Plurilateral agreements: a promising trade liberalization modality?[1]

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Abstract

In this paper we evaluate the opportunities given by plurilateral agreements (or plurilaterals) in terms of concluding trade liberalization agreements and study the characteristics of "agreeable" plurilaterals: inclusive or exclusive agreements, *i.e.* inclusion or not of an MFN clause, inclusion of specific trading partners, of specific sectors. We first design a theoretical model of international trade with four countries and four goods, where countries have implemented import duties based on terms-of-trade externalities, to identify the mechanisms by which these types of trade agreement affect members and non-members. Second, we use a static version of a multi-region multi-sector Computable General Equilibrium (CGE) model to evaluate the welfare consequences of 64,770 potential plurilaterals to estimate the number of "agreeable" deals, first because they increase members' welfare, second because either they are inclusive, or they are exclusive and do not decrease non-members' welfare. We conclude that the addition of an MFN clause tends to decrease members' welfare and increase non-members' welfare. "Agreeable" plurilaterals tend to include the European Union and to cover liberalization of capital goods while they tend to exclude Sub-Saharan Africa and agriculture.

Keywords: Plurilateral trade agreements, Most-Favored Nation clause, Computable General Equilibrium model

JEL classification: F11, F13, F15

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1 Introduction

After 50 years of success, multilateral trade liberalization is in a deadlock, as illustrated by the impasse in which the Doha Round is now. New modalities of trade liberalization have been explored: sectoral initiatives (Laborde, 2011), weighted voting approach instead of consensus (Jackson, 2001), specific proposals like improved effectiveness of the Agreement on Subsidies and Countervailing Measures (to better capture subsidies to state-owned enterprises) and re-designing of Special and Differential Treatment (Council of the European Union, 2018), plurilateral agreements…

Indeed, a promising alternative to multilateralism is the implementation of plurilateral agreements, *i.e.* sectoral trade liberalization conducted by a subset of countries. In this paper we evaluate the opportunities given by plurilateral agreements (or plurilaterals) in terms of concluding trade liberalization agreements (tariffs elimination) and study the characteristics of "agreeable" plurilaterals: inclusive or exclusive agreements, i.e. inclusion or not of an MFN clause, inclusion of specific trading partners, of specific sectors.

We start by a precise definition of plurilateral agreements with a distinction (Draper and Dube, 2013) between MFN *plurilaterals*, i.e. sectoral trade liberalization implemented by a subset of countries and conducted under a Most Favored Nation basis (other WTO members benefit from these tariff removal), and non-MFN *plurilaterals*, where improved market access only benefits members of the agreement. We also discuss article X:9 of WTO which implies that a plurilateral agreement '*can only be appended to WTO on the basis of consensus*' (Hoekman, 2011) and paragraph 47 of the Doha Ministerial Declaration which may obviate the need of consensus when negotiating *plurilaterals* (Draper and Dube, 2013).

Then we design a theoretical model of international trade with four countries and four goods, where countries have implemented import duties based on terms-of-trade externalities. We study the consequences of a sectoral trade agreement between two countries on members and on the non-member of the agreement and identify precisely the mechanisms at work. This theoretical exercise will allow us to identify the mechanisms by which these types of trade agreement affect members and non-members.

We then use a multi-country multi-sector computable general equilibrium model (MIRAGRODEP) to evaluate the economic and trade consequences of a very large number of plurilateral agreements with a relatively small country and sector disaggregation (10 regions – with five large countries and

five small countries- and 10 sectors) based on the GTAP 10 database (Aguiar, Narayanan and McDougall, 2016). This small disaggregation allows us to consider all the possible plurilateral agreements. This modelling exercise will allow us to identify potential features of plurilateral agreements (choice of sectors, characteristics of members of these agreements, ...).

2 A few definitions

Inclusive plurilaterals are trade liberalization agreements between n countries in a sector k where these n countries remove import duties on an MFN basis, meaning that they open their domestic markets to all WTO members. Draper and Dube (2013) state that this MFN basis obviates the need for consent by WTO members. However, they may be more difficult to achieve.

Example: Information Technology Agreement (ITA).

Exclusive plurilaterals are trade liberalization agreements between n countries in a sector k where these n countries remove import duties without a MFN basis, meaning that each country of the agreement open its domestic market to only the n-1 other members of the agreement while keeping the same level of protection with respect to other WTO members. This non-MFN basis may imply that the consent by WTO members is needed.

Example: Government Procurement Agreement (GPA) opens up government procurement markets to firms located in countries which have signed the GPA.

However exclusive plurilaterals that cover more than 90% of commerce between contracting parties may be considered as PTAs since: this is an agreement which includes "a schedule for the formation of such a customs union or of such a free-trade area within a reasonable length of time" (WTO article XXIV) and which does not imply an augmentation of protection of members vis-à-vis non-members. Such plurilaterals should not be contested by WTO.

3 A theoretical model of international trade

In this section we design a theoretical model of international trade with three countries and three goods, where countries have implemented import duties based on terms-of-trade externalities. We study the consequences of a sectoral trade agreement between two countries on members and on the non-member of the agreement. This model is based on the framework proposed by Bagwell and Staiger (2001 and 2004).

To be completed.

4 Design of the MIRAGRODEP model

4.1 The model

We use a static version of the MIRAGRODEP model. MIRAGRODEP is a Computable General Equilibrium (CGE) model based on MIRAGE (Modelling International Relations under Applied General Equilibrium). MIRAGE is a computable general equilibrium (CGE) model devoted to trade policy analysis, developed at Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), Paris, between 2001 and 2004 (Bchir et al., 2002; Decreux and Valin, 2007). However, as we will see, MIRAGRODEP has improved on MIRAGE in several ways.

Like MIRAGE and the GTAP model (see Corong et al., 2017), MIRAGRODEP is a multi-region, multi-sector, computable general equilibrium model with perfect competition and constant returns to scale. All of these models share common features: they are all based on an input-output framework and their theoretical structure is derived from optimizing behavior of economic agents, particularly households and firms. In all of these models, the Walras's law holds: if there is equilibrium in all but one of the markets, equilibrium also holds in the last market. Consequently, one price is held fixed and all other prices are evaluated relative to this numeraire. However, each of these models has specificities also: specific choices of functional form for final and intermediate demand function, treatment of international transport margins or specific duties, representation of factor markets, nesting in the Armington representation of trade preferences, etc. When studying the same policy reform using the same data, these models do not show large differences.

In its standard version, MIRAGRODEP is a recursive dynamic multi-region, multi-sector model. For the current study, we use a static version of the model to optimize the computational time and to avoid specific theoretical issues regarding the implementation of sequential agreements. In MIRAGRODEP, the government is explicitly modelled as different from private agents. Government income consists of taxes collected on production, on factors of production, on exports, on imports, on consumption, and on households' income.

MIRAGRODEP has already been utilized to study issues related to international trade and trade policy (Bouët, Deason, and Laborde 2014; Bouët, Laborde, and Traoré 2017; Bouët, Laborde, 2018).

From the supply side in each sector, the production function is a Leontief function of value-added and intermediate inputs; for its production, one output unit needs x percent of an aggregate of productive factors (labor, both unskilled and skilled; capital; land and natural resources) and (1 – x) percent of intermediate inputs. The intermediate inputs function is an aggregate constant elasticity of substitution (CES) function of all goods, which means that substitutability exists between two intermediate goods, depending on the relative prices of these goods. This substitutability is constant and at the same level for any pair of intermediate goods. Similarly, in the generic version of the model, value-added is a CES function of unskilled labor, land, natural resources, and a bundle of skilled labor and capital. This nesting allows for the introduction of less substitutability between capital and skilled labor than between these two and other factors. In this version, we assume that all sectors operate under perfect competition, there are no fixed costs, and price equals marginal cost.

The utilization rate of productive factors is assumed to be constant. The only factor with a fixed supply over time is natural resources. Capital supply is fixed in this static version of the model. Labor supply growth rates are fixed exogenously following the evolution of the active population. Land supply is endogenous, as it depends on the real remuneration of land.

Skilled labor is the only factor that is perfectly mobile. Installed capital and natural resources are sector-specific. New capital is allocated among sectors according to an investment function. We consider a long term closure with perfect sectoral capital mobility. In addition, we adjust the total stock of capital in each economy to match the proportional change in national investments. Unskilled labor is imperfectly mobile between agricultural and non-agricultural sectors, according to a constant elasticity of transformation (CET) function. Land is also imperfectly mobile between agricultural sectors.

Capital in a given region, whatever its origin (domestic or foreign), is assumed to be obtained by assembling intermediate inputs according to a specific combination. The capital good is the same regardless of the sector.

The demand side is modeled in each region through a representative agent whose propensity to save is constant. The rest of the national income is used to purchase final consumption. Preferences between goods are represented by a linear expenditure system–constant elasticity of substitution (LES-CES) function. This implies that consumption has a non-unitary income elasticity. The sector sub-utility function used in MIRAGRODEP is a nesting of three CES-Armington functions that defines the origin of the goods. In this study, Armington elasticities are drawn from the GTAP10 database

and are adjusted for each region based on sectoral composition. The specific import tree is specific to each market (importer x sector) to reflect the export-similarities (HS4 level) of each exporters (Laborde, 2019).

The external account closure concerns the assumption on the current account: either the exchange rate is variable and the current account is fixed, or the exchange rate is fixed and the current account is variable. In MIRAGRODEP, we suppose that the real exchange rate is adjusted in such a way that the current account is stable as a percent of national GDP: CABr,t,=scl_t *$SOLD0_r$*$GDP_{r,t}$, with $CAB_{r,t}$ the current account of country r at year t, SOLD0r a constant specific to country r, and $GDP_{r,t}$ the country GDP at time t. scl_t is a scaling factor applied to countries with a negative initial current account balance to guarantee that total demand of international capital equals the total supply. Concerning the adjustment of the real exchange rate, MIRAGRODEP supposes that the nominal exchange rate is constant and that international prices adjust.

The public account closure assumption concerns how the public balance is affected when taxes are changed by a reform. The public balance is equal to public revenues (taxes on households' incomes, consumption, production, factor incomes, imports, and exports) minus public expenses in goods and services minus public transfers to households. When public revenues vary through a change in taxes, either public expenses are constant and the public balance varies, or public expenses vary and the public balance is constant, or a new tax is implemented such that public expenses and public sold are constant. In this study, we assume that each government maintains the public balance constant as a percentage of GDP. Therefore, we assume that after a shock that reduces custom duties, a final consumption tax is established in order to maintain real public expenses per capita constant. With these assumptions, the level of public services in each country is constant and there is no variation of public budget balance and no associated crowding-out effect on private investment.

The private account closure assumption concerns the savings-investment closure. In MIRAGRODEP, the marginal propensity to save is constant, such that variations in savings are proportional to variations in net private income. Taking into account the macroeconomic constraint, and the two previous closures under which public savings and current account are stable, it implies that variation in savings leads to variation in private investment. This is used to be called a neo-classical savings-investment closure.

4.2 Geographic and product disaggregation

We adopt a limited geographic et product disaggregation: indeed, with r=8 regions and i=10 sectors, of which i=7 can be a target of trade liberalization (3 sectors of services are excluded from such as scheme), we already obtain a great number of combinations: $[\sum_{r=1}^{8} C_r^8].[\sum_{i=1}^{7} C_i^7] = 32{,}385$. Indeed, each sectoral combination of 1 to 7 sectors among 7 ($\sum_{i=1}^{7} C_i^7$) has to be combined with $[\sum_{r=1}^{8} C_r^8]$ combinations in the regional space.

Since there are two options of scenario, either an inclusive plurilateral, *i.e.* with the MFN clause, or an exclusive plurilateral, *i.e.* without the MFN clause, it implies $32{,}385 * 2 = 64{,}770$ simulations.[2]

Table 1 indicates the geographic disaggregation with only 8 regions, and the correspondence between each region and the GTAP nomenclature.[3]

Table 1. Geographic disaggregation and GTAP correspondence

Region Code	Region Label	GTAP Regions
ASEANp	South-East Asia	AUS, NZL, XOC, JPN, KOR, TWN, XEA, KHM, IDN, LAO, MYS, PHL, SGP, THA, VNM, XSE,
CHN	China	CHN, HKG,
Sasia	South Asia	BGD, IND, PAK, LKA, NPL, XSA,
NAFTA	North America	CAN, USA, MEX, XNA, PRI,
LAC	Latin America	ARG, BOL, BRA, CHL, COL, ECU, PRY, PER, URY, VEN, XSM, CRI, GTM, NIC, PAN, SLV, HND, XCA, DOM, JAM, TTO, XCB,
EFTA	European Economic Area with Euro Mediterranean Area included	AUT, BEL, CYP, CZE, DNK, EST, FIN, FRA, DEU, GRC, HUN, IRL, ITA, LVA, LTU, LUX, MLT, NLD, POL, PRT, SVK, SVN, ESP, SWE, GBR, CHE, NOR, XEF, BGR, HRV, ROU, IRN, TUR, ISR, JOR, ARE, BHR, KWT, OMN, QAT, SAU, XWS, EGY, MAR, TUN, XNF, XTW,
CISs	Eastern and Central Europe, Russia includeed	ALB, BLR, RUS, UKR, XEE, XER, KAZ, KGZ, MNG, XSU, ARM, AZE, GEO,
SSA	Sub-Saharan Africa	NGA, SEN, BEN, BFA, CIV, GHA, GIN, TGO, XWF, CMR, XCF, XAC, ETH, KEN, MDG, MWI, MUS, MOZ, RWA, TZA, UGA, ZMB, ZWE, XEC, BWA, ZAF, NAM, XSC,

Source: authors

[2] Let us suppose we do the same exercise with 20 regions and 20 sectors concerned with liberalization. A simple calculation gives more than 2 trillions of simulations!

[3] The simulations are based on the GTAP10 database. See Aguiar, Narayanan and McDougall (2016).

Table 2 indicates the sector disaggregation with only 10 sectors and the correspondence of each sector with the GTAP nomenclature.

Table 2. Sector disaggregation and GTAP correspondence

Sector Code	Sector Label	GTAP Sectors
Agric	Agriculture	PDR, WHT, GRO, V_F, OSD, C_B, PFB, OCR, CTL, OAP, RMK, WOL, CMT, OMT, VOL, MIL, PCR, SGR, OFD, B_T,
Primary	Primary (non agr.)	FRS, COA, OIL, GAS, OMN, P_C,
Fisheries	Fisheries	FSH,
textiles	Textiles, Apparel, Leather products	TEX, WAP, LEA,
OManuf	Other manufactured products	LUM, PPP, ELE, OMF,
ManufInp	Manufactured intermediate goods	CRP, NMM, I_S, NFM, FMP,
CapGoods	Manufactured capital goods	MVH, OTN, OME,
services	Other services	ELY, GDT, WTR, CNS, CMN, OFI, ISR, OBS, ROS, OSG, DWE,
trade	Trade	TRD,
trans	Transportation	OTP, WTP, ATP,

Source: authors

4.3 Design of scenarios

We first analyze the potential impact of full trade liberalization in the 7 goods sectors between the eight regions included in the study. This scenario will be considered as a benchmark for the assessment of plurilaterals.

Second, we conduct 64,770 simulations based on the number of combinations of r regions in a set of 8, and i sectors in a set of 7. In this framework, a zero-for-zero duty approach is proposed. We conduct an estimation of the consequences of inclusive and exclusive plurilaterals. Within the set of exclusive plurilaterals, are studied agreements that cover more than 90 percent of trade between members: these

agreements deserve special attention since they could be considered as an FTA-like agreement that could benefit from the WTO article XXIV.

Indeed, we could have focused only on "true" plurilaterals excluding agreements which look like FTA agreements: liberalization of trade between several members, without an MFN clause, and a coverage of more than 90 percent of total trade between members, while representing a critical mass of global trade (75% of global trade for the considered sectors).

However, the main objective of our analysis is to explore alternatives to multilateral trade agreements; therefore we include all agreements, including FTA-like, and looking at the feasibility/relevance of sectoral initiatives that does not meet a critical mass threshold.

5 Results of the modelling exercise

5.1 The impact of full liberalization

We start with the analysis of the potential impact of full trade liberalization. Table 3 indicates the impact of this scenario on each region in terms of welfare (equivalent variation) and GDP. Full trade liberalization is beneficial for all regions in terms of representative agent's welfare and GDP, except Sub-Saharan Africa which is affected by an erosion of trade preferences (deterioration of terms of trade). Gains are relatively large for China, South-East Asia and Eastern and Central Europe and relatively small for the EFTA region.

Table 3. Macroeconomic impact of full trade liberalization

	Welfare	**Real GDP**
CHN	0.52	0.5
ASEANp	0.69	0.39
Sasia	0	0.21
NAFTA	0.27	0.18
LAC	0.04	0.4
EFTA	0.14	0.05
CISs	0.75	0.8
SSA	-0.76	-0.2
World	**0.28**	**0.24**

Source: authors' calculation

Table 4 shows the trade impact of full trade liberalization, more precisely the implied variation, in percentage, of exports in volume by region and by sector. Augmentations of trade is particularly substantial in agricultural sector and in the textile-apparel-leather sector and small in the primary,

nonagricultural sector: this is obviously related to an initial relatively high tariff protection in the former sectors and relatively low in the latter.

Table 4. Rate of variation of exports by region by sector -Volume - %

	Agric	Primary	Fisheries	textiles	OManuf	ManufInp	CapGoods
CHN	16.6	6.1	7.5	57.7	4.3	18.9	10.4
ASEANp	53.1	-0.3	5.6	39.1	2.3	11.4	19.6
Sasia	43.5	42.8	17.6	42.2	30.7	30.2	73.7
NAFTA	20.3	0.4	5.4	-7.1	3.9	6.7	7.4
LAC	30	9.3	4.4	-8.8	17.9	9.8	15.8
EFTA	42.1	3.6	11.9	46.4	17	17	34.1
CISs	157	0.5	13.5	-1.3	4.7	6.8	-3.7
SSA	14.3	9	16.3	3.6	41.1	27	42.6
World	**40.4**	**4**	**7.8**	**45**	**5.6**	**13.8**	**18.7**

Source: authors' calculation

We now turn to the analysis of potential plurilaterals by exploring systematically the trade and economic implications of 64,770 trade agreements, half of them inclusive, the other half inclusive. We start by evaluating the number of plurilaterals than can be adopted.

5.2 Number of feasible plurilaterals

We adopt a first simple rule to distinguish the plurilaterals that can be adopted from the ones that cannot: the representative agent's welfare is increased for each region (Pareto improving agreement). Over 64,770 potential plurilaterals, 5,279 trade deals imply positive welfare gains for each of their members: this is what we call the **core** of the game. Amongst these 5,729 plurilaterals, 4,226 are exclusive and 1,053 are inclusive. It shows that if inclusive plurilaterals can be implemented, the absence of an MFN clause may facilitate the conclusion of trade agreements since adding the MFN clause adds 248 agreements in the core, but remove 3420 compared to the situation without the MFN clause.

The impact of plurilaterals on non-members must be accounted for. Amongst the 5,279 trade deals which imply positive welfare gains for each of their members, we expect that trade deals implemented with a MFN clause cannot be blocked by other WTO members since it is equivalent to a unilateral liberalization by participants: there are 1,053 such agreements. Amongst the 4,226 exclusive plurilaterals, we exclude trade deals which imply a loss for non-members since they can be opposed by other WTO members. This implies a reduction of the number of potential plurilaterals from 4,226 to 8 trade agreements. If we accept a threshold of 0.05% of welfare loss for non-members, the number

of agreeable exclusive plurilaterals is 1,565 (see Table 5). At a threshold of 1%, all exclusive plurilaterals are "agreeable".

Table 5. Number of "agreeable" exclusive plurilaterals according to a threshold of welfare loss for non-members

Threshold of loss (%)	Number of agreeable exclusive plurilaterals
0	8
0.01	759
0.05	1,565
0.25	3,812
0.5	4,187
1	4,226

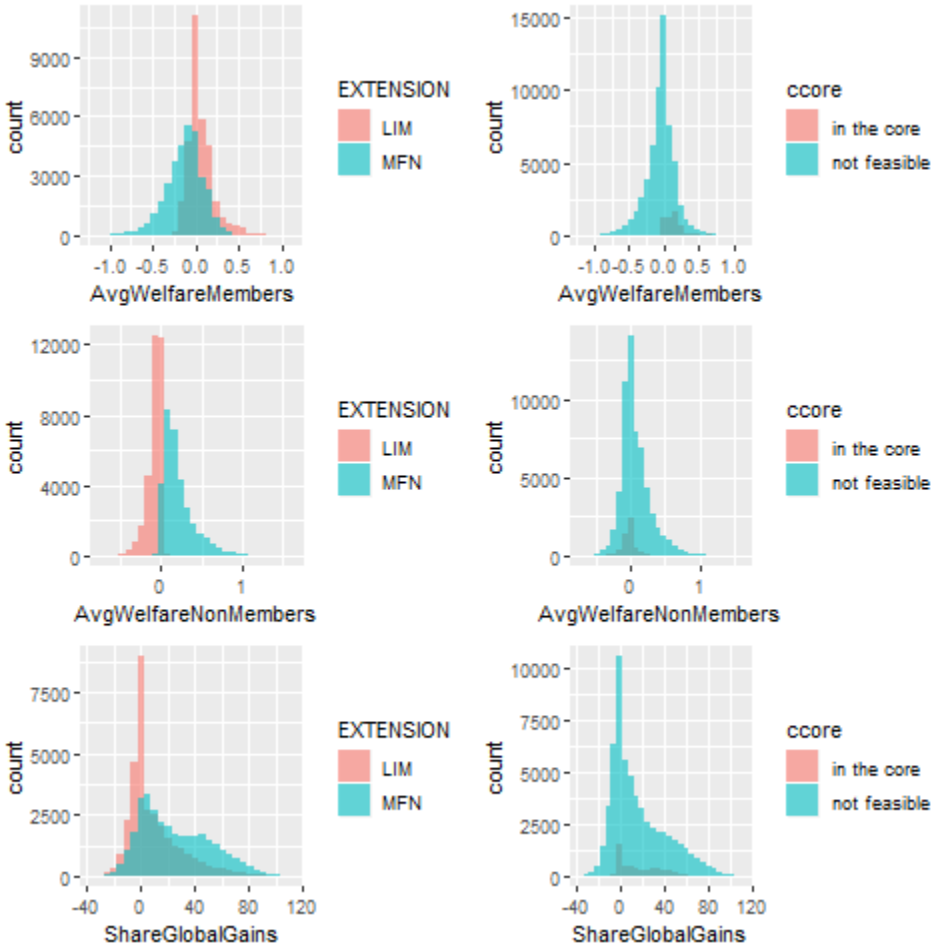
Source: authors' calculation

To summarize, evaluating the impact of plurilaterals on welfare substantially reduces the number of feasible trade agreements: we found that starting from 64,770 potential trade agreements, only 1,053 inclusive plurilaterals and 8 exclusive plurilaterals can be implemented.

5.3 Welfare implications of plurilaterals

We illustrate the implications of an MFN clause by plotting distribution of the number of plurilaterals by various metrics (see Figure 1): average welfare gain of members of plurilaterals, average welfare gain of non-members of plurilaterals, share in global gains, i.e. world gain from a specific scenario divided by the world gain from full liberalization). We oppose the distribution according to two partitions, a first one opposing exclusive plurilaterals (LIM) to inclusive plurilaterals (MFN), a second one plurilaterals in the core to those outside the core.

Figure 1. Distribution of plurilaterals from the core according to three metrics



Source: authors' calculation
Note: AvgWelfareMembers stands for Average Welfare gain of Members; AvgWelfareNonMembers stands for Average Welfare gain of Non-Members; ShareGlobalGains stands for Share in Global Gains – all horizontal axes are in %.

From the top and middle left graphs, we see that the absence of an MFN clause tends to raise the average welfare of members and decrease the average welfare of non-members. From the top and middle right graphs, we conclude that while a plurilateral within the core augments in general the average welfare of members, the distribution of welfare variation of non-members in the core exhibit the same shape as the one outside the core. The two bottom graphs point out that while the inclusion of an MFN clause is relatively efficient compared to non-inclusion of this clause, plurilaterals in the core (i.e. without losers) only manage to capture a part of the global gains.

In Figure 2, we plot all exclusive plurilaterals in with the average welfare gain by member in the exclusive scenario on the x-axis and the average welfare gain by member in the inclusive scenario, i.e. the trade deal associated to the addition of the MFN clause to the same agreement.

Figure 2. Impact of an MFN clause added to an exclusive plurilateral: the cases of "core" agreements

Source: authors' calculation, all horizontal axes are in %.

In the top graph a majority of plurilaterals stands under the y=x straight line: it implies that the inclusion of an MFN clause reduces more often the average gain of members than it augments it. This is particularly true for exclusive plurilaterals which implies a relatively large average gain for members.

The bottom graph shows that all exclusive plurilaterals implies a negative average welfare variation for non-members, but that the inclusion of an MFN clause increases significantly this average variation

such that it becomes positive for 82% of these trade deals: the inclusion of this clause is a major stake for non-members.

5.4 Regional and sectoral coverage of "agreeable" plurilaterals

Let us see now which regions and which sectors are regularly within "agreeable" plurilaterals. Table 6 indicates, for each region and each sector, the number of plurilaterals, either exclusive or inclusive, that include this region as member or cover liberalization in the sector (rows CORE) and the number of exclusive plurilaterals that can be vetoed by non-members (rows VETO) when such countries suffer a loss of 0.5% of their welfare or more. For example, over a total of 4,226 feasible exclusive plurilaterals, 973 include China, 39 of these agreements may be vetoed by non-members. Over 1,053 feasible inclusive plurilaterals, 236 include China.

Table 6. Number of "agreeable" (CORE) and "vetoable" (VETO) agreements containing each region and covering each sector

		Exclusive	*Inclusive*			*Exclusive*	*Inclusive*
CHN	CORE	973	236	***Agric***	CORE	1422	59
CHN	VETO	39		***Agric***	VETO	39	
ASEANp	CORE	2036	744	***Primary***	CORE	2372	538
ASEANp	VETO	39		***Primary***	VETO	20	
Sasia	CORE	1513	376	***Fisheries***	CORE	2120	521
NAFTA	CORE	1552	596	***Fisheries***	VETO	20	
NAFTA	VETO	39		***textiles***	CORE	1618	269
LAC	CORE	1690	555	***textiles***	VETO	39	
LAC	VETO	32		***OManuf***	CORE	2136	393
EFTA	CORE	2167	550	***OManuf***	VETO	23	
EFTA	VETO	39		***ManufInp***	CORE	1956	227
CISs	CORE	1605	515	***ManufInp***	VETO	23	
CISs	VETO	20		***CapGoods***	CORE	3316	1035
SSA	CORE	1151	504	***CapGoods***	VETO	39	

Source: authors' calculation

The region which is the most frequently included in plurilaterals is the EFTA region followed by the ASEANp region. It may be related to the size of their market, the average and dispersion of protection.

No plurilateral which includes the South-Asean and the SubSaharan regions may be vetoed. It could mean that both are the regions which are hurt by exclusive plurilaterals and are in a position of vetoing these deals. The sector which is the most frequently covered by a plurilateral, either exclusive or inclusive, is Capital goods, while the least frequently covered is agriculture.

These results lead us to conduct econometric estimations to understand if the inclusion of specific regions or sectors increases the odds of success of an agreement.

To be completed.

5.5 Does the addition of a country or a sector increase the odds of success of an agreement?

To be completed.

6 Conclusion

Main conclusions of the modelling exercise

What could be the long-term consequences of the multiplication of plurilateral trade agreements? A future direction of research is the identification of the agreements that can be adopted today, and the characteristics of trade distortions that will remain after the adoptions of these *plurilaterals*. Do these plurilaterals facilitate or make difficult future negotiations or we lock-in market access

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