-inclusion of clauses related to competition policy in PTAs can subvert the benefits from trade liberalization. It still has to be confirmed.

1.1.3 Labor Mobility

Although, covered in GATS, the provisions regarding labor mobility in PTAs offer greater liberalization. The negotiations of labor mobility clauses in PTAs is generally an extension of mode 4 Article I.2 (d) of provisions of GATS negotiated in Marrakech (1994). GATS

introduced very limited possibilities for labor mobility, temporary and in no case unlimited. Mobility, in this accord, is restricted to business visitors, independent professionals, intra-corporate transferees and contractual services suppliers. To sum up, it refers exclusively to temporary movement of service suppliers. Preferential trade agreements contain additional provisions beyond GATS (Nielson, 2003).

It is important to mention here that explicit inclusion of labor mobility clauses in PTAs do not refer to immigration and not even to general freedom of movements of workers, as it has been exceptionally achieved within European Union. Indeed, there has been an extensive debate, both at theoretical and empirical levels, on the impact of migrations on trade.¹ The current study focuses on the trade impact of temporary movement and not migration. Therefore, the trade effects of migration are outside the scope of this paper.

Labor mobility, in this restricted sense, is still an important issue for trade liberalization. For Stephenson and Hufbauer (2010), it is a promising channel for trade liberalization, given the stalemate at the negotiations in Doha Round.

For example, US-Singapore bilateral trade arrangement (2004) mentions:

“Each Party shall grant temporary entry and provide confirming documentation to a business person seeking to carry on substantial trade in goods or services principally between the territory of the Party of which the business person is a national and the territory of the other Party into which entry is sought”.

The ambition of labor mobility clauses is very limited. Their quantitative impact on flows of workers is not likely to be important. Still, the relevant question is to know whether deeper liberalization of this very limited labor mobility has a positive or negative impact on trade. Neumayer (2011) argues that restrictions to mobility of professionals involved in trading and FDI has a detrimental effect on trade. Symmetrically, easing labor mobility should stimulate trade. This intuition has to be confirmed.

¹ This literature also analyzes the effects of PTAs on bilateral migration flows. See Orefice (2012) and Figueiredo et al. 2014 for interesting analyses.

1.1.4 Environment

The trend to include environmental clauses in trade agreements is relatively recent. Trade agreements serve as forum for coherence and coordination between trade and environmental policies. One of the main reasons of deadlock in Doha negotiations was the disagreement between the negotiators of developed and developing countries, as the latter consider that in consequence of agreement with the environmental clauses, they would potentially lose their competitiveness. Further, the Cancun Ministerial Conference of WTO held in 2003 ended in a stalemate. Nevertheless, a number of developing countries have negotiated and endured the inclusion of strong environmental commitments in trade agreements signed with developed countries (OECD, 2007). The incorporation of environmental commitments in preferential trade agreements encompasses strategic benefits. For example they could act as driver for reform in domestic environmental policies and instigate co-operation among environment and trade officials.

Conventionally, the relationship between environmental regulation and trade has been studied under two hypotheses: race to the bottom and pollution havens. Race to the bottom approach refers to the fierce international competition which drives countries to be reluctant to adopt environmental rules which deteriorate their competitiveness, whereas the pollution haven hypothesis was proposed to take into account lucrative international trade in hazardous waste from developed countries, with stringent decontamination rules, to less developed countries with lax regulations. These theories relate international competition with a lowering of environmental standards. However, contrary to this view, Porter (1991) states that strict environmental policies do not necessarily deteriorate the competitive advantage of a country. On the contrary, they induce efficiency and stimulate innovations that can help improve the nation's commercial competitiveness. He further adds that the innovation and efficiency gains outweigh the costs of complying with these policy measures.

The empirical evidence of the impact on trade of setting higher environmental standards provides a mixed view. Van Beers and Van Den Bergh (1997) study the impact of environmental constraints on country's export flows. Based on indicators of environmental policy stringency, their results indicate positive relationship between policy stringency and

export flows. Harris et al. (2002) address the empirical shortcomings in Van Beers and Van Den Bergh and modify it slightly to include exporter and importer fixed-effects as well as time-effects in a panel setting. They show that environmental stringency has a non-significant impact on foreign trade. Arouri et al. (2012) revisit Harris et al. (2002), in the same panel setting, by using environmental data from Eurostat and focusing on Romanian competitiveness in the context of environmental conditionality to join European Union. Their findings were consistent with those of Harris et al. (2002).

Adopting a different strategy to assess stringency of environmental policy, De Santis (2012) estimates the impact of three major multilateral environmental agreements (MEAs) on 15 EU countries. She finds positive and highly significant effect of three agreements (Kyoto, UNFCCC and Montréal) on export flows. The Porter hypothesis is also confirmed by Trotignon (2010). This paper found positive and significant effect of carbon dioxide (CO₂) emissions restrictions on competitiveness of firms on international markets and hence on the level of exports. Further, a recent OECD working paper by Sauvage (2014) provides an interesting analysis on environmental regulations stringency and trade in environmental goods. However, the links between environmental standards stringency and trade flows are complex.¹

The specific impact of environmental clauses in PTAs remains to be tested.

1.2 Econometric Methodology and Results

1.2.1 Data:

The panel dataset is arranged by country-pair and year. It includes 188 countries for the period 1960-2010, in 5-year intervals with gaps. Bilateral trade data is obtained from IMF Direction of Trade Statistics (DoTS) database, assembled by Barbieri and Keshk (2012). The data on WTO^X provisions in PTAs is extracted from Global Preferential Trade Agreement Database (GPTAD), jointly developed and maintained by World Bank and Tuck Center for

¹ Ambec et al. (2013) reviewed recent literature, providing rather solid theoretical arguments in favor of the Porter Hypothesis (PH), nevertheless they admitted that empirical evidence is mixed.

International Business (World Bank, 2013). This database contains original full texts for more than 330 PTAs, including arrangements that have not been notified to the WTO. It serves as an important tool, allowing to search PTAs by specific provisions or keywords. GDP data are extracted from Penn World Tables (PWT 7.0) and geographic and historical data are taken from Centre d'Etudes Prospectives et d'Information Internationales (CEPII).

Bilateral migration data, to be used as a control, has been obtained from World Bank Bilateral Migration Matrix 2010 (Özden et al. 2011). This database is available since the year 1960 with 10-year intervals till 2010.

Figure 1.1 depicts the evolution of incorporation of different WTO^x policy areas into PTAs. It can be observed that countries still resist the incorporation of provisions related to environmental standards and labor mobility, although it should be noted that such clauses still increased with time. Capital mobility and competition policy clauses soar from the 1990s.

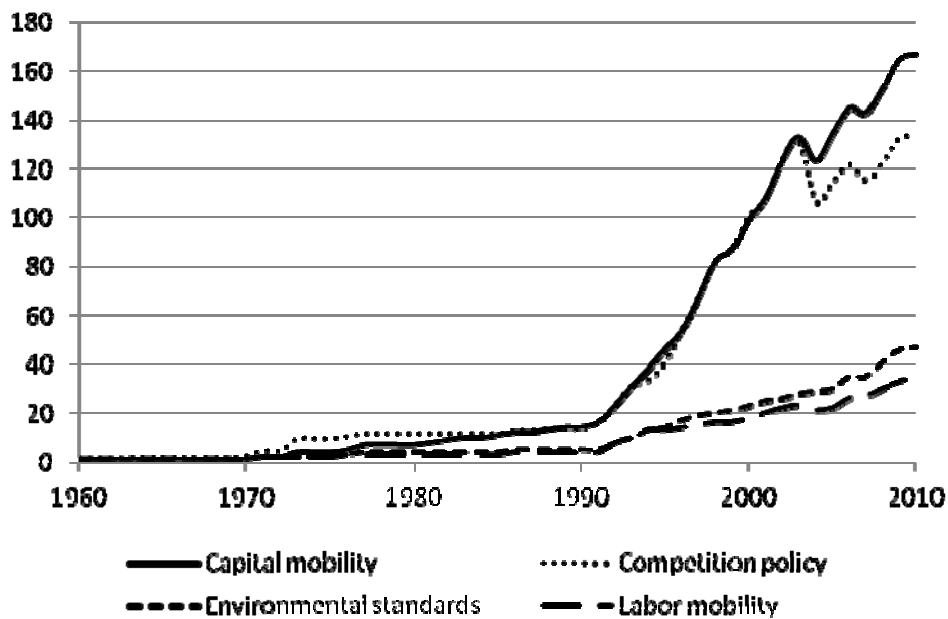


Figure 1.1: Number of Agreements containing WTO^x provisions

Table 1.1: Descriptive statistics of WTO^x provisions in PTAs

Provision	Covered and Enforced	Percentage (%)
Capital Mobility	203	69
Competition Policy	189	65
Labor Mobility	41	14
Environmental Standards	53	18

Estimates with Poisson Pseudo-Maximum likelihood

Silva and Tenreyro (2006) develop a rationale for employing PPML estimation method. This method is consistent in the presence of heteroskedasticity, and provides a way to deal with zero value of dependent variable, which is the case. The estimation equation for the Poisson Pseudo-Maximum likelihood is:

$$M_{ijt} = \beta_0 + \beta_1 \ln(GDP_{it}) + \beta_2 \ln(GDP_{jt}) + \beta_3 \ln(Distance_{ij}) \\ + \beta_3 Controls_{ij} + \beta_4 PTA_{ijt} + \beta_4 WTOX_{ijt} - \ln P_{it} - \ln P_{jt} + \varepsilon_{ijt}$$

The dependant variable M_{ijt} is import values (\$US millions) of country i from country j in year t . GDP_{it} and GDP_{jt} are importer and exporter GDPs respectively expressed in \$US millions. Controls are added, common to the gravity literature. Among these controls, are dummies that take the value of 1 when countries i and j share the same border, speak same language, had the same colonizer, whether country i had been colonized by country j in the past; when at least one of the two countries in the pair is landlocked. $Distance_{ij}$ is the geographical distance between major cities of countries i and j . $WTOX_{ijt}$ is a four-dimensional (dummy) variable with 0 or 1 for each WTO^x provision. These WTO^x provisions are used interchangeably in the model. P_{it} and P_{jt} account for Anderson and van Wincoop's (2003) multilateral resistance terms, which are explained by importer-time and exporter-time fixed effects. The estimates are given in Table 1.2 below.

Table 1.2: Basic estimates with PPML

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Capital Mobility	0.55*** (0.06)			
Not Capital Mobility	0.19** (0.07)			
Competition Policy		0.61*** (0.07)		
Not Competition Policy		0.27*** (0.07)		
Labor Mobility			0.58*** (0.06)	
Not Labor Mobility			0.27*** (0.06)	
Migration flows (log)			0.07*** (0.01)	
Environmental Standards				0.58*** (0.07)
Not Environmental Standards				0.28*** (0.06)
Distance (log)	-0.57*** (0.03)	-0.58*** (0.03)	-0.54*** (0.03)	-0.57*** (0.03)
Contiguity	0.34*** (0.07)	0.39*** (0.07)	0.32*** (0.07)	0.35*** (0.07)
Common language	0.31*** (0.07)	0.31*** (0.06)	0.24*** (0.06)	0.31*** (0.07)
Colonial link	0.41*** (0.14)	0.41*** (0.14)	0.14 (0.15)	0.43*** (0.14)
Common colonizer	0.31** (0.15)	0.34** (0.14)	0.12 (0.15)	0.35** (0.14)
Landlocked	-0.37** (0.15)	-0.36** (0.15)	-0.29** (0.14)	-0.39*** (0.15)
Constant	1.07 (1.29)	1.09 (1.29)	0.63 (1.48)	1.09 (1.29)
Pseudo-R ²	0.56	0.56	0.56	0.56
Observations	214,474	214,474	110,912	214,474
Log-pseudolikelihood	-11221904.1	-11237198.1	-6144330.4	-11231058.1

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

The results in table 1.2 suggest that all the WTO^x provisions have a significant positive effect on bilateral trade. All the provisions are not put together in a single estimation to avoid the risk of collinearity, but each estimation is controlled with a dummy variable

indicating that PTA does not contain that specific provision. Doing this will ensure consistent estimates of provisions under analysis. The inclusion of capital mobility clauses in PTAs increases trade flows up to 73% ($e^{0.55} - 1$). The magnitude is higher for competition policy (84%). Labor mobility provisions stimulate trade for about 79%, which confirms that providing facilities for movement of so-called natural persons favors increased trade. It is interesting to note that migration flow, introduced as a control variable, do also exhibit positive and significant sign even though this variable has only been added to isolate the specific effects of labor mobility as explained above. Agreements on environmental standards account for a 79% increase in trade flows which is consistent with Porter hypothesis as presented above (Porter, 1991). The results suggest that agreeing to incorporate environmental standards in PTAs induces efficiency and stimulates innovation, which in turn improves the country's overall commercial competitiveness, resulting in increased trade. This can also be attributed partly to the fact that developed nations give incentives of increased trade to developing countries in exchange for domestic environmental regulations. Further, as noted in the discussion above, these environmental negotiations, and hence, stringency, leads to increased trade in environmental goods (Sauvage 2014). The dummies, not containing the specific provisions are consistently positive and statistically significant in each estimation showing that equally, not accounting for these provisions, PTAs do increase trade flows. Generally, the control variables show the expected signs: geographical distance impedes bilateral trade flows as well as the fact to be landlocked, whereas sharing a common border, language or colonial history increases trade. However, it is interesting to note that countries, having common colonizers (in the past) are not found to be with increased trade.

Endogeneity

Indeed, earlier institutional designs of PTAs exert considerable influence on subsequent processes of agreements formation. States tend to negotiate the same level of policy issues when they enter new negotiations with new partners. Therefore, the choice to incorporate capital mobility, competition policy, environmental standards and labor mobility in PTAs is

an interdependent policy issue with an emulation process.¹ For example Horn, Mavroidis and Sapir (2010) argue that European PTAs (with third countries) tend to cover the same wide range of topics. These same provisions are diffused across PTAs.

The number of each WTO^X provision (discussed above) signed with the third countries by the countries in the dyad is used separately as instrumental variable.

Since, the endogenous variables (WTO^X provisions analyzed) are dummy variables, using the traditional two-stage methodology would yield inconsistent estimates unless the first-stage model is exactly achieved.² Angrist and Krueger (2001) establish that the values fitted from a simple probit model may be used as instruments. Then, OLS estimated could be used to generate first-stage results for the fitted values and other co-variates, known to be exogenous. Therefore, the three stage methodology is applied to address the existence of endogeneity.³ In the first stage, the values of four WTO^X clauses are predicted (individually) using simple probit estimator with the instruments. Then, these predicted values are used to generate distinct endogenous dummy along with other exogenous covariates by employing OLS model. In the third stage, these predictions are used in the PPML estimation. Table 1.3 presents the results taking endogeneity into account.

¹ A similar problem has been analyzed by Baldwin and Jaimovich (2012) to evidence a contagion process in PTAs formation. Their approach can also be applied for the cumulative diffusion of WTO^X clauses.

² See Wooldridge (2002).

³ Adams et al. (2009) adopt this approach.

Table 1.3: Estimates with PPML (with instrumental variables)

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Capital Mobility	-1.82*** (0.14)			
Not Capital Mobility	2.39*** (0.31)			
Competition Policy		0.39** (0.19)		
Not Competition Policy		0.80** (0.37)		
Labor Mobility			0.53** (0.23)	
Not Labor Mobility			4.53*** (0.86)	
Migration flows (log)			0.03*** (0.01)	
Environmental Standards				0.25** (0.11)
Not Environmental Standards				1.12*** (0.29)
Distance (log)	-0.78*** (0.03)	-0.59*** (0.05)	-0.18* (0.10)	-0.57*** (0.04)
Contiguity	0.36*** (0.08)	0.36*** (0.07)	0.26*** (0.07)	0.32*** (0.08)
Common language	0.15** (0.08)	0.28*** (0.07)	0.10 (0.07)	0.28*** (0.07)
Colonial link	0.28* (0.15)	0.31** (0.16)	0.02 (0.17)	0.25 (0.16)
Common colonizer	0.30** (0.15)	0.19 (0.15)	-0.17 (0.17)	0.13 (0.16)
Landlocked	-0.28* (0.16)	-0.26 (0.16)	-0.01 (0.16)	-0.26 (0.16)
Constant	2.81** (1.33)	1.04 (1.35)	-2.97* (1.72)	0.87 (1.31)
Pseudo-R ²	0.56	0.56	0.56	0.56
Observations	214,474	214,474	110,912	214,474
Log-pseudolikelihood	-11412631.4	-11560532.7	-6279598.2	-11497177.2

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

Interestingly, accounting for endogeneity, the results do show a positive and significant effect on bilateral trade flows for labor mobility and environmental standards, with lower magnitude, however significant, as compared to the baseline specifications in the table 1.2

(almost 70% for labor mobility and 28% for environmental provisions) whereas 48% for competition policy compared to 84% for the latter in baseline estimation. The provisions on capital mobility do exhibit a significant negative effect on trade, with is not consistent to that of baseline specification. The dummies, accounting for non inclusion of specific provisions, are consistently showing positive significant effects. The wald test for equality of coefficients have been carried out to analyze if there exists difference between the dummy accounting for non inclusion of specific provision and the respective dummy of WTO^X provision dummy under analysis.

1.2.2 Heterogeneity of WTO^X provisions

An important result is that the average treatment effects of WTO^X provisions providing increased trade opportunity are statistically different from the general agreement (PTA dummy). Indeed, the hypothesis of equality of coefficients on labor and environment provisions can be rejected, at traditional level of significance in the specifications accounting for endogeneity (see table 1.4). This suggests that the provisions related to labor mobility and environmental standards do affect trade independently of the PTA dummy. Heterogeneity among these provisions is clearly evidenced.

Table 1.4: Wald tests of equality of coefficients on provisions (CM, CP, LM, ES)

Specification	Not CM-CM	Not CP-CP	Not LM-LM	Not ES-ES
Basic specification				
Baseline	20.09***	12.46***	20.93***	20.42***
Instrumental var. strategy	103.27***	2.25	37.10***	12.29***
With lags	15.42***	6.36**	9.38***	0.52
Bilateral PTAs	3.19*	0.03	0.26	0.45
Post 1990	22.37***	12.58***	27.38***	23.63***

*, **, *** Null hypothesis of equality of coefficients can be rejected at the 10, 5 and 1% level, respectively. CM, CP, LM, ES signify Capital mobility, competition policy, labor mobility and environmental standards respectively.

1.3 Robustness analysis

1.3.1 Lagged effects

The provisions in PTAs generally plan a phase-in-period during which the provisions of the treaty are implemented gradually. They are thus likely to have lagged effects on trade, as the provisions are generally implemented over a 5 to 10 years period. For instance, MERCOSUR members adopted a Framework Agreement on Environment, ten years after the conclusion of the original agreement. In the EU - Mexico free trade agreement, the commitments related to labor mobility were to be implemented over a transition period up to ten years from the date of adoption. Consequently, dummy variables of provisions taking the value of 1 from the date of adoption of an agreement, as in tables 1.2 and 1.3 above, may introduce bias since the clauses are not yet fully implemented. The estimations are thus controlled by 5-year lagged dummies referring to clauses enforced with delay.

Table 1.5a: Robustness analysis: lagged effects

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Capital Mobility	0.47*** (0.05)			
Capital Mobility _(t-1)	0.12*** (0.04)			
Not Capital Mobility	0.29*** (0.08)			
Not Capital Mobility _(t-1)	-0.16** (0.07)			
Competition Policy		0.50*** (0.06)		
Competition Policy _(t-1)		0.15*** (0.04)		
Not Competition Policy		0.30*** (0.07)		
Not Competition Policy _(t-1)		-0.05 (0.06)		
Labor Mobility			0.46*** (0.07)	
Labor Mobility _(t-1)			0.14** (0.06)	
Not Labor Mobility			-0.02	

Not Labor Mobility _(t-1)			(0.09) 0.37***	
Migration flows (log) _(t-1)			(0.08) 0.09***	
Environmental Standards			(0.01)	0.54***
Environmental Standards _(t-1)				(0.06) 0.07*
Not Environmental Standards				(0.04) 0.26***
Not Environmental Standards _(t-1)				(0.06) 0.03
Distance (log)	-0.57*** (0.03)	-0.57*** (0.03)	-0.49*** (0.03)	-0.57*** (0.03)
Contiguity	0.33*** (0.07)	0.39*** (0.07)	0.30*** (0.06)	0.35*** (0.07)
Common language	0.31*** (0.07)	0.31*** (0.06)	0.23*** (0.06)	0.31*** (0.07)
Colonial link	0.39*** (0.14)	0.38*** (0.14)	0.20 (0.17)	0.40*** (0.14)
Common colonizer	0.30** (0.15)	0.33** (0.14)	-0.08 (0.13)	0.34** (0.14)
Landlocked	-0.35** (0.14)	-0.33** (0.14)	-0.35** (0.14)	-0.36** (0.15)
Constant	1.05 (1.42)	1.08 (1.41)	1.69* (1.02)	1.08 (1.41)
Pseudo-R ²	0.56	0.56	0.59	0.56
Observations	191,322	191,322	89,566	191,322
Log-pseudolikelihood	-10850898.5	-10875372.4	-3865605.3	-10872076.3

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

Results, presented in table 1.5a, confirm the previous findings. All provisions significantly affect bilateral trade positively for their date of entry into force. Moreover, the provisions of competition policy and labor mobility exhibit an additional effect after 5 years. The average treatment effect of capital mobility is positive and significant. For competition policy, the ATE is 81%. The total average treatment effect after 5 years is 15% and 79%, for labor mobility and environmental standards respectively. The hypothesis of equality of coefficient on capital mobility, competition policy and labor mobility can be rejected at traditional level of significance indicating that PTAs incorporating the said clauses have differential effects on bilateral trade flows as compared to the PTAs which do not contain these provisions.

1.3.2 Heterogeneity between bilateral and regional PTAs

Preferential trade agreements belong in fact to two different categories. They can be parted in plurilateral agreements (regional or trans-regional) and strictly bilateral agreements. The logic of the two categories is likely to be different. Forming or joining a plurilateral arrangement implies adhesion to a consensus view (take it or stay out). The bargaining power of each participant is limited, whereas in bilateral agreement, each party has an important capacity to influence the end result. Bilateral trade agreements are a new phenomenon and are essentially politically motivated (Menon, 2008). Lederman and Özden (2007) argue that the United States grant trade preferences largely on a geopolitical basis. Further, Haftel (2013) argues that bilateral agreements lack continuous institutional framework. Therefore, the motivations to bargain bilaterally are likely to be different from motivations to enter plurilateral agreements (including three or more partners located or not in the same region). Participating in plurilateral (or regional) arrangements requires deeper engagement in terms of institutional framework. It can be suspected that bilateral trade agreements may differ on their effects on trade. To take into account the heterogeneity of their WTO^x clauses, the following regressions estimate these effects for bilateral agreements only. The dummies for each of the four categories of clauses are set to 1 only if they are present in a bilateral agreement (excluding plurilateral agreements from the analysis). However, the PTAs between a regional accord and a country (for example EC-Jordan) are essentially bilateral, and therefore treated as bilateral PTA in estimations.

Table 1.5b: Robustness analysis: Bilateral trade agreements only

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Capital Mobility (bilateral)	0.16*** (0.06)			
Not Capital Mobility (bilateral)	0.00 (0.08)			
Competition Policy (bilateral)		0.09 (0.06)		
Not Competition Policy (bilateral)		0.11 (0.09)		
Labor Mobility (bilateral)			0.06 (0.09)	
Not Labor Mobility (bilateral)			0.12* (0.07)	
Migration flows (log)			0.07*** (0.01)	
Environmental Standards (bilateral)				0.04 (0.11)
Not Environmental Standards (bilateral)				0.11** (0.05)
Distance (log)	-0.70*** (0.02)	-0.70*** (0.02)	-0.65*** (0.02)	-0.70*** (0.02)
Contiguity	0.40*** (0.08)	0.40*** (0.08)	0.36*** (0.07)	0.40*** (0.08)
Common language	0.30*** (0.07)	0.30*** (0.07)	0.23*** (0.07)	0.30*** (0.07)
Colonial link	0.31** (0.16)	0.31** (0.16)	0.03 (0.17)	0.31** (0.16)
Common colonizer	0.21 (0.15)	0.22 (0.15)	-0.02 (0.16)	0.22 (0.15)
Landlocked	-0.28* (0.16)	-0.27* (0.16)	-0.15 (0.16)	-0.27* (0.16)
Constant	1.96 (1.28)	1.95 (1.27)	1.36 (1.47)	1.95 (1.27)
Pseudo-R ²	0.56	0.56	0.56	0.56
Observations	214,474	214,474	110,912	214,474
Log-pseudolikelihood	-11573415.3	-11581096.6	-6345562.4	-11579864.9

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

Table 1.5b presents the results for the provisions belonging to bilateral agreements only. This robustness test shows clearly that the general result obtained above in section 3 cannot be entirely maintained. In these estimates, the effects of WTO^X provisions are not significant.

The baseline results do not hold for bilateral PTAs. These important findings invite further investigation.

1.3.3 OECD vs. RoW

The effect of WTO^X provisions could vary according to the level of development of member countries. For example, developed countries have been reticent about opening their borders as the political resistance to all forms of labor mobility is extremely high (Stephenson and Hufbauer, 2010) and thus reluctant to negotiate these issues. The opposite is true in the case of environmental negotiations where the developing countries are unwilling to incorporate provisions related to environmental standards. It could be therefore of importance to distinguish PTAs among developed countries (North-North) and PTAs linking North-South or South-South countries. Estimations are proposed with a dummy OECD taking 1 for agreements in between OECD countries. In order to test the sensitivity of results, an interaction term between each WTO^X provision and the OECD dummy is included.

Table 1.5c: Robustness analysis : OECD vs RoW

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Both OECD	-0.27*** (0.09)	-0.32*** (0.09)	-0.25*** (0.08)	-0.24*** (0.09)
Capital Mobility	0.53*** (0.07)			
Not Capital Mobility	0.20*** (0.08)			
OECD x Cap Mob.	0.05 (0.10)			
Competition Policy		0.41*** (0.07)		
Not Competition Policy		0.28*** (0.07)		
OECD x Comp Pol.		0.35*** (0.09)		
Labor Mobility			0.74*** (0.09)	
Not Labor Mobility			0.29*** (0.06)	
OECD x Lab Mob.			-0.21* (0.11)	

Migration flows (log)			0.07*** (0.01)	
Environmental Standards				0.70*** (0.10)
Not Environmental Standards				0.30*** (0.06)
OECD x Env Stds.				-0.15 (0.13)
Distance (log)	-0.58*** (0.03)	-0.57*** (0.03)	-0.56*** (0.03)	-0.59*** (0.03)
Contiguity	0.36*** (0.07)	0.40*** (0.07)	0.33*** (0.06)	0.36*** (0.07)
Common language	0.32*** (0.07)	0.33*** (0.06)	0.23*** (0.06)	0.31*** (0.07)
Colonial link	0.40*** (0.13)	0.42*** (0.13)	0.13 (0.14)	0.41*** (0.13)
Common colonizer	0.35** (0.15)	0.39*** (0.14)	0.17 (0.15)	0.39*** (0.14)
Landlocked	-0.36** (0.15)	-0.35** (0.14)	-0.26* (0.14)	-0.38** (0.15)
Constant	0.92 (1.30)	0.82 (1.30)	0.64 (1.48)	1.02 (1.30)
Pseudo-R ²	0.56	0.56	0.56	0.56
Observations	214,474	214,474	110,912	214,474
Log-pseudolikelihood	-11163518.9	-11135080.5	-6099104.4	-11163640.3

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

Results are presented in table 1.5c. The interaction variable is significantly positive for competition policy negotiated in between OECD countries. However, it is insignificant for environmental standards. The latter suggests that maintaining environmental standards among developed countries have no effect on trade flows. This can probably be explained by the fact that negotiating on environmental standards is not a new phenomenon for developed countries, as their domestic policies are more environmental friendly. Therefore, their trade values are not affected by these policies.

1.3.4 PTAs post 1990

The baseline results presented in section 3 cover the period from 1960 until 2010. Looking in details at the data, it appears still that, from the early 1990s, a surge of new PTAs including WTO^X clauses can be observed (see fig. 1 above). It has led scholars to qualify this as a “*third wave*” of PTAs, starting from 1990. For instance, much of the trade arrangements were concluded between countries, formerly part of the Soviet Union. Moreover, the rise of PTA formation can be observed among East Asian countries at the start of the 1990s. It could be argued that the effect of WTO^X provisions could have diverse effects for the PTAs formed after 1990. In order to test for any sensitivity to this change of period, the sample is truncated and the model is estimated for 1990-2010.

Table 1.5d: Robustness analysis : Post 1990

Dependant variable	<i>Imports_{ijt}</i>			
	(1)	(2)	(3)	(4)
Capital Mobility	0.60*** (0.07)			
Not Capital Mobility	0.21*** (0.08)			
Competition Policy		0.67*** (0.08)		
Not Competition Policy		0.31*** (0.07)		
Labor Mobility			0.64*** (0.07)	
Not Labor Mobility			0.27*** (0.06)	
Migration flows (log)			0.07*** (0.01)	
Environmental Standards				0.64*** (0.07)
Not Environmental Standards				0.31*** (0.06)
Distance (log)	-0.56*** (0.03)	-0.57*** (0.03)	-0.53*** (0.03)	-0.56*** (0.03)
Contiguity	0.33*** (0.07)	0.39*** (0.08)	0.32*** (0.07)	0.34*** (0.07)
Common language	0.31*** (0.07)	0.31*** (0.07)	0.23*** (0.06)	0.30*** (0.07)
Colonial link	0.37*** (0.14)	0.37*** (0.14)	0.08 (0.15)	0.39*** (0.14)
Common colonizer	0.33** (0.15)	0.36** (0.15)	0.11 (0.15)	0.38*** (0.14)
Landlocked	-0.40*** (0.15)	-0.39*** (0.15)	-0.31** (0.14)	-0.42*** (0.15)
Constant	-5.47*** (2.07)	-5.43*** (2.07)	-3.62 (2.24)	-5.46*** (2.06)
Pseudo-R ²	0.61	0.61	0.60	0.60
Observations	128,739	128,739	71,735	128,739
Log-pseudolikelihood	-8564565.3	-8590523.8	-4702525.9	-8575108.3

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

The results, presented in table 1.5d, confirm the previous findings. However, the coefficients increase slightly for capital mobility and competition policy clauses but increase to a large extent (46% and 40%) for labor mobility and environmental provisions respectively. It suggests that basic findings are not sensitive to this period, rather the negotiations on these provisions in the last decade are more encouraging for trade flows. The Wald test of equality of coefficients on labor mobility provisions is rejected, confirming that the treatment effect of these provisions on trade does differ.

Indeed, PTAs exhibit two dimensions i.e. the scope and the enforcement power (Grieco, 1997). We have analyzed the scope of PTAs so far, by analyzing non-conventional provisions being negotiated in PTAs. However, it is important to analyze whether governments cooperate on these issue-areas (scope) and respect their obligations or not. There may exist time-inconsistency problem, where the governments commit to certain areas at the negotiation state (*ex ante*) but fail to comply afterwards (*ex post*). This failure of compliance can originate from domestic interest groups that pressurize the governments not to fulfill their obligations and adopt protectionist policy (Maggi and Rodriguez-Clare, 1998; Mitra, 2002). To avoid this problem, the governments institute the mechanisms known as dispute settlement mechanisms (DSMs) which constrain them to renege on their obligations, thus ensuring the credibility of commitment. Therefore, I analyze DSMs (the second dimension) by classifying into different types and examine their potential effects on bilateral trade flows.

2 Impact of dispute settlement mechanisms on trade

The states sign PTAs to secure economic benefits. The implicit assumption behind these benefits is that the signatories to a PTA would implement the commitment of trade liberalization with no malicious intent. If the agents (investors, multinational enterprises) in the signatory countries doubt on the credibility of commitments made by the governments, they assume it too risky to operate in the partner country. In order to yield

the maximum benefits from the trade agreement, the latter should be equipped with a governance and institutional structure that facilitate information exchange (Keohane, 1984), provide a way for the parties to settle discord between signatories concerning the scope of PTA and ensure compliance by the parties.

Consistent with the strand of international relations literature called “Neoliberal Institutionalism”¹, institutions store, archive, retrieve and process crucial information. Broadly, they act as information repository. International trade presents a fertile ground for transaction-cost economics (Yarbrough and Yarbrough, 1987). They further affirmed that in the presence of potential opportunism in international economic transactions, provision of adequate governance structures for international transactions require diverse and sophisticated range of institutions.

Institutions, by providing technical assistance in order to reduce transaction costs of international trade (Gilligan, 2009), act as trade facilitator, and by forestalling opportunistic behavior (Thompson and Snidal, 2005), they perform as conciliator. The demand for DSMs mainly arises from their potential to deter future violation (Yarbrough and Yarbrough, 1997). In the same vein, constructivists² put forward that institutions play a vital role in spreading global norms.

From an economic point of view, an institution is an equilibrium outcome of strategic interaction (North, 1990). Institutions significantly shape economic performance because they define and enforce economic rules (North, 1994). Institutionalization can be referred to as the establishment of formal and informal practices and regulations in an effort to liberalize trade (Duina and Morano-Foadi, 2011).

The focus of this part of the chapter is on the specific institutional aspect of Preferential Trade Agreements, namely the level of legalism of Dispute Settlement Mechanisms (DSMs). These mechanisms are the institutional configurations and procedures adopted by trade partners that provide the necessary structure to deal with the problem arising in case

¹ See the works of Keohane (1984) and Oye (1986).

² On the other hand, the realist critique is exactly the opposite. I do not discuss realist perspective in detail as it is outside the scope of this chapter. See Barbieri (2002) for details on realist paradigm.

of disagreement on the interpretation of certain clause. Economic theories on PTAs indicate that when the tariffs are already low, the gains from PTAs would be materialized only if they contain deep integration clauses¹. These clauses need to be backed up by a certain degree of enforceability. By agreeing to incorporate strong DSMs into a PTA, the governments signal their level of commitment to their partners, as well as to the private sectors of participating economies. DSMs act as safe-guard in case of violation of negotiated commitments on policy areas.

Institutions may have relatively strong central authorities and significant operating responsibilities or be little more than forums for consultation (Koremenos et al. 2001). While the countries establish these institutional mechanisms to resolve the problem of time-inconsistency, the degree of such mechanisms varies in important ways. DSMs could be of many forms. Smith (2000)'s work on determinants of DSMs' legal design, classifies them from non-legalistic to highly legalized form. His classification is based on five characteristics. (1) the existence or absence of right to third-party review (2) whether the rulings of panel are legally binding on parties under international legal terms (3) whether the panel judges are permanent or chosen on ad-hoc basis (4) whether the non-state actors have right to file cases other than national governments and (5) whether panel decisions are enforced in member states. This ranking criterion reflects the level of legalism design. A recent study by Jo and Namgung (2012) simplified the legal continuum provided by Smith and classified the DSMs, included in PTAs, into three categories corresponding to "low", "medium" or "high" level of legalism². They conceptualized by looking at three underlying key dimensions: (1) whether third-party review is allowed, (2) whether the review has any binding legal effect and (3) whether there are institutionalized bodies such as standing courts and tribunals.

¹ Anderson and van Wincoop (2004) argue that modern PTAs do not primarily focus on reducing tariff barriers, rather they have more to do with domestic policies which require negotiations on deep integration provisions.

² Porges (2010) also classified DSMs into three broad groups: political/diplomatic settlement of disputes, referral to an ad hoc arbitral panel, and systems established on a standing tribunal. Also, Chase et al. (2013) depart from Porges' model and categorized DSMs into three models: political/diplomatic, quasi-judicial and judicial.

Along the continuum of DSMs, the low level of legalism corresponds to the settlement of disputes at political or diplomatic levels and through negotiations (state-to-state bargaining). In this model, the PTA may contain no dispute settlement at all or it may refer to a third-party to make decision but that decision is not binding on parties. Moreover, it allows the parties to preclude that referral. In medium level of legalism, any party to an agreement has the right of access to third-party adjudication, in which the panel is convened for dispute being addressed only (as it is on ad-hoc basis). Here, the third-party's decision will be binding on the signatories. The highly legalistic model refers to the establishment of permanent tribunals. This model provides the highest level of institutionalization. The negotiators of a PTA have discretion to incorporate any type of DSM into PTAs and the underlying motive to include DSMs is to ensure that all the parties to a trade agreement hold their commitment specifically on negotiated policy issues and generally to ensure trade liberalization. We need to know, which specific type of DSM ensures these objectives. Therefore, we discuss a brief review on the effects of DSM types on trade flows.

2.1 DSMs and Trade Cooperation

There exists a variety of dispute settlement procedures. Therefore, different DSMs should promote trade cooperation in numerous ways. In a world of complete information, the governments pursue tit-for-tat strategies in case of any defection or compliance which emerges from iterated prisoner's dilemma (Axelrod, 1984). This can be achieved even in the absence of institutional mechanism (DSM). Pursuing this strategy may settle the trade dispute between the defendant and the complaining state but hinders the diffusion of conflict to other potential trading partners as the reputation of violating state is not public. Therefore, the other states possess no information of reputation of the violator.

Legally binding third-party dispute settlement may ameliorate this problem in different ways. The demand for DSMs arises to protect trade cooperation and liberalization and to constrain states from defection (Yarbrough and Yarbrough, 1987). First, as governments have incentives to pursue protectionist policies ex post in order to gain political support

from domestic lobbies (Grossman and Helpman, 1994), DSMs tie the hands of the governments to maintain cooperation, thus avoiding time-inconsistency problem. Secondly, they act as credible commitment devices by providing arbitration from a neutral body. The dispute attracts the public attention when it reaches international court for arbitration which is not the case for settlement through diplomatic negotiations. Hence, by promulgating the dispute and elucidating obligations, legally binding third-party DSMs increase the cost of violating a trade agreement. In this way, they can increase trade cooperation between the parties to an agreement.

It is important to note here that the presence of legally binding dispute settlement procedure in the form of ad hoc panel does not prevent negotiation between the states involved in a dispute (Guzman, 2002).

Standing tribunals and courts, also termed as highly legalistic procedures, could similarly promote trade cooperation through demonstrating higher level of credibility of commitment and reputational cost mechanisms. Abbott et al. (2000) establish it by arguing that arrangements make defection very costly by maintaining higher level of coercion. This institutional mechanism could thus increase the probability of compliance by the states with trade agreements.

On the empirical side, there are limited studies who examine the effects of DSMs on trade. Two papers are worth mentioning. Kono (2007) classify the DSMs according to their level of binding commitments. Moreover, Hicks and Kim (2012) captured the costs of non-compliance by measuring the level of obligation for East Asian PTAs terming as “the depth” of PTAs. They further added the dimension of escape clauses¹. Both studies conclude that more stringent mechanisms have no effect on trade flows. Others have investigated the effects of WTO’s dispute settlement process on trade flows. For example Rose (2004) find insignificant effect of GATT/WTO on trade flows, however, Tomz et al. (2007) find significantly positive effect of GATT and WTO on world trade. Moreover, their results confirm the increased WTO effect when the countries are party to any PTA.

¹ These clauses are not analyzed in this chapter which is a limitation of this study.

Therefore, they conclude that PTAs complement the multilateralism under the auspices of WTO.

However, it is important to mention that states self-select into DSMs. Treaties are acknowledged to be legally binding on the states that *ratify* them (Chayes and Chayes, 1993). Koremenos et al. (2001) further add by commenting on rational design of institutions, that institutions are self-conscious creation of states. Hence, the adoption of institutional features in PTA to promote trade liberalization is an endogenous design choice.

Keeping in view the above arguments about the effect of institutional features in PTAs, it remains to confirm which DSM characteristics are associated with increased trade flows. In this way, we can account for heterogeneity among PTAs at institutional level which is important to understand whether institutionalization of PTAs does have any effect on trade and if yes, which type is more trade creating.

2.2 Econometric strategy and results

The same panel dataset is arranged by country-pair and year as in the previous section and the PPML methodology has been applied. The data on DSMs has been coded by locating in the texts of trade agreements whether, in the case of dispute, the states agree to establish standing tribunals and courts (highly legalistic mechanism), third-party binding review where ad hoc panels are established for arbitration (medium level of legalization) or mere through political/diplomatic negotiations¹. The rest of the data sources have been described in the previous section.

¹ There are certain PTAs in which the states have formulated diplomatic means for resolving disputes at the stage of concluding a PTA but afterwards, they increase the level of legalization to medium level. For example, in South African Customs Union Agreement, states agreed for negotiations at diplomatic levels to solve a dispute but afterwards, in October 2002, states renewed the agreement and allowed for creation of a formal structure to make binding recommendations (medium level of legalization). Another example of moving towards the establishment of standing tribunal from ad hoc panel under Olivos Protocol, is of Southern Common Market (MERCOSUR) in January 2004. All PTAs, for which this situation exists, are coded accordingly.

Figure 1.2 shows the evolution of PTAs containing two different types of Dispute Settlement Provisions by years. It can be observed that nation states are reticent about incorporation of medium as well as highly legalistic DSM provisions, however, lesser in the case of medium level of legalization. There are 97 PTAs, in our dataset, which contain medium level of legalization till 2010 i.e. they provide for third party binding review in case of any dispute relating to the interpretation of the clauses of PTA. This number is dominated by bilateral arrangements. There are only 20 PTAs which allow for standing tribunals. However, the inclusion of DSMs in PTAs in the decades of 1990s and 2000s show an increasing trend, confirming that states are moving towards increasing level of hierarchy in law.

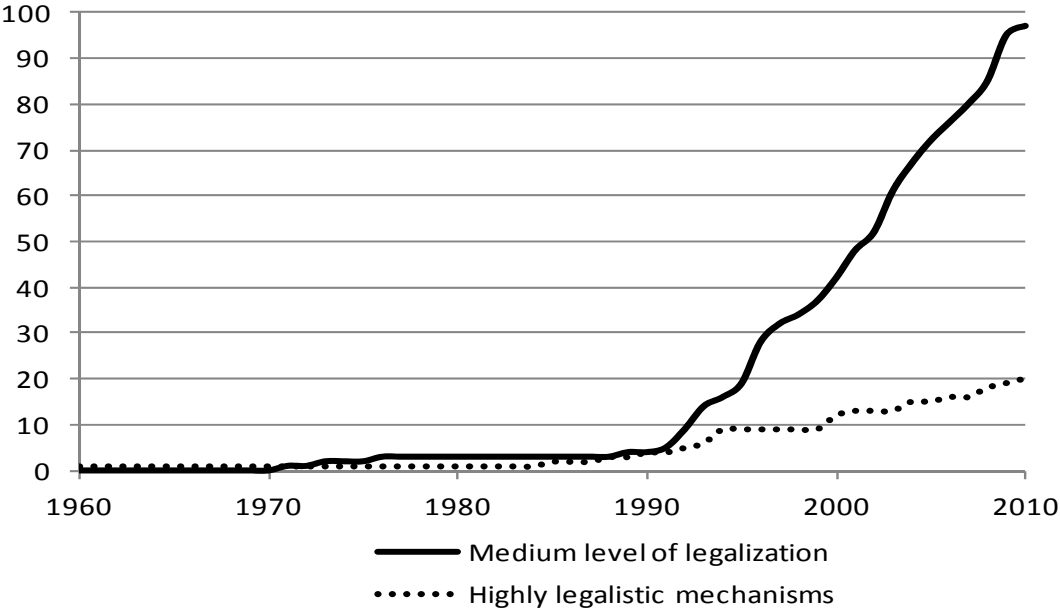


Figure 1.2: Number of Agreements containing provisions related to Dispute Settlement Mechanisms

Table 1.6: Descriptive statistics of DSM provisions in PTAs

Legalization Level	Covered	Percentage (%)
Political / diplomatic (low level)	173	59
Ad hoc Panel (medium level)	99	34
Standing Tribunal (high level)	20	7

Results on the effect of DSMs are reported in table 1.7. As indicated in the above section, the medium legalistic DSMs are those in which there is third party binding review and the highly legalistic DSMs represent the standing tribunals. The estimation (1) confirms that highly legalistic DSMs are significant in boosting trade flows (up to 55%), whereas, the medium legalistic DSMs exhibit no effect. This outcome contradicts the results obtained by Kono (2007) and Hicks and Kim (2012) who find insignificant effects of highly legalistic DSMs (establishment of standing tribunals) on trade. However, both papers failed to account for multilateral price resistance terms. Therefore, endogeneity bias originating from omitted unobserved variables affecting bilateral trade flows and DSMs differs according to the type of DSM considered. It suggests that different country pairs choose to institute different types of DSMs, and that the unobservable factors affecting the prospect of DSM incorporation also influence trade, but differently according to the depth of institutionalization. Further, both the studies mentioned above, do not employ PPML technique, hence do not take into account the zero trade problem, is providing the clearer picture.

Estimation (2) has been performed to account for potential endogeneity problem, as the states may be compelled to negotiate numerous types of DSMs (described above) in the aftermath of increased trade. This estimation confirms the findings to that of estimation (1), however, with a larger magnitude for highly legalistic DSMs.

Coefficients on the control variables exhibit expected sign and are found significant. Geographical distance between the countries impedes bilateral trade, as well as the fact to

be landlocked whereas sharing a common border, language and colonial history increases trade flows.

Table 1.7: Impact of DSMs on trade flows (PPML estimations)

Dependent variable	<i>Imports_{ijt}</i>	
	Basic	With instrumental variables
PTA	0.27*** (0.07)	-5.11*** (0.36)
Medium legalism DSM	0.08 (0.08)	1.88 (1.58)
Highly legalistic DSM	0.44*** (0.08)	4.23*** (0.34)
Distance (log)	-0.56*** (0.03)	-1.20*** (0.05)
Contiguity	0.36*** (0.07)	0.46*** (0.08)
Common language	0.33*** (0.06)	0.47*** (0.07)
Colonial link	0.41*** (0.13)	0.25 (0.16)
Common colonizer	0.34** (0.14)	0.29* (0.15)
Landlocked	-0.39*** (0.14)	-0.27 (0.17)
Constant	1.04 (1.28)	6.30*** (1.34)
Pseudo-R ²	0.55	0.56
Observations	214,474	214,474
Log-pseudolikelihood	-11181132.1	-11246504.4

Heteroscedasticity- and autocorrelation-robust standard errors (clustered by country-pair) in parentheses. All estimations include Importer-year and Exporter-year fixed effects. *, **, *** Significance at the 10, 5 and 1% level, respectively.

This result seems to be in line with the theories that predict increased cooperation in the presence of highly legalized institutions, hence the significant effects of the latter on bilateral trade flows.

2.3 Robustness analysis

This section tests for the sensitivity of the above results to several sources of bias, such as lagged effects, alternative samples of years, countries according to their level of development and geographical characteristics of PTAs.

2.3.1 Lagged effects

Preferential Trade Agreements plan phase-in periods. The DSM provisions are thus likely to have lagged effects on trade keeping in view the duration of decision making by the ad hoc panels or standing tribunals on specific disputes. Results, presented in columns (1) and (2) of table 1.8, confirm the previous findings for highly legalistic mechanisms showing a 65% increase in bilateral trade flows. However, the variable of lagged medium level of DSMs exhibits unexpectedly positive sign, however, to a significant level of 10 percent.

2.3.2 Samples of PTAs and years

One of the sources of heterogeneity among countries is related to their level of development. Indeed, the specificities of creating institutional framework and its effects on intraregional trade are dependent on the wealth of countries. To account for this, the interaction terms are created between DSM types and a dummy equal to one when both countries are OECD members, to represent the pairs of rich countries. Results are presented in column (2) of table 1.8. The interaction variables are negative and statistically significant for both medium level of legalism and highly legalistic DSMs.

However, it is consistently significant for highly legalistic mechanism. This implies that both levels of legalism does not create trade among developed countries possibly due to the fact that developed countries possess strong de facto mechanisms for conducting trade specifically when trading between themselves. Therefore, these negotiated mechanisms do not have marginal effects. The remaining variables show consistently the same signs and significance.

Another important source of heterogeneity among the proposed level of DSMs is certainly related to the geographical characteristics and number of members in a PTA. Indeed, bilateral trade agreements are likely to differ from regional agreements (signed between three or more partners and geographically located in the same region). Column (3) tests for heterogeneous mechanisms for PTAs concluded at bilateral level. The estimation shows the opposite results. Both the medium and highly legalistic DSMs show consistently negative and significant signs. This asserts that in bilateral relations, states do not cooperate with each other (hence deter trade flows) as the costs of noncompliance is very low and could be offset by strategic goals, no matter what is the level of legalism. Further, it is likely that baseline results derive from regional PTA DSMs where the dispute goes public when taken to court and consequently attracts attention of other states, which increases the costs, if not financial but reputational, for non-compliance. This implies that the effects are stronger in the case of regional arrangements where there is a form of community among nations and risks associated with defection are very high, which pushes the states to cooperate and not create impediments to the smooth functioning of trade flows.

Table 1.8: Robustness analysis: Impact of DSMs on trade flows (PPML estimations)

Dependent variable	<i>Imports_{ijt}</i>			
	Lagged effects	OECD vs. ROW	Bilateral	Post 1990
	(1)	(2)	(3)	(4)
PTA	0.29*** (0.08)	0.29*** (0.07)		0.26*** (0.07)
PTA _(t-1)	-0.03 (0.07)			
Medium legalism	-0.00 (0.09)	0.13 (0.09)		0.17** (0.08)
Highly legalistic	0.50*** (0.08)	0.83*** (0.09)		0.51*** (0.09)
Medium legalism _(t-1)	0.16* (0.08)			
Highly legalistic _(t-1)	-0.07 (0.08)			
OECD x Medium legalism		-0.28** (0.12)		
OECD x Highly legalistic		-0.47*** (0.10)		
OECD		-0.27*** (0.08)		
Medium legalism (Bilateral)			-0.29*** (0.07)	
Highly legalistic (Bilateral)			-0.58** (0.28)	
PTA (bilateral)			0.50*** (0.06)	
Distance (log)	-0.56*** (0.03)	-0.58*** (0.03)	-0.57*** (0.03)	-0.55*** (0.03)
Contiguity	0.36*** (0.07)	0.38*** (0.07)	0.35*** (0.07)	0.35*** (0.07)
Common language	0.33*** (0.07)	0.33*** (0.06)	0.30*** (0.07)	0.33*** (0.07)
Colonial link	0.38*** (0.13)	0.36*** (0.12)	0.42*** (0.13)	0.37*** (0.13)
Common colonizer	0.32** (0.14)	0.36** (0.14)	0.30** (0.15)	0.36** (0.14)
Landlocked	-0.38*** (0.14)	-0.36** (0.15)	-0.36** (0.15)	-0.43*** (0.14)
Constant	1.09 (1.41)	0.97 (1.29)	0.99 (1.29)	-5.48*** (2.06)
Pseudo- R^2	0.56	0.56	0.56	0.60
Observations	191,322	214,474	214,474	128,739
Log-pseudolikelihood	-10822401.4	-11048140.4	-11255935.4	-8522312.9

Heteroscedasticity- and autocorrelation-robust standard errors in parentheses. Coefficients for time, country-and-time and country-pair fixed effects are not reported.

*, **, *** Significance at the 10, 5 and 1% level, respectively

In addition, the introduction of DSMs (both medium and high) in PTAs has been exploding (see figure 1.2) since 1990s, which has led certain analysts to categorize this new wave as the new regionalism. It can be argued that the effects of DSMs on trade creation could be different for this period. Therefore, to account for this argument, the basic equation is estimated with a sample starting from 1990. Results are presented in column (4) of table 1.8. The effects of medium and high level DSMs are positive and significant for the PTAs entered into force since 1990, thus confirming the robustness of our baseline results.

3 Conclusion and discussion

The aim of this chapter was to revisit the debate on whether preferential trade agreements are beneficial or detrimental to trade. There were reasons to go beyond the traditional investigations. One was the acceleration of new PTAs concluded, especially bilateral arrangements proliferating from the 1990s. Second was the qualitative change in the scope of these agreements, with more and more frequent incorporation of non-conventional areas of negotiations referred to as WTO^X. Following Horn, Mavroidis and Sapir (2010), a methodology was developed to capture heterogeneity among PTAs. As far as scope is concerned, four domains were distinguished, capital mobility, competition policy, labor mobility and environmental standards. The question was therefore to identify the effect of each corresponding category of clauses on trade. If the main analysis conducted in section 2 showed that the inclusion of the four categories of clauses has beneficial effects on trade, at least in fixed-effect methodology, robustness tests do not entirely confirm these conclusions. The effects of clauses on capital mobility and competition policy are not systematically significant, in particular when the first-difference methodology is applied. The results are therefore inconclusive. On the contrary, robustness tests confirm the positive and significant effect of the inclusion of labor mobility clauses and environmental clauses. The hypothesis of heterogeneity is confirmed by the Wald tests of equality of coefficients.

The main conclusion remains that negotiations on labor mobility and environmental standards are unambiguously trade creating.

Still, entering in the territory of heterogeneity is like opening a Pandora box. There are many ways of negotiating labor mobility¹ or environmental standards in trade agreements and it would be too simple if their effects on trade were always similar. This shows the limits of econometric methods applied to qualitative variables.

¹ We recall that, in this context, labor mobility related clauses refer to temporary movements of professionals and should not be confused with migration.

On the institutionalization of PTAs, the so-called Dispute Settlement Mechanisms were classified according to their level of legalism. Highly legalistic mechanisms i.e. instituting standing tribunals, were found to be significantly increasing trade flows whereas, PTAs entailing medium level of legalism i.e. binding third-party review, exhibited an insignificant effect on trade. Moreover, dissecting and analyzing DSMs according to types of PTAs distinguishing bilateral (two signatories only) and regional (three or more signatories) reveal interesting results. DSMs at bilateral level are found to have negative effects, whether highly legalistic or with medium level of legalization. Hence, the baseline results derive from the regional PTA DSMs, where highly legalistic mechanisms are found to be trade enhancing. This is due to the fact that at regional level, the reputational costs of noncompliance is greater as in the event of breach as the other members internalize this information which is not possible in the case of bilateral arrangements, thus reducing the costs associated with noncompliance at bilateral level.

The question of legal design, which appeared as essential to investigate in depth and accurately the effects on the development of trade of various types of PTAs, is also a major issue to account for the role of PTA DSMs in conflict prevention and resolution. This question will be addressed in the next chapter.

Chapter II

Trade and conflicts: Do trade agreements matter?

Introduction

In 1945 A.O. Hirschman launched a timely debate on the role of international trade as a major factor influencing conflicts and even wars between states. This was also the time when the international community had to be reconstructed through complex cooperation mechanisms with the view to build on lessons of past errors.

Two centuries before, the German philosopher I. Kant, trying to devise a scheme for *perpetual peace*, had seen in international trade a powerful mean to consolidate peaceful relationship between states, thus praising *sweet trade*.

There is no contest on the fact that trade is central in antagonistic or cooperative relationships of nations pursuing legitimately their own interests. Still the ways through which trade institutions, trading arrangements and more recently the ever growing various types of free trade agreements, orientate states towards resolution of conflicts or

stalemate, has to be revisited. Specifically, the legal dimension of trade institutions (hence Preferential Trade Agreements) plays an important role for the preservation of peace. Also it is important to identify the ways through which the institutional (legal) dimension in PTAs (Duina and Morano-Foadi, 2011) may or may not have a profound effect on peace.

The aim of this chapter is to identify statistically the contribution of various form of institutionalization of trade relationship on conflict outbreaks of varying intensities (including wars), to identify also the channels through which these institutions mitigate or eventually exacerbate latent conflicts.

The literature in international relations identifies three pillar, based on so-called Kantian tripod, through which peace can be preserved (Russett and Oneal, 2001) which are democracy, economic (trade) interdependence and international institutionalization. Indeed, realists believe that trade induces conflict (Hirschman, 1945) or have no impact on the establishment of peace (Keshk et al, 2010) due to the existence of asymmetries in trade relationship whereas for the liberals, trade increases the opportunity cost of war and thus promotes peace (Hegre et al., 2010; Martin et al., 2008). Obviously, it is not possible to claim that all military conflicts originate in confrontation of trading interest. But trade would nonetheless play a central part in the set up of latent or developing conflicts. For this reason, the effects of trade interdependence on military conflict have become a widely discussed issue in economic and political literature. Furthermore, the role of institutions devised to organize trading relations, to set up rules to solve conflicts and to provide a legal framework to commercial exchanges, was viewed as central in these processes of cooperation and confrontation among nations. After 1945, institutions developed predominantly as multilateral organizations, but more recently, regional organizations and even bilateral preferential trade agreements began to occupy the front stage (e.g. Mansfield and Pevehouse, 2000).

Consequently, the legal dimension of PTAs became essential to contain possible conflicts (Russett and Oneal, 1998). Indeed, Robert Schuman accentuated the idea of a governing body, during the creation of European Steel and Coal Community, a predecessor to today's European Union.

In his words:

“By pooling basic production and by instituting a new High Authority, whose decisions will bind France, Germany and other member countries; this proposal will lead to the realization of the first concrete foundation of a European federation indispensable to the preservation of peace.”

The Schuman Declaration – 9 May 1950¹.

The basis of this High Authority, as well as in other trade agreements, lies in the creation of Dispute Settlement Mechanisms (DSMs) that perform numerous functions reducing transaction costs through restraining norm-breakers, mediating among the conflicting parties, arbitrating and adjudicating.

Preferential Trade Agreements, however, differ greatly in terms of legalization. Low level of legalism leaves to political/diplomatic negotiation the responsibility to resolve disputes, whereas medium level of legalism organizes the establishment of ad hoc panels (third party), whose arbitration is legally binding. These institutions are referred as quasi-judicial (Chase et al., 2013). Finally, the highly legalistic mechanisms allow for standing tribunals and courts. These represent the highest form of institutionalization.

This chapter will provide an empirical analysis of the impact of various types of dispute settlement mechanisms in PTAs on militarized disputes. A *two-stage approach* is proposed, where the link between DSMs and sanctions is combined with the link between sanctions and militarized disputes. First, the effects of threat and imposition of economic sanctions are analyzed using a simple probit model. Then, the selection issue is addressed in order to analyze the escalation of lower-level of disputes (economic sanctions) to the higher level of disputes (militarized interstate disputes) across country pairs using a bivariate probit model covering the period 1950-2001. Correlates of War (COW) database

¹ http://europa.eu/about-eu/basic-information/symbols/europe-day/schuman-declaration/index_en.htm

is used for the information on Militarized Interstate Disputes at country-pair level¹. The data on economic sanctions is extracted from Threats and Imposition of Sanctions (TIES) database.

The chapter proceeds as follows. The next section offers a broad review on the relationship between different aspects of international institutions (notably Preferential Trade Agreements) and militarized interstate disputes. Section 3 presents the analysis on the effects of sanctions on militarized conflicts. Section 4 presents the analysis on the impact of institutionalization of PTAs on war probabilities, section 5 analyses the determinants of institutionalization of PTAs whereas section 6 concludes.

1 Trade institutions and interstate conflict

The literature in international relations on economic interdependence has recently renewed its attention on the relationship between international trade institutions and agreements and interstate conflict, introducing econometric methods. Like in the old debate, a controversy exists between realists and liberals, who theorize contradictory effects of trade institutions on violent conflict.

The so-called realist school of thought considers international institutions to have little impact on the propensity of states to engage in conflicts. In the presence of powerful nations and international anarchy, organizations have little importance and reflect the interests of powerful states. The realists note that customary international law is very weak, so is the regulatory power of supranational institutions to protect the rights of states in the international system. This is the reason why these institutions could not play a vital role in reducing international conflict. Even in the context of European Union (which in the most advanced stage towards political union), Mearsheimer (1990) casts doubt on the belief that EU, as an institution, has played a major role in inducing profound peace in

¹ Currently the Correlates of War (COW) database offers the data till 2001, however, it will be updated till 2010 in the near future. It will then be possible to extend the analysis, to include the important wave of PTAs post 2001.

Europe. Instead, he accentuates the role of systemic forces, such as equality of power and existence of nuclear weapons creating balance. Institutions provide no guarantee in restraining the actions of powerful states pursuing a specific goal (Schweller, 2001).

In contrast to realists' views, institutionalists and liberals take on a completely opposite view and regard institutions as strong tools in shaping and constraining the behavior of states. One line of research analyzes the effect of international organizations (IOs) by distinguishing them between economic and security IOs. For example Boehmer et al. (2004) argue that organizations with security mandate are more effective at promoting peace than those with non-security objectives and interests. Although it is true that security organizations are deliberately formed to address directly the political and security issues, the *commercial institutions* have also played an important role in mitigating conflict. The literature on commercial institutions deals with the causal logics explaining how trade institutions and agreements affect military conflict. It identifies two mechanisms through which regional trade institutions are likely to affect violent conflict (Bearce, 2003). The first one, grounded in the conventional wisdom, is, since war disrupts international trade benefits¹ (Martin et al., 2008; Glick and Taylor, 2010), trade institutions and agreements increase the opportunity cost of conflict by increasing intra-agreement trade (Martin et al., 2008; Polachek, 1980; Oneal and Russett, 1999) and future trade gains (Copeland, 1996; Martin et al., 2012)². The concerns about uneven gains and losses could lead to potential conflict among states and PTAs address these issues by providing information and thereby reducing uncertainty about the distribution of benefits accrued from economic exchange (Mansfield and Pevehouse, 2000).

Another vein of research explains economic interdependence beyond trade and reckons capital flows between nations as inhibitors of violent conflict in the context of preferential trade agreements. Preferential trade agreements frequently include provisions related to

¹ Barbieri and Levy (1999) and Levy and Barbieri (2004) challenge this view and found no significant evidence that war inhibits trade flows.

² A dissenting body of research views relative gains from increased trade as the cause of conflict. The argument lies in the notion that state acquiring wealth and boosting productivity from a trade arrangement could be translated into the accumulation of military strength which could be used against other member of the agreement (Barbieri, 1996; Gowa, 1994; Grieco, 1988; Mansfield, 1993). This argument is criticized by Schiff and Winters, 1998) arguing that agreements need not raise income.

foreign direct investments (FDI) to boost inward FDI and to protect the investor's rights¹. Firms locating investments in a member state gain preferential access to other participants' markets as well (Mansfield, 2003) and could exploit economies of scale from this larger market (Jaumotte, 2004). Moreover, since PTAs reduce the ability of the governments to renege on their commitments made to foreign investors (Büthe and Milner, 2008, 2014), the prospects are limited that these investments could be threatened by state actions. (Fernandez and Portes, 1998; Yarbrough and Yarbrough, 1992). FDI provides realizable benefits to countries by increasing capital flows which could be menaced in case of interstate conflict eruption (Gartzke, 2007). Further, FDI renders private information that reduces uncertainty (Gartzke et al., 2001).

Recently, however, several studies cast doubt on the idea that preferential trade agreements help reduce interstate conflict by increasing opportunity cost through increased bilateral trade and investment flows. This line of investigation is deeply rooted in the rationalist logic of war formulated by Fearon (1995): issue indivisibility, commitment problems and asymmetries of information. Indeed, Nye (1971) argues that preferential arrangements help to dampen conflicts by providing a forum for bargaining and negotiation among member states, assisting them in resolving disagreements before open hostilities break out. Keohane (1984) claims also that institutions do reduce transaction costs, provide information and limit uncertainty, mitigating the probability of member states renegeing on agreed commitments. The literature elaborates elements of Fearon's rational logic of war and identifies causal mechanisms through which information dissemination and increased credibility affect conflict. International conflict could occur due to informational problems. International institutions provide forums for consultations and exchange of information between state leaders. More formally, they provide mechanisms for collecting and disseminating important information, useful to member states. Trade agreements, in addition to trade issues, address political and military issues as well (Bearce, 2003) and some preferential trade agreements include formal

¹ See chapter 3 below.

security and military substructures¹ which organize joint military exercises and defense minister forums (Vicard, 2012). In the light of informational channel to conflict mitigation, Boehmer et al. (2004) introduced an informational theory of intergovernmental organizations and argue that these organizations promote peace by revealing private information about competing states. As discussed, this private information can be related to trade as well as other military and political matters².

Secondly, the factors causing commitment problems such as time inconsistencies could induce war (Gartzke et al., 2010). Negotiations stall if an established agreement is not credibly enforced. Trade institutions may institute the mechanisms of dispute settlement and also act as mediators, encouraging dialogue. Moreover, the regular meetings of high level officials and heads of the states create trust between members and reduces the problem of credible commitment. The obstacles to the enforcement of parties' rights and monitoring of commitments reduce incentives for negotiations (Fearon, 1998). To overcome these commitment problems, commercial institutions offer opportunities for high-level state leaders to meet and interact, which helps in mitigating mutual political and military differences even if negotiating on these differences is not part of the formal agenda (Bearce, 2003). This creates trust among the member nations and could unfreeze interstate political and military tensions. Following this logic, the regional economic agreement of MERCOSUR has emerged as a forum for discussion of sensitive policy areas including nuclear proliferation concerns (Manzetti, 1993) and repeated interaction of leaders of ECOWAS states encourage norms of peace in the region. In addition, bilateral as well as interregional trade agreements concluded by EU include provisions on nuclear safety and terrorism (for example EC-FYROM, EC-Egypt, EC-Albania ...). Further, European Union's (EU) motives for negotiating a trade deal with the Gulf Cooperation Council (GCC) countries are elucidated by the EU's geopolitical and ideational interests (Antkiewicz and Momani, 2009) and therefore uses trade to achieve foreign policy objectives (Messerlin, 2001). This suggests that there exists variety of issue areas in

¹ There exist alliance agreements which specifically institute elements of economic cooperation. See Long and Leeds (2006).

² Although Bearce (2003) contend that even with full information, violent conflict may occur due to commitment problems.

preferential trade agreements through which the states may pursue their policies other than trade.

1.1 Approaches to institutional diversity

The *first approach*, entailing a vast literature, discusses the effects of international organizations and agreements on conflict. The preliminary work ignores the fact that trade agreements differ in scope, coverage and institutionalization. Several studies examine the effects of International Governmental Organizations (IGOs) in general (Boehmer et al., 2004; Gartzke et al., 2010) and trade agreements in particular (Mansfield and Pevehouse, 2000; Mansfield et al., 1999; Russett and Oneal, 2001). The implicit hypothesis behind this empirical work is that agreements mitigate the conflict between members by raising opportunity cost of conflict through trade and investment gains. Although, these studies provide an important insight into the analysis but their assumption of homogeneity and uniformity across agreements undermine the analyses of their pacifying effects on conflict between members of agreements. The theoretical arguments in response to Fearon (1995)'s *Rational Theory of War* suggest that institutional variation has important implications for analysis.

Nevertheless, the *second approach* returns to the task of differentiating between trade agreements. Much of the research follows this logic, identifying various features of preferential trade agreements, and analyses various mechanisms through which these features have an impact on peace. This approach stresses the importance of delineating trade agreements (Kahler, 1995; Grieco, 1997; Hicks and Kim, 2012), regional trade institutions (Haftel, 2007) and international organizations (Gartzke, et al., 2010). These studies accounted for variation in institutional design of agreements and organizations. Grieco (1997) mainly pointed two dimensions of organizations; the scope of activity and the level of institutional authority but falls short of providing a specific measure for these dimensions. Kahler (1995) also proposes two dimensions i.e. strength and scope.

Gartzke et al., (2010) disaggregated IOs according to their level of institutionalization. They differentiated organizations according to their mandate whether political, economic or social. Interestingly, they found that organizations with economic mandate increase crises relative to other IOs. Their argument, based on empirical results, is that economic organizations increase tensions between members due to inefficient distribution of surplus generated under these organizations. Again, they did not provide any measure to scale these economic organizations which blurs the analysis of the capacity of the latter to address these issues. Nevertheless, the issues of broader cooperation under these trade organizations (PTAs) can mitigate the tensions that arise between members. Moreover, the PTAs provide forums and incorporate mechanisms for the resolution of disputes and institute the authority, which may dilute tensions between the member states and provide the opportunity not to go for war. Specifically, this point is of particular importance with respect to the study conducted in this chapter. The present study builds on these approaches to draw a clear picture of trade agreements and institutions and to analyze their role in mediating and controlling the disputes escalation to violent conflict.

The *third approach* emphasizes on the reduction of barriers to trade. This conception follows the canonical taxonomy of trade agreements developed by Balassa (1961) that views regionalism as successive process towards economic, monetary and finally political union through free trade area (FTA), customs union (CU) and common market (CM). This classification is still widely used in economics literature (Ghosh and Yamarik, 2004b; Magee, 2008; Vicard, 2009) as well as in international relations (Bearce, 2003; Bearce and Omori, 2005). Although, the analysis based on this classification of agreements is widely used, it is confusing for the following reasons:

First, the classification to represent institutional variation using typology of Balassa, neglects the institutional diversity across trade agreements. The shortcomings of analysis lie in the simplistic notion of various trade agreements into free trade area and customs union (Whalley, 1998). For example, a simple glance would be sufficient to note the difference between SAFTA (South Asian Free Trade Area) and NAFTA (North American Free Trade Agreement). Both differ widely in terms of their issue-area coverage and the

level of institutionalization they entail, both being part of the FTA category. Another example can be the comparison between two customs unions: European Community and Andean Customs Union, but their institutional variations are in fact enormous (Li, 2000). Page (2000) points out that PTAs assume a continuum from less to more integrated level. She further argues that assumption of World Trade Organization's (WTO) classification into free trade areas, customs unions, and common markets is not relevant. Secondly, these different typologies of trade agreements fail to capture the range of activities corresponding to inherent political and legal heterogeneity. The varied institutional rules are subsumed into a single phenomenon, thus concealing the complexity and heterogeneity.

In fact preferential trade agreements differ in scope and vary dramatically in their design (Johns and Peritz, 2014). Indeed, they are heterogeneous in nature. Some commercial arrangements are larger in scope while others tend to be of lesser scope. Some impose shallow trade obligations while others concentrate on deep obligations. The question follows whether PTAs do indeed represent strong state commitments or are merely paper tigers (Hicks and Kim, 2012). Consequently, the effectiveness of trading arrangements to contain disputes between states could vary. The agreed upon issue areas and varying degrees of institutionalization of trade agreements could have diverse effect on the escalation of disputes. In the next section, we will discuss the kaleidoscopic picture of trade agreements and their capacity to minimize conflicts.

1.2 Qualitative differences in preferential trade agreements and conflict

In addition to trade related issues, PTAs have cooperation objectives of political nature, such as civil protection, regional cooperation, terrorism, visa and asylum, nuclear safety...¹ Therefore, PTAs (especially recent) could be treated as instruments of foreign policy (Capling, 2008). Moreover, the diversity of PTAs can be analyzed from a

¹ See for a full discussion of issue areas negotiated in US and EU preferential trade agreements (PTAs) by Horn, Mavroidis and Sapir, 2010).

geographical point of view (Aggarwal and Fogarty, 2004). PTAs can be bilateral (arrangement between two countries and/or regions only)¹, regional (between three or more contiguous countries located in a certain region) (Johns and Peritz, 2014) and plurilateral (between three or more countries not located in the same region)². Contrary to traditional approaches to regional integration³, every PTA formed on the bilateral, regional or plurilateral level has its own dynamics of political, institutional and economic integration. Therefore, PTAs include the elements of foreign policy, ensuring peaceful settlements of political and military disputes, are not only geographically regional in scope but also bilateral (Rosen, 2004)⁴.

Recent research provides an insight on the fact that international trade agreements are heterogeneous by nature and have therefore varying effects on interstate conflict. Trade agreements can be viewed from two different aspects. First, the issue coverage, known as breadth and second, the legal obligations to restrain states from defection and to respect the commitments they made in agreement, known as depth. We will discuss the effects of the latter in detail in the next section.

1.3 Institutionalized trade arrangements and peace (the issue of depth)

The analysis of the connections between commercial exchange and conflict can be traced centuries back. Indeed, Immanuel Kant, prolonging a long debate initiated in the seventeenth century⁵, believed that perpetual peace is based on three pillars, democracy, economic interdependence, *sweet commerce*, and progressive building of international institutions.

¹ Bilateral arrangements may include an agreement between two countries, a country and a region as well as between two regions.

² Another terminology is multilateral which is commonly referred to the countries signatories to GATT/WTO.

³ See for example Haftel (2007) for an analysis on regional institutions only.

⁴ Rosen discussed foreign policy objectives of United States that it pursued through the conclusion of bilateral FTAs, US-Israel FTA and US-Jordan FTA.

⁵ See General Introduction.

The institutionalist notion and the liberal arguments are often derived from the views of Kant (1991 [1795]). This school of thought further developed theoretical connections between economic interdependence and risk of conflict. These insights were largely influenced by subsequent European thinkers and scholars. For example, Machlup (1977) documents that Wilfredo Pareto uphold the idea that peace in European continent could be achieved through customs union and John Maynard Keynes (1920, ch. 7) advocated the idea that states would be politically bound in the aftermath of economic integration which would be vital for reducing conflict.

More recently, these notions have been widely examined empirically. The empirical research largely confirms (with few exceptions) that trade agreements succeed in mitigating conflict. Initially, Mansfield and Pevehouse (2000) analyzed the effect on military conflict in the institutional context, which has largely been ignored before their work, by examining the links between preferential trade agreements (PTAs) and military conflict. The authors argue that PTAs dampen conflict through increased trade, heightened investment and providing conflict resolution mechanisms. In addition, they find that PTAs, encompassing all these features, moderate the effect of bilateral trade in mitigating political conflict. Although, their work provided an important insight into the dampening effect of PTAs on military conflict and served as the base for empirical works afterwards, but do not delineate the mechanisms through which PTAs have an impact on Militarized Interstate Disputes (MIDs). However, Bearce (2003) attempted to answer the question on how institutions (i.e. through which mechanisms) matter by theoretically conceptualizing three potential mechanisms through which PTAs may impact conflicts – state leaders' increased expectations of future commerce discourage them to fight, due to increased cost – better information exchange, including security coordination, provided by the framework of commercial institutions – regular meetings or forums of high-level state leaders creating the inter-state trust.

Bearce (2003) further performs case analysis of GCC and ECOWAS (CEDEAO) and finds that these mechanisms are active in reducing conflict. Also, the diffusion of tensions has been witnessed between India and Pakistan, political rivals for decades. The then

Pakistani president employed “Cricket Diplomacy” by travelling to India ostensibly to watch cricket match in Jaipur to reduce tensions at the Indo-Pak border created by “Operation Brasstacks” in 1987. Both India and Pakistan are members of regional organization, SAARC, established in 1985¹. Bearce and Omori (2005) empirically examine these potential mechanisms and find a stronger role for state leaders’ interaction in containing conflicts, while trade integration and security coordination are found to be insignificant.

Subsequent works disaggregate the large PTA category to account for differences in institutions, proxied by the number of clauses. Haftel (2007) measures the number of issues encompassed by regional organizations and argue that a wide array of economic issues does play a strong role in dampening conflicts among nations. He further argues that the number of meetings between high-level officials provides valuable information regarding national interests. He tests his arguments and finds considerable support for them, although he collects the data on only 28 regional organizations. Further, Vicard (2012) classifies PTAs according to their depth. He distinguishes two categories, “Shallow” and “Deep” PTAs. He finds that deep integration agreements (custom union and common market), involving political cooperation, are robust to reduce the probability that low-level disputes escalate into war. He further shows that shallow integration has no effect on war probability. Finally, Shaffer (2011) tests that economic integration agreements increase the probability of conflict among PTA members having symmetry of trade relationships.

The literature, discussed above provides an important insight into the causal mechanisms of commercial institutions and agreements to inhibit the military conflict, but it is a sort of "black box". Furthermore, if this literature accounts for variation in scope of agreements, it generally ignores the legal dimension of PTAs and their potential mitigating effects on militarized conflict. The legal dimension of PTAs may have important implications for military conflicts. Indeed, the results obtained by Gartzke et al., (2010) and Hafner-Burton and Montgomery (2012) indicate that organizations with economic mandate (i.e. trade

¹ See Chari, Cheema and Cohen (2007) for details.

organizations) tend to increase conflict among members. This argument is based on the possibility that under the membership of an economic organization, the nations compete over benefits and therefore, the dispute arising from asymmetric distribution may escalate to military conflict. According to functionalist logic, PTAs, well equipped with proper institutionalization such as Dispute Settlement Mechanisms (DSMs) that address cooperation problems (Koremenos et al., 2001), may help to alleviate these concerns related to uneven distribution.

Based on Kantian notions, scholars have attempted to conceptualize and empirically analyze the effects of the third leg of the Kantian tripod i.e. progressive building of international institutions. (See above). The modern interpretation of Kant's proposition refers more to international law and even to international organizations, which were hardly conceivable notions at the end of the 18th century. Research has started to account for various schemes of institutions and their effects on violent conflict (Haftel, 2007; Vicard, 2012). The works have been carried out on the conflict mitigating effects of legal dimension but the research on this aspect of international trade agreements is relatively rare as well as inconclusive. The present chapter thus focuses on this dimension by looking deeply into it and identifying the channel through which legalization may affect the outbreak of war. Therefore, in the first step, we need to review some of the major concepts and theories linking the legal aspect of trade agreements (DSMs) and violent conflict.

1.4 Dispute settlement mechanisms of PTAs and risks of militarized interstate conflict

There is a recent tendency to institute in PTAs more and more military and security standing committees. For example, a forum exists under MERCOSUR for consultations on security policy areas such as nuclear proliferation (Manzetti, 1993). Preferential trade agreements such as Communauté Economique des Pays des Grands Lacs (CEPGL), Economic Community of West African States (ECOWAS) and European Union (EU)

embody rules about military engagement such as entente pact, non-aggression pact as well as mutual defense pact (Powers, 2004) which is termed as issue-linkage. The PTAs that directly include provisions related to military and security and provide conflict resolution mechanisms could have direct mitigating effect on violent conflict but there are few PTAs that include these components and one cannot generalize these effects.

In addition to increasing cost of conflict as a result of intensified trade, PTAs could on the contrary create capacity for conflicts as the nations compete over gains from the agreement (Hafner-Burton and Montgomery, 2008), especially when the gains from economic integration are unbalanced. The rising dependencies among economies are not exclusive of asymmetries generating economic and political troubles (Schneider, 1999). Agreement member(s) may perceive themselves as threatened as a result of increased supremacy of other members(s) due to uneven distribution of gains. Here, it is important to understand the difference between the gains whether it is “absolute gain” or “relative gain” which is the potential source of tension. Kenneth Waltz (1979) outlines

“When faced with the possibility of cooperating for mutual gain, states that feel insecure must ask how the gain will be divided. For them, the important issue is not “Will both of us gain?” (absolute) but “Who will gain more?” (relative). If an expected gain is to be divided, say, in the ratio of two to one, one state may use its disproportionate gain to implement a policy intended to damage or destroy the other. Even the prospect of large absolute gains for both parties does not elicit their cooperation so long as each fears how the other will use its increased capabilities”.

The states are concerned about the relative gains under the agreement, which is indeed the seed of contention under international anarchy, and therefore the relative gains hypothesis have implications for economy as well as security (Snidal, 1991). Along the same line, Hegre (2004) develops an expected utility model demonstrating that trade is more effective in reducing the conflict probability when economic interdependence is symmetric and when states have symmetric information about each other’s intentions.

However, trade gains extracted through trade agreements can be translated into military gains (Gowa and Mansfield, 1993).

Legal institutions of adjudication and arbitration perform functions of diplomatic good offices as well as mediation among conflicting parties, thus resolving disputes (Russett et al., 1998 and Russett and Oneal, 2001). They help to remedy market failures that inhibit cooperation (Kono, 2007). DSMs are primarily incorporated to solve commercial disputes (Bearce, 2003) that could potentially degenerate in political conflict (Stein, 1993; Mansfield and Pollins, 2003) but Bearce (2003) does not share this notion and casts strong doubts on the escalation of trade and economic disputes to military confrontation. Therefore, in his view, DSMs under PTAs may not have any (high-level) conflict mitigating effects as disputes on economic issues are not likely to spillover into war. In line of the arguments put forward by Bearce (2003), it can be deduced that there are loose theoretical connections between DSMs and militarized conflict, however, DSMs have strong implications for lower level of political-economic conflicts, such as trade or economic sanctions.

Nevertheless, trade sanctions have strong implications on military conflict, justifying the two-stage approach proposed above. The literature on international relations exhibits competing theories of sanctions on war. One line of research considers it as a substitute to war (Lopez and Cortright, 1995) whereas the other theorize it as complementary to war and argue that trade sanctions could escalate to military aggression. Therefore, the DSMs, by preventing sanctions or their escalation to war, could have pacifying effects on war. This chapter identifies this channel through which DSMs could affect the lower-level conflicts (sanctions) and their potential escalation to high-level conflict. Therefore, DSMs have indirect effects on military.

The channel would look like in figure 2.1.

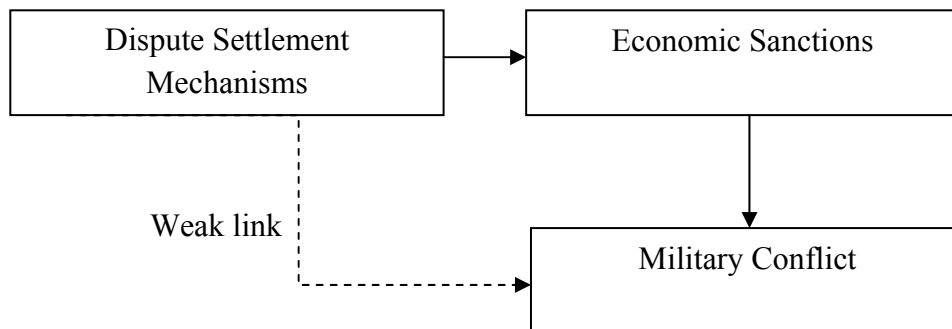


Figure 2.1: Dispute settlement mechanisms and military conflict through economic sanctions

To analyze this channel through which DSMs affect war, it is important to examine the effects of trade sanctions on interstate war. Before examining the pacifying effects of DSMs on sanctions, we evaluate the potential impact of trade sanctions on war and look what the theory tells about the effects of the former on violent conflict. Then, we investigate empirically this impact using our database and check what our data tells about the effects of sanctions.

Therefore, the following section first offers a brief review and an empirical analysis on the potential effects of sanctions on war. Afterwards, it evaluates the effects of DSMs on sanctions as well as their impact on preventing the escalation into military conflict.

2 DSMs, Sanctions and Military conflict

The object of this section is twofold: first to analyze the effect of economic sanctions on militarized disputes and, the second to examine the potential effects of DSMs in preventing the sanctions that may escalate to military conflict. This strategy to decompose the process in a two-stage framework is proposed as an alternative to prior inconclusive literature.

2.1 Economic sanctions and military conflict

International economic sanctions appear to be a common and recurring feature in political interactions between states (Caruso, 2007). They are often viewed as a substitute to military action. For example, Shaffer (2011) adopts a policy substitution framework which signifies that states may pursue foreign policy goals using several different means. The main point behind this notion is that sanctions may be used as an alternative means of coercion to achieve foreign policy goals, thereby forestalling the eruption of military aggression. Therefore, imposing sanctions is a policy mechanism to solve a conflict without resorting to violent means of fighting such as war.

During conflicts, states possess numerous options to adopt. Among them, certain alternatives are more preferable than the option to use military force (Starr, 2000; Gartzke et al., 2001; Stein, 2003). Sanctions are thus classified as an option between diplomacy and war (Selden, 1999). Sanctions are employed to harm the target state through disruption of economic activities (Hufbauer et al., 1990; Drezner, 2003) such as bilateral trade and FDI, thus producing an outcome of deadlock (Drezner, 1998). They involve one state attempting to alter another state's behavior politically or economically without the use of weapons or military force and range from travel bans and arms embargoes to trade bans (Smith, 2004).

Sanctions are also imposed to punish the target states (Drezner, 1999). Therefore, sanctions are the costly signals sent by the targeting state (Gartzke et al., 2001). The motivation of the targeting state, to change the policy of the targeted state, is also analyzed in a political economy perspective, considering the impact of sanctions on domestic public opinion of the targeted state (Fearon, 1997; Gartzke et al., 2001).

Notwithstanding, the sanctions' status as substitutes for militarized aggression, their success rate is problematic. Indeed, Wallensteen (2000) finds that the success of sanctions in altering the policy behavior of targeted states range from 5 to 30 percent. The success of economic sanctions may be dependent upon the level of interstate commercial activities. Sanctions may be used to harm the target economy if economic interdependence

is sufficiently high. Therefore, the success or failure of economic sanctions is dependent on the structure of economic interdependence between the conflicting states (Hirschman, 1945; Stein, 2003).

Sanctions may have a consequence, different from the desire of changing the behavior of the sanctioned state. They may escalate to military action. Indeed, Lektzian and Sprecher, (2007) argue that the sanctioning state has to bear economic and political costs which restrain its range of choices in future. Therefore, the costs of economic sanctions are incurred not only by the targeted state, but also by the sanctioning state (Hufbauer et al., 1990; Wagner, 1988). Further, Lektzian and Sprecher, (2007) explain, in a public choice perspective, that sanctions tie the hands of democratic leaders, facing their public opinion and are more likely to be involved in a militarized conflict. George (1991) explains in the historical context of WW2 that Japan's attack on Pearl Harbor, followed by United States' entry into war was actually rooted in economic sanctions. In his words:

“The oil embargo the United States imposed on Japan in July 1941 was so credible and so potent that it quickly provoked Japanese leaders into making a very difficult and desperate decision to initiate war rather than capitulate to Washington's extreme demands that it get out of China and, in effect, give up its aspirations for regional hegemony in Southeast Asia”.

The initiation of sanctions by the targeting state signals its preparation for eventual future militarized conflict. The sanctions may increase tension on both sides and possibly end up into militarized dispute. Drury and Park (2004) put forward that leaders who are prepared to use military force, may impose economic coercion as a last chance before resolving to military action. Therefore, contrary to the popular belief that sanctions are substitutes to military option, they may be viewed as complementary to militarized conflict¹.

Empirical studies, however, show mixed outcomes in establishing whether the economic sanctions are substitutes or complementary to militarized conflicts. For example, Petrescu

¹ The recent tension between Russia and EU, which are presently at the stage of sanctions and retaliation are a good illustration of this discussion.

(2011) finds that sanctions could be used as an alternative policy tools to military action. Shaffer (2011) argues that states may choose sanctions to signal conflict in lieu of military action but did not find empirical support for the argument. On the opposite, numerous studies find strong positive links between economic sanctions and armed conflict (Drury and Park, 2004; Lektzian and Sprecher, 2007; Shaffer, 2011). This relationship is empirically analyzed below.

2.2 The impact of economic sanctions on war

2.2.1 Data

The Correlates of War (COW) dataset provides detailed and comprehensive data on Militarized Interstate Disputes (MIDs) over the period 1816-2001 (Ghosn, Palmer and Bremer; 2004). War itself is defined as a MID which involves at least 1000 deaths of military personnel. This restricted definition reduces the number of events considered as war to less than 100. Yet, this database can be used to adopt a broader definition of war involving armed conflicts such as mere display of force. The COW dataset distinguishes each event according to its intensity i.e. a MID of hostility level 3 represents display of force, level 4 representing the use of force and 5, war. However, the MID hostility level 2, which represents the threat to force is not considered as a military conflict, even in a broad sense.

From an empirical point of view, it is interesting to distinguish between different levels of hostility and not just retain a strict definition of war.

Therefore in the following analysis bearing on the period 1950-2001, two dependent variables are used. The first dependent variable is constructed by assuming the broader definition of war (MID 3, 4, 5) and the second, used for robustness, is composed of a

stricter definition of MID (levels 4 and 5 only). This practice is in line with the conflict literature¹.

The sanctions data are coded using the Threats and Imposition of Sanctions (TIES) dataset. The updated TIES database provides the data on sanctions over the period 1945-2005 (Morgan, Bapat and Kobayashi, 2013). TIES database defines sanctions as policy option adopted by states to limit or end their economic relations with a target state.

Each observation of sanction is coded as involving one targeting state and one targeted state (dyad). Sanctions cases are coded according to their duration e.g. when a targeting state initiates a threat or imposes sanctions against another state, for instance, in 1990 and terminates in 1993, the duration of the sanctions will be recorded as lasting four years and the variable will be coded ‘1’ for the whole interval, or ‘0’ otherwise. In case of new states following the initiator of the sanction, only the action of the initiator is taken into account. Several episodes of sanctions were dropped due to insufficient information regarding the targeting or the targeted state.

Table 2.1: Descriptive statistics 1950 – 2001

Sample	Full	Restricted*
Observations	493573	232243
MIDs (all levels)	1435	717
Display of force (3)	379 (26.4 %)	200 (27.8 %)
Use of force (4)	980 (68.3 %)	488 (68.1 %)
War (5)	76 (5.3 %)	29 (4.1 %)
Sanctions	-	2222
	Mean	
Highly legalistic DSMs	0.011	0.017
Medium legalistic DSMs	0.005	0.007

* Sample based on all the explanatory variables in estimation 4 of Table 2.2

** Source: Correlates of War Database (COW)

Table 2.1 shows the total number of MIDs and occurrence / duration of sanctions episodes in full sample as well as the restricted sample, for which the data for all variables is available. The proportion of dyad-years engaging in three different hostility levels is

¹ See for example Russett and Oneal (2001), Vicard (2012).

almost similar in full sample and the restricted sample. Out of 232,243 dyad-years (restricted sample), there are 2,222 observations of sanctions-years and 717 MIDs.

In order to test whether economic sanctions are substitutes or complementary policies to military conflict, this analysis replicates the standard research hypothesis on military conflict based on Kantian tripod. Therefore, the econometric analysis in this section draws methodological insights from Oneal and Russett (1999)'s study of the effects of International Organizations on violent conflict as well as Mansfield and Pevehouse (2000)'s analysis of the impact of Preferential Trade Agreements on war. However, the present study relies on an alternative dataset comprising 300 PTAs (extracted from GPTAD) ¹and more important the period of analysis is different. Oneal and Russett's study does not go beyond the year 1992 and that of Mansfield's goes up to the year 1985 only. The time span of the analysis below (1950-2001) encompass a more recent period, including the post Cold War period.

To establish a robust relationship between sanctions and occurrence of wars, it is necessary to control with the well established variables derived from Kantian analysis to explain wars.

These variables relate to democratic regimes, economic interdependence and international institutions and, by extension, preferential trade agreements. Data on the presence of democratic norms are taken from Polity IV dataset. It attempts to measure the level of democracy in a country and ranges from the value of -10 (highly autocratic regime) to +10 (highly democratic regime). The sum of polity scores of both countries in the dyad is included. This hypothesis suggests that democracies are less prone to initiate war, which is the accepted regularity in the international relations literature. Trade variable is included at bilateral level which measures the log of the mean of bilateral imports as a percentage of GDP. The dummy variable for zero trade is added as a control. Finally, the estimations are controlled with the variable where countries in a dyad share a trade agreement or not.

¹ See chapter 1 for discussion on GPTAD.

Other control variables include dummies, indicating countries sharing a common border and language, countries with a common former colonizer or a colonial relationship and whether the countries are landlocked. The estimations are further controlled with the size of countries, defense alliances signed between the dyad and diplomatic relations between them. The latter measures the correlation of voting patterns in the UN general assembly. We now turn to the econometric specifications and analyze the outcomes of the effects of sanctions on the outbreaks of militarized confrontation.

2.2.2 Results

The results are presented in Table 2.2

Table 2.2: Effects of Economic Sanctions on War

Dependant variable	<i>Militarized Interstate Dispute</i>			
	(1) MID	(2) MID	(3) MID 4 & 5	(4) MID 4 & 5
Sanctions	1.31*** (12.63)	0.79*** (7.85)	1.23*** (12.31)	0.71*** (6.10)
No. of peaceful years	-0.02*** (-8.05)	-0.02*** (-8.16)	-0.02*** (-7.82)	-0.02*** (-8.48)
Log distance	-0.23*** (-9.32)	-0.31*** (-5.78)	-0.22*** (-8.76)	-0.28*** (-5.20)
Contiguity	1.01*** (13.25)	0.70*** (7.02)	0.97*** (12.60)	0.70*** (6.56)
No. of landlocked countries	-0.26*** (-6.38)	-0.21*** (-4.00)	-0.25*** (-5.99)	-0.19*** (-3.60)
Bilateral Trade dependence ($t - 4$)		0.01 (0.57)		-0.00 (-0.02)
Zero trade dum. ($t - 4$)		-0.11* (-1.84)		-0.10 (-1.42)
Common language		0.06 (0.92)		0.05 (0.79)
Colonial relationship		0.31 (1.44)		0.33 (1.43)
Common colonizer		-0.06 (-0.64)		0.02 (0.16)
Sum log area		0.11*** (7.12)		0.09*** (6.38)
Sum of polity indexes		-0.00 (-1.44)		-0.00 (-1.01)
Defense alliance		0.02 (0.32)		0.04 (0.59)
PTA		0.12 (1.37)		0.13 (1.47)
UN voting correlation ($t - 4$)		-0.40*** (-4.12)		-0.41*** (-3.91)
Observations	493,537	236,132	493,537	236,132
Log likelihood	-7067	-3207.1	-5431.7	-2434.3
Time dummies	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. Time dummies and intercept are not reported. Standard errors are clustered by dyad. *, **, *** Significance at the 10, 5 and 1% level, respectively

The first two specifications test for the influence of economic sanctions on MIDs when the latter are coded for broader definition of war. Estimations (3) and (4) test the sensitivity of results obtained in the first two specifications to a more restricted definition of military conflict including MIDs of hostility level of 4 and 5. The results are obtained employing a simple probit estimator. Column 1 shows economic sanctions have significant effects on war probabilities for the full sample of dyad-years. The effects of sanctions remain significant when controlled with other factors, commonly known to be the determinants of war including Kantian factors. Moreover, sanctions are significant in their impact on war of hostility levels 4 and 5. Now that it is established from the data and econometric specifications that economic sanctions do have strong effects on the probability of war, it will be seen, pursuing our two-stage strategy, how DSMs have an impact on these sanctions and their escalation to military conflict.

3 DSMs, economic sanctions and prevention of militarized conflicts

The conflict process is dynamic and involves numerous procedures and strategies. The conflict between the states comprises various stages from the emergence of low-level disputes over some issue, attempts to settle through negotiations, impositions of economic sanctions in case of not reaching any solution, threat of military aggression and, finally, escalation to full-fledged military action (Dixon, 1994). Mansfield and Pollins (2003) note that conflict between nations occurs at many levels and in several forms. Therefore, if there is any dispute over policy between two states, the sanctioning state would issue a threat of economic coercion, and consequently imposes it. Further, if this does not work, there exists a risk of eruption of militarized conflict (Drury and Park, 2004; Drezner, 2003). Preferential trade agreements and, specifically their legal dimension (DSMs) could intervene into these stages of conflict at earlier stages before it escalates to military action. States are more likely to resolve their disputes through negotiation, compromises and

third-party mediation and/or arbitration before the war outbreaks (Dixon, 1994; Raymond, 1994).

International institutions enhance trade interdependence (Mansfield et al., 1999), increase policy-maker's expectations of future trade gains (Martin et, 2012), reveal private information (Boehmer et al, 2004) and more important, supply forums for dispute settlement (Yarbrough and Yarbrough, 1997), which encourage co-operation by overcoming co-ordination problems (Hafner-Burton and Montgomery, 2008)). As discussed above, the researchers have assessed the capability of DSMs to resolve contentious issues between states related to commerce which in turn, prevent potential escalation of these conflicts to military aggression. Although criticized by Bearce (2003), these functions of DSMs, at least, have pacifying effects on politically motivated lower level of conflicts such as trade and economic sanctions which could lead to violent conflict¹. Indeed, Hafner-Burton and Montgomery (2008) stress that “...*trade institutions are designed to discourage politically motivated market penalties between the participants; the very thing sanctions harshly impose*”. Therefore, there is a strong reason to believe that PTAs do have mitigating effect on sanctions. This section offers a brief review establishing link between DSMs and their mitigating effects on economic sanctions.

In international trade policy, cheating or reneging on commitments under trade agreements takes the form of opportunistic protectionism and in the presence of transaction costs, imperfect information and high enforcement costs; states have an incentive to practice it (Yarbrough and Yarbrough, 1987). This action could result in retaliation by the aggrieved party, leading to high level conflict. Therefore, they further assert that a discipline against opportunism must be embodied within a trade agreement itself so that each party must individually perceive the benefits of compliance as greater than the benefits from opportunistic protectionism. DSMs, with judiciary procedures (panels, standing tribunals) could arbitrate disputes credibly (Russett et al, 1998) by

¹ See previous subsection for detailed theoretical discussion and empirical investigation on how economic sanctions could lead to military conflict.

ensuring non-interference of states. In addition, enhanced legitimacy of PTAs provide authentic and uniform source of interpretation (Biukovic, 2008; Chayes and Chayes, 1993). DSMs reduce transaction costs and enforcement costs (Russett and Oneal, 2001) and provide information (Keohane, 1984), thus ensuring the smooth functioning of trade flows and reducing the risk of imposed sanctions. DSMs help in early resolution of disputes (Yarbrough and Yarbrough, 1997), thus mitigating the imposition of sanctions. Based on Fearon (1995)'s logic, Hafner-Burton and Montgomery (2008) argue that DSMs decrease uncertainty about relative disparities in distribution, capabilities and resolve that provide rational incentives to avoid sanctions.

However, all dispute settlement mechanisms are not equal in their capacity of enforcement. Smith (2000) initially classified DSMs into different categories.¹ Indeed, (Goldstein et al., 2000) claim that the world is witnessing a move to law. Indeed, Schneider (1999) asserts that international trade organizations establish dispute resolution regimes that move away from pure negotiation to legal procedures. In the same vein, (Biukovic, 2008) observes that there is a growing trend towards judicialization in international dispute settlement over the past two decades. Therefore, different types of DSMs differ in their capacity to maintain cooperation. Helfer and Slaughter (1997) note that an important function of a well-tailored and efficient DSM is to enhance the legitimacy of the international treaty and international organization to which it is attached and to “enhance the credibility of international commitments in specific multilateral contexts.” Therefore, the efficient Dispute Resolution Mechanism is the most important component of international cooperation (Schneider, 1999).

Dispute Settlement Mechanisms can be categorized broadly into three types: Non-binding third party review (or negotiations), binding third-party review (ad-hoc panels) and standing courts (tribunals). Chase et al (2013) term these categories as political/diplomatic, quasi-judicial and judicial model respectively². The recent trend of PTAs exhibits the preference of states to sign PTAs with more stringent DSMs, whether

¹ See detailed discussion of different types of dispute settlement mechanisms instituted in PTAs in the previous chapter

² See Appendix 1.

they are developed or developing countries. Trade institutions may have a direct impact on sanctions but different institutional features of PTAs have a varying impact (Hafner-Burton and Montgomery, 2008). Therefore, different types of DSMs could have heterogeneous effect on sanctions prevention and their escalation to military conflict. In the next section, we will examine econometrically how different types of DSMs have differential effects on the escalations of sanctions to military aggression.

3.1 Empirical strategy

The aim of this section is to test the hypothesis that DSMs containing institutionalized procedures for early resolution do significantly reduce the probability that sanctions between the member states escalate into military conflict. As emphasized above, the direct effect of DSMs on war is not based on sound theoretical reasoning. Moreover, econometrically, using a simple probit or logit model to estimate the conditional probability of war would create a selection bias. In general, the conflict literature on the determinants of war limits the sample to “politically relevant dyads” i.e. pairs of countries sharing a common border or involving a major power. However a lower-level form of conflicts (which may potentially escalate to war) i.e. sanctions is used in the analysis below.

The empirical strategy would then be to use a bivariate probit with censoring to estimate the conditional probability of war for each dyad-year. Bivariate models assume that the independent, identically distributed errors are correlated (Green, 2008).

The setup of the model is as follows:

$$y_1^* = X_1' \beta_1 + \varepsilon_1 \quad \text{and} \quad \text{sanction} = \begin{cases} 1 & \text{if } y_1^* > 0 \\ 0 & \text{if } y_1^* \leq 0 \end{cases} \quad (1)$$

$$y_2^* = X_2' \beta_2 + \varepsilon_2 \quad \text{and} \quad \text{war} = \begin{cases} 1 & \text{if } y_2^* > 0 \\ 0 & \text{if } y_2^* \leq 0 \end{cases} \quad (2)$$

where $X_{1,2}$ are vectors of explanatory variables, $\beta_{1,2}$ vectors of parameters, and error terms ε_1 and ε_2 are assumed to be independent from $X_{1,2}$ and to follow

$$E(\varepsilon_1) = E(\varepsilon_2) = 0, \text{ Var}(\varepsilon_1) = \text{Var}(\varepsilon_2) = 1, \text{ and Cov}[\varepsilon_1, \varepsilon_2] = \rho.$$

Two equations are jointly estimated (each equation is binary choice model), one explaining the initiation of the sanction and the second the sanction's escalation into war. Consider two unobserved (latent) variables, representing the difference in utility levels from the initiation of sanction and the sanction's escalation into war respectively. The model estimated is derived from a standard bivariate probit model. In order to set up of this model, based on both equations (1) and (2), four possible outcomes are considered:

$$P_{00} = \Pr[\text{sanction} = 0, \text{war} = 0] = \int_{X_1'\beta_1}^{\infty} \int_{X_2'\beta_2}^{\infty} \Phi_2(z_1, z_2, \rho) dz_1 dz_2$$

$$P_{10} = \Pr[\text{sanction} = 1, \text{war} = 0] = \int_{-\infty}^{X_1'\beta_1} \int_{X_2'\beta_2}^{\infty} \Phi_2(z_1, z_2, \rho) dz_1 dz_2$$

$$P_{01} = \Pr[\text{sanction} = 0, \text{war} = 1] = \int_{X_1'\beta_1}^{\infty} \int_{-\infty}^{X_2'\beta_2} \Phi_2(z_1, z_2, \rho) dz_1 dz_2$$

$$P_{11} = \Pr[\text{sanction} = 1, \text{war} = 1] = \int_{-\infty}^{X_1'\beta_1} \int_{-\infty}^{X_2'\beta_2} \Phi_2(z_1, z_2, \rho) dz_1 dz_2$$

i.e. no sanction and no war ($\text{sanction} = 0$ and $\text{war} = 0$), a sanction is threatened or imposed but does not escalate into war ($\text{sanction} = 1$ and $\text{war} = 0$), no sanction but war occurs ($\text{sanction} = 0$ and $\text{war} = 1$) and the sanction escalates into war ($\text{sanction} = 1$ and $\text{war} = 1$). The log-likelihood function is based on unconditional probabilities and obtained in steps as follows:

- i. Define $q_{i1} = 2y_{i1} - 1$ and $q_{i2} = 2y_{i2} - 1$
- ii. Define $z_{ij} = x'_{ij}\beta_j$ and $w_{ij} = q_{ij}z_{ij}$; $j = 1, 2$
- iii. Define $\rho_i^* = q_{i1}q_{i2}\rho$
- iv. Then, $\Pr[Y_1 = y_{i1}, Y_2 = y_{i2}] = \Phi_2(w_{i1}, w_{i2}, \rho_i^*)$

v. $\text{Log Likelihood} = \sum_{i=1}^n \log \phi_2(w_{i1}, w_{i2}, \rho_i^*)$

Wooldridge (2010) emphasizes that, technically, the coefficients can be identified due only to the nonlinearity of the two equations in the bivariate probit. Hence, it is not necessary for X_2 to be a strict subset of X_1 for the outcome equation to be identified.

3.2 Econometric Analysis

The results are presented in Table 2.3. All specifications are controlled with the basic determinants of war considered by the conflict literature in international relations and political science: geographical distance, contiguity and the number of peaceful years between the two countries. Further, all estimations include PTA dummy, indicating whether a PTA is concluded between the dyad. This is to capture the effects of those PTAs who do not contain any dispute resolution mechanism (DSM) or include a low level of DSM where the judicialization is absent. The highly legalistic DSMs dummy variable includes those PTAs who establish standing tribunals and courts to resolve their intra-PTA disputes. The dummy variable of medium level of legalism accounts for those PTAs who sign for the third party binding review (ad hoc panels).

Table 2.3: Impact of DSMs on war: bivariate censored probit model

Dependent variable	MID	MID	MID	Sanctions	MID	Sanctions
	(1)	(2)	(3)	(3)	(4)	(4)
Highly legalistic DSM	-0.32 (-1.52)	-0.18 (-0.65)	-0.39* (-1.77)	0.35** (2.53)	-0.04 (-0.35)	-0.67*** (-3.95)
Medium legalistic DSM	-0.13 (-1.15)	0.00 (0.01)	-0.16 (-1.47)	-0.26* (-1.92)	-0.63** (-1.89)	-0.17 (-1.07)
PTA	0.04 (0.56)	-0.11 (-1.19)	0.06 (0.72)	-0.22** (-2.20)	0.11 (1.09)	-0.27** (-2.07)
No. of peaceful years	-0.01*** (-7.43)	-0.04*** (-7.47)	-0.01*** (-7.51)	0.01*** (9.88)	-0.02*** (-8.20)	-0.00* (-1.82)
<i>Trade Variables</i>						
Trade dependence (<i>t-4</i>) (Bilateral)					0.03*** (2.58)	0.13*** (7.43)
Trade dependence (<i>t-4</i>) (Multilateral)					-0.18*** (-4.02)	0.02 (0.30)
Zero trade dummy (<i>t-4</i>)					-0.14**	-0.38**
<i>Socio-political variables</i>						
Common language dummy					0.08 (1.23)	-0.04 (-0.49)
Colonial relationship dummy					0.25 (1.20)	0.16 (0.94)
Common colonizer dummy					-0.08 (-0.90)	-0.45** (-2.14)
Sum of polity indexes					-0.00 (-1.48)	0.02*** (6.98)
Defense alliance					0.07	0.68***

UN voting correlation					(0.97)	(6.90)
					-0.55***	-1.31***
					(-6.07)	(-18.88)
<i>Geographical Variables</i>						
Log Distance	-0.22***	0.02	-0.23***	-0.10***	-0.31***	-0.10**
	(-8.44)	(0.30)	(-9.04)	(-4.12)	(-6.17)	(-2.30)
Contiguity dummy	1.04***	0.95***	1.03***	0.51***	0.64***	0.19
	(13.92)	(9.73)	(13.74)	(4.39)	(6.61)	(1.16)
No. of landlocked countries	-0.28***	-0.20***	-0.29***	-0.42***	-0.20***	-0.06
	(-6.91)	(-2.90)	(-7.16)	(-7.18)	(-4.02)	(-0.85)
Sum log area					0.10***	0.13***
					(7.02)	(10.06)
Observations	493 537	15 335		493 537		232 243
Uncensored observations	-	-		2817		2222
Log likelihood	-7363.6	-1763.1		-23 094.5		-11 293.9
Estimation method	Probit	Probit		-----Bivariate probit with censoring-----		
Sample	Full	dist<1000km		Full	Full	Full
Time dummies	Yes	Yes		Yes	Yes	Yes

Robust standard errors in parentheses. Time dummies and intercept are not reported. Standard errors are clustered by dyad.

*, **, *** Significance at the 10, 5 and 1% level, respectively

The first two specifications (1) and (2) are tested using the simple probit estimator to analyze the direct impact of DSMs on war. Column 1 shows that both levels of DSMs (highly and medium legalistic) have no significant effects on the probabilities of war on the full sample of dyad-years. Their effects remain insignificant when the specification accounts only for the countries separated by less than 1000 km (specification (2)). These results do confirm the hypothesis developed by Bearce (2003) (see above) that DSMs have no direct impact on war probabilities as he asserts that economic disputes do not escalate to political disputes (war).

However, as discussed above, there are strong theoretical reasons to anticipate that DSMs can have indirect effect on war probabilities through the mechanism of sanctions (Hafner-Burton and Montgomery, 2008) before the latter escalate into military hostility. Specification (3) reports the bivariate probit analysis accounting for selection. The first and second columns present the results of the equations of the escalation into war and initiation of sanctions episodes respectively. Results for most variables representing the standard hypothesis are significant and with the expected sign. For instance landlocked countries encounter a lower probability of sanctions. The coefficient is significant at 1% in all specifications but not significant when controlled for the additional variables. However, it is significant in reducing the probability of escalation into military aggression. The duration of peace between the states and distance do significantly lessen the chances of sanctions initiation as well as their escalation into war, whereas the probability of escalation into war is found to be increasing between adjacent countries. However the PTA dummy, capturing lower legalism (or absence of legalism), is found to have a negative effects on sanctions initiation, nevertheless, it does have any significant effects in preventing war.

Specification (4) in table 2.3, includes diverse potential co-determinants of PTAs (and DSMs) and war. First of all, the time dummies are included to control for any shock that may affect war and PTA legalization as well as to account for spurious trend. The additional control variables refer to the categories of trade and political variables.

Regarding trade variables, it is interesting to point out the importance of both bilateral and multilateral trade dependence. Bilateral trade dependence variable measures the log of the mean of bilateral trade as percentage of GDP whereas multilateral trade dependence equals the log of the mean of multilateral (excluding bilateral) trade as a percentage of GDP. The trade variables are four-year lagged.

Bilateral trade dependence do significantly increase the probability to initiate sanctions (significance level of 1%), and is further significant to the escalation of sanctions into war. Multilateral trade has no significant impact on the threat or imposition of sanctions. Interestingly, they do exhibit significant negative effects on the probability of sanctions escalation to the outbreaks of war. The coefficient is highly significant at 1% level. This outcome coincides with the argument of the so-called realists school, launched by Hirschman (1945), developed by Mansfield and Pollins (2003) and the results of Oneal and Russett (1999) who measure the direct impact of bilateral trade dependence on the probability of war. Further, our results contradict the findings of Martin et al., (2008) and Vicard (2012). Indeed, their proposition is that multilateral trade, by reducing bilateral trade dependence, increases the probability of military conflict. The present study finds the opposite results when analyzing the conflict process through sanctions escalation. When the countries are bilaterally trade dependent, the sanctions initiation is significant between them as the utility of sanctions would be maximized in the presence of high bilateral trade flows. Interestingly, the results further show once, the highly dependent countries are engaged in sanctions dispute, the risk of war cannot be ignored. In other words, the sanctions episodes could further increase the probability of war. Further, when the country is facing economic or trade sanctions by the targeting country, it replaces its trade with the rest of the world. By deflecting the trade in the event of sanctions, the countries in a dyad do not remain dependent on each other, but their increased trade with the third countries does inhibit their mutual bilateral conflicts (representing through sanctions) in escalating into military aggression. These results do have an important implication from the point of view of sanctions and their potential escalation to military conflict.

Following Vicard (2012), the zero trade dummy is included to account for the dyad-years where trade flow is not experienced. Other control dummies are included indicating whether they share a common language, countries that have common colonizer or colonial history. The results indicate that these variables have no significant effects on the probability of war.

The set of domestic and international political variables are included to control for domestic political regime type, the geographical size of countries, military and defense alliances and diplomatic relations between states. Diplomatic affinity is four-year lagged. The level of democracy is found to be insignificant on war probability, whereas it is usually found to be positive and significant in the literature (see for instance ONeal and Russett, 1999)¹. Nevertheless, democracy variable is found to have significant positive effects on sanctions. Democratic status of the states does affect the choice of DSMs (Jo and Namgung, 2012). Evidently, the countries with the larger size are more prone to initiate sanctions and war. Surprisingly, the defense alliance is highly significant in initiating sanctions episodes but is not significant when countries engage in military conflict. Diplomatic relation (UN General Assembly voting correlation) significantly reduces the initiation of sanctions as well as their escalation into war. Controlling for all these determinants of war and PTAs (and DSMs), the results in specification (4) indicate that highly legalistic DSMs do reduce the probability of sanctions, but have no impact on the prevention of sanctions spillover into war.

On the opposite, the medium level of legalism has no significant impact on sanctions, but significantly reduces the probability that sanctions escalate into military conflict. Disintegrating and analyzing the third leg of Kantian tripod i.e. international law (institutionalization of international organizations) (see Russett and ONeal, 1998) reveals important information that medium level of legalism (ascertaining third party legally binding mechanism) is more effective in reducing the probability of war where the sovereignty of states remain intact, however, when the state sovereignty is limited (due to the presence of highly legalistic DSMs), they do affect sanctions negatively but not the

¹ ONeal and Russett (1999) analyzed the conflicts for the period 1885-1992.

probability of war. The PTA dummy, which technically captures the effect of PTAs having low level of legalism (diplomatic/political measures) (See Chase et al., 2013) do reduce the probability of sanctions but have no significant impact on war. In a nutshell, the lower and higher forms of legalism do not have any significant effects on the escalation of sanctions into war whereas the medium legalism does. These results, however, may be sensitive to other determinants of war. A number of sensitivity tests are carried out in the next subsection.

3.3 Robustness analysis

The robustness tests of previously acquired results in our baseline specification (specification 4 of table 2.3) are presented in tables 2.4, 2.5 and 2.6.

Table 2.4: Impact of DSMs on war: robustness

Dependent variable	MID 4 & 5	Sanctions	MID	Sanctions	MID	Sanctions
	(1)		(2)		(3)	
Highly legalistic DSM	-0.01 (0.129)	-0.67*** (0.168)	-0.91** (0.396)	-0.95*** (0.176)	-0.09 (0.125)	-0.82*** (0.180)
Medium Legalistic DSM	-0.83*** (0.279)	-0.17 (0.161)	-0.50 (0.470)	-0.19 (0.178)	-0.59* (0.330)	-0.17 (0.156)
PTA	0.13 (0.104)	-0.27** (0.129)	-0.08 (0.173)	-0.21 (0.153)	0.14 (0.104)	-0.22* (0.128)
No. of peaceful years	-0.02*** (0.003)	-0.00* (0.001)	-0.02*** (0.004)	-0.00*** (0.001)	-0.02*** (0.003)	-0.00 (0.001)
No. of major powers					0.35*** (0.074)	0.46*** (0.058)
One communist cty dummy					-0.01 (0.081)	-0.15 (0.114)
Two communist ctys dummy					-0.08 (0.298)	0.85** (0.351)
<i>Trade Variables</i>						
Trade dependence (<i>t-4</i>) (Bil)	0.03* (0.014)	0.13*** (0.018)	0.04 (0.024)	0.12*** (0.019)	0.02* (0.013)	0.11*** (0.017)
Trade dependence (<i>t-4</i>) (Multil.)	-0.18*** (0.046)	0.02 (0.060)	-0.26*** (0.078)	-0.19** (0.084)	-0.16*** (0.048)	0.10 (0.061)
Zero trade dummy (<i>t-4</i>)	-0.12* (0.070)	-0.38** (0.185)	0.19 (0.159)	-0.70*** (0.197)	-0.11* (0.064)	-0.32* (0.187)
<i>Socio-political variables</i>						
Common language dummy	0.07 (0.066)	-0.04 (0.079)	-0.13 (0.138)	0.02 (0.092)	0.09 (0.066)	-0.03 (0.077)
Colonial relationship dummy	0.26 (0.223)	0.16 (0.170)	0.32 (0.198)	-0.17 (0.211)	0.11 (0.229)	-0.05 (0.164)
Common colonizer dummy	-0.01	-0.45**			-0.06	-0.36*

	(0.092)	(0.211)			(0.096)	(0.201)
Sum of polity indexes	-0.00	0.02***	-0.01*	0.00	-0.01*	0.02***
	(0.003)	(0.003)	(0.006)	(0.004)	(0.003)	(0.003)
Defense alliance	0.08	0.68***	0.27**	1.01***	0.03	0.60***
	(0.072)	(0.099)	(0.135)	(0.103)	(0.073)	(0.096)
UN voting correlation	-0.55***	-1.31***	-0.52***	-1.11***	-0.40***	-1.09***
	(0.095)	(0.070)	(0.125)	(0.093)	(0.087)	(0.074)
<i>Geographical variables</i>						
Log Distance	-0.29***	-0.10**	-0.31***	-0.08*	-0.31***	-0.11**
	(0.052)	(0.045)	(0.071)	(0.044)	(0.048)	(0.045)
Contiguity dummy	0.63***	0.18	0.49**	-0.11	0.68***	0.24
	(0.103)	(0.162)	(0.198)	(0.142)	(0.098)	(0.154)
No. of landlocked countries	-0.19***	-0.06	-0.94***	-0.09	-0.20***	-0.09
	(0.052)	(0.076)	(0.208)	(0.087)	(0.051)	(0.076)
Sum log area	0.09***	0.13***	0.09***	0.09***	0.08***	0.11***
	(0.014)	(0.013)	(0.023)	(0.016)	(0.014)	(0.013)
Observations	232 243		74 473		232 243	
Uncensored observations	2222		2045		2222	
Log likelihood	-10 529.1		-7441.3		-11 094.7	
Estimation method	-----Bivariate probit with censoring-----					
Sample	Full	Full	OECD	OECD	Full	Full
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. Time dummies and intercept are not reported. Standard errors are clustered by dyad.

*, **, *** Significance at the 10, 5 and 1% level, respectively

The first specification (1) of table 2.4 tests the sensitivity of results to a more restrictive definition of war for the hostility level of 4 and 5, implying the use of force and full-fledged war respectively. The significance of medium level of legalism is increased to 1% level compared to our baseline estimation in table 2.3. This signifies that medium levels of DSMs are more robust in inhibiting the escalation of sanctions to the higher level of armed conflicts. Highly legalistic DSMs are, however, significant in mitigating the risk of sanctions imposition but not efficient in preventing war through sanctions. Specification (2) shows the results for OECD countries only. As can be seen, our baseline results are sensitive when the level of legalism is tested only for OECD countries. Highly legalistic DSMs are highly significant in reducing the probability of sanctions and moreover, their escalation to war, whereas the medium legalistic DSMs are not significant, contrary to baseline specification. These results provide an important insight, that, the highly legalistic DSMs have a significant impact on sanctions and eventually on war among wealthy countries. This can also be inferred that highly legalistic DSMs have a strong impact for the countries having high-quality domestic institutions. This mitigating effect of highly legalistic DSMs may not be the case for the developed-developing as well as developing-developing countries.

Specification (3) controls for other potential co-determinants of war. Major powers do strongly and positively initiate sanctions and further escalate to armed conflict. These results are intuitive as major powers have certain interests in world politics and they signal their intentions through economic sanctions and eventually through war. The communist regimes do increase the probability of sanctions which does not spill over into war. Most importantly, the effects of medium level of legalism remain significant.

Moreover, controlling for multilateral trade regime (membership of GATT/WTO) and military expenditures of countries in dyad do not affect the baseline results. These robustness checks are presented in table 2.5.

Table 2.5: Impact of DSMs on war: robustness cont...

Dependent variable	MID		Sanctions		MID		Sanctions	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Highly legalistic DSM	-0.05 (0.122)	-0.65*** (0.167)	0.04 (0.139)	-0.89*** (0.183)	-0.04 (0.121)	-0.66*** (0.161)		
Medium Legalistic DSM	-0.63* (0.332)	-0.17 (0.160)	-0.54* (0.330)	-0.20 (0.154)	-0.64* (0.339)	-0.17 (0.150)		
PTA	0.11 (0.102)	-0.30** (0.125)	0.05 (0.114)	-0.27** (0.129)	0.12 (0.103)	-0.23* (0.124)		
No. of peaceful years	-0.02*** (0.003)	-0.00** (0.001)	-0.02*** (0.003)	-0.00 (0.001)	-0.02*** (0.003)	-0.00 (0.001)		
GATT_WTO Membership	0.05 (0.057)	0.23*** (0.050)						
Sum log military expenditure (<i>t</i> -			0.08*** (0.012)	0.16*** (0.013)				
Abs. diff. log military			-0.02* (0.014)	0.02 (0.015)				
USA dummy					0.29** (0.133)	0.97*** (0.105)		
<i>Trade Variables</i>								
Trade dependence (<i>t</i> -4) (Bil)	0.03** (0.013)	0.13*** (0.018)	-0.00 (0.013)	0.04*** (0.016)	0.03** (0.013)	0.13*** (0.017)		
Trade dependence (<i>t</i> -4) (Multil.)	-0.17*** (0.044)	0.02 (0.061)	-0.16*** (0.047)	0.16** (0.067)	-0.15*** (0.045)	0.16*** (0.055)		
Zero trade dummy (<i>t</i> -4)	-0.14** (0.063)	-0.39** (0.183)	-0.04 (0.063)	-0.17 (0.212)	-0.13** (0.064)	-0.32* (0.180)		
<i>Socio-political variables</i>								
Common language dummy	0.08 (0.063)	-0.03 (0.076)	0.12* (0.063)	0.06 (0.071)	0.05 (0.066)	-0.13* (0.079)		
Colonial relationship dummy	0.26	0.21	0.29	0.21	0.31	0.40**		

	(0.208)	(0.171)	(0.213)	(0.164)	(0.213)	(0.174)
Common colonizer dummy	-0.09	-0.51**	0.05	-0.20	-0.09	-0.43**
	(0.092)	(0.214)	(0.092)	(0.237)	(0.094)	(0.191)
Sum of polity indexes	-0.00*	0.02***	-0.01***	0.01***	-0.00*	0.01***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Defense alliance	0.07	0.65***	0.07	0.66***	0.02	0.40***
	(0.072)	(0.096)	(0.068)	(0.085)	(0.075)	(0.087)
UN voting correlation	-0.55***	-1.32***	-0.39***	-0.88***	-0.44***	-0.79***
	(0.091)	(0.069)	(0.091)	(0.078)	(0.100)	(0.083)
<i><u>Geographical variables</u></i>						
Log Distance	-0.30***	-0.12***	-0.30***	-0.12***	-0.31***	-0.15***
	(0.049)	(0.044)	(0.040)	(0.040)	(0.050)	(0.042)
Contiguity dummy	0.64***	0.18	0.72***	0.34**	0.65***	0.22
	(0.096)	(0.159)	(0.095)	(0.146)	(0.097)	(0.159)
No. of landlocked countries	-0.20***	-0.05	-0.10*	0.04	-0.21***	-0.15**
	(0.050)	(0.075)	(0.053)	(0.076)	(0.051)	(0.074)
Sum log area	0.10***	0.13***	0.06***	0.06***	0.10***	0.11***
	(0.015)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)
Observations	232 243		220 291		232 243	
Uncensored observations	2222		2168		2222	
Log likelihood	-11 245.6		-10 374.7		-11 064.6	
Estimation method	-----Bivariate probit with censoring-----					
Sample	Full	Full	Full	Full	Full	Full
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. Time dummies and intercept are not reported. Standard errors are clustered by dyad.

*, **, *** Significance at the 10, 5 and 1% level, respectively.

Membership of GATT/WTO (specification (1) of table 2.5) increases the probability of sanctions but exhibits no impact on war probability. The total military expenditure of countries in dyad significantly increases the probability of sanctions and war, whereas the difference in military expenditure between the dyad reduces the escalation of sanctions into war (at 10 % level) (Specification (2)). Finally, it is important to consider the influence of United States, the world's most frequent initiator of economic sanctions. (Hafner-Burton and Montgomery, 2008). The specification (3) offers the estimation, controlling for US dummy, constituting 1 when one country in a dyad is United States. The effects of medium level of legalism remain qualitatively the same. The presence of US in a dyad increases the probability of sanctions initiation and also their escalation into armed aggression.

The baseline and robustness results may suffer from unobserved heterogeneity as some variables may be omitted in our analysis. The next subsection takes this issue into account by implementing instrumental variable strategy.

3.4 Endogeneity

Jo and Namgung (2012) suggest that earlier institutional designs of PTAs exert considerable influence on the current processes of institution creation. Moreover, states tend to build the same level of legal instruments in subsequent PTAs. Therefore, the choice of DSMs in PTAs is interdependent policy issues and there exists emulation process of DSMs. The legal provisions in PTAs are diffused across PTAs.

Therefore, the number of PTAs containing the same level of DSM, signed with the third countries would qualify as strong instruments for the existence of specific design of DSMs. The number of high and medium legalistic DSMs (in PTAs) signed with the third countries by the countries in the dyad are used separately as instrumental variables for specific level of legalism. Further, the enlargement of PTAs (accession agreements) indeed extends the same form of DSMs.

Since, the endogenous variables (highly and medium legalistic) are dummy variables, using the traditional two-stage methodology would yield inconsistent estimates unless the first-stage model is exactly achieved. Angrist and Krueger (2001) establish that the values fitted from a simple probit model may be used as instruments. Then, OLS estimated could be used to generate first-stage results for the fitted values and other co-variates, known to be exogenous. Therefore, following Vicard (2012), the three stage methodology is applied here to address the existence of endogeneity. In the first stage, the values of highly and medium legalistic DSMs are predicted using simple probit estimator with the two instruments. Then, these predicted values are used to generate two distinct endogenous DSM (highly and medium legalistic) dummies along with other exogenous covariates by employing OLS model. In the third stage, these predictions are used in the bivariate probit estimation.

The first stage IV coefficients are reported in specification (1) of table 2.6. The two coefficients for highly and medium level of legalization are statistically significant at 1%, confirming that they are strong instruments. As specified, by Jo and Namgung (2012) that if a country signs a PTA, having a specific legal level, with one partner, will follow the establishment of same institutional setup in subsequent PTAs. The results of endogenous treatment of DSMs indeed exhibit that the influence of both types of DSMs is highly significant and positive (with the increased magnitude) but the PTAs with the medium level of legalism robustly prevent the sanctions escalation into the probability of war. The effects of highly legalistic DSMs on war remain insignificant.

Table 2.6: Impact of DSMs on war: robustness cont...

Dependent variable	MID		Sanctions		MID		Sanctions	
	(1)	(2)	(3)	(4)	(5)	(6)		
Highly legalistic DSM	0.18 (0.627)	4.39*** (0.437)	-0.01 (0.123)	-0.72*** (0.172)	-0.03 (0.125)	-0.54*** (0.189)		
Medium Legalistic DSM	-1.18** (1.779)	1.07** (0.472)	-0.59* (0.334)	-0.19 (0.158)	-0.45* (0.282)	-0.14 (0.158)		
PTA	0.30 (0.459)	-2.01*** (0.230)	0.10 (0.104)	-0.28** (0.124)	0.11 (0.104)	-0.30** (0.132)		
No. of peaceful years	-0.02*** (0.003)	-0.00 (0.001)	-0.02*** (0.003)	-0.00** (0.001)	-0.02*** (0.003)	-0.00 (0.001)		
Log Distance	-0.31*** (0.050)	-0.08 (0.049)	-0.30*** (0.048)	-0.14*** (0.045)	-0.31*** (0.051)	-0.13*** (0.044)		
Contiguity dummy	0.60*** (0.107)	0.18 (0.167)	0.64*** (0.098)	0.13 (0.158)	0.64*** (0.098)	0.39** (0.157)		
No. of landlocked countries	-0.22*** (0.050)	-0.11 (0.082)	-0.18*** (0.051)	-0.11 (0.078)	-0.21*** (0.051)	-0.07 (0.077)		
Trade dependence (<i>t-4</i>) (Bil)	0.03** (0.013)	0.14*** (0.019)	0.03*** (0.013)	0.13*** (0.018)	0.03** (0.014)	0.11*** (0.018)		
Trade dependence (<i>t-4</i>) (Multil.)	-0.17*** (0.046)	-0.05 (0.064)	-0.20*** (0.045)	0.09 (0.062)	-0.18*** (0.045)	-0.13* (0.071)		
Zero trade dummy (<i>t-4</i>)	-0.14** (0.064)	-0.40** (0.193)	-0.14** (0.063)	-0.38** (0.183)	-0.13* (0.067)	-0.14 (0.181)		
Common language dummy	0.08 (0.068)	0.10 (0.078)	0.08 (0.064)	-0.05 (0.079)	0.08 (0.065)	-0.03 (0.077)		
Colonial relationship dummy	0.28 (0.203)	0.08 (0.179)	0.24 (0.212)	0.15 (0.172)	0.25 (0.208)	0.21 (0.169)		
Common colonizer dummy	-0.09 (0.093)	-0.56** (0.219)	-0.07 (0.092)	-0.48** (0.206)	-0.08 (0.093)	-0.15 (0.237)		
Sum log area	0.10*** (0.015)	0.13*** (0.013)	0.10*** (0.016)	0.16*** (0.014)	0.10*** (0.015)	0.12*** (0.013)		
Sum of polity indexes	-0.00	0.02***	-0.00	0.02***	-0.00	0.01***		

	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Defense alliance	0.00	0.41***	0.06	0.69***	0.08	0.64***
	(0.080)	(0.101)	(0.071)	(0.099)	(0.071)	(0.091)
UN voting correlation	-0.54***	-1.38***	-0.56***	-1.25***	-0.55***	-1.05***
	(0.093)	(0.073)	(0.093)	(0.070)	(0.092)	(0.070)
<i>First stage IV</i>	High Legal	Med. Legal				
Sum highly legalistic DSMs with third countries	0.04*** (0.00)	-0.02*** (0.00)				
Sum medium legalistic DSMs with third countries	-0.01*** (0.00)	0.06*** (0.00)				
One oil exporter dummy			0.06 (0.069)	-0.32*** (0.067)		
Two oil exporters dummy			0.31** (0.148)	-0.51 (0.374)		
Abs. diff in log GDP per capita (<i>t-4</i>)					0.02 (0.027)	0.09*** (0.032)
Log sum GDP per capita (<i>t-4</i>)					-0.03 (0.048)	0.37*** (0.068)
Trade Symmetry					-0.00 (0.017)	0.03 (0.032)
Trade Asymmetry					-4.09*** (1.19)	-1.84 (1.35)
Observations	232 243		232 243		229 598	
Uncensored observations	2222		2222		2218	
Log likelihood	-11 159.7		-11 259.8		-11 015.5	
Estimation method	-----Bivariate probit with censoring-----					
Sample	Full	Full	Full	Full	Full	Full
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. Time dummies and intercept are not reported. Standard errors are clustered by dyad.

*, **, *** Significance at the 10, 5 and 1% level, respectively.

3.5 Economic Asymmetry and dependence

Pollins (2008) argue that economic ties may be conflict generating when a country experiences dependence and thus may have security concerns. He notes the excerpt of President Bush's speech where he expressed concerns on the dependence on Middle East oil. Moreover, the concerns of countries regarding relative gains may increase tensions, potentially leading to armed conflict (Waltz, 1979; Snidal, 1991). Further estimations control for the dependence and asymmetry among countries with oil exporter dummy as well as the relative wealth of countries.

Accounting for oil exporting dummies (specification (2) of table 2.6) does not affect our baseline results. However, the probability of sanctions escalation into war is significant when the dyad consists of two oil exporters dummy. This may be interpreted as an increasing tension in the aftermath of rising competition among oil exporters. The baseline results are robust to the addition of variables concerning the wealth of countries and disparity between them. In estimation (3), the results show that poor countries are not likely to escalate the sanctions into war. The economic disparity (difference in GDP per capita) is found to be insignificant. However, the two variables are found to be significantly initiating sanctions.

Further, the variables "trade symmetry" which is indeed Barbieri's measure, calculated as

$$\text{Trade Symmetry}_{ij} = 1 - |\text{Trade Share}_i - \text{Trade Share}_j|$$

does not exhibit significant sign on sanctions as well as the latter's escalation to military conflict. This confirms that the states, having symmetrical trade relations do not tend to have conflicts. Further, the variable for asymmetry in trade, the measure used by Oneal and Russett (1999) as:

$$\text{Trade Asymmetry}_{ij} = \text{higher of } (\text{Dependence}_{ij} - \text{Dependence}_{ji})$$

Asymmetric trade relationship between the dyad does not show any significant impact on sanctions imposition, however, it is strongly significant (at 1%) in reducing the escalation of sanctions towards war. The significance of medium legalistic DSMs is still significant although at 10 percent level.

Table 2.7: Estimated Change in probabilities for sanctions escalation to militarized disputes

Variables	% Δ Pr (MID=1 sanction=1)
Highly legalistic DSM	[-33.4]
Medium Legalistic DSM	-48.8
PTA	[-4.8]
No. of peaceful years	-1.4
Log Distance	-24.6
No. of landlocked countries	-16.2
Trade dependence (<i>t-4</i>) (Bilateral)	8.32
Trade dependence (<i>t-4</i>) (Multilateral)	-10.5
Common language dummy	[3.35]
Colonial relationship dummy	[23.6]
Common colonizer dummy	[-26.1]
Sum log area	12.4
Sum of polity indexes	[-0.6]
UN voting correlation	-96.5

Based on the outcomes of estimation (4) of table 2.3. Brackets indicate insignificant estimates for respective variable.

4 Determinants of institutionalization in preferential trade agreements

The previous section confirms the differential effects of institutionalization in PTAs on the probability that economic sanctions escalate into violent conflict, this section analyzes international security specificities as determinants of institutionalization in PTAs.

The institutions are characterized by the development of patterns, values and norms. The work of Parson in sociology emphasizes the role of the system itself allowing for the integration of different functions into a coordinated, cohesive and, therefore, institutionalized manner. Indeed, Parson defines social system as a system of interaction between actors.

Karl Deutsch adapts the same logic of social systems, put forward by Parson, to the study the political systems. Deutsch (1953 [1966])’s transactionalist theory emphasizes the role of actors present in different jurisdictional boundaries (countries) in the progress towards governance. In the other words, the basis of institutional integration is grounded in communication. In Deutsch’s words:

“Communication is the cement that makes organizations. Communication enables a group to think together, to see together and to act together”.

Hence, the visits of state leaders, exchange of persons, activities have an important role to play in institution building. The transactionalist theory hypothesizes that integration among nations is based on political, economic, social and cultural ties. In other words, cooperation in various fields among nations has a spillover towards institutions. By symmetry, the conflicting relations between the countries hinder the institution building process.

After the seminal paper of Baier and Bergstrand (2004), which examines the economic determinants of PTAs, the literature moved on to analyze other than economic determinants of PTAs.

In the empirical literature of institution building, specifically in the context of trade agreements, few scholars have attempted to examine the political determinants of PTAs. For example, Lederman and Özden (2007) argue that US gives the status of Generalized System of Preferences (GSP) unilaterally to the states on the basis of geopolitical relations. Vicard (2012) finds that low-level interstate conflicts lead to the formation of deep institutions (CUs and CMs) and hinder the formation of shallow agreements (FTAs). However, Martin et al. (2012) argue that the conflicts in the recent past hinder the formation of trade agreements.

Further, in the world of trade negotiations, China's prime criteria to choose the trade partner is that state should have good political and diplomatic relations with China (see general introduction).

This section attempts to analyze the effects of interstate cooperation in various fields on the incorporation of dispute settlement mechanisms (DSMs) in the light of Deutsch's transactionalist theory. The implications to test the different levels of institutionalization in PTAs are clear. This study quantifies these notions using Global Data on Events, Location and Tone (GDELT) database. This database carries the records of political and economic events between the states whether cooperative or conflictual. These cooperation and conflictual events could be verbal or material. Each event is then mapped to Goldstein (1992) scale which provides the quantification based on the intensity of event whether cooperative or conflictual (positive values for cooperative and negative values for conflictual). The events data between each pair of countries is then aggregated by year and the index is created by subtracting the conflictual events (hence values) from cooperative events (values). This index depicts the level of net interstate cooperative events, hence communication in political, economic and social spheres. It follows

$$Net\ cooperation_{ijt} = \sum_{events\ from\ i\ to\ j\ in\ t} (cooperation_{ij} - conflict_{ij})$$

Simple probit model is employed across pooled-cross sectional data to analyze these effects with time fixed effects. The impact of this index is examined on both types of DSMs (described in previous section). The equation takes the form:

$$\begin{aligned}
 Pr(DSM_{ij}^k = 1) & \\
 &= \beta_0 + \beta_1 Net\ cooperation_{ijt} + \beta_2 Trade\ flows_{ijt} + \beta_3 Controls_{ij} \\
 &+ \gamma_t + \varepsilon_{ijt}, k = \text{medium, highly legalistic DSMs.}
 \end{aligned}$$

The variable of net cooperation is logged. However, this variable can take negative values (when cooperation will be less than conflict). Therefore, to take into account the negative values, the log-modulus transformation proposed by John and Draper (1980) is applied. The transformation takes the log of the absolute value by adding the value of 1 to it. Then, if the original value is negative, the negative sign is “put back” by multiplying the value with -1. In this way, one can take account of zero values also. Symbolically, it takes the form:

$$\ln Net\ cooperation = sign(Net\ cooperation) * \ln(|Net\ cooperation| + 1)$$

Haftel (2012) argues that increasing trade flows do create the need for institutionalization. This variable is added accordingly to the model. Remaining are the control variables that may affect the level of institutionalization in PTAs.

Results are presented in table 2.8.

Table 2.8: Determinants of dispute settlement mechanisms (DSMs) in PTAs

Dependant variable	Dispute settlement mechanisms (medium and highly legalistic)			
	(1) H.DSM	(2) H.DSM	(3) M.DSM	(4) M.DSM
Net cooperation ($t - 4$)	0.05*** (0.013)	0.03* (0.015)	-0.01 (0.015)	0.00 (0.014)
Bilateral Trade flows (log)	0.12*** (0.024)	0.11*** (0.025)	0.049* (0.027)	0.07** (0.029)
Log sum GDP ($t-4$)	-0.48*** (0.085)	-0.46*** (0.087)	0.066 (0.094)	-0.04 (0.097)
Log diff GDP ($t-4$)	0.11** (0.051)	0.12** (0.051)	-0.03 (0.054)	-0.02 (0.055)
Log distance	-0.32*** (0.061)	-0.19*** (0.066)	0.14** (0.063)	0.02 (0.068)
Contiguity	0.16 (0.15)	0.15 (0.151)	0.16 (0.175)	0.33* (0.191)
No. of landlocked countries	0.06 (0.080)	0.18** (0.082)	-0.18* (0.093)	-0.21** (0.099)
Common language	-0.25** (0.109)	-0.52*** (0.126)	-0.21 (0.129)	-0.16 (0.149)
Common colonizer	1.02*** (0.15)	0.92*** (0.148)	-0.32 (0.230)	-0.14 (0.242)
Sum of polity indexes	0.051*** (0.005)	0.05*** (0.00490)	0.03*** (0.007)	0.05*** (0.007)
Defense alliance		0.91*** (0.112)		-0.53*** (0.123)
UN voting correlation ($t - 5$)		1.02*** (0.19)		-1.01*** (0.160)
Observations	21715	21715	21715	21715
Log likelihood	-7268.41	-6512.34	-5869.92	-6210.36
Pseudo R ²	0.31	0.38	0.19	0.15
Dyads	1032	1032	1032	1032
Time dummies	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. Standard errors are clustered by dyad. H.DSM and M. DSM are Highly legalistic and Medium legalistic mechanisms respectively.

*, **, *** Significance at the 10, 5 and 1% level, respectively.

Specifications 1 and 2 measure the effects of net interstate cooperation on highly legalistic dispute settlement mechanism whereas (3) and (4) on medium level of institutionalization. All specifications are controlled by time dummies. Only those dyads are considered which have entered into any kind of PTA whether they have low, medium or highly legalistic mechanisms. All dyads are dropped which do not have any kind of PTA. This allows to analyze the institutionalization of PTAs and not just PTAs. Estimation (1) clearly indicates that net cooperation has positive effects on high levels of institutionalization in PTAs implying that cooperative communication¹ between the pair of countries push them to sign high level of institutions. The variable is highly significant at 1 percent level. The political, economic and military cooperation and thus, higher level of trust among states, encourages the latter to enter into highly legalistic institutions. Specification (2) adds two important strategic variables i.e. defense alliance and UN voting correlation, capturing the strategic relationship between the pair of countries outside PTA. Accounting for these variables, which are highly significant, reduces the significance for the variable of net cooperation, however it is still significant at 10 percent level. The sum of GDPs of the two countries discourages them to sign high levels of institutions whereas it is interesting to note that difference in GDP levels have positive and significant effects on the design of highly legalistic mechanisms. Therefore, the GDP asymmetry plays an important role. The larger economies ensure the credibility of commitments from the smaller economies by signing hard law. Sum of democracy indexes is positive and significant in the creation of highly legalistic mechanisms. The control variables such as geographical distance, common language and common colonizer are showing the expected signs.

On the other hand, the explanatory variable (cooperation) has no significant effects on the incorporation of medium level of legalism in PTAs. The countries, having mutual cooperation in various fields do not create medium level of institutions rather they resort to high level of legalism.

¹ Communication could be conflictual

5 Conclusion and discussion

This chapter has investigated systematically the ways by which trade institutions could influence the complex processes conducting states to avoid military conflicts or to resort to war. Essentially, it identifies an important channel through which institutionalization in economic agreements (Dispute Settlement Mechanisms in particular) may have pacifying effects on militarized interstate disputes (MIDs) i.e. through threat and imposition of economic sanctions.

There is a long debate going on whether international institutions (specifically international trade institutions) affect security relations between nations. Contradicting theories and empirical claims are put forward by realists and liberals. The former posit that the institutions are epiphenomenal and possess no power to constrain state behavior whereas the latter claim that the institutions are likely to promote cooperation by supplying forums for consultation, arbitration and adjudication, thus reducing the risk of war between states.

Empirical studies, attempting to assess these contradicting theories, didn't bring univocal conclusions. Recent empirical evidence, finding the conflict mitigating effects of institutions fails to provide proper explanations on “how” institutions matter.

This study has identified an important channel through which the legal dimension of trade institutions (hence DSMs in PTAs) may have pacifying effects on the outbreaks of war. This dimension is also termed as the third leg of the Kantian tripod of perpetual peace. Dispute Settlement Mechanisms of PTAs do have strong implications for MIDs, although not directly, but through low-level of foreign policy disputes, such as economic sanctions. On the research question, whether economic sanctions increase conflicts or not, there exists contrasting theories and empirical evidence. Our data has confirmed, in the first step, that economic sanctions lead to military aggression. But on the other hand, PTAs, containing DSMs prevent the escalation of sanctions into militarized interstate disputes.

Dispute Settlement Mechanisms, having capability to intervene in lower-level economic disputes (such as sanctions), are more likely to end up in negotiation, compromises, third-party arbitration or adjudication, *before* interstate disputes escalate into open hostilities.

This study has proposed a model to account for selection effects, helping to delineate clearly, the effects of DSMs on sanctions as well as the latter's escalation into MIDs. In order to analyze the differential effects of the institutionalization, the DSMs were identified according to their scope, highly legalistic and medium level of legalism.

Results indicate that medium level of legalism in PTAs, allowing for third-party binding resolution, do not have any impact on sanctions. However, they are efficient and robust in preventing the sanctions conflict to turn into militarized conflict. Highly legalistic institutions (standing tribunals) do reduce significantly the sanctions but have no impact on war probabilities. Another important result drawn from this study is that bilateral trade dependence increases the probability of sanctions, and further escalates economic sanctions into military conflict. However, multilateralism trade dependence with the rest of the world reduces significantly the probability of military aggression between the two states.

The study conducted in this chapter has important implications. First it reveals important information regarding the interplay of institutionalization (legalization) of trade institutions and militarized interstate disputes. The level of legalism is effective in preventing the escalation into military conflict when the sovereignty of states remains intact. These institutions can also be referred to as state-controlled DSMs. However, when the state sovereignty is limited (in the presence of highly legalistic mechanisms), the institutionalization has no impact on war probability. Therefore, the results of this study suggest that PTAs, containing DSMs have positive effects on cooperation and thus mitigating military disputes but this is not true for all types of DSMs. Moreover, bilateral trade dependence increases the risk of war as suggested by Hirschman when he first launched this debate. The above analysis brings additional results by showing that sanctions are an important intermediate stage in the process of conflict escalation. It also

shows that multilateral trade dependence with rest of the world plays an important role in preventing the outbreaks of militarized disputes in between two nations.

This chapter then contributed to underline the important role of trade institutions, and more specifically of free trade agreements, in shaping international cooperation and in mitigating conflicts.

A limitation of this investigation is that it implicitly assumes that trade disputes and political disputes are always closely intricated. In fact, part of the conflicts escalating into war may be traced back to trade conflicts, leading to sanctions (as the phrase *trade war* suggests), but it is not always the case. As for trade conflicts, it is only rarely that they end up in war. To take the ironical formula of Bearce (2003) “*disputes about banana tariffs, are not likely to escalate into military confrontations*”, nor will conflicts on foie gras or Roquefort (to give a French touch).

Obviously, many war outbreaks have origins which are not directly related to trade disputes, even though economic interests may be at stake. Such are territorial disputes, conflicts on the exploitation of natural resources, including access to water reserves or exploitation or fisheries resources. It is to be noted that even the more economy related of these conflicts are not likely to be part of preferential trade agreements focusing on trade and investment issues. They would rather be settled by separate treaties.

Chapter III

Does Foreign Direct Investment in developing countries benefit from the spreading of trade agreements and from political relations?

Introduction

Foreign Direct Investment (FDI) inflows have recently been the most persistent source of capital inflows in developing countries¹. In 2013, these countries have attracted FDI inflows of \$778 billion constituting the share of 54% of total inward investment (UNCTAD, 2014). This extensive and recent growth of FDI in developing countries has, consequently, given rise to competition among policy makers in these countries to adopt higher investment incentives and make ex ante commitments to foreign investors about the continuity of economic policies. The instruments they use to make commitments were

¹ Developing countries are here defined as non-OECD countries (see for instance Büthe and Milner, 2008).

initially the membership of multilateral organizations such as GATT-WTO and United Nations, more specifically, United Nations Conference for Trade and Development (UNCTAD)¹. However, many countries are trying to attract FDI at bilateral and regional level through the negotiation and conclusion of Bilateral Investment Treaties (BITs) or Preferential Trade Agreements (PTAs), with or without special provisions on FDI, with various degrees of legal enforceability. Bilateral Investment Treaties have been a traditional tool for countries to attract FDI. Nevertheless, PTAs became also important as a tool to promote and legally secure flows of foreign direct investment (Büthe and Milner, 2008). Pertaining to enlarged issues of bilateral and regional economic relations, they contribute as a stronger signal of commitment to investors. The inclusion of investment clauses is a prominent feature of recent PTAs. The intention to introduce these provisions is to establish a regulatory framework for foreign direct investments, hence legally binding on governments, even though it could be detrimental to sovereignty. For these reasons, these provisions may have strong implications for foreign direct investment.

To attract investments, governments offer variety of attractive investment incentives to the foreign firms in the form of reduced taxes, investment grants and wage subsidies (Li and Resnick, 2003). But FDI is often characterized by a high degree of irreversibility and sunk costs (Stasavage, 2002; Jensen, 2003). Furthermore, weak governance of property rights in the host country affects FDI (Dixit, 2011). Thus, the investors are worried about the credibility of the attractive stances taken by the governments and the successful continuation of the policies after the investment is made (risk of obsolescing bargain). Examples of policy changes include changes in performance requirements, direct expropriation, nationalization, and confiscation of foreign assets (Henisz, 2000). Therefore, to avoid the said problems, both, the investors as well as the host governments need the institutions which regulate the operations relating to FDI.

¹ The United Nations Conference on Restrictive Business Practices was convened by the General Assembly in its resolution 33/153 of 20 December 1978 under the auspices of UNCTAD.
<http://ec.europa.eu/competition/international/legislation/unctad.pdf>

Indeed, international institutions such as (GATT-WTO) and UNCTAD could ensure the investor rights but as discussed above, these institutions provide weak international law which is not sufficient to fully protect the investments.

Therefore, the governments have resorted to alternative instruments such as Bilateral Investment treaties (BITs) in order to ensure the credibility of commitment to attract foreign investments. However, in recent times, the ratification of PTAs is being widely considered a favored instrument in establishing credibility of commitment in the goal to attract FDI flows (Büthe and Milner, 2008; 2012). PTAs contain separate investment chapters and investment related dispute settlement mechanism, thus providing confidence to investor regarding the security of their investments. However, not all PTAs provide the same level of investment protection and liberalization. Whether the investment provisions, present in PTAs, are legally enforceable or not is an important question in order to understand the role of PTAs to increase FDI. Therefore, a deeper analysis of investment provisions is warranted.

The presence of democratic political system reduces the risks of appropriation and is therefore by itself considered credible. Jensen (2003) argues that democratic political institutions constrain policies which signal to foreign investors about policy stability after FDI location. Empirically, numerous researchers have found positive impact of a democratic regime on FDI (e.g. Busse, 2003). However, Li (2009) opposes this notion and argues that democracy is not a remedy for eliminating risk of expropriation. There exists contradiction in literature about the impact of democratic regime on FDI. Whether negotiations on FDI in PTAs are related to the level of democracy of the receiving country, is therefore an important issue.

In addition to domestic political risks, foreign investors (hence MNEs) face another type of risk at international level such as diplomatic and foreign political risk. The foreign investor may find their investments threatened in the presence of bilateral political and diplomatic tensions. A state engaged in conflict may introduce restrictive measures, make such investments less desirable by the investors of the rival state (Gartzke, Li and Boehmer, 2001). Moreover, in the event of interstate conflict, nationalist sentiments run

high, implying reluctance to consume goods and services produced by MNE of the belligerent country (Li, 2008). Also, the investment provisions, providing for dispute settlement, may countervail the diplomatic tensions. Therefore, investment chapters in PTAs are closely related to potential diplomatic and foreign political risk.

This chapter will successively address three important questions related to the inclusion of FDI clauses in PTAs. They are distinguished for analytical purpose but it is important to see how they interact with certain domestic and international risks to impact FDI.

The first question is to identify the role of legal designs, i.e. legally enforceable or non-enforceable investment provisions to attract FDI.

The second question focuses on the role of political regimes assessed with the scale proposed by Polity IV project (see chapter 2). Is democracy an important factor to attract FDI?

The third question introduces the dimension of international diplomatic and political relations, including risks of severe deterioration of bilateral relations.

Econometric analysis will attempt to capture those three dimensions, but also interactions between them.

The model employed is system generalized method of moments (GMM) estimator for panel data.

The chapter is structured as follows: Section (2) presents the review of literature, analyzing the effects of provisions related to investments in PTAs, domestic political institutions, specifically the level of democracy and, interstate diplomatic relations on bilateral FDI flows. Section (3) includes explanation of data. Econometric results are presented in section (4), whereas section (5) concludes.

1 Related Literature

The number of Preferential Trade Agreements, encompassing investment provisions, has risen to a great extent. By the end of 2013, around 140 PTAs (out of 300) contain investment provisions. This suggests that states consider them as an important instrument for boosting FDI inflows. Moreover, by signing PTAs, with investment provisions, host countries' governments signal the assurance of investment protection which is the concern of investors and their governments.

The investment arbitration regime was specifically created to provide private actors both rights and remedies under the relevant international treaty (Schneider, 1999) in the presence of uncertainty on the part of host governments. International treaties address this important issue of ensuring investor rights by providing legal instruments. Indeed, the move towards investor arbitration began with the establishment of International Centre for the Settlement of Investment Disputes (ICSID)¹ under the mandate of the World Bank. Afterwards, the rules for ad hoc arbitration were devised by United Nation Commission for International Trade Law (UNCITRAL)². These rules were further embedded in NAFTA (Schneider, 1999). The NAFTA agreement further set the standard for subsequent trade agreements (Bayne and Woolcock, 2011) in the context of investment provisions.

Nevertheless, the international institutions at multilateral level, encompassing customary international law, have not been much effective in establishing the mechanisms of obligation to compensate the aggrieved state (or investor). The UN general assembly resolution of May 1, 1974 on the Declaration on the establishment of the New International Economic Order (see general introduction) failed to provide proper protection to investors for their investment (Bhagwati, 1977). Indeed, this declaration asserts that activities of multinational enterprises may be regulated and supervised

¹ ICSID was established in 1966 by a treaty drafted by the International Bank for Reconstruction and Development's executive directors and signed by member countries.

² The United Nations Commission on International Trade Law (UNCITRAL) was established by the UN General Assembly in 1966, the same year as the establishment of ICSID.

according to the national interest of host developing countries. Hence MNEs have to operate on the basis of full sovereignty of developing countries¹. The strong opposition by the developing (and socialist) countries, acting as a group, rendered the UN resolutions very weak in the decades of 1960 and 1970. Therefore, in the presence of weak customary international law, the developing countries may be able to expropriate foreign investments when they feel it is justified and further, they themselves determine the criteria for compensation (Guzman, 1998).

As discussed above, the developing countries have vigorously resisted the inclusion of stringent provisions at multilateral level (specifically UN resolutions) in the form of groups and were thus able to extract rents from investors by exercising their sovereignty. However, the developing countries, when they act in individual capacity, may offer more protection and surety to investors in order to increase the share of foreign direct investment, giving rise to the competition (Guzman, 1998). This situation may arise due to disproportionate share of FDI inflows attracted by different countries when they act as a group. This may lead them to engage in fierce competition among them which further leads to sign treaties and agreements at bilateral and regional level, in a sort of domino pattern. They then make the use of these agreements, by making commitments to investors that their investments would be safe, in order to attract production capital. Among these treaties are bilateral investment treaties and Preferential Trade Agreements.

The proliferation of these agreements may be attributed to the disintegration of Soviet Union, in the post Cold War era, when the group or “cartel” of socialist countries broke.

However, foreign investors, typically from developed countries, have concerns about the issue of time inconsistency and cross border jurisdictions. They face an “obsolescing bargain” in which the governments can renege on commitments made prior to investment inflows. The next section analyzes the specific investment provisions according to the legal enforceability they encompass.

¹ Declaration on the Establishment of a New International Economic Order. Resolution adopted by the General Assembly, May 1, 1974. <http://www.un-documents.net/s6r3201.htm>

1.1 Investment provisions in PTAs and FDI

The benefit of international institutions lies primarily in the creation of disincentives for states to behave opportunistically (Goldstein and Martin, 2000). Among them, GATT-WTO has provided the forum for investment provisions and its protection. Apart from multilateral institutions, there exist regional and bilateral arrangements such as PTAs. On top of their traditional objectives of tariff reduction, PTAs offer two fold advantages in the context of attracting FDI: PTAs include strategic instruments such as specific provisions related to investment and its protection, reducing barriers to investment and transaction costs. They also contribute to dynamic benefits resulting from deep integration involving, among other issues, increased bilateral investment, industrial relocation and self sustained growth (Schiff and Winters, 1998a) and secondly, at the same time, they serve as an insurance device and provide mechanisms for making credible commitments to foreign investors about the continuation of policies and treatment of their assets, thus avoiding the time-inconsistency trap, reassuring investors and increased investment (Fernandez and Portes, 1998, Simmons, 2000 and Büthe and Milner, 2008).

The investment provisions in PTAs, nevertheless, differ in scope and coverage as well as in legalization. These provisions do vary in terms of stringency and legalization. There exists heterogeneity between investment provisions and their different types are the drivers of diverse investment outcomes. Emphasizing on the differing effects of economic integration agreements on investments, Blomstrom and Kokko (1997) argue that perhaps the most serious challenge facing a study of the relation between regional integration and foreign direct investment is the multi-dimensional character of the issue.

Highly legalized dispute settlement mechanism indicates a strong commitment to the protection of property rights of investors and, subsequently, should be an effective way of attracting investment flows (Büthe and Milner, 2008).

Strong dispute settlement mechanisms provide predictable environment for investors who seek to raise their voice in the event of policy change (ex-post agreement) or expropriation of their assets in the host country after the location of their investments.

Secondly, for the host countries¹, they serve as mechanism to prove credibility of their commitments about the treatment of foreign investors' assets when noncompliance is difficult to assess ex-ante. Focusing on the preferences of countries for using hard law in international economic arrangements, Abbott and Snidal (2000) suggests that hard law reduces private risk premiums and intergovernmental transaction costs associated with trade and investment. Thus, reduced uncertainty and costs associated with broader and deeper forms of investment provisions boosts the flow of investments to the host country.

If the provision is flexible and is not legally protected, the asymmetry of information remains high and therefore, the plausibility of renegeing on the ex ante commitments cannot be ignored. Also, Abbott and Snidal (1998) argue that noncompliance does not typically result from deliberate cheating but from ambiguity in agreements. Including investment chapters in PTAs may also serve another objective, mainly political, which is to shape networks of interstate cooperation to pursue strategic goals. Interstate cooperation is therefore likely to influence positively FDI. This point will be discussed below.

1.2 Interstate cooperation/conflict and FDI

The investors also take into consideration the international security environment while making decision to invest abroad, specifically the diplomatic relations between his home country and host country. Foreign direct investment may largely be affected by international relations of the country. Indeed, the interstate diplomatic communication in political and economic spheres has strong implications for FDI. Therefore, the investment decision possesses an international dimension. Indeed, these international diplomatic risks do increase the cost of investments. Investors experience low cost when their home country and potential host country are engaged in good diplomatic relations. In this situation, they feel it less risky to invest. Under the same logic, when the bilateral diplomatic relations suffer from mutual tensions between the two countries, the risk of

¹ Developing countries in general, as their domestic institutions and political conditions are not stable as compared to developed economies.

investment rises. Therefore, during investment decisions, the role of interstate diplomacy cannot be ignored.

Interstate political shocks have detrimental implications for FDI inflows for mainly three reasons. First, they may imply capital flights from host countries (Gartzke, Li and Boehmer, 2001) as the investor feels insecure about his investment in the host country. Second, governments engaged in military warfare may have incentives to raise taxes with the aim of financing war and, thirdly, in the event of interstate conflict, nationalist sentiments are likely to run high. Consumers in host country may be reluctant to purchase goods and services produced by the MNEs of foreign (home) country with whom the host country is engaged in conflict (Li, 2008), thus creating uncertainty for foreign investors. Conversely, the bilateral cooperation in various fields would send a positive signal to investors, thus positive implications for FDI.

Based on the empirical analysis of US FDI flows to developing countries, Biglaiser and DeRouen (2007) claim that the US armed forces deployment in host countries is a positive sign for US MNEs about the stability of their investments and thus locate production capital in those countries. Further, Li and Vashchilko (2010) argue that defense pacts and security alliances increase investment flows. They find strong empirical support for their arguments.

The research on interstate relations and FDI focused only on high-intensity military conflicts and cooperation. However, the lower intensity conflicts and cooperation also have strong implications for FDI inflows. This dimension, measuring the political climate between two states is more or less neglected (with few exceptions) in the literature. In this vein, Reuveny (2003) calls on researchers to use events data to measure and operationalize geopolitical cooperation and conflict.

Nigh (1985) did one of the first analyses investigating the impact of political events on US manufacturing direct investment in Latin American countries. He argues that investors observe closely the interstate events and take into account the latter in their investment decisions. He finds support for the argument that interstate conflict do reduce US

investment while the dyadic cooperation increases it. Desbordes and Vicard (2009) equally find significant positive effects of interstate relations on bilateral FDI flows.

These studies put an important insight to the understanding of low-intensity cooperation and conflict in their effects on FDI. However, the identification of these events into different categories would add to our understanding, their differentiating effects on bilateral FDI flows. Indeed, there are multifaceted dimensions of international relations such as political, military and economic relations.

In addition to net interstate cooperation or conflict, the domestic political system has also important implications in attracting FDI flows. The incentives for the governments to expropriate or nationalize foreign assets arise from changing national preferences. Indeed, the issue has domestic implications for governments. One of the biggest concerns for foreign investors is that the host country governments could impose regulations which could affect the profits of investor. The governments may take these steps in order to gain popularity at the domestic level in the presence of numerous political groups and lobbies. However, it is important to understand the importance of domestic political regime in attracting foreign direct investments and their implications for FDI inflows in the wake of conclusion of PTAs with different investment provisions (area covered only or legally enforceable allowing for the mechanisms of dispute settlement).

Therefore, the investors do also take into account the domestic political environment specifically in the developing or under developed host country. Since, the countries are characterized by different levels of domestic institutions, the good quality institutions, specifically the high level of democracy in a country, reduce the risk for investor and thus contribute to the increased FDI inflows. The effects of these institutions (democracy) are discussed in detail in the next section.

1.3 Preferential Trade Agreements, domestic politics and FDI

The presence of democratic regime contributes positively in attracting FDI (Busse, 2003). In the same vein, Jensen (2003) argues that democratic political institutions at the domestic level constrain the committed policy flexibility of the executive. Democracies signal their intention to other states and are able to commit credibly and clearly as opposed to authoritarian states (Fearon, 1994 and Pevehouse et al., 2002). Li and Resnick (2003) argue that property rights are stronger in democratic regimes, thus providing confidence to investors that they are safe from expropriation of their assets in host countries. However, this argument could also be contradicted in literature. For example, Li (2009) argued that democratic regime is not a remedy for eliminating the risk of expropriation. According to Yang (2007) there is no systematic relationship between democracy and FDI inflows. Analyzing the arguments of Jensen (2003) and Li and Resnick (2003), he argued that these studies do not offer complete theoretical explanations on how political institutions influence expropriation of foreign assets i.e. they did not analyze opportunistic incentives on part of political actors.¹

The debate is still indecisive, whether democratic countries are credible in respecting the rights of foreign investors and attract FDI, there is another mechanism through which countries can assure investors and attract FDI is by concluding bilateral and regional trade agreements. As argued, trade agreements provide mainly two direct advantages in the context of investments: they include investment provisions and at the same time, supporting these provisions with the system for dispute settlement related to investments.² Thus, through these institutionalized investment arrangements, the democratic governments ensure the credibility of their policy commitment (ex-post) to foreign investors (Büthe and Milner, 2012). The democratic political regime has to assume the conflicting interests of domestic institutions before including investment clauses in PTAs.

¹ Other than on FDI, the effects of democracy on trade flows have also been analyzed. See for example, Duc, Lavallée and Siröen (2008) and Yu (2010).

² The indirect effect of trade agreements on FDI can be seen from the fact that these arrangements lower tariff barriers leading to increased trade flows. Trade flows could be closely related to FDI, either as complementary such as conducting intra-firm trade or substitutes to FDI such as tariff jumping.

These players are the institutional and partisan actors whose consent is necessary to introduce new policies (Tsebelis, 2002). In a coalition government, any one member may veto a certain policy proposal by threatening to withdraw from government if there are certain reservations. In general, the domestic actors are divided into two main categories; median voters¹ and interest groups. The results of Mansfield *et al.* (2008) indicate that more important the domestic veto players are, the higher the probability that the governments will form lower/shallower forms of integration agreements. But the preferences of domestic institutions are diverse i.e. there exists strong heterogeneity in domestic groups as well. Stolper -Samuelson theorem predicts that free trade is more beneficial to the working class in labor-abundant countries. In those countries, the workers are winners and capitalists are losers; and vice versa in capital-rich countries. In an unequal country, the median-voter will be labor-rich and capital poor thus it will influence government to adopt pro-labor policies. Median voter approach (pro-labor) is assumed by Levy (1997) in his widely studied political economy model based on Heckscher-Ohlin framework. Other competing theory in contrast to median voter theory, the lobbying model, also based on two-factor Heckscher-Ohlin framework, Rodrik (1986) argues that capitalist lobby is more concentrated (and possessing better information (Goldstein and Martin, 2000) than workers and therefore are more effective in pressurizing the government to conclude the policy which would be more pro-capital thus giving protection to the possessors of capital in labor-abundant countries².

The difference among domestic groups, described above, gives rise to the alternate choices of legalization and procedures in negotiations of economic arrangements. The import-competing groups feel themselves threatened as they face potential loss of market share in the presence of foreign firms and production capital. They restrain the government to commit the highly legalized form of investment arrangement thus falling short of full-fledged arrangement. On the other hand, in the light of the theory put forward by Levy (1997) and in the context of developing countries, the state has to fulfill the

¹ Median voters are sometimes called ‘selectorates’ mentioned by (Mansfield et al. 2008) as they make up a broader portion of society in a democracy and choose the leader and keep them in office.

² Labor-abundant countries are developing countries, which are the focus of our analysis here, who obtain benefits from FDI, which comes through institutionalized arrangements providing more credibility.

demands of median voters, as they would be pro-labour and the regime prefers to commit highly legalized agreements to favour these voters.

Trade agreements increase domestic costs in the event of contract breach (Mitchell and Hensel 2007, and Tomz, 2007) thus enhancing the reliability of the host governments that they will work for the continuity of policies. Also, the cost of renegeing on commitment increases with the level of legalization where the potential of opportunistic behavior is high (Abbott and Snidal, 2000). Therefore, the argument here is that domestic cost of renegeing on the deeper commitments such as legally enforceable investment provisions will be higher than those which are covered but not legalized. Deeper investment provisions offer the governments to gain credibility (by increasing costs and locking-in) both at domestic and international level. A democratic government incurs two types of costs in the event of noncompliance: International reputational costs (Mitchell and Hensel, 2007, and Smith, 2000) and Domestic audience costs (Fearon, 1994, and Tomz, 2007). The democratic governments seek the support of median voter to get themselves reelected. Therefore, they find it more useful to comply with deeper and broader arrangements as the median voter is more concerned with actions of government. As anecdotal evidence for this argument, Tomz find the support based on the experimental surveys.

The domestic politics play an important role in developed countries also whose investors make investments abroad. The investors influence the PTA negotiations on investment provisions to ensure the establishment of regulatory framework, hence protection of their capital. The barriers to trade and investment restrict the prospects of benefitting from differences in capital costs between countries. Thus, the investors, being part of the domestic pressure groups and in order to benefit from larger market, and at the same time to secure their investments, force their governments to include investment provisions providing legal cover. International institutions (hence PTAs) are self conscious creation of states (and to a lesser extent, of interest groups and corporations). Non-state actors participate with increasing frequency in institutional design Koremenos *et al.* (2001) directly or indirectly. Further, Bhagwati (2008) maintains that ethnic groups and bureaucracies pushed for particular PTAs.

The next section empirically analyzes the theoretical arguments provided above, regarding the relationship of international institutional factors (preferential trade agreements with legally enforced investment provisions), interstate cooperation and conflict and domestic political institutions with FDI inflows.

2 Empirical Analysis

2.1 Data

This study examines the effects of investment provisions, interstate cooperation and democracy of host country on FDI flows to the host country using a sample of directed dyads between 147 countries from 1990 to 2004, including 31 member countries of OECD and 116 non-OECD countries. The dependent variable is the log of bilateral FDI flows (in millions of US \$) from one OECD country to any of 147 OECD and non-OECD countries or from one non-OECD countries to any of 31 OECD countries¹. There is no data available on bilateral FDI flows between non-OECD countries. Data are collected from OECD International Direct Investment Statistics Year-book.

FDI flows could take negative values when divestment takes place. This variable is log transformed taking into account the negative values using the method called the log-modulus transformation proposed by (John and Draper, 1980). The transformation takes the log of the absolute value by adding the value of 1 to it. Then, if the original value is negative, the negative sign is “put back” by multiplying the value with -1. In this way, one can take account of zero values also. Symbolically, it takes the form:

$$\ln FDI = \text{sign}(FDI) * \ln(|FDI| + 1)$$

¹ However, in the second set of analysis, the FDI inflows are considered only for Non-OECD countries from OECD countries.

The data for interstate cooperation is based on events data originally developed by Virtual Research Associates Inc. (VRA)¹. This dataset comprises machine coded international events data set for the period 1990 – 2004. The VRA Reader uses the lead news from Reuters news reports to categorize into one of 157 possible event codes called Integrated Data for Events Analysis (IDEA). Then these events belonging to specific IDEA category are mapped onto Goldstein's (1992) scale in which the positive values represent cooperation and the negative, conflictual events. These events are classified into three types such as political, economic and military events by Massoud and Magee (2012). This study uses the dataset compiled by these authors. The political events relate to interstate governmental and diplomatic actions. The economic events are policy adoption regarding economic issues such as providing economic aid, threatening or easing economic sanctions whereas the military category contains the military activities including armed groups, weapons or violent actions.

The constructed variable is net cooperation which indicates the overall state of diplomatic relations between two states (Reuveny and Kang, 1996). The cooperation (positive) and conflict (negative) values between a pair of countries are aggregated by year and are added separately. Then yearly net cooperation (indicator) is calculated by subtracting total conflict value from total cooperation value. If the conflict value is higher than that of cooperation, then the indicator will be negative. It contains the value of zero if no any diplomatic event takes place. This variable is also log-transformed and the same methodology is used as for FDI inflows (see above). Desbordes and Vicard (2009) also examine the effects of interstate cooperation on FDI using events dataset. This study adds value to their study by differentiating between three different domains of cooperation and conflict i.e. political, economic and military.

¹ See <http://www.vranet.com>

The net cooperation variable will then be:

$$\text{Net interstate cooperation} = \sum_{\text{events from } i \text{ to } j \text{ in year } t} (\text{cooperation}_{ij} - \text{conflict}_{ij})$$

The variables of PTAs containing investment provisions are extracted from GPTAD database (see chapter 1 for details on the extraction of PTAs by provisions). Table 3.1 shows the descriptive statistics for PTAs containing investment provisions as well as those which are legally enforceable. The identification of policy area related to investment and the definition of legal enforceability related to dispute settlement is based on Horn et al. (2010). The descriptive statistics for investment provisions till the year 2004 are presented in table 3.1.

Table 3.1: Descriptive statistics of investment provisions in PTAs (till 2004)

	Number of PTAs	Percentage (of total no. of PTAs)
Total PTAs	230	-
PTAs w/ Inv. Provisions	116	50.43%
PTAs w/o Inv. Provisions	114	49.57%
PTAs w/ Inv. Provisions but not legally enforceable	72	31.30%
PTAs w/ Inv. Provisions and legally enforceable	44	19.13%

The total number of PTAs in 2004 was 230. PTAs containing Investment provisions account for 50.43 % of total number of PTAs concluded till 2004. PTAs, not accounting for investment provisions, are almost of the same number. Also, there is not a sharp contrast between the PTAs with or without legal enforcement.

Data on Bilateral Investment Treaties (BITs) are taken from United Nations Conference on Trade and Development (UNCTAD).

The bilateral trade data is also added as a variable explaining FDI flows. There are two possibilities regarding the relationship between trade and FDI. Trade and FDI flows could be substitutes or complementary. This variable will provide information on this. The variable on democracy is constructed using Polity IV dataset. The variable for political instability in the host countries is the composite measure from Banks and Wilson's (2013) dataset of political events (specific to the country) that indicate political violence and instability.

The control variables, distance, contiguity, language and colonial history are taken from French Research Center in International Economics (CEPII).

Summary statistics are provided in table 3.2.

Table 3.2: Summary statistics

Variables	All dyads			OECD/Non-OECD dyads		
	N	Mean	SD	N	Mean	SD
FDI flows	19,837	238.791	1965.391	7,112	68.356	436.21
FDI flows (log)	19,837	1.257	2.908	7,112	1.068	2.478
Lagged FDI flows (log)	19,837	1.216	2.841	7,112	0.989	2.418
PTAs (all)	19,837	0.242	0.428	7,112	0.109	0.312
PTA w/ LE Inv Prov	19,837	0.153	0.360	7,112	0.040	0.197
PTA w/o LE Inv Prov	19,837	0.029	0.168	7,112	0.036	0.188
Net cooperation (all)	19,837	0.707	1.405	7,112	0.421	1.154
Net political	19,837	0.735	1.355	7,112	0.464	1.112
Net economic	19,837	0.111	0.565	7,112	0.046	0.360
Net military cooperation	19,837	-0.099	0.550	7,112	-0.069	0.443
Democracy index (host)	-	-	-	7,112	2.024	6.511
Ratification of BIT	19,837	0.373	0.483	7,112	0.445	0.497
Trade flows	19,837	5.070	2.722	7,112	4.108	2.499
GDP per capita of host	19,837	8.980	1.53	7,112	7.276	1.252
GDP per capita of home	19,837	8.936	1.557	7,112	9.936	0.683
Distance (log)	19,837	8.431	0.953	7,112	8.633	0.736
Contiguity	19,837	0.037	0.189	7,112	0.011	0.108
Common language	19,837	0.103	0.304	7,112	0.091	0.287
Colonial history	19,837	0.067	0.250	7,112	0.071	0.257
Defense alliance	19,837	0.121	0.327	7,112	0.018	0.136
Sum of democracy	19,837	13.754	6.631	-	-	-
Political instability of	19,837	1.705	3.048	7,112	2.019	3.797

Note: referring to the sample of OECD/Non-OECD sample, Non-OECD countries are recipients of FDI flows from OECD countries.

3 Estimation strategy

This study follows a standard gravity model specification and employs a dynamic panel data to estimate the effects on bilateral FDI inflows. The lagged dependent variable, specifically in our case of estimating FDI inflows, helps to absorb other possible variables hence it takes into account the unobserved omitted variables. However, by composition, it correlates with the unobserved panel-level effects, causing inconsistent estimates for OLS. Moreover, it is suspected that there exists endogeneity for PTAs as well as for interstate cooperation variables. The exogenous variables for cooperation variable do not exist (Desbordes and Vicard, 2009). To solve this problem and to obtain consistent estimates, Arellano and Bond (1991) suggest a GMM estimator that uses first differencing in order to remove time-invariant fixed effects and employs instruments. Arellano and Bover (1995) and Blundell and Bond (1998) further refine this model.

For the analysis in this chapter, the GMM-system estimator (GMM-SYS) is employed. This estimator allows for solving the problems of serial correlation, heteroskedasticity and endogeneity. It contains both first differenced and level equations. The estimator assumes that errors are distributed independently across observations. In order for the moment conditions to be valid, in the first differencing, the errors should be serially correlated at first order whereas not at the second order. Finally, the dynamic panel data would be valid only if the estimator is consistent and the instruments are valid.

4 Results

Table 3.3 presents the results for the effects of PTAs containing investment provisions on FDI inflows. For all specifications, the results for serial correlation test are as expected. The null hypothesis of the absence of serial correlation at the first order is rejected but cannot be rejected at second order. Therefore, the moment conditions are valid. Moreover, in all estimations, the validity of instruments is never rejected.

Table 3.3: Impact of PTAs containing investment provisions and cooperation on FDI

Dependent variable	FDI (1)	FDI (2)	FDI (3)	FDI (4)	FDI (5)
Lagged FDI inflow (log)	0.16*** (0.052)	0.15** (0.060)	0.13*** (0.046)	0.12*** (0.045)	0.14*** (0.045)
PTA	-1.22*** (0.390)		-1.01*** (0.386)	-1.17*** (0.434)	-0.71* (0.377)
PTA w/ LE Inv Prov.	0.82** (0.355)		0.69** (0.351)	0.72** (0.404)	
PTA w/o LE Inv Prov	0.61 (0.446)		0.41 (0.449)	0.50 (0.550)	0.11 (0.440)
Net cooperation (log)		0.26*** (0.092)	0.21** (0.080)	0.13 (0.103)	0.20** (0.078)
PTA w/ LE Inv Prov * Coop				0.25 (0.151)	
PTA w/o LE Inv Prov * Coop				-0.07 (0.162)	
Bilateral Trade flow (log)	0.26*** (0.049)	0.21*** (0.052)	0.24*** (0.049)	0.27*** (0.051)	0.23*** (0.050)
GDP per capita of host (log)	0.04 (0.046)	0.01 (0.045)	0.02 (0.044)	-0.01 (0.046)	0.01 (0.044)
GDP per capita of home (log)	0.26*** (0.047)	0.23*** (0.045)	0.24*** (0.044)	0.22*** (0.047)	0.23*** (0.044)
Ratification of BIT	-0.29 (0.175)	-0.21 (0.185)	-0.28 (0.176)	-0.39** (0.185)	-0.03 (0.185)
Sum of democracy indexes	0.01*** (0.005)	0.01 (0.005)	0.01*** (0.005)	0.01** (0.005)	0.01** (0.005)
Political instability (host)	0.00 (0.007)	0.00 (0.007)	0.00 (0.007)	-0.00 (0.007)	0.00 (0.007)
PTA w/ LE Inv Prov. (Regional)					0.78** (0.373)
PTA w/ LE Inv Prov. (Bilateral)					0.10 (0.359)
Geographical distance (log)	-0.31*** (0.079)	-0.11** (0.055)	-0.28*** (0.076)	-0.26*** (0.073)	-0.20** (0.084)

Contiguity	0.38 (0.237)	0.37 (0.232)	0.29 (0.237)	0.16 (0.234)	0.31 (0.233)
Common language	0.30** (0.137)	0.08 (0.131)	0.21 (0.138)	0.20 (0.146)	0.25* (0.141)
Colonial history	0.37** (0.147)	0.44*** (0.132)	0.36** (0.138)	0.38*** (0.141)	0.38*** (0.139)
Defense alliance	-0.03 (0.316)	0.44 (0.413)	0.05 (0.302)	0.23 (0.314)	0.11 (0.327)
Observations	19,837	19,837	19,837	19,837	19,837
Number of dyads	4,191	4,191	4,191	4,191	4,191
AR (2) Test (p-value)	0.10	0.14	0.13	0.18	0.13
Hansen test of over identification	0.43	0.32	0.44	0.80	0.59

Note: *, **, *** Significance at the 10, 5 and 1% level, respectively.

Robust standard errors in parentheses

All AR(1) test statistics are statistically significant at 1% level; all AR(2) test statistics are statistically insignificant. Unreported time dummies are included in each specification.

The results for PTAs including legally enforceable investment provisions support our hypothesis. They are significant in boosting bilateral FDI flows. The estimations also contain the variable on PTAs that include investment provisions but do not allow for dispute settlement mechanism in case of any disagreement between the investor of the home country and the government of host country. They are found to be insignificant in all specifications.

- Column (1) shows the estimations including PTAs incorporating investment provisions or not. If they incorporate investment clauses, whether they allow for the dispute resolution in case of investment related disputes i.e. legally enforceable investment provisions. The specification is also controlled for PTAs concluded without referring to investment clauses. PTAs that incorporate legally enforceable investment provisions increase FDI to 127 percent. ($e^{0.82} - 1$). Moreover, the PTAs that contain provisions on investments but do not include measures to protect them are insignificant. This underlines that governments attract FDI significantly when

they signal the credibility of commitments by signing the specific legal measures associated with investment provisions in PTAs to investors in the home country. Therefore, the host country could boost FDI inflows, not only by embodying a PTA with investment provisions but also providing them the legal cover. However, the PTA dummy, technically capturing the PTAs concluded that do not account for investment related provisions at all, surprisingly decrease FDI flows significantly. This is consistent in all estimations.

- One of the hypotheses of this study is that, in addition to institutionalized cooperation (i.e. forming PTAs), the general de facto interstate cooperation and conflict could have implications for FDI. Specification (2) of table 3.3 confirms this conjecture. Interstate cooperation significantly boosts bilateral FDI inflows. Specification (3) controls for both PTAs and net interstate cooperation. Results remain qualitatively the same i.e. both of these variables increase FDI flows significantly.

All estimations account for the group of controls including standard gravity covariates. Bilateral trade flows are added to the specifications. Casson (1990) suggests that FDI is logical intersection of trade theory. Indeed, in the seminal work, originated from neoclassical Heckscher-Ohlin-Samuelson theorem, Mundell (1957) argues that there exists a substitutive relationship between FDI and international trade. The implicit assumption behind this reasoning is that trade flows are driven by differences in factor endowments and factor prices for homogenous goods. However, on the other hand, certain theories predict that trade and FDI are complementary. For example, Chase (2003) finds the support for the argument that reducing barriers significantly help investors to move their production facilities. Our results confirm the existence of complementarity between trade flows and FDI and no “tariff jumping” is observed. The bilateral trade flows are highly significant and positive in all specifications. The GDP per capita for the host country is insignificant whereas it is significant and positive for home countries. It is intuitive as the host countries are generally the recipient of FDI flows. The ratification of bilateral investment treaties is not found to be significant. The domestic political and

security conditions of the host country exhibit no significant effects. The measure, constructed by adding the democracy indexes of both countries in country pair is significant and positive in explaining FDI flows. Geographical distance between the pair of countries reduces FDI whereas the contiguity dummy is not significant. Finally, colonial history exhibits strong effects for FDI. Finally, the common language variable and defense alliance is not consistently significant in all specifications.

The above estimation (4) examines the effects of interaction between PTAs containing legally enforceable investment provisions as well as non-legally enforceable provisions with interstate political and diplomatic cooperation.

It would be important to analyze whether the de facto interstate cooperation modifies or conditions the effects of PTAs (containing legally enforceable investment provisions) on FDI flows. In other words, to see whether net interstate cooperation acts as substitute or complementary to PTAs in explain FDI flows. Estimation (4) of table 3.3 presents the analysis. The two product (interaction) terms are created using the cooperation variable with the PTAs containing legally enforceable investment provisions as well as those, not allowing for legality. The significance of legally enforceable investment provisions holds. The coefficients for the interaction terms are insignificant but when the interaction effects for legally enforceable investment provisions and cooperation are analyzed graphically using Bramborian threshold effects¹ (see figure 3.1a), the detailed effects are obvious. The conditional effects of interstate cooperation are insignificant at initial values of cooperation scale. However, when a certain threshold is achieved, the conditional effects of net interstate cooperation become significant. This is the case when (logged) value of cooperation is above the mean which is 0.70. In other words, when the net interstate cooperation is more than the mean value, it modifies the relationship of PTAs with legal enforceability and FDI flows positively and significantly. The higher net cooperation between the dyad modifies positively and significantly, the effects of institutionalized and legalized investment cooperation on FDI flows. However, the conditional effects of

¹ This methodology was introduced by Brambor, Clark and Golder in 2006. It is abundantly used in quantitative methods in political science.

interstate cooperation are insignificant for all the levels of cooperation when examined for the impact of non-legally enforceable to FDI inflows. This can be seen in figure 3.1b.

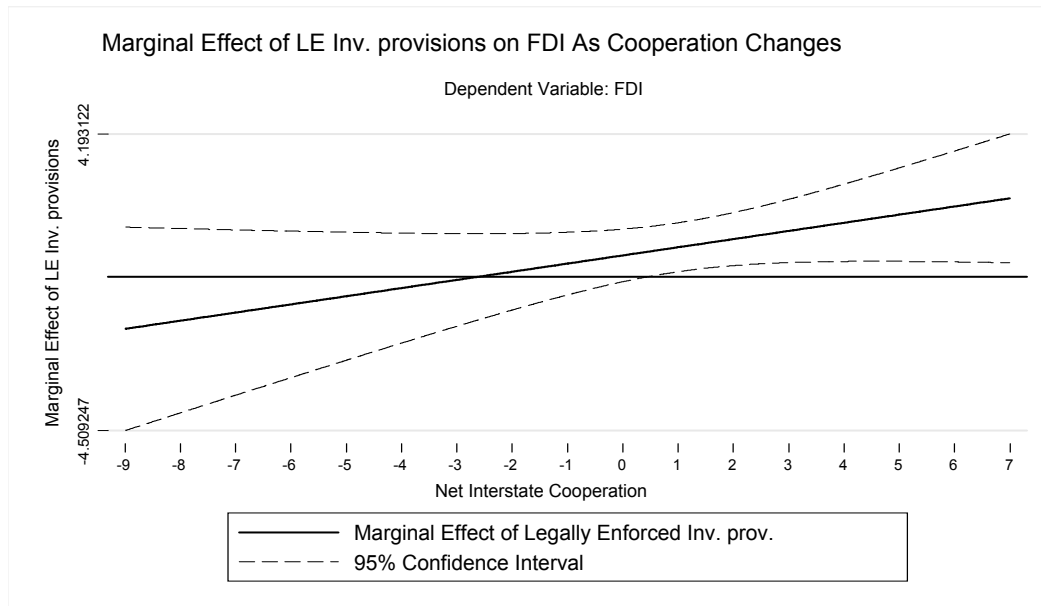


Figure 3.1a: Conditional effects of net interstate cooperation on the relationship between the PTAs, containing legally enforceable investment provisions, and bilateral FDI flows

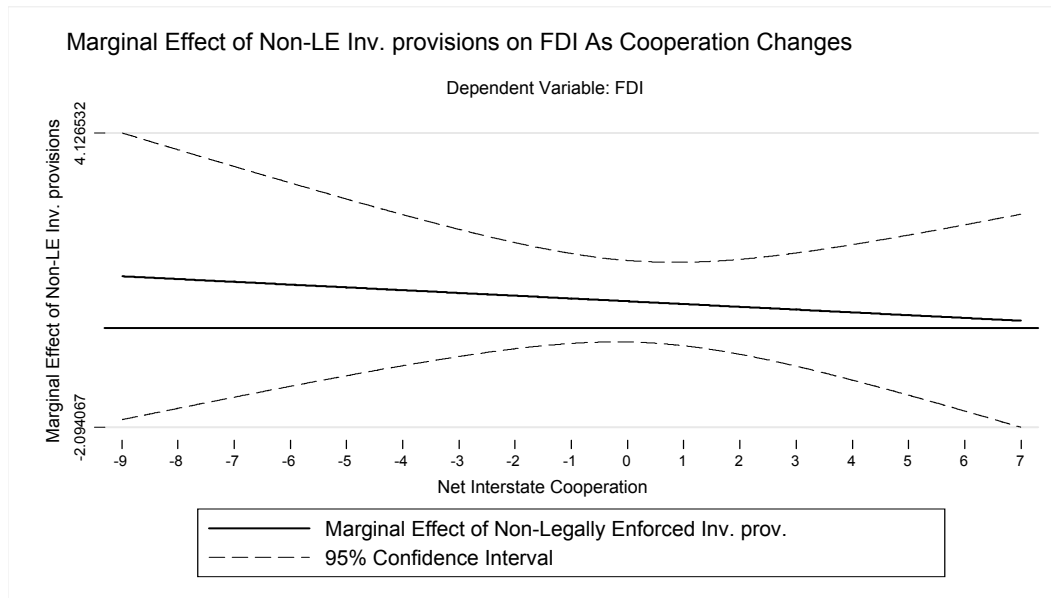


Figure 3.1b: Conditional effects of net interstate cooperation on the relationship between the PTAs, containing non-legally enforceable investment provisions, and bilateral FDI

Finally, the specification (5) tests for the robustness of the effects of PTAs on FDI inflows. PTAs, accounting for legally enforceable investment provisions, are distinguished according to their geographical scope. The dummy for legally enforceable investment provisions is split into regional and bilateral PTAs. The results indicate that PTAs are significant in attracting FDI flows if they are regional in scope. The bilateral PTAs (accounting for legally enforceable provisions) are not significant, hence, not robust to the results previously obtained. Interstate cooperation is, however, significant after controlling for legally enforced bilateral and regional PTAs.

The interstate cooperation is found to be increasing FDI flows significantly. However, it would be more interesting to analyze the effects of different types of interstate cooperation in order to understand the individual effects of different forms of cooperation. Table 3.4 presents the results, delineating the effects of interstate cooperation. The interstate cooperation is of three different types: political, economic and military. The three different estimations analyze the effects of net political, economic and military cooperation separately.

Table 3.4: Impact of political, economic and military cooperation on FDI inflows

Dependent variable	FDI	FDI	FDI
	Political	Economic	Military
Net cooperation	0.25** (0.101)	-0.05 (0.239)	0.18 (0.225)
Lagged FDI inflow (log)	0.12** (0.062)	0.17*** (0.062)	0.21*** (0.059)
Bilateral Trade flow (log)	0.20*** (0.051)	0.22*** (0.053)	0.24*** (0.053)
GDP per capita of host (log)	0.03 (0.042)	0.03 (0.048)	-0.00 (0.047)
GDP per capita of home (log)	0.26*** (0.042)	0.25*** (0.048)	0.20*** (0.047)
Ratification of BIT	-0.22 (0.188)	-0.52** (0.211)	-0.54*** (0.198)
Sum of democracy indexes	0.01** (0.005)	0.01 (0.005)	0.00 (0.005)
Political instability (host)	-0.01 (0.036)	-0.00 (0.035)	-0.01 (0.036)
Geographical distance (log)	-0.15*** (0.055)	-0.14** (0.060)	-0.11* (0.060)
Contiguity	0.39 (0.243)	0.44* (0.234)	0.40* (0.217)
Common language	0.13 (0.132)	0.15 (0.136)	0.11 (0.136)
Colonial history	0.45*** (0.139)	0.55*** (0.139)	0.53*** (0.134)
Defense alliance	0.14 (0.410)	0.33 (0.459)	0.48 (0.492)
Observations	19,837	19,837	19,837
Number of dyads	4,191	4,191	4,191
AR (2) Test (p-value)	0.28	0.11	0.14
Hansen test of over identification	0.29	0.11	0.18

Note: *, **, *** Significance at the 10, 5 and 1% level, respectively.

Robust standard errors in parentheses

All AR(1) test statistics are statistically significant at 1% level; all AR(2) test statistics are statistically insignificant. Unreported time dummies are included in each specification

The results indicate that political (or diplomatic) cooperation is significant for FDI flows.

The net interstate economic and military cooperation are insignificant in their impact on

FDI flows. In all the specifications, the validity of instruments is not rejected. The controls show qualitatively the same signs and magnitude.

In addition to international factors (interstate cooperation and conflict), the domestic political factors equally play an important role for FDI flows. To account for this fact, the analysis is done using the level of democracy in a country as a proxy for good domestic political institutions. Table 3.5 shows the results for the effects of the level of democracy in the host developing (non-OECD) countries in attracting FDI inflows from developed host (OECD) countries.

Table 3.5: Impact of democratic regime in non-OECD countries on FDI inflows

Dependent variable	FDI	FDI	FDI
	(1)	(2)	(3)
Lagged FDI inflow (log)	0.12*** (0.033)	0.19*** (0.056)	0.12*** (0.033)
PTA	0.05 (0.502)	-0.24 (0.576)	-0.59 (0.610)
PTA w/ LE Inv Prov.		0.90* (0.481)	0.59 (0.647)
PTA w/o LE Inv Prov		-0.07 (0.676)	0.65 (0.608)
Democracy index (host)	0.05* (0.027)	-0.01 (0.022)	0.01 (0.023)
Bilateral Trade flows (log)	0.32*** (0.069)	0.31*** (0.065)	0.31*** (0.057)
PTA w/ LE Inv Prov * Democracy (host.)			0.03 (0.055)
PTA w/o LE Inv Prov * Democracy (host.)			0.01 (0.060)
GDP per capita of host (log)	0.04 (0.059)	0.07 (0.049)	0.07 (0.048)
GDP per capita of home (log)	0.14*** (0.054)	0.10* (0.060)	0.08 (0.054)
Ratification of BIT	0.13 (0.332)	0.40 (0.277)	0.21 (0.247)
Political instability (host)	-0.00 (0.010)	0.00 (0.010)	-0.00 (0.010)

Geographical distance (log)	-0.08 (0.117)	0.01 (0.120)	-0.01 (0.109)
Contiguity	-0.21 (0.331)	0.04 (0.317)	-0.07 (0.320)
Common language	0.41* (0.222)	0.85* (0.442)	0.14 (0.343)
Colonial history	0.34* (0.199)	0.14 (0.257)	0.46* (0.241)
Defense alliance	-0.52 (0.620)	-2.71 (2.510)	1.75 (1.728)
Observations	7,112	7,112	7,112
Number of dyads	1,781	1,781	1,781
AR (2) Test (p-value)	0.83	0.70	0.85
Hansen test of over identification	0.27	0.81	0.97

Note: *, **, *** Significance at the 10, 5 and 1% level, respectively
Robust standard errors in parentheses.

All AR(1) test statistics are statistically significant at 1% level; all AR(2) test statistics are statistically insignificant. Unreported time dummies are included in each specification.

Specification (1) exhibits the positive impact of democratic regime in a country on FDI inflows. However, these effects are significant at 10 percent level. Once the PTAs are included in the estimation (specification (2)), the effects of democracy turns insignificant. Specification (3) tests for the moderating effects of domestic political institutions on FDI inflows by adding the interaction term between PTAs with and without legally enforceable investment provisions and the level of democracy. Figure 3.2a clearly demonstrates that democracy is only significant in conditioning the effects of international institutions at very high levels (i.e. the index value of more than 7). It is insignificant at low levels. Further, the moderating effects of democracy are insignificant at all levels when analyzed for the effects of PTAs having non-legally enforceable investment provisions (Figure 3.2b). Therefore, the good domestic political institutions and PTAs, accounting for legally enforceable investment provisions are complementary in boosting FDI inflows into developing economies.

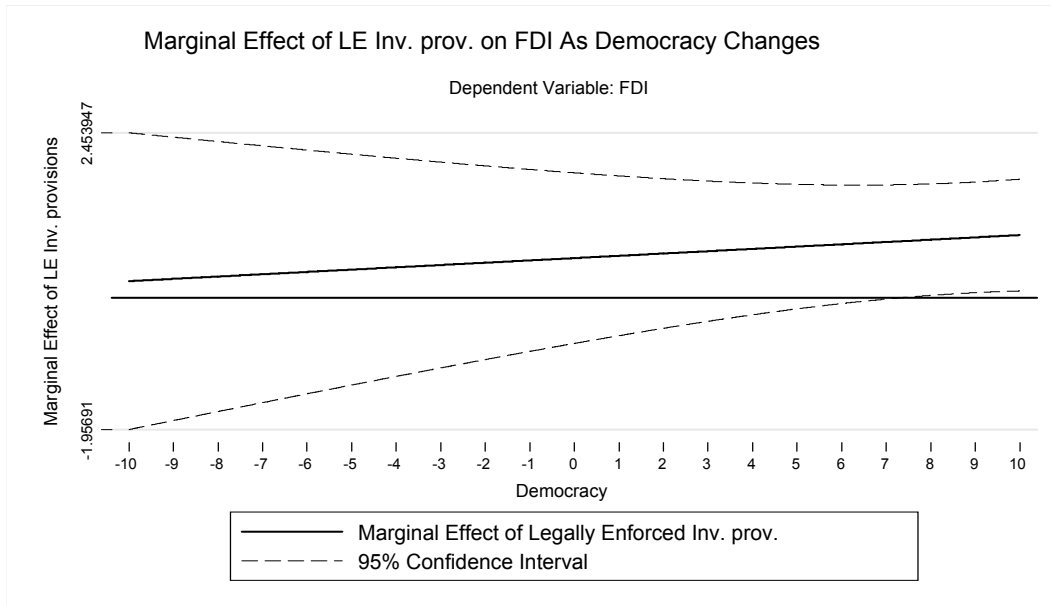


Figure 3.2a: Conditional effects of level of democracy in host developing country on the relationship between PTAs, containing legally enforceable investment provisions, and bilateral FDI flows

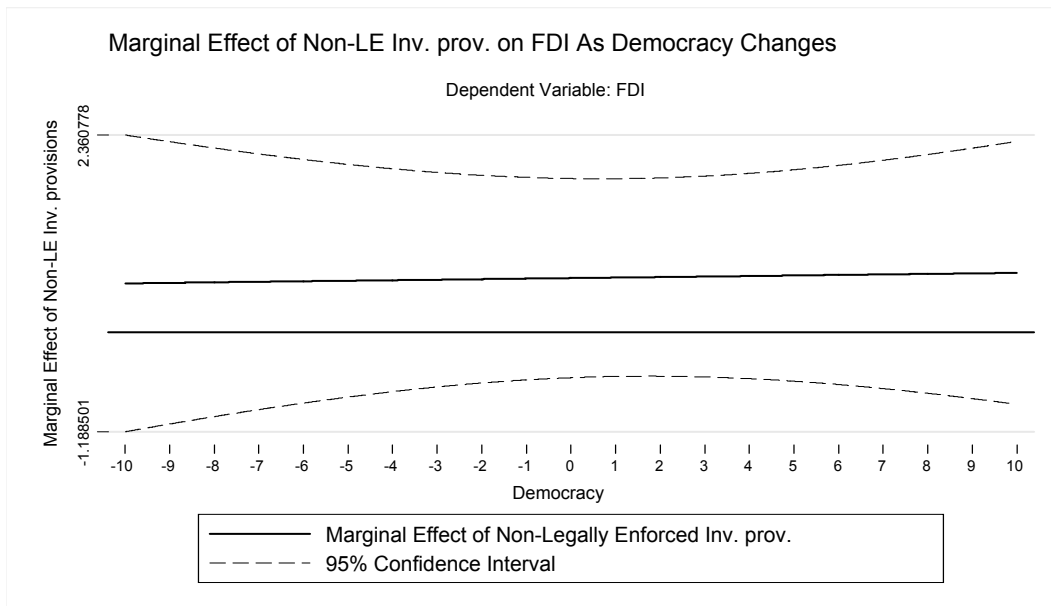


Figure 3.2b: Conditional effects of level of democracy in host developing country on the relationship between PTAs, containing non-legally enforceable investment provisions, and bilateral FDI flows

There are several outliers in interstate cooperation variable data set. There are extremely large negative as well as positive values for some of the dyads. For example, very large negative values exist between United States and Iraq or United Kingdom and Iraq during Gulf war in the years 2003 and 2004. The robustness has been tested without outliers.

Secondly, there are a large number of dyads which have not interacted for certain years in the sample and the variable therefore contains value of zero. The specifications have been controlled with the dummy variable representing no events in a given year. Table 3.6 shows these robustness tests for the cooperation variable. The Interstate cooperation variable is consistently positive and significant in explaining bilateral FDI flows. Among the different forms of cooperation, the political cooperation is significant but the economic and military cooperation are still insignificant.

Table 3.6: Robustness of the impact of cooperation variable on bilateral FDI flows

Dependent variable	FDI	FDI	FDI	FDI
	All events	Political	Economic	Military
Outliers excluded	0.21** (0.086)	0.24** (0.101)	0.26 (0.202)	0.20 (0.220)
Interactive dyads	0.29*** (0.095)	0.28*** (0.106)	0.23 (0.196)	0.15 (0.221)

Note: *, **, *** Significance at the 10, 5 and 1% level, respectively

Robust standard errors in parentheses.

All AR(1) test statistics are statistically significant at 1% level; all AR(2) test statistics are statistically insignificant. Unreported time dummies are included in each specification.

5 Concluding Remarks

Foreign Direct Investment (FDI) inflows have recently been the most persistent source of capital inflows in developing countries. This extensive growth of FDI has, consequently, given rise to competition among policy makers in developing countries. These countries pursue negotiations and incorporation of investment provisions in international trade agreements to boost foreign direct investment inflows. However, not all investment provisions contain identical level of stringency and legalization and their impact is different in attracting FDI. Legally enforceable investment provisions signal credibility of commitments. Also there is debate whether the level of democracy encourages foreign investors to invest. The goal of this paper was to explore in detail the role of heterogeneous legal dimension relating to investment provisions in international trade agreements in their role to attract FDI flows. Further, to assess the impact of domestic and international political factors on FDI.

The results maintain that the impact of PTAs, containing legally enforceable investment provisions is found to significantly increase bilateral FDI flows, rendering that they signal well the credibility of host government. However, the PTAs having non-legally enforceable investment provisions have no impact on FDI. The level of democracy of developing host country is not systematically significant in attracting FDI. Thirdly, the bilateral diplomatic cooperation has strong impact in boosting FDI rendering that the presence of political and diplomatic tensions have detrimental effects on FDI. Further, the interaction of two different types of PTAs according to investment provisions with the domestic institutions (level of democracy) and international political and diplomatic cooperation reveal some important results. Both the highly democratic political institutions and high level of interstate cooperation significantly condition the effects of PTAs with legally enforceable investment provisions on FDI and not in the case of non-legally enforceable investment provisions.

This shows that democratic regimes do care more about their commitments when they conclude PTAs ascertaining legally enforceable investment provisions. These agreements

increase the reputational cost for democratic regimes in case of renegeing from their commitments. Further the good diplomatic and political relations do also influence the effects of signing legally enforceable investment provisions.

Chapter IV

Les clauses environnementales dans les accords de libre échange. Analyse des déterminants

Chapter 4 below is excerpt from a paper published in French language, in *Mondes en Développement*, n°162-2013/2)

Introduction

La multiplication des accords de libre-échange, qui devaient à l'origine ne concerner que les projets d'intégration essentiellement régionale visés à l'article XXIV du GATT, a mis en évidence les difficultés du multilatéralisme pour aller plus avant dans la libéralisation des échanges. Ce blocage, outre d'éventuelles tentations de retour au protectionnisme, est la rançon des succès obtenus. En matière strictement tarifaire, en matière d'échanges de services, d'ouverture aux investissements directs, de propriété intellectuelle, les avancées ont été spectaculaires, au point que ce qui peut rester sur la table des négociateurs constitue le noyau dur sur lequel un accord général est de plus en plus difficile à atteindre.

En outre, la libéralisation très avancée des échanges a mis sur le devant de la scène des enjeux qui étaient peu visibles au départ du processus d'ouverture. Les barrières non-tarifaires constituent à cet égard un ensemble aux contours vagues dont l'Organisation Mondiale du Commerce (OMC) a du mal à se saisir et pour lesquels les pays membres ne montrent aucun enthousiasme à une mise sur la table de négociations multilatérales.

L'article XX du GATT, sur les possibilités d'invoquer des exceptions aux principes généraux et en particulier au principe de non-discrimination, s'est à cet égard montré décevant, comme mal adapté à la diversité des situations pouvant légitimer ces exceptions, comme imprécis et ouvrant la voie à la multiplication des contentieux dès lors qu'il y serait fait recours.

En matière d'environnement, la mise en œuvre d'exceptions fondées sur l'article XX a montré certaines limites. Les Etats-Unis en particulier ont éprouvé de sérieuses difficultés à faire accepter leur point de vue, notamment concernant la protection des espèces animales menacées (contentieux sur les restrictions à l'importation de crevettes pêchées par des méthodes mettant en péril les tortues marines, contentieux sur la pêche au thon menaçant les dauphins...).

Par ailleurs, les nombreux accords multilatéraux qui portent sur l'environnement (AME, plus de 200 à ce jour selon l'OMC, notamment CITES pour la protection des espèces en danger, pour faire référence aux cas évoqués plus haut) n'apportent pas toujours, du point de vue de certains Etats, des réponses adéquates, en raison des difficultés à aller suffisamment loin par la négociation multilatérale et même en raison de leur non ratification par certains Etats ou des menaces de retrait (protocole de Kyoto). De plus ces accords ne comportent pas toujours de volet sur le commerce autorisant l'imposition de restrictions ou de sanctions commerciales et sont à cet égard difficiles à appliquer (protocole de Kyoto).

Il n'est donc pas surprenant que les clauses environnementales constituent souvent un volet important, ou en tous cas très fréquemment présent, dans les accords de libre-échange, régionaux ou bilatéraux. Il s'agit donc d'une voie alternative pour les Etats qui souhaitent poursuivre des objectifs environnementaux ou qui sont prêts à consentir à des avancées pour lesquelles ils font l'objet de pressions. La voie bilatérale (ou plurilatérale lorsque groupes régionaux et Etats sont parties prenantes) ouvre donc des possibilités difficilement accessibles par la voie multilatérale. C'est le cas en particulier pour les exigences environnementales qui portent sur les procédés et méthodes de production (PMP), difficiles à imposer dans le cadre des règles actuelles de l'OMC (bois provenant de forêts gérées selon des règles de développement durable, produits de la pêche obtenus dans le respect de la préservation de la ressource...)

Dans un tel domaine, lorsqu'on cherche à qualifier les différentes situations, on se heurte immédiatement au problème de la très grande hétérogénéité des types d'accord, non seulement quant au nombre de participants et à leur pouvoir économique, mais aussi quant à l'étendue des accords eux mêmes, qui peut aller d'accords très partiels, limités sectoriellement par exemple, jusqu'à des accords généraux visant l'ensemble des échanges et des relations économiques des parties prenantes. Il ne faut pas à cet égard sous-estimer les difficultés à conduire une analyse qui suppose pour un traitement économétrique de pouvoir ranger des phénomènes qualitatifs dans des catégories permettant une quantification. L'existence de bases de données complètes et détaillées en matière d'accords de libre échange ouvre cependant dans ce domaine des perspectives intéressantes, même si l'on doit être conscient des limites de l'exercice.

L'Organisation Mondiale du Commerce (OMC), compile dans ce domaine des informations détaillées, mais qui ont l'inconvénient de ne concerner que les accords qui lui ont été notifiés. Or, de manière justifiée ou non, une part significative des accords n'est jamais notifiée à l'OMC, qui se contente de cet état de fait, la notification étant facultative. Il est donc préférable de se référer à la base plus large tenue à jour par la Banque

Mondiale, « *Global Preferential Trade Agreements Data Base (GPTAD)* » qui recense actuellement plus de 300 accords de libre-échange (Banque Mondiale, 2014)¹.

En utilisant cette base, il sera donc possible d'analyser les déterminants de l'introduction des clauses environnementales dans les accords de libre échange.

Trois points seront abordés. Ils seront suivis d'une conclusion:

-Pourquoi introduire des clauses environnementales dans les accords de libre-échange?

-Sources et présentation des statistiques descriptives.

-Analyse économétrique des déterminants.

1 Pourquoi négocier sur l'environnement dans les accords de libre-échange?

Les difficultés à obtenir la prise en compte des objectifs environnementaux très variés des différents Etats ou blocs régionaux dans un cadre multilatéral ont déjà été évoquées. Elles justifient à elle seules que les accords de libre-échange séparés puissent subsidiairement y pourvoir. Pour bien comprendre la motivation des négociateurs, il est cependant nécessaire d'identifier ce qui fait obstacle, dans la négociation d'accords internationaux, à la prise en compte de ces objectifs environnementaux.

La préservation de l'environnement est le plus souvent un bien public international. Sa mise en œuvre produit des effets positifs sur tout ou partie des pays, que ceux-ci aient ou non contribué financièrement à la production de ce bien public international. On a donc affaire à un classique problème de passager clandestin. On pourrait imaginer à cet égard que la négociation multilatérale, qui implique l'ensemble des pays, soit mieux à même de débusquer les passagers clandestins. Il faut cependant admettre que l'absence de mécanisme pouvant contraindre à l'accord, les règles de l'unanimité, ont de fait bloqué de

¹ voir annexe 1

nombreuses négociations portant sur des questions environnementales, associées ou non à des négociations commerciales. En outre l'OMC, si elle autorise des exceptions au libre commerce, fondées sur l'environnement, n'a jamais réussi à initier une négociation multilatérale associant commerce et protection de l'environnement, en dépit des intentions affichées dans l'accord de Marrakech de 1994, qui a institué un "*Comité pour le Commerce et l'Environnement*". Son rôle dans ce domaine relève d'avantage de l'imposition d'un respect des règles existantes que d'initiatives pour ouvrir un nouveau chapitre de ses négociations. L'hostilité marquée de certains pays face à une telle initiative n'y est pas étrangère.

Les négociations séparées, au risque d'être discriminatoires, offrent à cet égard de grands avantages et peuvent reposer sur un ensemble de motivations:

-L'expression dans la négociation de rapports de force permet aux pays puissants (à la fois par la taille et par le niveau de développement) d'obtenir des avancées, vis-à-vis de leurs interlocuteurs, dans les objectifs environnementaux qu'ils défendent, là où le multilatéralisme aboutit au blocage. Inversement, un rapport de force favorable permettrait de bloquer une négociation environnementale, mais dans ce cas le résultat serait le même que dans un cadre multilatéral. Le principe du donnant-donnant et sa variante gagnant-gagnant permettent d'obtenir certaines concessions environnementales qui sont troquées contre des avantages commerciaux. De tels accords ont en outre plus de chance de ne pas être remis en cause, en raison des capacités de représailles réciproques qu'offrent les accords de libre-échange.

Il en résulte que l'on devrait observer que les déséquilibres de taille et de niveau de développement contribuent à l'introduction de clauses environnementales. Néanmoins, des pays ou blocs commerciaux puissants de part et d'autre (et donc de tailles relativement similaires) peuvent être conduits à négocier des clauses environnementales s'ils sont rivaux et qu'une des parties considère que des différences de règles environnementales introduisent des distorsions de concurrence. Cette demande de négociation vise à éviter un nivellement par le bas, un moins disant écologique, pouvant résulter de l'exacerbation de la concurrence. Manifestement, un tel motif d'introduction de clauses environnementales

ne peut concerner que de grandes économies ou ensembles régionaux, et ce d'autant plus que les différences de niveau de développement et de système social font craindre le nivellement par le bas. La taille absolue des parties prenantes à la négociation est donc susceptible d'agir positivement sur l'introduction de clauses environnementales.

Plus généralement, les nombreux travaux sur la courbe de Kuznets environnementale ont mis en évidence les divergences d'intérêts entre pays avancés (pays du "*Nord*") et pays émergents et moins avancés (pays du "*Sud*"), divergences qui sont à l'origine du blocage des négociations multilatérales (Frankel, 2003). Les populations riches des pays avancés demandent une meilleure protection de l'environnement et comprennent bien que les politiques environnementales ne s'arrêtent pas aux frontières. Le processus démocratique qui prévaut dans ces pays permet de traduire politiquement cette exigence. Les pays émergents, quant à eux, considèrent que la prise en charge de l'environnement est susceptible de constituer un frein important à la croissance, alors même que leur stratégie de rattrapage et d'offensive concurrentielle repose en partie sur un niveau faible d'exigences environnementales. Les populations elles-mêmes expriment peu d'exigences environnementales et pèsent peu politiquement face aux lobbys industriels. Les négociations séparées, portant à la fois sur le commerce et l'environnement, apparaissent donc comme le meilleur moyen de faire avancer la conclusion d'accords environnementaux.

Là encore, l'analyse conduit à anticiper que la différence de niveau de développement (PIB/habitant) sera un déterminant important de l'introduction de clauses environnementales dans les accords de libre échange, pour remédier à l'impasse des négociations multilatérales.

- Si l'environnement est un bien public international, en raison des effets externes qui découlent de la qualité de l'environnement, ces mêmes effets externes n'ont pas une aire de diffusion identique quel que soit le type d'environnement envisagé. La protection contre les dommages des gaz à effet de serre relève d'une approche mondiale, même si tous les pays ne font pas peser des menaces identiques en termes de réchauffement climatique. Par contre certaines atteintes environnementales font peser des risques plus circonscrits

géographiquement, voire de voisinage, qui justifient pleinement des négociations régionales ou bilatérales entre pays proches (protection de l'environnement des côtes de pays partageant un même bassin maritime, gestion de l'eau de pays frontaliers, pollution de l'air transfrontalière). Il en résulte que la distance entre partenaires doit agir négativement dans l'introduction de clauses environnementales, la proximité multipliant les points d'intérêt commun en matière d'environnement.

- Un dernier motif d'introduction de clauses environnementales dans les accords de libre-échange pourrait résulter d'une recherche plus générale d'abaissement des barrières non-tarifaires, très mal prises en compte par l'OMC. Les barrières réglementaires, qui ont pu servir de rempart face au désarmement douanier, visent également des objectifs sanitaires qui sont étroitement liés aux questions environnementales (bœuf aux hormones, OGM, normes des moteurs à combustion, amiante...). Les subventions domestiques accordées aux entreprises qui respectent des règles environnementales peuvent être considérées également comme des barrières non-tarifaires, tolérées par l'OMC, mais pouvant faire l'objet de négociations dans les accords de libre échange. De même, la négociation d'un code d'investissement va naturellement de pair avec l'introduction de clauses environnementales. Le respect de l'environnement par les firmes multinationales est un objectif poursuivi par les négociateurs de codes d'investissement.

La négociation d'accords généraux et approfondis (du type Etats-Unis/Corée ou UE/Corée) est donc de nature à susciter l'introduction de clauses environnementales. Plus l'accord sera large, plus il est probable qu'il intègre des clauses environnementales, au-delà du fait même que l'environnement puisse naturellement faire partie d'un accord à visée large. Les accords partiels ont donc moins de chances d'incorporer des clauses environnementales.

Il résulte de cette discussion que les effets sont complexes et parfois ambigus.

La différence de niveau de développement semblerait favorable à l'introduction de clauses environnementales, de même que la proximité, mais la taille agit de manière

contradictoire. Il est donc nécessaire de conduire une investigation empirique pour tenter de dégager des observations significatives sur l'influence de ces diverses variables.

Une investigation empirique devrait permettre également de vérifier ou d'infirmar l'idée que l'exigence environnementale, qui s'est accrue avec le temps, s'est traduite par une incorporation de plus en plus fréquente dans les accords les plus récents.

Bien sûr, la présence ou l'absence de clauses environnementales dans un accord de libre échange traduit mal l'importance du phénomène que l'on veut observer. Une approche binaire revient à masquer les différences entre des préambules ou déclarations d'intention de pure forme et des clauses contraignantes et ayant un impact sur les flux commerciaux. Il apparaît donc nécessaire de distinguer les accords de libre-échange qui comportent des clauses contraignantes avec un *mécanisme de règlement des différends*, de ceux qui se contentent d'introduire un préambule ou un chapitre séparé sur la coopération environnementale (North American Agreement on Environmental Cooperation, NAAEC, annexé au traité de l'ALENA; accord entre les Etats-Unis et les pays méditerranéens, hors UE; accord Canada-Chili...). Il s'agit bien sûr d'informations qualitatives et distinguer entre différentes catégories de clauses environnementales comporte une part d'arbitraire, mais permet néanmoins d'approfondir l'analyse.

Une première série d'observations empiriques permettra de présenter des statistiques descriptives.

2 Sources et présentation des statistiques descriptives.

La base de données de la Banque Mondiale (GPTAD, 2012), après élimination des comptes multiples relatifs à des accords complétés ou modifiés à plusieurs reprises, permet d'identifier 295 accords en vigueur depuis 1990 et conclus jusqu'en 2010. Sur cet ensemble, 103 comportent, sous une forme ou sous une autre, des clauses environnementales, soit 34,92 % du total. Ce chiffre confirme l'importance du phénomène bien qu'il s'agisse là d'une notion large de clause environnementale, pouvant prendre par exemple la forme d'un chapitre séparé mettant en place un accord sur la coopération environnementale (ACE), sans clauses contraignantes par ailleurs.

Les accords comportant des clauses environnementales contraignantes ne sont qu'au nombre de 54, soit seulement 18,3 % du total.

Une acception encore plus étroite, ne retenant que les accords de libre-échange comportant des clauses accompagnées d'un mécanisme de règlement des différends, conduit à ne retenir que 15 observations, soit 5 % du total des accords.

Ces observations confirment la nécessité de prendre en compte les caractéristiques qualitatives des accords de libre-échange.

Tableau 4.1. *Accords de libre-échange 1990-2010 source: Banque Mondiale*

Année	Ensemble des accords	Accords contenant des clauses	Pourcentage
1990*	31	9	29.03%
1991	3	1	33.33%
1992	10	5	50.00%
1993	13	6	46.15%
1994	8	3	37.50%
1995	14	4	28.57%
1996	19	11	57.89%
1997	18	5	27.78%
1998	19	3	15.79%
1999	9	3	33.33%
2000	19	6	31.58%
2001	12	4	33.33%
2002	18	6	33.33%
2003	20	5	25.00%
2004	17	5	29.41%
2005	11	2	18.18%
2006	16	6	37.50%
2007	10	3	30.00%
2008	12	6	50.00%
2009	14	8	57.14%
2010	2	2	100.00%
Total	295	103	34.92%

* cumul des accords en vigueur en 1990

Le *tableau 4.1.* montre l'évolution, depuis 1990, du nombre de nouveaux accords conclus et de ceux comportant des clauses environnementales. Plusieurs observations s'imposent:

-contrairement à certaines idées reçues, aucune accélération du nombre d'accords conclus depuis 1990 n'est véritablement décelable, ce qui peut traduire un phénomène de saturation ou de fermeture de l'espace de négociation à mesure de la mise en place de nouveaux accords.

-le nombre de nouveaux accords comportant des clauses environnementales ne marque lui-même aucune augmentation décelable.

Il ne faut pas perdre de vue bien sûr que ces accords et leurs dispositions environnementales se cumulent d'année en année, de sorte que leurs effets en matière de libéralisation des échanges et de protection environnementale s'accroissent. Il n'y a pas forcément un paradoxe à observer cette constance et à faire état de l'importance croissante de l'environnement dans les accords de libre-échange.

Une analyse plus détaillée distinguant les différentes clauses environnementales, ne permet pas davantage d'identifier une tendance à l'accélération du phénomène d'intégration de l'environnement dans les accords de libre-échange (tableau 4.2).

Tableau 4.2 : Accords de libre-échange 1990-2010/clauses environnementales

Année	Ensemble des accords	ENV 1		ENV 2		ENV 3	
			%		%		%
1990*	31	2	6.45%	6	19.35%	1	3.23%
1991	3	1	33.33%	0	0.00%	0	0.00%
1992	10	2	20.00%	3	30.00%	0	0.00%
1993	13	4	30.77%	2	15.38%	0	0.00%
1994	8	0	0.00%	1	12.50%	2	25.00%
1995	14	3	21.43%	1	7.14%	0	0.00%
1996	19	8	42.11%	3	15.79%	0	0.00%
1997	18	3	16.67%	2	11.11%	0	0.00%
1998	19	2	10.53%	1	5.26%	0	0.00%
1999	9	2	22.22%	1	11.11%	0	0.00%
2000	19	4	21.05%	2	10.53%	0	0.00%
2001	12	2	16.67%	1	8.33%	1	8.33%
2002	18	5	27.78%	1	5.56%	0	0.00%
2003	20	3	15.00%	2	10.00%	0	0.00%
2004	17	0	0.00%	2	11.76%	3	17.65%
2005	11	1	9.09%	0	0.00%	1	9.09%
2006	16	1	6.25%	2	12.50%	3	18.75%
2007	10	2	20.00%	0	0.00%	1	10.00%
2008	12	0	0.00%	5	41.67%	1	8.33%
2009	14	3	21.43%	3	21.43%	2	14.29%
2010	2	1	50.00%	1	50.00%	0	0.00%
Total	295	49	16.61	39	13.22	15	5.08%

* cumul des accords en vigueur en 1990

ENV 1: accords contenant des références à l'environnement sans portée juridique

ENV 2: accords contenant des clauses environnementales faiblement contraignantes

ENV 3: accords contenant des clauses environnementales contraignantes et des mécanismes de résolution des différends. Source: Banque Mondiale

L'influence du niveau de développement des parties signataires sur l'incorporation de clauses environnementales est plus nette. Les accords *Nord/Sud*, avec un pourcentage d'accords comportant des clauses environnementales au sens large de 81,7 %, devancent largement les accords *Nord/Nord* (73,9 %) et *Sud/Sud* (47,4 %). Certaines conjectures avancées au point 1. trouvent une première confirmation.

Un examen plus détaillé distinguant entre les différentes formes de clauses environnementales apporte des nuances à ces résultats.

L'importance faible des clauses environnementales dans les accords *Sud/Sud* est encore accentuée, puisque seuls 11 % des accords comportent des clauses contraignantes et 2,5 % comportent des clauses contraignantes avec mécanisme de résolution des différends. Ces observations confirment la très faible place de l'environnement dans les accords négociés entre les pays moins avancés.

S'agissant des accords *Nord/Sud* et des accords *Nord/Nord*, la situation est plus nuancée. Les accords *Nord/Sud* incorporent davantage de clauses environnementales au sens large (non contraignantes et contraignantes sans mécanisme de résolution des différends), que les accords *Nord/Nord*, mais la situation est inverse pour les seuls accords contraignants comportant des mécanismes de résolution des différends, qui sont presque trois fois plus nombreux dans les accords *Nord/Nord* que dans les accords *Nord/Sud*. Cela semble confirmer le fort contenu de négociation sur les barrières non-tarifaires environnementales dans les négociations entre les grandes économies développées. L'ensemble de ces résultats est regroupé dans le tableau 4.3.

Tableau 4.3 : Accords Nord / Nord

Année	Total	Accords	%	ENV 1	%	ENV 2	%		
1990*	10	4	40.00%	1	10.00%	2	20.00%	1	10.00%
1991	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992	1	1	100.00	1	100.00	0	0.00%	0	0.00%
1993	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1994	2	2	100.00	0	0.00%	0	0.00%	2	100.00%
1995	1	1	100.00	0	0.00%	1	100.00	0	0.00%
1996	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1997	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	2	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	2	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	2	1	50.00%	0	0.00%	1	50.00%	0	0.00%
2004	2	2	100.00	0	0.00%	0	0.00%	2	100.00%
2005	2	2	100.00	1	50.00%	0	0.00%	1	50.00%
2006	2	1	50.00%	0	0.00%	1	50.00%	0	0.00%
2007	1	1	100.00	0	0.00%	0	0.00%	1	100.00%
2008	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	2	1	50.00%	1	50.00%	0	0.00%	0	0.00%
2010	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	33	16	48.48%	4	12.12%	5	15.15%	7	21.21%

* cumul des accords en vigueur en 1990

ENV 1: accords contenant des références à l'environnement sans portée juridique

ENV 2: accords contenant des clauses environnementales faiblement contraignantes

ENV 3: accords contenant des clauses environnementales contraignantes et des mécanismes de résolution des différends

Source: Banque Mondiale

Tableau 4.4 : Accords Nord / Sud

Année	Total accords	Accords avec des clauses Env. ensemble		ENV 1		ENV 2		ENV 3	
			%		%		%		%
1990*	8	3	37.50%	0	0.00%	3	37.50%	0	0.00%
1991	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992	6	4	66.67%	1	16.67%	3	50.00%	0	0.00%
1993	7	4	57.14%	2	28.57%	2	28.57%	0	0.00%
1994	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1995	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1996	6	3	50.00%	3	50.00%	0	0.00%	0	0.00%
1997	6	2	33.33%	1	16.67%	1	16.67%	0	0.00%
1998	9	1	11.11%	1	11.11%	0	0.00%	0	0.00%
1999	3	2	66.67%	1	33.33%	1	33.33%	0	0.00%
2000	11	4	36.36%	3	27.27%	1	9.09%	0	0.00%
2001	4	2	50.00%	0	0.00%	1	25.00%	1	25.00%
2002	5	3	60.00%	3	60.00%	0	0.00%	0	0.00%
2003	4	4	100.00%	3	75.00%	1	25.00%	0	0.00%
2004	3	2	66.67%	0	0.00%	1	33.33%	1	33.33%
2005	7	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	9	4	44.44%	1	11.11%	0	0.00%	3	33.33%
2007	6	2	33.33%	2	33.33%	0	0.00%	0	0.00%
2008	10	5	50.00%	0	0.00%	4	40.00%	1	10.00%
2009	10	7	70.00%	2	20.00%	3	30.00%	2	20.00%
2010	1	1	100.00%	0	0.00%	1	100.00%	0	0.00%
Total	120	53	44.17%	23	19.17%	22	18.33%	8	6.67%

* cumul des accords en vigueur en 1990

ENV 1: accords contenant des références à l'environnement sans portée juridique

ENV 2: accords contenant des clauses environnementales faiblement contraignantes

ENV 3: accords contenant des clauses environnementales contraignantes et des mécanismes de résolution des différends

Source: Banque Mondiale

Tableau 4.5 : Accords Sud / Sud

Année	Total accords	Accords avec des clauses Env. ensemble			ENV 1			ENV 2			ENV 3		
				%		%		%		%		%	
1990*	13	2	15.38%	1	7.69%	1	7.69%	0	0	0	0		
1991	2	1	50.00%	1	50.00%	0	0.00%	0	0	0	0		
1992	3	0	0.00%	0	0.00%	0	0.00%	0	0	0	0		
1993	6	2	33.33%	2	33.33%	0	0.00%	0	0	0	0		
1994	6	1	16.67%	0	0.00%	1	16.67%	0	0	0	0		
1995	9	3	33.33%	3	33.33%	0	0.00%	0	0	0	0		
1996	12	8	66.67%	5	41.67%	3	25.00%	0	0	0	0		
1997	11	3	27.27%	2	18.18%	1	9.09%	0	0	0	0		
1998	9	2	22.22%	1	11.11%	1	11.11%	0	0	0	0		
1999	6	1	16.67%	1	16.67%	0	0.00%	0	0	0	0		
2000	6	2	33.33%	1	16.67%	1	16.67%	0	0	0	0		
2001	6	2	33.33%	2	33.33%	0	0.00%	0	0	0	0		
2002	12	3	25.00%	2	16.67%	1	8.33%	0	0	0	0		
2003	14	0	0.00%	0	0.00%	0	0.00%	0	0	0	0		
2004	12	1	8.33%	0	0.00%	1	8.33%	0	0	0	0		
2005	2	0	0.00%	0	0.00%	0	0.00%	0	0	0	0		
2006	5	1	20.00%	0	0.00%	1	20.00%	0	0	0	0		
2007	3	0	0.00%	0	0.00%	0	0.00%	0	0	0	0		
2008	2	1	50.00%	0	0.00%	1	50.00%	0	0	0	0		
2009	2	0	0.00%	0	0.00%	0	0.00%	0	0	0	0		
2010	1	1	100.00%	1	100.00%	0	0.00%	0	0	0	0		
Total	142	34	23.94%	22	15.49%	12	8.45%	0	0.00%	0	0.00%		

* cumul des accords en vigueur en 1990

ENV 1: accords contenant des références à l'environnement sans portée juridique

ENV 2: accords contenant des clauses environnementales faiblement contraignantes

ENV 3: accords contenant des clauses environnementales contraignantes et des mécanismes de résolution des différends

Ces premières observations doivent être confirmées et complétées par une analyse économétrique des déterminants de l'incorporation des clauses environnementales dans les accords de libre-échange.

3 Analyse économétrique des déterminants

Les observations de la section précédente et les hypothèses théoriques de la première section suggèrent que l'introduction de clauses environnementales dans les accords de libre-échange suit une logique complexe dans laquelle les caractéristiques des partenaires à l'accord, mais aussi la nature des clauses qui ont été introduites, jouent un rôle déterminant. Pour tenter d'approfondir l'analyse descriptive, cette section propose une approche économétrique à partir d'une méthode de régression logistique visant à expliquer les facteurs qui conditionnent la probabilité que des clauses environnementales soient introduites dans des accords bilatéraux (ou plurilatéraux).

A partir des hypothèses théoriques avancées plus haut, on définit un modèle général pour lequel la variable dépendante et les variables indépendantes sont susceptibles de prendre diverses expressions. Pour une approche méthodologiquement similaire voir, par exemple, Tavernier E. & Turvey C. (2006).

Le modèle logit estimé sera donc classiquement de la forme

$$ENV = \beta_0 + \beta_1 TAILLE + \beta_2 SIMILARITE_{ijt} + \beta_3 DISTANCE_{ij} + \beta_4 DIFDEV_{ijt} + \beta_5 OMC + \beta_6 NORD/NORD + \varepsilon_{ijt}$$

Variables indépendantes

Les variables indépendantes qui seront testées pour expliquer la probabilité d'introduction de clauses environnementales (sous diverses formes) sont définies en suivant les mesures proposées par Helpman (1987), mesures très souvent reprises dans les travaux économétriques sur les politiques commerciales.

On retient donc les formes suivantes:

-Pour mesurer la taille de la paire de pays ou groupes de pays qui ont négocié un accord (**TAILLE i,j**)

$$\text{TAILLE } i,j = \log(\text{PIB}_{it} + \text{PIB}_{jt})$$

Rappelons que la taille des pays, pour l'ensemble partie à l'accord, est supposée influencer positivement l'introduction de clauses environnementales.

-La différence de taille (mesurée en fait par **SIMILARITE i,j**) a sans doute un effet plus ambigu qu'il convient d'évaluer économétriquement. On retient classiquement une mesure de similarité des tailles à savoir

$$\text{SIMILARITE}_{i,j} = \left[1 - \left(\frac{\text{PIB}_{it}}{\text{PIB}_{it} + \text{PIB}_{jt}} \right)^2 - \left(\frac{\text{PIB}_{jt}}{\text{PIB}_{it} + \text{PIB}_{jt}} \right)^2 \right]$$

Cette mesure varie entre 0 (pays de taille très dissemblable) et 0,5 (pays de taille égale).

Il conviendra donc d'observer le rôle de cette variable de contrôle classique dans l'explication du phénomène

-La variable essentielle, celle pour laquelle des hypothèses fortes nécessitent une vérification empirique, est la différence de niveau de développement (**DIFDEV i,j**).

Il s'agit en effet de tester une hypothèse importante, à savoir que la courbe de Kuznets environnementale se traduit par un blocage au niveau des négociations multilatérales entre pays avancés (Nord) et pays moins avancés ou émergents (Sud) et conduit, en conséquence, à un report sur les accords de libre-échange. Là encore on retient une mesure classique

$$DIFDEV_{i,j} = \left| \log \left(\frac{PIB_{it}}{population_{it}} \right) - \log \left(\frac{PIB_{jt}}{population_{jt}} \right) \right|$$

On s'attend donc à ce que la différence de développement favorise l'introduction de clauses environnementales (les accords de libre-échange étant à cet égard un moyen de contourner l'échec des négociations multilatérales). Toutefois une analyse distinguant selon la forme des clauses introduites sera susceptible de nuancer cette prédiction.

-La distance (**DISTANCE_{i,j}**) est par ailleurs une variable de contrôle classique, mais son statut est ici plus important puisque sa significativité, et un signe négatif, appuieraient l'hypothèse que la proximité géographique constitue un motif important pour négocier des clauses environnementales, en raison d'effets externes liés principalement à la pollution.

Cette distance (en logarithmes) entre les deux partenaires qui ont négocié un accord est donc introduite. Les données sont tirées de la base du CEPII.

-Enfin, deux variables muettes sont introduites dans tout ou partie des estimations

OMC qui prend la valeur 1 si les deux partenaires sont membres de l'OMC (ou antérieurement du GATT) et 0 dans les autres cas.

NORD/NORD qui prend la valeur 1 si les deux partenaires appartiennent au groupe des pays dits du Nord et 0 dans les autres cas.

Le but recherché par l'introduction de cette dernière variable muette est de pouvoir discriminer entre deux partenaires de niveaux de développement similaires, selon qu'ils sont tous les deux de niveau de PIB par tête élevé (Nord) ou au contraire tous les deux de niveau de développement faible, la mesure DIFDEV ne pouvant à cet égard introduire une discrimination. Or les hypothèses théoriques et l'observation des statistiques descriptives suggèrent que lorsque les deux partenaires appartiennent au groupe des pays avancés, ils sont incités à négocier des clauses environnementales, en particulier s'agissant des clauses les plus contraignantes qui prévoient des sanctions et des mécanismes de règlement des différends. A l'inverse, lorsque les deux partenaires appartiennent au groupe des pays dits du Sud, ils négocient peu sur des clauses environnementales, conformément à l'hypothèse formulée sur la variable DIFDEV.

Les données, outre le CEPII pour les mesures de distance, sont extraites des Penn World Tables (PWT) version 7.1.

Ces variables indépendantes ont été introduites dans diverses équations, selon les hypothèses testées et en particulier selon la forme de la variable dépendante.

Variable(s) dépendante(s)

Il a été en effet souligné que la notion de clause environnementale est très qualitative et peut regrouper aussi bien une référence de pure forme à l'environnement dans l'accord commercial, sans qu'il n'y soit associé la moindre contrainte, ou peut faire référence, à des degrés divers, à des clauses, ou chapitres séparés, plus ou moins contraignants et associés à des sanctions et/ou à des mécanismes de règlement des différends. C'est pourquoi il a été jugé utile d'envisager plusieurs catégories de variables dépendantes selon l'importance des clauses environnementales figurant dans les accords de libre échange.

Un examen détaillé de chacun des accords contenant des clauses environnementales a conduit à les ranger dans trois catégories (la base de données a été construite en conséquence).

ENV 1 qui se rapporte aux accords dans lesquels, sous une forme de préambule, de chapitre séparé ou autre, la référence à l'environnement est formelle et n'est associée à aucune clause contraignante et donc à aucun mécanisme de sanction, ni de règlement des différends.

ENV 2 qui constitue un degré plus approfondi dans l'introduction de clauses environnementales, avec des articles séparés, mais articles incitatifs et modérément contraignants.

ENV 3 qui ne concerne que les accords comportant des clauses environnementales contraignantes et où les exigences en matière de protection de l'environnement sont particulièrement strictes, avec un mécanisme de règlement des différends.

A partir de ces trois catégories d'accords avec clauses environnementales, et pour les besoins de l'analyse, on construit et on utilise successivement les variables dépendantes suivantes:

ENV = ENV 1 + ENV 2 + ENV 3 il s'agit donc d'identifier les accords de libre-échange qui introduisent des clauses environnementales au sens large.

ENV* = ENV 1 + ENV 2 avec cette catégorie, on identifie l'ensemble des accords qui comportent des clauses non-contraignantes ou faiblement contraignantes (clauses environnementales *faibles*)

ENV** correspond à la catégorie ENV 3 définie plus haut et constitue le complément de ENV*. Il s'agit donc exclusivement des accords avec clauses environnementales *fortes*.

Plusieurs catégories de régressions seront estimées successivement et sont regroupées dans le *tableau 4.7* (variable dépendante = **ENV**), le *tableau 4.8* (variable dépendante = **ENV***), le *tableau 4.9* (variables dépendantes ENV 1 et ENV 2).

Le *tableau 4.10* présentera les résultats sur l'échantillon des accords avec clauses environnementales fortes (ENV**).

Les statistiques descriptives sur l'ensembles des observations sont regroupées dans le *tableau 4.6*

Tableau 4.6: Statistiques descriptives

Variables	Observations	Moyenne	Ecart	Min	Max
ENV (total)	396306	.05	.213	0	1
ENV 1	396306	.01	.113	0	1
ENV 2	396306	.01	.099	0	1
ENV*	396306	.02	.150	0	1
ENV **	396306	.03	.155	0	1
TAILLE i,j	330271	10.99	2.03	4.57	16.59
SIMILARITE i,j	330271	-2.38	1.72	-11.53	-.69
DISTANCE (log)	379582	8.78	.76	4.11	9.89
OMC (dum)	396306	.47	.50	0	1
DIFDEV i,j	330271	1.85	1.32	0	6.75
NORD/NORD	396306	.06	.24	0	1

La variable dépendante étant dichotomique, les estimations sont effectuées par un modèle logit. La significativité est testée à partir de la robustesse des erreurs types pour tenir compte de l'hétéroscedasticité éventuelle dans les données.

4 Résultats

Une première série d'estimations (*tableau 4.7*) donne un aperçu général de l'influence des différentes variables explicatives sur l'introduction de clauses environnementales, au sens large (ENV), dans les accords de libre échange.

La régression (2) met en évidence que la différence de niveau de développement agit négativement sur la probabilité d'introduction de clauses environnementales contrairement aux prédictions. Pour toutes les autres variables les signes correspondent à ce qui était

attendu. Outre la différence de niveau de développement, la taille, la distance et la variable muette OMC sont significatives dans les trois estimations.

Il est à remarquer que la similarité est significative et positive, bien qu'aucune prédiction théorique n'ait indiqué a priori le signe que devait prendre cette variable.

La variable NORD/NORD, introduite dans la régression (3) est elle aussi significative et positive, ce qui s'interprète comme le fait que les pays avancés, dont les différences de niveau de développement sont par définition faibles, ont au surplus une forte probabilité de négocier des clauses environnementales. On a souligné précédemment que la recherche de l'élimination des barrières non-tarifaires pouvait expliquer cette observation.

Tableau 4.7: Modèle logit d'estimation des probabilités d'introduction des clauses environnementales (ENV ensemble)

Variable	ENV		
	(1)	(2)	(3)
Variables			
TAILLE	0.173*** (0.0194)	0.176*** (0.0192)	0.0662*** (0.0224)
SIMILARITE	0.243*** (0.0248)	0.208*** (0.0251)	0.138*** (0.0264)
DISTANCE (Log)	-1.510*** (0.0347)	-1.461*** (0.0347)	-1.393*** (0.0347)
DIFDEV		-0.182*** (0.0259)	-0.131*** (0.0261)
NORD/NORD			1.103*** (0.0912)
OMC	1.032*** (0.0715)	1.012*** (0.0713)	0.980*** (0.0724)
Constante	7.564*** (0.338)	7.370*** (0.334)	7.669*** (0.338)
N	326675	326675	326675
Nombre de paires	18424	18424	18424
Log Pseudo	-48431.48	-48166.53	-47265.607
Pseudo R ²	0.2786	0.2825	0.2959

Les erreurs types sont robustes et agrégées au niveau des paires (dyades).

*** p<0.01, ** p<0.05, * p<0.1

Ces résultats exploratoires, et sans doute contre-intuitifs en ce qui concerne l'influence de la différence de niveau de développement, peuvent être affinés en tenant compte des différents types de clauses environnementales.

Le *tableau 4.8* reprend les mêmes estimations, mais pour la catégorie de clauses environnementales ENV*, qui correspond aux seules clauses non-contraignantes ou faiblement contraignantes (ENV 1 + ENV 2).

On observe que les résultats ne sont pas significativement modifiés, hormis l'influence de la différence de niveau de développement qui devient positive et significative à 10% dans l'estimation (2).

Tableau 4.8 : Modèle logit d'estimation des probabilités d'introduction des clauses environnementales (ENV* clauses faibles)

Variable dépendante	ENV*		
	(1)	(2)	(3)
Variables			
TAILLE	0.228*** (0.0221)	0.228*** (0.0222)	0.251*** (0.0264)
SIMILARITE	0.275*** (0.0330)	0.287*** (0.0347)	0.303*** (0.0358)
DISTANCE (Log)	-1.170*** (0.0364)	-1.186*** (0.0392)	-1.207*** (0.0411)
DIFDEV		0.0523* (0.0322)	0.0411 (0.0332)
NORD/NORD			-0.267* (0.141)
OMC	0.498*** (0.0884)	0.506*** (0.0880)	0.519*** (0.0872)
Constante	3.811*** (0.368)	3.869*** (0.373)	3.850*** (0.372)
N	326675	326675	326675
Nombre de paires de	18424	18424	18424
Log Pseudo	-31681.92	-31668.48	-31641.19
Pseudo R ²	0.1859	0.1863	0.1870

Les erreurs types sont robustes et agrégées au niveau des paires (dyades).

*** p<0.01, ** p<0.05, * p<0.1

La régression (3), qui introduit la variable muette NORD/NORD, retrouve le signe négatif pour l'influence du niveau de développement. Ce résultat suggère une forte hétérogénéité entre les sous-échantillons ENV 1, ENV 2 et ENV 3 et conduit à approfondir l'analyse avant de proposer une interprétation.

Le *tableau 4.9* propose en conséquence des estimations séparées pour chacun des sous-échantillons ENV 1 et ENV 2.

Tableau 4.9 : Modèle logit d'estimation des probabilités d'introduction des clauses environnementales (décomposition de ENV* en ENV 1 et ENV 2)

Variable dépendante	ENV 1		ENV 2	
	(1)	(2)	(1)	(2)
TAILLE	0.277*** (0.0258)	0.350*** (0.0308)	0.146*** (0.0319)	0.0893** (0.0413)
SIMILARITE	0.304*** (0.0419)	0.337*** (0.0452)	0.217*** (0.0490)	0.228*** (0.0560)
DISTANCE (Log)	-1.007*** (0.0455)	-1.058*** (0.0502)	-1.203*** (0.0423)	-1.243*** (0.0513)
DIFDEV		-0.102** (0.0470)		0.240*** (0.0437)
NORD/NORD		-1.031*** (0.214)		0.579*** (0.179)
OMC	-0.131 (0.108)	-0.0772 (0.108)	1.445*** (0.170)	1.460*** (0.168)
Constante	1.770*** (0.481)	1.675*** (0.469)	3.274*** (0.465)	3.715*** (0.489)
N	326675	326675	326675	326675
Nombre de paires de	18424	18424	18424	18424
Log Pseudo	-21188.62	-20969.99	-16057.03	-15889.11
Pseudo R ²	0.1344	0.1433	0.2065	0.2148

Les erreurs types sont robustes et agrégées au niveau des paires (dyades)

*** p<0.01, ** p<0.05, * p<0.1

Les résultats complètent et éclairent les estimations précédentes. Ils confirment la significativité de toutes les variables testées précédemment, mais apportent également des indications très importantes sur le signe de la variable qui mesure la différence de niveau de développement. Le signe de cette variable devient positif avec une significativité à 1% pour le sous-échantillon ENV 2, régression (2).

Ce résultat va dans le sens des hypothèses théoriques et des premières observations sur les tableaux de statistiques descriptives de la section 2 qui suggéraient que les négociations entre pays (ou groupes de pays) avancés et les pays moins avancés se portaient essentiellement sur des clauses incitatives et des engagements relativement forts, alors même que les clauses les plus contraignantes sont rejetées par les pays moins avancés et plus particulièrement par les pays émergents.

C'est donc à ce niveau intermédiaire que se situent les négociations Nord/Sud sur l'environnement, ce qui apparaît bien comme un moyen pour les pays avancés de palier le blocage de l'OMC, notamment sur les questions environnementales et le peu de résultats des accords multilatéraux sur l'environnement (AME). Ce processus peut être le moteur de réformes dans les pays du Sud et accélérer la prise en compte des impératifs environnementaux.

Restent à examiner les déterminants des accords les plus approfondis (ENV**). Les statistiques descriptives suggéraient un modèle très différent, dans lequel en particulier l'appartenance des deux partenaires à la négociation au groupe des pays du Nord est essentielle. Cette intuition est confirmée par la significativité de la variable muette NORD/NORD.

Il se confirme que la négociation de clauses environnementales très contraignantes dans des accords de libre-échange, qui reste par ailleurs très limitée, concerne presque exclusivement les relations entre les pays les plus avancés.

Il faut souligner un résultat important. Lorsqu'on contrôle la régression par la variable muette NORD/NORD, non seulement cette variable est très significative, comme souligné plus haut, mais il apparaît que les variables TAILLE et SIMILARITE, qui restent significatives, changent de signe, cf. régression (3). Autrement dit les accords Nord/Nord qui comportent des clauses environnementales contraignantes obéissent à un modèle différent, dans lequel la taille globale des partenaires et la similarité ne sont plus des facteurs qui agissent dans le même sens que dans le modèle général.

Dès lors qu'il s'agit de pays avancés, les pays de petite taille ou les paires de pays dissimilaires ont des probabilités fortes d'introduire des clauses environnementales dans leurs accords commerciaux (on peut penser, à titre d'exemple, aux pays de l'AELE).

Tableau 4.10 : Modèle logit d'estimation des probabilités d'introduction des clauses environnementales (ENV** clauses fortes)

Variable dépendante	ENV**		
	(1)	(2)	(3)
TAILLE	0.0798*** (0.0276)	0.0828*** (0.0263)	-0.182*** (0.0284)
SIMILARITE	0.164*** (0.0335)	0.0918*** (0.0321)	-0.0861** (0.0345)
DISTANCE (Log)	-1.401*** (0.0389)	-1.300*** (0.0377)	-1.199*** (0.0393)
DIFDEV		-0.416*** (0.0423)	-0.330*** (0.0423)
NORD/NORD			2.053*** (0.100)
OMC	1.333*** (0.107)	1.294*** (0.106)	1.299*** (0.113)
Constante	6.530*** (0.460)	6.162*** (0.448)	7.344*** (0.467)
N	326675	326675	326675
Nombre de paires de partenaires	18424	18424	18424
Log Pseudo Vraisemblance	-30055.68	-29410.90	-27521.94
Pseudo R ²	0.2542	0.2702	0.3171

Les erreurs types sont robustes et agrégées au niveau des paires (dyades)

*** p<0.01, ** p<0.05, * p<0.1

5 Conclusion

La négociation de clauses environnementales dans les accords de libre-échange, qui dérogent aux principes de non-discrimination, constitue une voie alternative, alors que les négociations multilatérales de l'OMC et les accords multilatéraux sur l'environnement (AME) ne parviennent pas à atteindre leurs objectifs. Cette voie présente, il est vrai, bien des écueils qui ont été souvent soulignés. En matière d'environnement, comme en matière de clauses commerciales, la voie bilatérale superpose des règles complexes jusqu'à rendre l'ensemble des objectifs difficiles à discerner. Néanmoins la multiplication des accords avec clauses environnementales a contribué à des avancées significatives, là où la voie multilatérale marque le pas.

L'étude empirique qui a été conduite a permis de mettre en évidence des résultats importants qui permettent d'appréhender dans le détail les déterminants de l'introduction de ces clauses.

Il est confirmé, d'une manière générale, que la taille globale des négociateurs favorise l'introduction de telles clauses, de même que l'équilibre entre les tailles des partenaires, bien que ces deux facteurs explicatifs soient moins pertinents pour les accords approfondis conclus entre partenaires d'économies avancées.

L'effet négatif de la distance sur l'introduction de clauses environnementales souligne que nombre d'enjeux environnementaux concernent des effets externes de proximité, même si certaines dégradations environnementales ont une diffusion planétaire.

Le point le plus important, relatif aux déterminants de l'introduction de clauses environnementales, porte sur l'influence de la différence de niveau de développement entre les partenaires à l'accord. D'une manière générale, cette influence n'est pas confirmée, mais lorsqu'on fait porter l'analyse sur les seules clauses environnementales incitatives et modérément contraignantes, l'influence de cette différence est très significative. Cela confirme que l'instrument des accords de libre-échange est un moyen, utilisé sans doute par les pays développés, pour conduire les pays moins avancés et

émergents à s'engager dans la voie d'une prise en compte des impératifs environnementaux.

Si d'autres analyses confirmaient ces résultats, cela pourrait conduire à réévaluer positivement cette forme de négociation internationale.

General Conclusion

The four chapters of this thesis can be understood independently. Still, they obey to a common logic. They investigate the various dimensions of all interstate economic agreements which are not concluded in a multilateral framework. Most of these come under the heading of Preferential Trade Agreements, even though they may encompass issues that are much wider than mere trade. As it was discussed in the introduction, the spreading of these PTAs cannot be interpreted as a sort of exception to the operation of multilateral mechanisms. Initially, they might have been just tolerated (GATT art. XXIV), but recent experience shows that now they are at the initiative to promote international economic and political cooperation, even though they might also serve as an instrument of confrontation.

A long rearguard battle has been fought by supposedly orthodox theoreticians, defending the legacy running from David Ricardo to the elegant corpus developed from the HOS theorem. Academic research has put forward an important issue which is the benefits that can be expected from the development of trade in a welfare perspective. Thousands of articles and essays have been written in this vein, most of them concluding on the superiority of universal free trade achieved progressively by eliminating discrimination and by favoring multilateral agreements. Unfortunately, they were too often based on unrealistic assumptions and could not convince beyond the narrow circle of theoreticians. The heart of the problem lies in the reluctance of these theoreticians to assume that the real world is not one of perfect competition, where optimum is automatically attained. A new trend in international economics is determined to cope with the challenge of imperfect competition, where everything is more complex, but first of all inequality of power becomes the rule, whether we consider interaction between firms or interaction between states and also maybe between firms and states.

This complexity means that no clear-cut demonstration on the issues, such as the superiority of multilateralism over bilateralism, can be achieved. There is obviously ample room for empirical research to have a realistic view. This is the justification of the approach which has been chosen. Anyway, a realistic approach cannot concentrate on what states should do and ignore what they persistently do. The spreading of PTAs is a fact of life and even if it were demonstrated that this violates welfare theorems, it deserves to be studied as such. A full understanding of the logic of PTAs implies that, beyond the economics of welfare, the economics of power be given its proper place, as advocated by A. O. Hirschman.

In the **first chapter**, the long debated issue on welfare gains, achieved respectively by multilateralism or discriminatory arrangements, is revisited. As pointed out, it had to be settled empirically. What has been proposed is to go further, in terms of methodological approach, to take into account more accurately the complex phenomena coming from the heterogeneity among all the types of agreements. All PTAs cannot be considered as identical items of a common data set, to be part of an econometric model. The added value of this chapter has been to go inside each PTA, to distinguish, among other things, their degree of enforceability (legalism) and the scope they cover, going sometime far beyond traditional trade liberalization. The ambition was to build on recent advances of econometrics with qualitative variables to attain more convincing results.

This more detailed approach gives unambiguous results. Contrary to the repeated warnings of theoreticians led by J. Bhagwati, in no way it is established that PTAs have a negative impact on trade, the level of trade being considered implicitly as a proxy of welfare. Yet the advantage of the method adopted was to point out specific cases, or more precisely clauses within agreements, the impact of which on trade is insignificant.

Concerning the legal design of PTAs, it was shown that enforceability is an important factor and that PTAs with highly legalistic designs are more favorable to the development of trade than loose arrangements.

As for the scope of PTAs, it was possible to show that most areas of negotiations have a positive and heterogeneous impact on trade, giving a more robust basis to previous investigations. This detailed approach allowed the identification of specific areas of negotiation for which the positive effect is not confirmed, such is the case for clauses related to competition policy and capital mobility. It is important to point out in this context that, contrary to common wisdom, adoption of environmental clauses has a positive and significant impact on trade. These results have obviously important policy implications and should influence governments and public opinion attitude towards free trade agreements.

Chapter 2 had an ambitious goal. It was to go beyond the traditional academic debate focusing on welfare issues. A tribute to realism cannot neglect the fact that governments, by signing agreements, have also, and maybe primary, political objectives, completely distinct and possibly antagonistic to welfare issues. These political objectives result from the fact that countries, remaining sovereign in principle, are confronted to strategic dilemma, to inequalities of power between nations infringing their de facto sovereignty. The pursuit of national interest which remains the ultimate goal of governments has its own logic made of alliances and confrontation. It is therefore important to investigate this hidden face of trade agreements. It has to be admitted that they are also instruments of power.

Needless to say that an empirical approach taking into account the complexity and the heterogeneity among PTAs was more appropriate for that purpose than less detailed investigations assuming that all agreements are alike.

The question was, are PTAs good instruments to prevent conflicts, to contribute to security and to sustain objectives of foreign policy.

The methodology which has been adopted in this chapter was to try to identify empirically the relationship between the conclusion of PTAs and the occurrence of conflicts and eventually of warfare. As expected, results drew a complex picture of the interaction

between the legal design of PTAs and the propensity for states to engage in disputes, sanctions and ultimately into war.

Contrary to the claims of the so-called realists, it appeared that institutional mechanisms within PTAs (Dispute Settlement Mechanisms) do matter as incentives to prevent escalation of conflicts.

Econometric investigation established that medium level dispute settlement mechanisms (non-binding third-party review) are efficient to resolve disputes and to avoid military conflicts. Still, it does not necessarily comfort the point of view of the liberals who believe that the rule of law should always be put forward as the best mean to prevent violent conflicts. An important result of this chapter was to show that highly legalistic PTAs, with strongly binding instruments have no significant effects on the prevention of military conflicts (contrary to medium level DSMs).

The **third chapter** analyzed the effects of investment provisions negotiated in PTAs on flows of FDI. Indeed, not all PTAs contain mechanisms for regulating or enforcing investor's rights. For those who do, levels of legalism and enforceability may vary. The question was therefore to identify the influence of the design of PTAs, especially when they include investment chapters, on the development of foreign direct investment. The methodology adopted had in common with the other chapters to underline qualitative differences among PTAs. Important and significant results could be put forward in this general conclusion. In the context of investment clauses, it appeared that strong enforceability contributes positively to the development of FDI. On the contrary, mere declarations of intentions to promote FDI have no impact on foreign investment. Another important result was to show that the effect of binding investment clauses is significantly conditioned by the quality of domestic institutions of the host country and, generally speaking, by the level of democracy. Even though, these results are not contrary to common intuition, this chapter may contribute, by the more detailed methodology adopted, to settle some debates on the ambiguous relationship between democracy and foreign direct investment.

The **last chapter** tried to venture in a new territory where many things are still to be investigated. The consciousness of vital environmental issues is progressively penetrating international politics, but has to face strong obstacles. Needless to say that many hopes that have been put on multilateral forums have been deceived. So, a new subject emerged, as an ironical parallel with the debate on how to achieve the goal of free trade, on the way to attain objectives of sustainable growth based on preservation of environment. The recent inclusion of environment related chapters in preferential trade agreements suggests that it is seriously considered as an alternative way, or at least complementary to multilateral forums, to attain environmental goals. This chapter has consequently tried to identify the characteristics of countries which drive states to enlarge the scope of PTAs they are negotiating to environmental issues for which they have direct interest. The more significant result was to show that in North-South type of PTAs, the dominant pattern is to include environmental clauses with a medium level of enforceability, as opposed to North-North type of PTAs where strong enforceability dominates. The interpretation of these results is probably of interest to understand the stalemate of multilateral negotiations because of antagonistic interests between developed and developing countries in matters of environment. It was confirmed that, generally, developing countries are reluctant to engage in agreements (whether multilateral or bilateral), which impose strong constraints on their domestic policies and which they interpret as detrimental to their competitiveness. So, it is not surprising that the results of chapter 4 show that developing countries resign themselves to engage in agreements including environmental clauses with medium levels of enforceability. They might have preferred to completely avoid entering discussions on environmental issues, but they finally gave way in a “give and take” process, where concessions on environment were traded, in the global package of PTAs, against commercial advantages. Once again, it shows that preferential trade agreements can prove to be efficient to attain desirable objectives, where multilateral has not yet brought sufficient results.

As a conclusion within the conclusion, it has to be noted that the balance between multilateralism and preferential agreements is tilted in favor of the latter. Preferential agreements do not appear as detrimental to the attainment of the goal of trade expansion,

as it was supposed in the past. They cannot be discarded as unnecessary instruments of political cooperation between states. On the issue of sovereignty, they often appear as a second best solution, since PTAs are, in the end, adopted when they are not contrary to national interest. The rule of an international law, as promoted by international institutions (UN, WTO) has probably regressed since it was established just after World War II. The growing role of preferential agreements has probably to do with this reshaping of international political relations, with no ordinate structure organized from the hegemony of the US. In the absence of clear leadership, there is not much room for multilateral institutions, even though they might have been considered as desirable in theoretical debates among economists.

There is no question on the relevance of Jagdish Bhagwati plea in favor of a world where welfare would be the one and only reference for economists attached to rational behavior. There is no question on the technical achievement of this current of thought, but it has to be recognized that the message it conveys is more the reflection of a world economic order in which hopes have been put to subordinate politics to economic rationality. World has changed and politics, if it ever disappeared, is back in the front stage.

The surge of PTAs is not just the result of a pragmatic approach to attain economic goals, it is also the outcome of important changes in the international economic and political order, where commercial policy recovers its legitimacy as an essential attribute of sovereignty.

Why is it that China has recently been negotiating more than 30 preferential trade agreements¹ with potential partners all around the world? Has it nothing to do with a fundamental reshaping of the world economic and political order?

Why is it that China and EU are competing to attract in their sphere of influence countries belonging to the Gulf Cooperation Council (GCC) and essential for the procurement of energy resources?

¹ Gao (2011) qualifies China's policy as a "political battle in the name of trade".

Is the difficult negotiation of a free trade agreement between EU and US (TTIP) a mere question of increasing the efficiency of their economic structures, or has it to do with an attempt to maintain (or to restore) a balance between dominant powers?

Preferential trade agreements may just be the sign of a new logic in international economic and political relations.

Appendix 1: Details of specific provisions and Dispute Settlement Mechanisms in PTAs

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EC (Treaty of Rome)	1958		✓	✓	✓	✓			✓		
EFTA	1960			✓			✓			✓	✓
EFTA Accession of Iceland	1970			✓			✓			✓	✓
EC - Malta	1971			✓				✓			
EC - OCT	1971		✓	✓	✓	✓	✓			✓	✓
CARICOM	1973		✓	✓			✓			✓	
Costa Rica - Panama	1973		✓	✓			✓				
EC - Cyprus	1973	2004		✓				✓			

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EC - Iceland	1973	1994		✓			✓				
EC - Norway	1973						✓				
EC - Switzerland and Liechtenstein	1973			✓			✓				
EC (9) Enlargement	1973		✓	✓	✓	✓			✓		
MRU	1973						✓				
PTN	1973						✓				
EC - Algeria	1976		✓	✓	✓	✓		✓		✓	✓
(PATCRA	1977			✓	✓		✓			✓	✓
EC - Egypt	1977		✓				✓			✓	
EC - Syria	1977		✓				✓			✓	
EC (10) Enlargement	1981								✓		
India - Maldives	1981						✓				
LAIA	1981		✓				✓			✓	
SPARTECA	1981						✓				
GCC	1982		✓				✓			✓	
ANZCERTA	1983		✓				✓				

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
China - India	1984						✓				
United States - Israel	1985		✓				✓			✓	
EC (12) Enlargement	1986		✓	✓	✓	✓			✓	✓	✓
Andean Community	1988		✓	✓					✓	✓	
Arab Maghreb Union	1989		✓				✓				
GSTP	1989						✓				
CACM	1990		✓	✓	✓	✓			✓		
EC - Andorra	1991						✓				
India - Nepal	1991		✓	✓			✓				
MERCOSUR*	1991		✓	✓				✓			
ASEAN (AFTA)*	1992		✓				✓				
Czech Republic - Slovakia	1992	2004	✓	✓				✓			
EC - Czech Republic	1992	2004	✓	✓	✓	✓		✓		✓	✓
EC - Hungary	1992	2004	✓	✓	✓	✓		✓		✓	✓
EC - Poland	1992	2004	✓	✓		✓		✓		✓	✓
EC - Slovakia	1992	2004	✓	✓	✓	✓		✓		✓	✓
ECO	1992		✓				✓				

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EFTA - Czech Republic	1992	2004		✓			✓			✓	
EFTA - Turkey	1992			✓			✓				
EFTA - Slovak Republic	1992	2004		✓			✓			✓	
Armenia - Russia	1993		✓					✓			
CARICOM - Venezuela	1993		✓				✓			✓	
Chile - Venezuela	1993		✓					✓		✓	
EC - Bulgaria	1993	2007	✓	✓	✓	✓	✓			✓	✓
EC - Romania	1993	2004	✓	✓	✓	✓		✓		✓	✓
ECCAS	1993		✓						✓	✓	
ECOWAS	1993		✓						✓		
EFTA - Bulgaria	1993	2007		✓				✓			
EFTA - Hungary	1993	2004		✓			✓				
EFTA - Israel	1993			✓				✓		✓	
EFTA - Poland	1993	2004		✓			✓			✓	
EFTA - Romania	1993	2007		✓			✓			✓	
Kyrgyzstan - Russia	1993		✓	✓			✓				
CEFTA	1994	2004		✓			✓			✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
COMESA	1994		✓	✓	✓	✓			✓	✓	✓
CIS	1994		✓						✓		
EEA	1994		✓	✓	✓	✓	✓			✓	✓
Georgia - Russia	1994		✓				✓				
Melanesian Spearhead Group	1994		✓				✓				
NAFTA	1994		✓		✓	✓		✓		✓	✓
Russia - Ukraine	1994		✓				✓				
Armenia - Kyrgyz	1995		✓				✓				
Armenia - Moldova	1995							✓			
Bolivia - Chile	1995		✓					✓		✓	✓
CARICOM - Colombia	1995						✓			✓	
Costa Rica - Mexico	1995		✓					✓		✓	✓
EC - Estonia	1995	2004	✓	✓				✓			
EC - Latvia	1995	2004	✓	✓				✓			
EC - Lithuania	1995	2004	✓	✓				✓			
EC (15) Enlargement	1995		✓	✓	✓				✓		

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EFTA - Slovenia	1995	2004		✓				✓		✓	
Kazakhstan - Kyrgyzstan	1995			✓				✓		✓	
Moldova - Romania	1995						✓				
SAPTA	1995						✓				
Turkmenistan - Ukraine	1995		✓	✓			✓			✓	
Armenia - Turkmenistan	1996		✓					✓		✓	
Armenia - Ukraine	1996						✓			✓	
Azerbaijan - Georgia	1996		✓				✓			✓	
Azerbaijan - Ukraine	1996		✓	✓		✓	✓				
Croatia - FYROM	1996	2003		✓			✓				
Czech Republic - Estonia	1996	2004	✓	✓			✓				
Czech Republic - Israel	1996	2004	✓	✓				✓			
Czech Republic - Latvia	1996	2004	✓	✓			✓				
Czech Republic - Lithuania	1996	2004	✓	✓			✓				
EC - Turkey	1996			✓				✓			
EFTA - Estonia	1996	2004		✓				✓			
EFTA - Latvia	1996	2004		✓				✓			

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EFTA - Lithuania	1996	2004		✓				✓		✓	✓
Estonia - Ukraine	1996	2004					✓				
Georgia - Ukraine	1996				✓		✓				
Kyrgyzstan - Moldova	1996			✓				✓			
Latvia - Slovenia	1996			✓			✓			✓	
Slovenia - FYROM	1996			✓	✓		✓				
Ukraine - Uzbekistan	1996		✓	✓	✓		✓				
Armenia-Iran	1997						✓				
Canada - Chile	1997		✓	✓	✓	✓		✓		✓	✓
Canada - Israel	1997		✓	✓				✓			
CEFTA Accession of Romania	1997	2007		✓			✓			✓	
Chile - China	1997		✓		✓			✓		✓	
Czech Republic - Turkey	1997	2004	✓	✓			✓				
EC - Faroe Islands	1997						✓				
EC - Slovenia	1997	2004	✓	✓				✓		✓	✓
Estonia - Slovenia	1997	2004	✓	✓			✓			✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EAEC	1997								✓		
Israel - Slovak Republic	1997		✓	✓				✓			
Israel - Turkey	1997		✓	✓				✓		✓	
Latvia - Slovak Republic	1997		✓	✓			✓				
Lithuania - Poland	1997			✓			✓			✓	
Lithuania - Slovakia	1997		✓	✓			✓				
Lithuania - Slovenia	1997		✓	✓			✓				
MERCOSUR - Bolivia	1997		✓					✓		✓	
Turkey - Israel	1997		✓	✓				✓			
Armenia - Georgia	1998						✓				
EC - Tunisia	1998		✓	✓		✓	✓			✓	✓
Estonia - Hungary	1998	2004	✓	✓			✓				
Estonia - Slovak Republic	1998	2004	✓	✓			✓				
Estonia - Turkey	1998	2004	✓	✓			✓			✓	
Hungary - Israel	1998		✓	✓			✓				
Hungary - Turkey	1998		✓	✓			✓				
Israel - Poland	1998		✓	✓				✓			

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Israel - Slovenia	1998		✓	✓			✓				
Kazakhstan - Ukraine	1998		✓	✓	✓		✓				
Kyrgyzstan - Ukraine	1998			✓			✓				
Kyrgyzstan - Uzbekistan	1998		✓	✓			✓				
Lithuania - Turkey	1998		✓	✓			✓			✓	
MERCOSUR - Andean Community	1998						✓				
Mexico - Nicaragua	1998		✓				✓			✓	✓
PAFTA	1998						✓				
Romania - Turkey	1998		✓	✓			✓			✓	
Slovak Republic - Turkey	1998		✓	✓			✓				
United States - Albania	1998		✓				✓			✓	
Bulgaria - Turkey	1999	2007	✓	✓			✓			✓	
CARICOM - Dominican Republic	1999		✓				✓			✓	
CEFTA Accession of Bulgaria	1999	2007		✓			✓			✓	
Chile - Mexico	1999		✓	✓	✓			✓		✓	✓

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Croatia - Slovenia	1999	2003	✓	✓			✓			✓	
EFTA - Morocco	1999			✓				✓		✓	
Egypt - Jordan	1999						✓				
Georgia - Kazakhstan	1999		✓				✓				
Latvia - Poland	1999			✓			✓			✓	
Bulgaria - Macedonia	2000	2006		✓			✓				
EAC	2000		✓		✓				✓	✓	
EC - Israel	2000		✓	✓	✓	✓		✓		✓	
EC - Mexico	2000		✓	✓				✓		✓	
EC - Morocco	2000		✓	✓		✓	✓			✓	✓
EC - South Africa	2000		✓	✓			✓			✓	
FYROM - Turkey	2000			✓			✓				
Georgia - Turkmenistan	2000		✓					✓			
Guatemala - Mexico	2000							✓		✓	✓
Honduras - Mexico	2000							✓		✓	✓
Hungary - Latvia	2000		✓	✓			✓				

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Hungary - Lithuania	2000		✓	✓			✓				
Israel - Mexico	2000		✓	✓			✓				
Latvia - Turkey	2000		✓	✓			✓				
MERCOSUR - Chile	2000						✓			✓	
Poland - Turkey	2000		✓	✓			✓			✓	
SADC	2000			✓					✓	✓	
Slovenia - Turkey	2000		✓	✓			✓				
WAEMU	2000								✓		
Armenia - Kazakhstan	2001						✓				
Bulgaria - Lithuania	2001	2004	✓	✓			✓				
CARICOM - Cuba	2001						✓			✓	
EC - FYROM	2001		✓	✓	✓	✓	✓			✓	✓
EFTA - Macedonia	2001			✓				✓		✓	
EFTA - Mexico	2001		✓	✓				✓		✓	✓
India - Sri Lanka	2001		✓					✓			
Israel - Romania	2001	2007	✓	✓				✓			
Jordan - Syria	2001		✓				✓			✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
New Zealand-Singapore	2001		✓	✓				✓		✓	✓
United States - Jordan	2001				✓	✓	✓				
United States - Vietnam	2001		✓					✓		✓	✓
Albania - FYROM	2002	2006		✓			✓			✓	
Albania-Buglaria	2002	2007	✓				✓			✓	
Bosnia and Herzegovina - Romania	2002	2007	✓	✓			✓			✓	
Bosnia and Herzegovina - Slovenia	2002	2004	✓	✓			✓			✓	
Bosnia-Herzegovina - (FYROM)	2002	2006	✓	✓			✓				
Bulgaria - Estonia	2002	2004	✓	✓			✓			✓	
Bulgaria - Israel	2002	2007	✓	✓				✓			
Bulgaria - Latvia	2002	2004	✓	✓			✓				
Canada - Costa Rica	2002		✓	✓		✓		✓		✓	✓
Chile - Costa Rica	2002		✓	✓				✓		✓	
Chile - El Salvador	2002		✓	✓				✓		✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
EC - Croatia	2002		✓	✓			✓			✓	✓
EC - Jordan	2002		✓	✓		✓	✓			✓	✓
EFTA - Croatia	2002			✓				✓		✓	✓
EFTA - Croatia	2002			✓				✓		✓	✓
EFTA - Jordan	2002			✓				✓		✓	
El Salvador - Panama	2002		✓				✓				
Japan - Singapore	2002		✓	✓				✓		✓	✓
Tajikistan - Ukraine	2002		✓	✓	✓		✓				
Afghanistan - India	2003		✓					✓			
Albania - Croatia	2003	2003		✓			✓			✓	
Albania - Moldova	2003		✓	✓			✓			✓	
Albania-Romania	2003	2007	✓	✓			✓			✓	
ASEAN - China	2003		✓				✓			✓	
ASEAN - India	2003						✓				
Bosnia and Herzegovina - Croatia	2003	2007	✓	✓			✓			✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
CEFTA Accession of Croatia	2003			✓			✓			✓	
Croatia - Lithuania	2003			✓			✓			✓	
Croatia - Serbia - Montenegro	2003	2003		✓			✓			✓	
Croatia - Turkey	2003			✓			✓			✓	
Dominican Republic - Panama	2003		✓				✓				
EC - Chile	2003		✓		✓			✓		✓	✓
EC - Lebanon	2003		✓	✓			✓				
EFTA - Singapore	2003		✓	✓				✓		✓	
India - Thailand	2003		✓				✓			✓	✓
Moldova - Montenegro - Serbia	2003						✓				
PICTA	2003							✓			
Singapore - Australia	2003		✓	✓	✓	✓		✓		✓	✓
Turkey - Bosnia and Herzegovina	2003			✓			✓			✓	
Bulgaria - Bosnia and Herzegovina	2004	2007		✓			✓				

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
CARICOM - Costa Rica	2004		✓	✓					✓	✓	✓
Chile - Korea	2004		✓	✓	✓			✓		✓	✓
CEZ	2004		✓				✓			✓	✓
Croatia - Moldova	2004						✓				
Croatia-Bosnia-Herzegovina	2004	2004	✓	✓			✓			✓	
EC (25) Enlargement	2004		✓	✓	✓	✓			✓		
EFTA - Chile	2004		✓	✓				✓		✓	
FYROM - Moldova	2004						✓				
FYROM - Romania	2004	2007	✓	✓			✓			✓	
Iran - Pakistan	2004		✓				✓				
Israel - Jordan	2004		✓				✓				
Moldova - Bosnia and Herzegovina	2004		✓				✓				
Panama - Taiwan	2004		✓	✓	✓			✓		✓	✓
SACU	2004		✓	✓				✓			
United States - Chile	2004		✓		✓	✓		✓		✓	✓
United States - Singapore	2004		✓		✓	✓		✓		✓	✓

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Australia - Thailand	2005		✓	✓				✓		✓	
EFTA - Tunisia	2005		✓	✓				✓		✓	✓
India - Singapore	2005		✓				✓			✓	✓
Japan - Mexico	2005		✓	✓				✓		✓	✓
Japan-Malaysia	2005		✓	✓				✓		✓	✓
Jordan - Singapore	2005		✓				✓			✓	
Moldova - Ukraine	2005		✓	✓				✓			
New Zealand -Thailand	2005		✓	✓				✓		✓	✓
Pakistan - Sri Lanka	2005		✓	✓			✓				
Tunisia - Turkey	2005		✓	✓			✓			✓	
United States - Australia	2005		✓		✓	✓		✓		✓	✓
ASEAN - Korea	2006						✓				
Bangladesh - India	2006						✓				
Belarus - Ukraine	2006		✓	✓			✓				
Bhutan-India	2006		✓				✓				
CAFTA -DR	2006		✓	✓	✓	✓			✓	✓	✓
Chile - Peru	2006		✓				✓			✓	

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
China - Nicaragua	2006		✓	✓	✓	✓		✓		✓	✓
EC - Albania	2006		✓	✓			✓			✓	
EFTA - Korea	2006		✓	✓				✓		✓	
EFTA-SACU	2006			✓			✓			✓	✓
Morocco - Turkey	2006			✓			✓				
Singapore - Korea	2006		✓	✓	✓			✓		✓	✓
Singapore - Panama	2006		✓	✓			✓			✓	✓
Trans-Pacific Strategic Economic Partnership	2006		✓	✓				✓		✓	
United States - Bahrain	2006		✓		✓	✓	✓				
United States - Morocco	2006		✓		✓	✓	✓			✓	✓
Chile - India	2007		✓					✓			
Chile - Japan	2007		✓	✓		✓		✓		✓	✓
China - Pakistan	2007		✓					✓		✓	✓
EC (27) Enlargement	2007		✓	✓	✓	✓			✓	✓	✓
EFTA - Egypt	2007		✓	✓				✓		✓	✓
EFTA - Lebanon	2007			✓			✓			✓	✓

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Egypt - Turkey	2007			✓			✓			✓	
Japan - Thailand	2007		✓	✓				✓		✓	✓
Mauritius - Pakistan	2007		✓				✓				
Japan - Thailand	2007		✓	✓				✓		✓	✓
Syria – Turkey	2007			✓			✓				
Albania - Turkey	2008			✓			✓			✓	
ASEAN-Japan	2008		✓				✓			✓	
Brunei Darussalam - Japan	2008		✓		✓			✓		✓	✓
China - New Zealand	2008		✓	✓	✓	✓		✓		✓	✓
EC - Bosnia & Herzegovina	2008		✓	✓			✓				
EC - CARIFORUM States EPA	2008		✓	✓	✓	✓			✓	✓	✓
EC - Montenegro	2008		✓	✓				✓			
El Salvador - Honduras - Taiwan	2008		✓		✓				✓	✓	✓
Georgia - Turkey	2008						✓				
Japan - Indonesia	2008		✓	✓	✓			✓		✓	✓

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
Malaysia - Pakistan	2008		✓					✓		✓	✓
Japan-Philippines	2008		✓	✓	✓	✓		✓		✓	✓
ASEAN - Australia - New Zealand	2009		✓	✓					✓	✓	✓
Australia - Chile	2009		✓	✓				✓		✓	✓
Canada - EFTA	2009			✓				✓		✓	✓
Canada - Peru	2009		✓	✓					✓	✓	✓
Chile - Colombia	2009		✓					✓		✓	
China - Singapore	2009		✓	✓				✓		✓	
EC - Cameroon	2009		✓	✓	✓			✓		✓	
EC - Côte d'Ivoire	2009		✓	✓	✓			✓		✓	
Japan - Switzerland	2009		✓	✓				✓		✓	✓
Japan - Vietnam	2009		✓	✓				✓			
MERCOSUR - India	2009						✓				
Peru - Singapore	2009		✓	✓	✓	✓		✓		✓	✓
United States - Oman	2009		✓		✓	✓	✓			✓	✓

Agreements	Year (entry)	Year (expired)	CM	CP	ES	LM	Diplomatic DSM	Medium legalistic DSM	Highly legalistic DSM	Investment (AC)	Investment (LE)
United States - Peru	2009		✓		✓	✓		✓		✓	✓
China – Peru	2010		✓			✓		✓		✓	✓
India - Korea	2010		✓		✓			✓		✓	✓

*ASEAN (AFTA) countries have agreed to deepen legal cooperation between them and placed the mechanism of third-party binding review in 2004 known as ASEAN Protocol on Enhanced Dispute Settlement Mechanism. In South African Customs Union Agreement (SACU), states agreed for negotiations at diplomatic levels to solve a dispute but afterwards, in October 2002, states renewed the agreement and allowed for creation of a formal structure to make binding recommendations (medium level of legalization). Southern Common Market (MERCOSUR) moved towards the establishment of standing tribunal from ad hoc panel under Olivos Protocol, in January 2004.

-Negotiations on capital mobility, competition policy, environmental standards and labor mobility are legally enforceable

-AC – Area covered and LE – Legally enforceable

Source: Global Preferential Trade Agreements Database and personal investigations.

Appendix 2: Categories of Dyadic Events with classification

Classification	Goldstein	Definition	IDEA Code
Political	-8.3	riot or political turmoil	224
Political	-6.9	protest altruism	1814
Political	-6.9	give ultimatum	174
Political	-6.4	nonmilitary force threats	175
Political	-6.4	threaten	17
Political	-5.8	threaten to halt negotiations	1721
Political	-5.8	threaten to halt mediation	1722
Political	-5.8	threaten to reduce or break relations	1725
Political	-5.6	reduce humanitarian assistance	1932
Political	-5.2	protest defacement and art	1813
Political	-5.2	protest procession	1812
Political	-5.2	protest obstruction	1811
Political	-5.2	protest demonstrations	181
Political	-4.9	demand	151
Political	-4.9	demand	15
Political	-4.4	political arrest and detention	2122
Political	-4.4	criminal arrest and detention	2121
Political	-4.4	arrest and detention	212
Political	-4.4	nonspecific threats	171
Political	-3.8	halt negotiations	194
Political	-3.8	halt negotiations	1941
Political	-3.8	halt mediation	1942
Political	-2.4	formally complain	132
Political	-2.4	informally complain	131
Political	-2.4	complain	13
Political	-2.2	reduce routine activity	192
Political	-2.2	criticize or blame	121
Political	-1.1	grant asylum	0631
Political	-7	break relations	195
Political	-5	expel	20
Political	-4	break law	1134

Political	-4	disclose information	1132
Political	-4	political flight	1131
Political	-4	defy norms	113
Political	-4	veto	1123
Political	-4	cancel media	1122
Political	-4	impose curfew	1121
Political	-4	refuse to allow	112
Political	-4	reject proposal	111
Political	-4	reject	11
Political	-3	warn	161
Political	-3	warn	16
Political	-0.1	ask for protection	095
Political	-0.1	pessimistic comment	022
Political	-0.1	decline comment	021
Political	-0.1	comment	02
Political	-1	deny	14
Political	1	discussions	031
Political	1	engage in negotiation	0312
Political	1	mediate talks	0311
Political	0.1	ask for information	091
Political	0.1	optimistic comment	024
Political	2	acknowledge responsibility	026
Political	3	agree or accept	082
Political	3	agree to negotiate	0823
Political	3	agree to mediate	0822
Political	0.6	yield to order	011
Political	0.8	propose	10
Political	1.1	yield	01
Political	1.2	call for action	094
Political	1.5	peace proposal	101
Political	1.5	consult	03
Political	1.5	offer to mediate	104
Political	1.5	offer to negotiate	103
Political	1.6	ask for humanitarian aid	0933
Political	1.6	request	09
Political	1.8	apologize	044
Political	1.9	release or return	066
Political	1.9	return, release property	0662
Political	1.9	return, release persons	0661
Political	1.9	travel to meet	032
Political	2.2	relax curfew	0655
Political	2.2	relax censorship	0652
Political	2.2	evacuate victims	0632
Political	2.2	provide shelter	063
Political	2.2	grant	06
Political	2.5	extend invitation	062
Political	2.8	assure	054
Political	2.8	host meeting	033
Political	3.4	solicit support	092
Political	3.4	empathize	043

Political	3.4	praise	041
Political	3.5	endorse or approve	04
Political	4.5	promise policy support	051
Political	4.7	promise	05
Political	4.8	collaborate	083
Political	4.8	agree	08
Political	5.2	promise humanitarian support	0523
Political	5.4	improve relations	064
Political	6.5	agree to settlement	0824
Political	7.6	rally support	074
Political	7.6	extend humanitarian aid	073
Economic	-5.8	sanctions threat	172
Economic	-5.6	reduce or stop aid	193
Economic	-4.5	strike and boycotts	196
Economic	-4.5	Sanction	19
Economic	0.6	yield position	012
Economic	1.6	ask for economic aid	0931
Economic	2.2	relax administrative sanction	0653
Economic	2.9	ease sanctions	065
Economic	3.4	ask for material aid	093
Economic	5.2	promise economic support	0521
Economic	5.2	promise material support	052
Economic	7.4	extend economic aid	071
Military	-9.6	torture	2225
Military	-9.6	sexual assault	2224
Military	-9.6	bodily punishment	2223
Military	-9.6	beatings	2221
Military	-9.6	physical assault	222
Military	-9.6	force	22
Military	-9.2	military seizure	2236
Military	-9.2	abduction	213
Military	-9.2	abduction	2132
Military	-9.2	seize possession	211
Military	-8.7	bombings	221
Military	-8.7	vehicle bombing	2238
Military	-7.6	border fortification	1822
Military	-7.6	military alert	1821
Military	-7.6	military demonstration	182
Military	-6.9	control crowds	226
Military	-6.8	guerrilla seizure	2112
Military	-6.8	police seizure	2111
Military	-6.8	seize	21
Military	-5.6	reduce military assistance	1933
Military	-5.6	reduce peacekeeping forces	1934
Military	-10	missile attack	2239
Military	-10	biological weapons use	2237
Military	-10	assault	2235
Military	-10	military occupation	2234
Military	-10	coups and mutinies	2233
Military	-10	military raid	2232

Military	-10	military engagements	223
Military	-10	unconventional weapon attack	225
Military	-10	chemical-biological attack	2251
Military	-7	military clash	2231
Military	-7	threaten biological attack	1736
Military	-7	threaten military war	1734
Military	-7	threaten military occupation	1733
Military	-7	threaten military blockade	1732
Military	-7	threaten military attack	1731
Military	-7	military force threat	173
Military	-7	declare war	198
Military	3	agree to peacekeeping	0821
Military	1.6	ask for military aid	0932
Military	2.2	demobilize armed forces	0654
Military	2.2	observe truce	0651
Military	2.9	de-mining	0656
Military	2.9	ease military blockade	0658
Military	5.2	promise military support	0522
Military	8.3	extend military aid	072

Source: Massoud and Magee (2012).

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La logique des accords de commerce préférentiels, une analyse empirique des conséquences d'un nouvel ordre économique mondial

Résumé

Les accords de commerce préférentiels (ACP) sont devenus des instruments importants au travers desquels les Etats souverains conduisent leurs politiques économiques et façonnent leurs relations politiques internationales. Cette thèse analyse les enjeux transversaux et multidimensionnels des ACP. Dans un premier chapitre, nous montrons que les domaines de négociation abordés dans les ACP, qui ne relèvent pas du mandat de l'organisation mondiale du commerce (OMC), augmentent les échanges commerciaux. De plus, les mécanismes de règlement des différends (en anglais DSM) les plus contraignants favorisent le commerce alors que les mécanismes moyennement contraignants ne sont pas efficaces. Le second chapitre se tourne vers le côté politique des ACP et identifie un canal important au travers duquel les DSM incorporés aux ACP peuvent avoir un impact profond sur la prévention des conflits militaires. Nous montrons que les ACP avec les DSM moyennement contraignants empêchent l'escalade des sanctions vers les conflits militaires, tandis que les plus contraignants ne sont pas efficaces. En plus, les Etats qui sont proches politiquement, économiquement et socialement, sont plus portés à conclure les DSM les plus contraignants. Le troisième chapitre identifie les ACP selon le niveau de légalisme des clauses d'investissement. Nous montrons que les investisseurs internationaux font face aux risques d'expropriation liés au régime politique du pays hôte ainsi qu'aux relations diplomatiques entre leur pays et le pays hôte. Notre analyse montre qu'un régime démocratique ainsi que les bonnes relations diplomatiques conditionnent positivement les effets des clauses d'investissement légalement contraignantes. Enfin, le quatrième chapitre se penche sur les clauses environnementales pouvant figurer dans les ACP. Il identifie les ACP selon le niveau de légalisme des clauses environnementales. Nous montrons que les pays Nord-Nord concluent les clauses environnementales avec le niveau le plus contraignant alors que les paires Nord-Sud sont plus sujettes à adopter les clauses environnementales moyennement contraignantes.

Mots clés: Organisations internationales, commerce international, sanctions économiques, conflits militaires, investissements directs étrangers, standards environnementaux

The Logic of Preferential Trade Agreements, an Empirical Analysis of the Consequences of a New Economic Order

Abstract:

Preferential Trade Agreements (PTAs) have become important instruments through which sovereign states conduct international economic as well as foreign policies. This thesis analyses multidimensional and cross-cutting issues in PTAs. In the first chapter, we show that policy issues incorporated in PTAs, but outside the mandate of World Trade Organization (WTO), have a positive effect on trade. More specifically, highly legalistic dispute settlement mechanisms (DSM) promote trade liberalization while medium legalistic DSM features do not. The second chapter turns to the political side of PTAs and identifies an important channel through which DSMs in PTAs may have profound impact on the prevention of military conflicts. We show that PTAs with medium level of DSMs prevent the escalation of sanctions to military conflicts, whereas higher level does not. Further, the states that are more politically, economically and socially connected are more prone to form highly legalistic framework in PTAs. The third chapter identifies PTAs according to the level of legalism of investment provisions. Further, we show that international investors face risk of expropriation related to the domestic political regime of host country as well as the diplomatic relations between home and host countries. Our analysis shows that highly democratic regime as well as the good diplomatic relationship condition positively the effects of legally enforced investment provisions. Finally, the fourth chapter identifies PTAs according to different levels of legalism of environmental provisions. We show that North-North countries sign highly legalistic environmental provisions whereas North-South country-pairs are more prone to sign medium legalistic environmental provisions.

Keywords: International organizations, international trade, economic sanctions, military conflicts, foreign direct investment, environmental standards.

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