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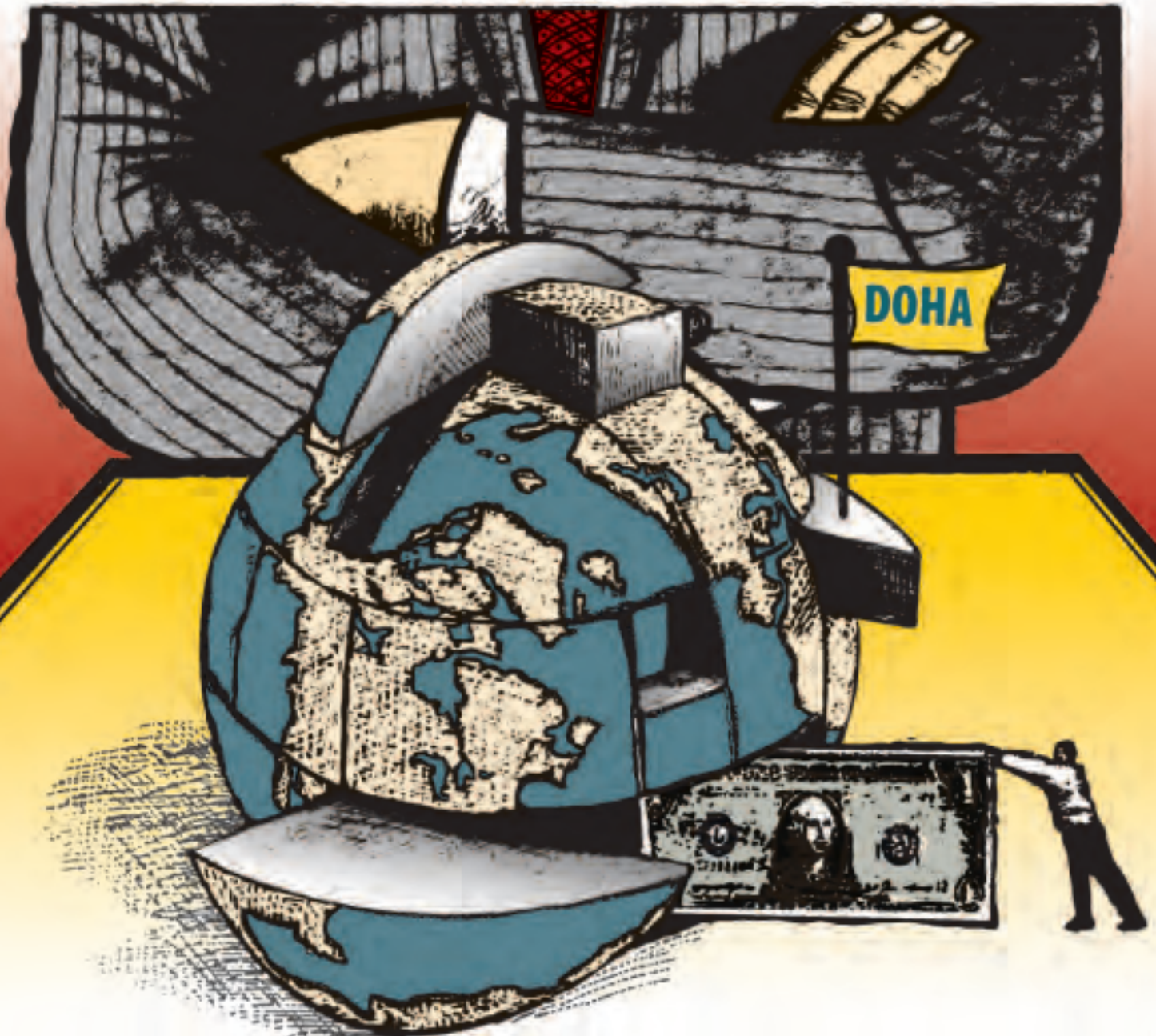
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# THE POTENTIAL COST OF A FAILED DOHA ROUND

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IFPRI Issue Brief 56 • December 2008



**In times of economic turmoil, countries might decide to increase current tariff rates to protect domestic industries or raise revenues in order to finance domestic programs. Using the highest applied or bound rate imposed by countries from 1995 to 2008 as an indicator, this study presents several scenarios regarding the economic costs of a failed Doha Round and a subsequent rush into protectionism. For example, in a scenario where the applied tariffs of major economies would go all the way up to currently bound tariff rates, world trade would decrease by 7.7 percent. In a more modest scenario where countries would raise tariffs to maximum rates applied during the past 13 years, world trade would decrease by 3.2 percent. These increases in duties would reduce world welfare by US\$353 billion under the first scenario, and by US\$134 billion under the more modest scenario. While such an increase in duties would particularly impact agricultural exports (-6.9 percent), especially in developing countries (-11.5 percent), exports of industrial goods could also face a substantial reduction: 2 percent in developed countries and 4.8 percent in developing countries. This study concludes there would be a potential loss of US\$1,064 billion in world trade if world leaders were to fail to conclude the Doha Development Round of trade negotiations in the next few weeks and if countries were to implement subsequently protectionist policies, as occurred after the end of the Uruguay Round. The failure of the negotiations would prevent a US\$336 billion increase in world trade that would have come from a reduction in tariffs and domestic support, while a worldwide resort to protectionism would contract world trade by US\$728 billion.**

After seven years of negotiations, participants at the World Trade Organization (WTO) mini-ministerial meeting in Geneva last July could not reach a final agreement on the Doha Round liberalization modalities. Conflicts still exist regarding the commitments that both developed and developing countries should make. For instance, the United States is still reluctant to tackle the issue of domestic support to the cotton sector, and India and other developing countries wish to avoid restrictions (such as the anti-concentration clause) on their ability to use flexibility in non-agricultural liberalization.

Beyond these very specific elements of disagreement, it seems that the incentives to conclude the Doha Round are weak. Because large market access gains have already been achieved in the manufacturing sectors of developed country markets, the impetus for previous multilateral negotiations has vanished. In addition, the remaining issues are not only more difficult to negotiate, but the political costs are higher and the gains are less easy to assess. For developed countries, liberalizing their agricultural markets remains a very complex issue. At the same time, developing countries want to maintain protection in manufacturing and avoid making new commitments regarding services based on nascent industry

considerations. Lastly, regional and bilateral liberalizations have reduced the market access gains expected by key players and have fostered resistance to multilateral liberalization that will erode existing preferences. Therefore, the longer the negotiations last, the weaker is the incentive to conclude a successful round.

In parallel, impact assessments using a computable general equilibrium (CGE) model have provided increasingly accurate quantitative information concerning the gains and losses associated with the Doha Development Agenda (DDA). Great improvements have been achieved since the Uruguay Round assessment, where a lack of information on tariffs led to an overestimation of potential gains. However, improved information has shown that the gains of the Doha Round have decreased since the models now capture the fact that applied tariffs are in most cases lower than their Most Favored Nation (MFN) bound level, due to both binding overhang (the gap between MFN bound and applied rates) and preferences (the gap between MFN and bilateral applied rates). In addition, the implementation of trade scenarios has become more and more precise, adding details and including the numerous flexibilities and exceptions that exist, limiting per se the scope of liberalization.

The shrinking gains associated with the Doha Round have led both economists and policymakers to state that the real gains go far beyond tariff-reduction effects and can be found outside the standard model. For example, gains in productivity, the liberalization of services, and trade facilitation are still weakly represented in CGE exercises, but may account for a large share of the positive effects of a successful round. Moreover, even if applied tariffs are not cut, the simple fact that tariff lines are bound and that the existing binding overhang is reduced has significant value because it provides a stable trade environment. The goal of this study is not to uncover additional benefits associated with the DDA, but to re-examine the value of an agreement by considering potential gains and losses in a moving landscape of trade policies.

Traditional impact studies have assessed the potential gains of the Doha negotiations by comparing the consequences of the negotiation modalities to the status quo (baseline). Therefore, the cost of failed negotiations is just an opportunity cost representing the unrealized gains. However, this approach may underestimate the real losses associated with a failure of the DDA. Such a drastic event will make the business-as-usual assumption uncertain since the status quo is not a long-term perspective for trade policies. The current trend of multilateral trade liberalization may not survive this failure, and the global public good provided by the WTO that helps to free trade in a stable and less-distorted environment may vanish. Therefore, this study compares the effects of a DDA scenario with other relevant alternatives.

First, the threat of trade wars will escalate. The number of litigations at the WTO will increase, and countries may try to reverse past unilateral trade liberalization moves.

Second, the current financial crisis may foster protectionist behavior, as occurred after the October 1929 crisis. A parallel can easily be drawn between the current situation and the one that existed then; in early 1930, unemployment was also rising, fears of deflation were prevailing, and a lack of public resources (which was more pronounced in countries that paid war reparations) prevented governments from remedying the economic crisis. Moreover, today as in 1930, the context of decreasing prices can mechanically reinforce protection, as specific duties (defined as monetary amounts by physical units), which are numerous in agriculture, become more and more restrictive when world prices are down. In this type of economic context, protectionism is a tempting policy instrument for policymakers—it short-sightedly increases domestic prices and supports domestic activity,

and it provides new public receipts. Finally, governments do not correctly anticipate world retaliation and counter-retaliation, as was the case with the United States in 1930 and also last year when, in the middle of the food crisis, governments implemented export bans and export restrictions in successive rounds of retaliation and counter-retaliation.

Third, since the failure of the DDA will mainly be due to disagreements between rich and emerging countries, the main trade powers will promote their market access interests by negotiating new free trade areas (FTAs) with key partners. So, depending on the success or failure of the DDA, the trade policy dynamics will strongly differ. However, defining a baseline other than the status-quo is a challenging task. It is difficult to guess the reaction of different countries in a non-cooperative world.

## ALTERNATIVE SCENARIOS

The five scenarios analyzed here include the Doha compromise of July 2008 and four alternatives driven by the failure of the negotiations (see Box 1).

### BOX 1—SCENARIOS

**DOHA:** July 2008 modalities

**Up to Bound:** Non-FTA applied tariffs increased to existing bound level.

**Up to Max:** Non-FTA applied tariffs increased to their last 13 years maximum level, capped by existing bound tariffs.

**FTA-HICs:** An FTA covering 95 percent of tariff lines is implanted between High-Income Countries.

**FTA-HICs + Up to Max:** Combination of *Up to Max* and *FTA-HIC* scenarios.

### Doha Scenario

The first scenario represents a successful Doha outcome based on July 2008 modalities. After seven years of trade talks, market access modalities have reached a high level of sophistication. Even if the general philosophy is simple, with progressive tariff-cut formulas for both agricultural and nonagricultural goods, many flexibilities



have been introduced with different degrees of special and differential treatment for different groups of developing countries. This scenario implements all the details of these modalities in terms of market access as well as a duty-free-quota-free market access initiative for least-developed countries (LDCs) and OECD countries (excluding South Korea but including Mexico and Turkey). It authorizes a 3-percent exemption clause in terms of products. Export subsidies are phased out by 2013 for developed countries. Concerning domestic support, this scenario includes the overall constraint on Overall Trade Distorting Support (OTDS) for the United States and the European Union (EU). Due to the complexity of integrating other elements of the DDA agenda in the simulations, other sources of potential gains are omitted, such as liberalization in services, WTO rules, trade facilitation and intellectual property rights.

### Up to Bound Scenario

If the DDA fails, two scenarios are analyzed: an upward protectionist trend and a push for regional agreements between countries eager to reach freer trade. The first option, the *Up to Bound* scenario, examines the possibility for WTO countries to increase their tariffs up to their Uruguay Round (UR) bound level in a five-year period (2009–2014). It assumes that the entire binding overhang will be eliminated. For unbound lines, the existing average binding overhang is applied to compute new tariffs. This scenario represents a strong increase in protection by eliminating all unilateral liberalization but does not represent an open trade war between WTO members. Existing commitments are still respected. This scenario may appear extreme since many developing countries bound their tariffs during the UR using a ceiling option to levels that they have never and will never apply. Moreover, countries have decided to apply zero tariffs on a large selection of raw materials and imported input even if the existing bound tariffs are strictly positive.

### Up to Max Scenario

To adopt a more realistic scenario, historical data were used to determine the highest applied protection rate implemented by every country during 1995–2006. Then, the minimum between the historical maximum level and existing bound tariffs was selected. This *Up to Max* scenario corresponds to a case whereby governments apply the more adverse trade policies of the past 13 years but still respect their UR commitments. On

an historical basis, tariffs evolve to answer changes in world prices, domestic production structure, and political pressures. This scenario allows the share of binding overhang that is really relevant for private agents to be captured since it corresponds to the behavior exhibited by policymakers since the end of the UR. It is important to note that in both scenarios (*Up to Bound* and *Up to Max*), the preferential tariffs protected by bilateral or regional agreements are not changed. Only MFN applied rates and non-reciprocal preferential rates are modified. The only non-reciprocal program that is maintained is the EU “Everything but Arms” initiative due to the way this program has been implemented and renewed in the EU legislation. *Up to Bound* is not the worst scenario that can be anticipated; many countries have not yet bound their import tariffs and are not today constrained by any upward limitation. Anti-dumping duties and safeguard mechanisms can be activated and can restrict trade even in rich countries where binding overhang is nil or limited.

### FTA-HICs Scenario

Another effect of failed Doha negotiations is that countries would be more likely to seek market access gains through bilateral or plurilateral agreements. It is possible to imagine a multiplication of FTAs that would worsen the already existing spaghetti bowl and increase trade costs due to a lack of transparency and the complexity of overlapping rules of origin. However, this study focuses on the implementation of one plurilateral agreement (the *FTA-HICs* scenario). It assumes that HICs will adopt a zero-for-zero approach whereby each member of the plurilateral agreement will liberalize 95 percent of its tariff lines. Several considerations justify this choice. First, North-South and South-South negotiations are still difficult to conduct, are often delayed and, in the case of the latter, are weakly enforced. Second, HICs will place the responsibility for the failure of DDA on the MICs’ lack of commitment to open their own markets. In reaction, they may decide to move more quickly toward freer trade with countries ready to do this. Finally, by implementing a 95-percent duty-free agreement, rich countries will still be consistent with GATT article XXIV and will protect their sensitive sectors, especially agriculture. At the same time, an FTA will not entail commitments regarding export subsidies and domestic support policies, another delicate issue for some OECD countries.

## FTA-HICs + Up to Max Scenario

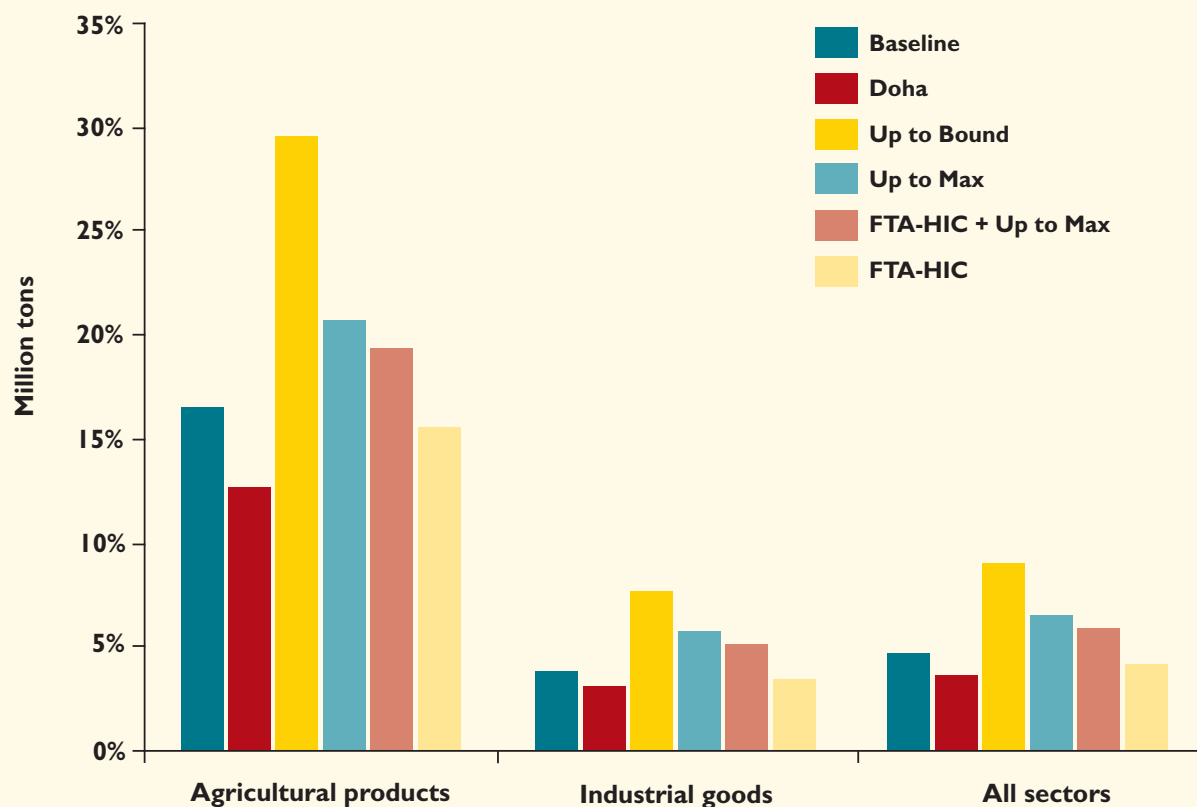
The last scenario, *FTA-HICs + Up to Max*, is a combination of two scenarios: a rise of protection to past levels and the implementation of an HIC FTA. An HIC FTA will lead to increased differences between insiders and outsiders and will drive trade blocks to retaliate. Thus, the *FTA-HIC + Up to Max* scenario may represent the stage after the *FTA-HIC* scenario.

## Consequences

Figure 1 displays the consequences of these five scenarios on average world tariffs. The *Doha* scenario will reduce world protection by 22 percent, from 4.6 percent to 3.6 percent. Moving to bound tariffs (*Up to Bound*

scenario) will double the level of protection on average. The elimination of recent unilateral tariff reduction enacted during the past 13 years (*Up to Max* scenario) has a more limited impact but still represents an increase of 40 percent in world tariffs compared to the baseline (from 4.6 percent to 6.4 percent). Even with its limited geographical scope, the implementation of the *FTA-HICs* scenario still has an impact on world-level protection since it concerns important economic zones—in particular, trade inside the Quad (United States, Canada, EU, and Japan). This FTA will exclude many agricultural products and therefore, the average rate of tariff cut in the *FTA-HICs* scenario is lower for agriculture (5 percent) than for non-agricultural products (11 percent).

Figure 1—World Average Tariffs by Scenario (2025 level)



Source: MAcMapHS6v2.1, TRAINS and authors' calculations (reference group weighting scheme).

**Table 1—Protection by category of countries**

	PROTECTION FACED (%)			PROTECTION APPLIED (%)		
	HICs	MICs	LDCs	HICs	MICs	LDCs
<b>Baseline</b>	4.6	4.6	4.0	3.0	8.6	9.8
<b>Doha</b>	3.6	3.6	3.2	1.9	7.8	9.8
<b>Up to Bound</b>	9.0	8.9	11.7	4.4	19.8	36.1
<b>Up to Max</b>	6.5	6.3	7.3	3.7	13.3	16.3
<b>FTA-HIC + Up to Max</b>	5.6	6.3	7.3	2.9	13.3	16.3
<b>FTA-HIC</b>	3.9	4.6	4.0	2.4	8.6	9.8

Source: MAcMapHS6v2.1, TRAINS, and authors' calculations (reference group weighting scheme).

Note: HICs stands for High-Income Countries, MICs for Middle-Income Countries, and LDCs for Least-Developed Countries.

**Table 2—Global results led by tariffs and domestic support changes—Change compared to the baseline in 2025**

	Doha	Up to Bound	Up to Max	Up to Max + FTA-HICs	FTA-HICs
<b>PERCENTAGE CHANGES</b>					
<b>World Exports<sup>(a)(b)</sup></b>	<b>1.46</b>	<b>-7.70</b>	<b>-3.16</b>	<b>-2.63</b>	<b>0.40</b>
Agro-food	4.03	-14.82	-6.86	-6.29	0.40
Industry	1.50	-7.45	-3.19	-2.59	0.46
<b>World Welfare</b>	<b>0.09</b>	<b>-0.51</b>	<b>-0.19</b>	<b>-0.19</b>	<b>0.01</b>
North	0.07	-0.32	-0.14	-0.12	0.02
South	0.13	-1.00	-0.32	-0.35	-0.02
<b>VALUE CHANGES (\$BN – 2004 CONSTANT US\$)</b>					
<b>World Exports<sup>(a)(b)</sup></b>	<b>336</b>	<b>-1774</b>	<b>-728</b>	<b>-605</b>	<b>92</b>
Agro-food	68	-251	-116	-107	7
Industry	256	-1272	-545	-442	79
<b>World Welfare</b>	<b>59</b>	<b>-353</b>	<b>-134</b>	<b>-128</b>	<b>4</b>
North	34	-159	-71	-60	8
South	25	-194	-63	-68	-4

(a) including EU-Trade. (b) including services.

Table 1 displays the results of protection faced by exports and applied on imports by group of countries. The *Doha* scenario will cut the applied protection by one-third for HICs and one-tenth for MICs, a significant achievement when compared to previous GATT rounds. It will also lock existing market access due to unilateral liberalization on a MFN or nonreciprocal preferences basis. Indeed, under the *Up to Bound* scenario, protection could increase by 50 percent in HICs, 130 percent in MICs, and 270 percent in LDCs compared to the current level. Under the *Up to the Max* scenario, protection will increase by 23 percent,

56 percent, and 67 percent, respectively, in these three groups of countries. Interestingly, for the HICs, the combination of the FTA and the raise in tariffs applied to other countries to past observed levels (*FTA-HICs + Up to Max* scenario) keeps the average level of applied protection unchanged.

It is noteworthy to examine which group of countries is the more severely impacted by these scenarios. In relative terms, the *Doha* scenario manages to deliver homogeneous market access gains with an average decrease of about 20 percent of the tariffs faced by the

## BOX 2—METHODOLOGY

Tariff reform is implemented at the disaggregation level of the MacMap-HS6v2.1 database with tariff data for 2004 (including 5,113 products, 170 importing countries, and 208 exporting countries). The analysis accounts for all major changes that occurred up to 2008, including major regional trade agreements (RTA), new WTO members (such as Ukraine), and so on. The TRAINS database was used to investigate the tariff changes since 1995, and a special procedure was created to ensure comparability between MacMap and TRAINS. The political economy model developed by Jean, Laborde, and Martin (2008) was used when sensitive products had to be selected for implementing tariff scenarios (such as agricultural and non-agricultural DDA modalities, DFQF initiative, 5-percent exclusion in the FTA HICs scenario). Finally, when WTO members liberalize under the DDA, the market access remains unchanged for non-WTO members.

The tariff scenarios are then implemented in the MIRAGE (Modeling International Relationships in Applied General Equilibrium) model, developed initially at the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) in Paris. Based on standard and robust assumptions, it should be noted that the model may underestimate the positive effects of trade reform, particularly when such reform drives new investments, technology improvements, or important trade or production diversification.

Macroeconomic data (such as world trade flows, production, consumption, and intermediate use of commodities and services) come from the GTAP 7 database. The modeling exercise assumes perfect competition. Twenty-seven regions are identified in the model (8 high-income regions), which maps the main trade blocks. The sectoral decomposition is highly detailed in terms of agriculture and agrifood business (with 12 sectors), since most of the protection faced is in this sector. All other sectors are non-agricultural, including 13 industrial sectors and 2 service sectors.

A baseline is implemented from 2008 to 2025, which depicts the world without a new multilateral agreement. Concerning trade reform, the following agreements since 2004 have been included in the baseline:

- Achievement of a complete FTA for ASEAN, CEMAC, COMESA, and SADC ECOWAS;
- EU-ACP Economic Partnership Agreements
- Implementation of the EU-India, EU-ASEAN, US-Colombia, US-Oman, US-Bahrain, US-Morocco, US-Australia, Mercosur-Colombia, and China-Chile FTAs.

This baseline serves as a point of comparison with all the scenarios. The results are reported for the year 2025. The analysis does not account for the surge in world prices of energy and food products between 2004 and 2008.

## ECONOMIC IMPACTS

three groups of countries (from 4.6 percent to 3.6 percent for both HIC and MIC countries, and from 4.0 to 3.2 percent for LDCs). The other scenarios, however, have significantly different results. Though the two protectionist scenarios have similar effects for HICs and MICs (90 percent+ for *Up to Bound* and 40 percent for *Up to Max*), the LDCs are more severely affected due to the losses of nonreciprocal preferences. Of course, the *FTA-HICs* scenario only benefits HIC countries (a 14-percent decrease in faced protection) but less than the DDA scenario does.

The MIRAGE CGE model was used to assess the economic impacts of these different tariff and domestic support scenarios (see methodology in Box 2). Table 2 indicates the global results of all scenarios for the world economy in 2025, compared to baseline.

Under the *Doha* scenario considered here, and focusing on only a part of the rich DDA agenda (the tariff liberalization and domestic support discipline), world trade is augmented by a mere 1.46 percent (US\$336 billion) and world real income by US\$59 billion in 2025. However, these numbers are driven by the assumption that no

major political shock will take place if the DDA is not signed; such an assumption should be considered carefully.

In case of the *Up to Bound* scenario, world trade would contract by 7.7 percent (–US\$1,774 billion) and world real income by US\$353 billion. In the case of the less damaging *Up to Max* scenario, world trade would be reduced less, by 3.2 percent (–US\$728 billion). While such an increase in duties would especially impact agricultural exports (–6.9 percent), particularly harming developing countries' agricultural exports (–11.5 percent), the exports of industrial goods could also face a substantial reduction—2 percent in developed countries and 4.8 percent in developing countries. While only tariffs on goods would be increased, trade in services will also be affected in countries that decide to tighten trade policy in these services.

It is important to note that the establishment of an HIC free trade zone would only increase world trade by 0.4 percent since this agreement would remove tariff barriers between countries already close to free trade while allowing them to exempt 5 percent of highly protected products from this process. This is not a major shock for world trade as compared to protectionist scenarios or the failure of the DDA. Due to the trade diversion effect, developing countries will be negatively affected by an HIC FTA (–0.02 percent of their real income) while developed countries will benefit from such an agreement (+0.02 percent of their real income). When combined with the *Up To Max* scenario, the HIC FTA would not prevent a contraction of world trade, which decreases by 2.63 percent.

These figures allow for a clear reassessment of what is really at stake. A disagreement between WTO countries over the DDA would signal international non-cooperation. If those countries subsequently implement protectionist policies, the loss could be much greater. In a CGE model like MIRAGE, scenarios are not additive, so it is not strictly consistent to add up gains and losses. But this exercise clearly gives a first approximation of what could be lost by the failure of the DDA. A simple calculation measures the potential loss in world trade at US\$1,064 billion: the failure

of the DDA would not only prevent a US\$336 billion increase in world trade coming from new commitments on tariffs, but a worldwide move toward protectionism would contract world trade by US\$728 billion. If trade among EU27 members is excluded, this figure reaches US\$1,140 billion. Moreover, the DDA will not only increase trade, it will also reinforce binding commitments and reduce existing bound duties. In so doing, it will play its international public good role by making the trade environment more secure and decreasing the costs associated with potential trade wars.

## CONCLUSION

Recent studies assessing the potential impact of the DDA have concluded there would be modest augmentation in world trade and world real income. This study, which is limited to tariffs and domestic support discipline, does not invalidate this conclusion, but examines the situation from a completely different perspective. The failure of a WTO agreement would be a clear sign of international noncooperation; it would launch trade conflicts and litigations (especially between High-Income and Developing Countries) and would be the first unsuccessful Round despite the fact that it is the first Round to focus on development and the first Round launched by the WTO. In a period of economic stagnation, the risk is high that this failure would give WTO members the incentive to pursue non-cooperative strategies via the adoption of protectionist policies. In that case, the loss would be much greater than a mere US\$79 billion. This study concludes there would be a potential loss of at least US\$1,064 billion in world trade if world leaders were to fail to conclude the Doha Development Round of trade negotiations in the next few weeks and if countries were to implement subsequently protectionist policies, as was observed after the end of the Uruguay Round. Thus, the stakes in Geneva are very high and the July 2008 package appears to be the closest and most promising step toward a global development agenda for a world in turmoil.

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### FINANCIAL CONTRIBUTORS AND PARTNERS

IFPRI's research, capacity strengthening, and communications work is made possible by its financial contributors and partners. IFPRI receives its principal funding from governments, private foundations, and international and regional organizations, most of which are members of the Consultative Group on International Agricultural Research (CGIAR). IFPRI gratefully acknowledges the generous unrestricted funding from Australia, Canada, China, Finland, France, Germany, India, Ireland, Italy, Japan, Netherlands, Norway, South Africa, Sweden, Switzerland, United Kingdom, United States, and World Bank.

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