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What Determines IMF Involvement in Trade Policy?

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Abstract

There seem to be consistent factors underlying the IMF's decision to become involved in trade policy. In surveillance, the degree of a country's trade restrictiveness was the main factor determining if the country received IMF trade policy advice. In IMF-supported programs, trade conditionality was linked to the degree of trade restrictiveness as well as to program duration and the 2000 streamlining initiative. The Fund's Policy Development and Review Department seems to have made a reasonable effort to filter the institution's views on trade policy issues to mission teams through the internal review process.

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I. Introduction

1. In accordance with its mandate to facilitate the expansion and balanced growth of international trade, the IMF has, on occasion, actively supported trade liberalization in its member countries through policy advice provided in the context of Article IV surveillance and in some cases through structural conditionality in Fund-supported programs. Notwithstanding this mandate, trade policy—in contrast to exchange rate, monetary, and fiscal policies—is not considered a core responsibility of the Fund and guidance to IMF staff on when they were expected to cover trade policy issues and what type of trade policy issues they were expected to cover evolved during the evaluation period (1996–2007).

2. What determined whether or not the IMF provided trade policy advice (in surveillance) or conditionality (in programs)? In this paper, we analyze data on IMF trade policy advice gleaned from Article IV staff reports and program requests to identify the main factors underlying IMF missions' decisions to provide trade policy advice or impose trade conditionality. Our purpose is to determine to what extent the IMF's trade policy advice/conditionality was consistently applied and followed basic principles of economics.

3. The paper is organized as follows. Section II summarizes some salient facts about trade policy advice in the IMF's bilateral surveillance during the evaluation period and estimates a simple model of the determinants of the Fund's trade policy advice. Section III does the same for trade conditions in Fund-supported programs during the evaluation period. Section IV looks more closely at the role of the IMF's Policy Development and Review Department (PDR) in filtering IMF Board guidance on trade policy issues to the staff. Section V offers conclusions.

II. Determinants of Trade Policy Advice in IMF Surveillance

4. As part of its mandate under Article IV, the IMF undertakes regular surveillance of its member countries' exchange rate, monetary, and fiscal policies. IMF Article IV surveillance missions may also discuss or advise on trade policy. Most IMF member countries are on an annual surveillance cycle, i.e., they have one Article IV consultation (approximately) every year; the rest are on a biennial cycle. Each Article IV consultation is documented in a staff report that sets out the economic situation of the country, describes the discussions between the IMF mission and the country authorities, and provides a staff appraisal. The Article IV staff reports are therefore a natural starting point for our investigation into a consistent underlying economic rationale for the IMF's coverage of trade policy issues during surveillance.

5. This section addresses the question of whether the IMF's coverage of trade policy in surveillance was appropriate, i.e., did IMF staff offer trade policy advice when they should have (and not when they should not have)? We assess this empirically, based on different viewpoints of "should/should not," namely, the relative costs and benefits of trade liberalization for overall macroeconomic growth and IMF internal guidelines on when to

cover trade policy issues during surveillance. As a corollary, the analysis provides some evidence as to whether the IMF has been evenhanded in its trade policy advice, i.e., whether during the evaluation period the Fund treated advanced and developing countries and countries in different geographical regions uniformly in addressing the need for trade reform when it was relevant.

6. For the entire IMF membership, we reviewed all bilateral Article IV staff reports for 1996, 2000, and 2006.[1] If a country did not have an Article IV consultation in those years, the staff report from the closest earlier year was used. This led to a total of 180 staff reports for 1996, 185 staff reports for 2000, and 190 staff reports for 2006. Each staff report was reviewed for its coverage of eleven trade policy topics: tariffs; nontariff barriers (NTBs); export restrictions; anti-dumping/countervailing measures; export subsidies; state trading monopolies; customs administration; trade in services; preferential trade agreements (PTAs); World Trade Organization (WTO) membership or activities; and trade liberalization in general. The coverage of each topic was given a rating of either 0 or 1, where: 0 indicated no coverage or coverage limited to factual reporting only and 1 indicated that the staff expressed a view or took a position on the issue. Table 1 provides summary statistics on the overall trade policy advice variable (which is one if any of the eleven topics was rated one, and zero otherwise) and selected individual topic advice variables.

Table 1. Summary Statistics for Trade Policy Advice Variables

Variable	Mean	Std. Dev.	Min	Max
Advice on:				
Trade policy (TP)	0.753	0.4316	0	1
Tariffs (T)	0.386	0.4871	0	1
NTBs (NTB)	0.148	0.3552	0	1
Export taxes/restrictions	0.079	0.2704	0	1
Anti-dumping/countervailing measures	0.018	0.1331	0	1
Export subsidies	0.256	0.4367	0	1
State trading monopoly	0.074	0.2618	0	1
Customs administration	0.187	0.3906	0	1
Trade in services	0.206	0.4046	0	1
PTAs	0.139	0.3460	0	1
WTO	0.097	0.2966	0	1
Trade liberalization in general	0.099	0.2990	0	1

Note: Number of observations = 555

[1] Including three territories (Hong Kong, Aruba, and Netherlands Antilles) that had Article IV consultations with the IMF during the evaluation period, and excluding Montenegro and Somalia, which had no Article IV consultations during the evaluation period.

7. To find out what determines when an Article IV mission gave trade policy advice, we use a probit model with the following specification:

$$\Pr\{TP_{it}\} = \alpha + \beta_1 TRI_{it} + \beta_2 INC_{it} + \beta_3 OPEN_{it} + \beta_4 REMOTE_i + \beta_5 CA_{it} + \beta_6 FISCAL_{it} + \beta_7 WTOM_{it} + \beta_8 WTOA_{it} + \beta_9 GOV_{it} + \sum_{k=1}^{4} \lambda_k A_{ki} + \varepsilon_{it}$$

where *TP* denotes whether or not country *i* received trade policy advice during the IMF Article IV consultation in year *t* (1 if yes, 0 if no); *TRI* denotes country *i*'s rating on the IMF's 10-point trade restrictiveness index (TRI) in year *t*; *INC* is the country's per capita purchasing power parity (PPP) adjusted income in U.S. dollars in year *t*; *OPEN* is the country's average exports plus imports relative to GDP in year *t*; *REMOTE* denotes the country's distance to the equator weighted by GDP (Frankel and Romer, 1999); *CA* is the country's current account balance normalized by its GDP in year *t*; *FISCAL* is the country's central government fiscal balance normalized by its GDP in year *t*; *WTOM* is 1 if the country is a WTO member and 0 otherwise; *WTOA* is 1 if the country is in WTO accession and 0 otherwise; *GOV* is the country's rating on the World Bank's Government Effectiveness Index in year *t* (Kaufmann, Kraay, and Mastruzzi (2008); A_k are dummy variables representing the IMF area department to which the country belongs (African (AFR), Asia-Pacific (APD), Middle East and Central Asia (MCD), Western Hemisphere (WHD), with European (EUR) being the default); and ε is an i.i.d random term with zero mean and positive variance.

8. When "should" IMF staff have offered trade policy advice? The motivation for the independent variables is as follows. One hypothesis is that IMF staff should have advised on trade policy when the net benefits from trade liberalization for overall growth were relatively large.[2] The factors that capture a country's potential net gains from trade include: the initial degree of the country's trade policy restrictiveness, the initial extent of the country's exposure to trade; the country's geographical remoteness (and hence the transport costs involved in trade); and the initial size of the economy or the degree of economic development. These four factors typically feature prominently in traditional models of international trade and income determination.

9. The degree of trade restrictiveness is captured by the *TRI* variable, which is the country's rating on the Trade Restrictiveness Index (TRI), an index systematically compiled in the IMF's PDR since 1997. The TRI ranges from 1 to 10, where 1 denotes the least restrictive and 10 the most restrictive trade regime. It is an aggregate of two sub-indices measuring average tariffs (on a scale of 1 to 5, with 1 indicating the lowest tariffs and 5 the

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[2] Article I (ii) of the IMF's Articles of Agreement states as one of the Fund's purposes: "To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy" (http://www.imf.org/external/pubs/ft/aa/aa01.htm).

highest tariffs) and the coverage of NTBs (on a scale of 1 to 3, with 1 indicating minimal NTB coverage and 3 indicating extensive NTB coverage).[3]

10. The exposure of a country to trade is captured by the *OPEN* variable which measures average exports plus imports relative to the country's GDP. The *OPEN* variable may capture a variety of trade policies beyond tariff or nontariff barriers to trade, for example, export-promoting policies such as export subsidies, preferential credit allocation or investment subsidies. Furthermore, the exposure to trade also has the advantage of being more directly related to the incremental gains from trade: in a country that is already quite open to trade, the incremental gains from further liberalization are expected to be rather small, hence trade liberalization may get less priority on the reform agenda.

11. Transport costs, which dilute the potential gains from trade, are captured by Frankel and Romer's (1999) remoteness variable, *REMOTE*, which measures the average distance of a country to major markets, weighted by GDP. The higher the transport costs, the lower the gains from trade will be and, therefore, the less priority one would expect IMF staff (and the country's policymakers) to attach to trade liberalization relative to other structural policies.

12. The size of an economy or its level of economic development—captured by the *INC* variable—determines the degree of gains from trade in most traditional and modern models of trade (Alvarez and Lucas, 2007). The intuition is that wealthier economies tend to be those that are already the most efficient producers of many goods and services. It is therefore expected that the richer the country is, the smaller would be its incremental gains from trade.

13. To capture the potential costs (including implementation costs) of trade policies, we include an index of government effectiveness, *GOV*, which ranges in value from -2.5 (worst governance) to 2.5 (best governance).[4] The intuition is that the less effective the government,

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[3] See Krishna (2009) for more on the IMF's TRI and alternative indices of trade restrictiveness. The main shortcoming of the TRI is that it is not conceptually well based. Ideally, to assess the restrictiveness of a country's trade policy, one would like to have an ad valorem tariff equivalent that aggregates tariff and nontariff barriers, along the lines of the World Bank's Overall Trade Restrictiveness Index (OTRI). However, the OTRI estimates cover a smaller group of countries and a shorter time span than the TRI.

[4] The government effectiveness index is a measure of "the quality of public service provision, the quality of the bureaucracy, the competence of public servants, and the independence of the civil service from political pressures." This index describes the ability of governments to effectively deliver public services and make policy. Values are indexed to have a mean of zero and a standard deviation of one index unit (Kaufmann, Kraay, and Mastruzzi, 2008). The index is available for every other year between 1996 and 2002, and every year thereafter. Indices for the missing years are assumed to be unchanged from those of the previous year.

the higher the implementation cost of policies and the lower the net benefits from trade liberalization, hence the less likely the IMF might be to advise trade liberalization.[5]

14. Another way of approaching the question is to say that IMF staff should have advised on trade policy per their instructions to do so. This overlaps with the first approach—one would expect that IMF staff would have been instructed to cover trade policy where the net gains from trade were considered to be large—but not completely. The IMF's 2002 and 2005 Surveillance Guidelines specified that coverage of trade policy was essential in: (i) countries where serious trade distortions hampered macroeconomic prospects; (ii) countries whose trade policies had systemic regional or global implications and, thus, significantly affected other countries' market access; and (iii) countries where balance of payments or fiscal accounts were vulnerable to trade developments (IMF, 2002, 2005b). While points (i) and (ii) loosely correspond to features that would be captured by the trade restrictiveness, openness, and income variables, an explicit consideration of balance of payments and fiscal variables seems warranted for point (iii).[6]

15. To capture balance of payments vulnerabilities, we include among the explanatory variables *CA*—the current account balance normalized by GDP. We expect that the larger the current account deficit, the greater the likelihood that the IMF would offer trade policy advice to the country. We include the fiscal balance variable, *FIS*, to take into account the potential (adverse) fiscal implications of trade policy such as tariff reduction. The more vulnerable the fiscal condition of the country is, the less likely the IMF is offer trade liberalization advice.[7]

16. The WTO dummies are included to address the question of the IMF's role in trade policy in a post-WTO world. One could hypothesize that there is less of a need for the IMF to be involved in trade policy in WTO member countries as these countries are subject to regular (albeit infrequent in some cases) WTO trade policy reviews. And while WTO accession countries are not subject to trade policy reviews, their trade policies nevertheless come under scrutiny by WTO members during the accession process. As the IMF's involvement in the WTO accession process tends to be minimal, it is possible that the IMF will also be less likely to offer trade policy advice to WTO accession countries relative to non-members of the WTO.

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[5] On the other hand, corruption may function effectively as a type of NTB. The higher the level of corruption in a country, the more likely the IMF would be to recommend trade policy reforms to improve transparency and prevent rent seeking by customs officials.

[6] Note that according to this approach, high-income countries are more likely to get trade policy advice from the IMF whereas according to the first approach, high-income countries are less likely to get trade policy advice.

[7] On the other hand, the IMF may be more like to offer certain types of trade policy advice (e.g., advice on customs reform) the more vulnerable the country's fiscal situation is.

17. The area department dummies are included to assess whether the IMF was evenhanded in its trade policy advice surveillance or if it tended to push harder on trade policy issues in certain regions than in others, all else the same. As a further check on evenhandedness, we replace the income variable *INC* with dummy variables for income groups (high-income and low-income, with middle-income being the default), to see if there is any truth to the criticism that the IMF pushed harder on trade policy issues in low-income countries than in high-income countries that had the same degree of trade restrictiveness.

18. Table 2 presents the estimation results. The second and fifth columns show the results from the probit estimation with *TP* as the dependent variable (and aggregate TRI on the right hand side); the third and sixth columns show the results for tariff advice only (and the tariff sub-index of the TRI on the right hand side); and the fourth and seventh columns show the results for NTB advice only (and the NTB sub-index of the TRI on the right hand side).

Table 2. Probit Model of IMF Trade Policy Advice

	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only
Aggregate TRI	**0.176*** [0.035]**	–	–	**0.187*** [0.037]**	–	–
Tariff TRI	–	**0.262*** [0.059]**	–	–	**0.251*** [0.058]**	–
NTB TRI	–	–	**0.810*** [0.127]**	–	–	**0.825*** [0.135]**
Income	-0.088 [0.087]	-0.069 [0.075]	0.113 [0.104]	–	–	–
Openness	0.009 [0.015]	0.009 [0.013]	**-0.393** [0.184]**	0.007 [0.015]	0.007 [0.013]	**-0.360** [0.175]**
Current Account	0.611 [0.759]	-0.487 [0.572]	-1.244 [1.205]	0.583 [0.771]	-0.698 [0.602]	-0.955 [1.147]
Fiscal	1.090 [1.131]	-0.217 [0.931]	0.906 [1.139]	1.018 [1.110]	-0.323 [0.923]	1.249 [1.194]
WTO Member	**-6.002* [3.434]**	-0.037 [0.309]	-0.281 [0.308]	**-6.082* [3.222]**	-0.055 [0.306]	-0.257 [0.310]
WTO Accession	**-5.794* [3.414]**	0.041 [0.319]	-0.**510*** [0.**307]**	**-5.867* [3.203]**	-0.018 [0.318]	-0.460 [0.310]
Governance	0.001 [0.129]	-0.001 [0.118]	-0.183 [0.168]	-0.026 [0.123]	0.033 [0.110]	-0.084 [0.150]
Remoteness	-0.325 [0.286]	-0.452 [0.284]	0.134 [0.373]	-0.339 [0.285]	-0.412 [0.286]	0.031 [0.368]
Dummy for advanced economy	–	–	–	-0.063 [0.272]	**-0.563** [0.268]**	0.156 [0.346]
Dummy for low-income country	–	–	–	0.287 [0.192]	-0.071 [0.157]	0.056 [0.207]
Dummy for AFR	-0.136 [0.367]	-0.267 [0.356]	0.276 [0.491]	-0.167 [0.358]	-0.201 [0.348]	0.101 [0.473]
Dummy for APD	0.263 [0.315]	0.315 [0.301]	**0.801** [0.401]**	0.239 [0.313]	0.358 [0.296]	**0.648* [0.390]**
Dummy for MCD	0.395 [0.290]	0.024 [0.273]	**0.619* [0.357]**	0.353 [0.291]	-0.006 [0.276]	0.553 [0.366]
Dummy for WHD	0.107 [0.288]	-0.085 [0.292]	0.434 [0.397]	0.079 [0.299]	-0.208 [0.300]	0.426 [0.404]
Number of observations	507	507	507	507	507	507

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1.

19. The IMF's TRI is the only explanatory variable that comes up significantly in all three specifications. There is also weak evidence that the IMF is less likely to advise on aggregate trade policy in WTO member and accession countries, all else the same. For the most part, the income and area department dummies are not significantly different from zero, suggesting that the IMF was fairly evenhanded in its provision of trade policy advice across its member countries. There is, however, some evidence that the IMF tends to advise less on tariff policy in high-income countries relative to other countries and that the IMF tends to press more on NTB liberalization in the Asia-Pacific region relative to other regions.

20. To test whether there was a drop in trade policy coverage following the 2002 Surveillance Review, which called for greater selectivity in such coverage (IMF, 2002), we added a dummy variable with a value of one for post-2000 observations and zero otherwise (Table 3). The results indicate that the call for greater selectivity was reflected in a drop in both tariff and NTB-related advice but not in overall trade policy advice.

Table 3. Probit Model of IMF Trade Policy Advice with 2002 Surveillance Review Dummy

	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only
Aggregate TRI	**0.177*** [0.035]**	–	–	**0.187*** [0.037]**	–	–
Tariff TRI	–	**0.257*** [0.059]**	–	–	**0.246*** [0.059]**	–
NTB TRI	–	–	**0.825*** [0.126]**	–	–	**0.841*** [0.135]**
Income	-0.111 [0.089]	-0.037 [0.077]	0.171 [0.107]	–	–	–
Openness	0.012 [0.016]	0.005 [0.014]	**-0.415** [0.184]**	0.009 [0.016]	0.003 [0.014]	**-0.360** [0.172]**
Current Account	0.751 [0.823]	-0.698 [0.642]	-1.660 [1.280]	0.662 [0.812]	-0.877 [0.667]	-1.181 [1.214]
Fiscal	0.792 [1.158]	0.095 [0.954]	1.471 [1.203]	0.752 [1.160]	0.147 [0.960]	1.868 [1.271]
WTO Member	**-6.078* [3.455]**	-0.017 [0.308]	-0.269 [0.317]	**-6.124* [3.228]**	-0.037 [0.306]	-0.243 [0.319]
WTO Accession	**-5.848* [3.438]**	0.037 [0.317]	**-0.540* [0.311]**	**-5.893* [3.210]**	-0.025 [0.317]	-0.474 [0.315]
Governance	0.030 [0.133]	-0.044 [0.122]	-0.264 [0.174]	-0.026 [0.123]	0.031 [0.110]	-0.095 [0.151]
Remoteness	-0.344 [0.287]	-0.420 [0.284]	0.217 [0.377]	-0.344 [0.286]	-0.400 [0.285]	0.058 [0.372]
Dummy for advanced economy	–	–	–	-0.052 [0.272]	**-0.581** [0.269]**	0.144 [0.347]
Dummy for low-income country	–	–	–	0.284 [0.192]	-0.063 [0.157]	0.063 [0.206]
Dummy for AFR	-0.169 [0.368]	-0.189 [0.357]	0.394 [0.494]	-0.162 [0.358]	-0.184 [0.348]	0.112 [0.480]
Dummy for APD	0.236 [0.316]	0.379 [0.301]	**0.895** [0.406]**	0.238 [0.313]	0.378 [0.294]	**0.651* [0.395]**
Dummy for MCD	0.375 [0.291]	0.071 [0.272]	**0.663* [0.362]**	0.351 [0.292]	0.011 [0.274]	0.545 [0.371]
Dummy for WHD	0.104 [0.287]	-0.061 [0.291]	0.470 [0.403]	0.086 [0.298]	-0.201 [0.299]	0.430 [0.411]
Dummy for 2002 surveillance review	0.152 [0.145]	**-0.228* [0.135]**	**-0.395** [0.178]**	0.106 [0.140]	**-0.250* [0.132]**	**-0.319* [0.168]**
Number of observations	507	507	507	507	507	507

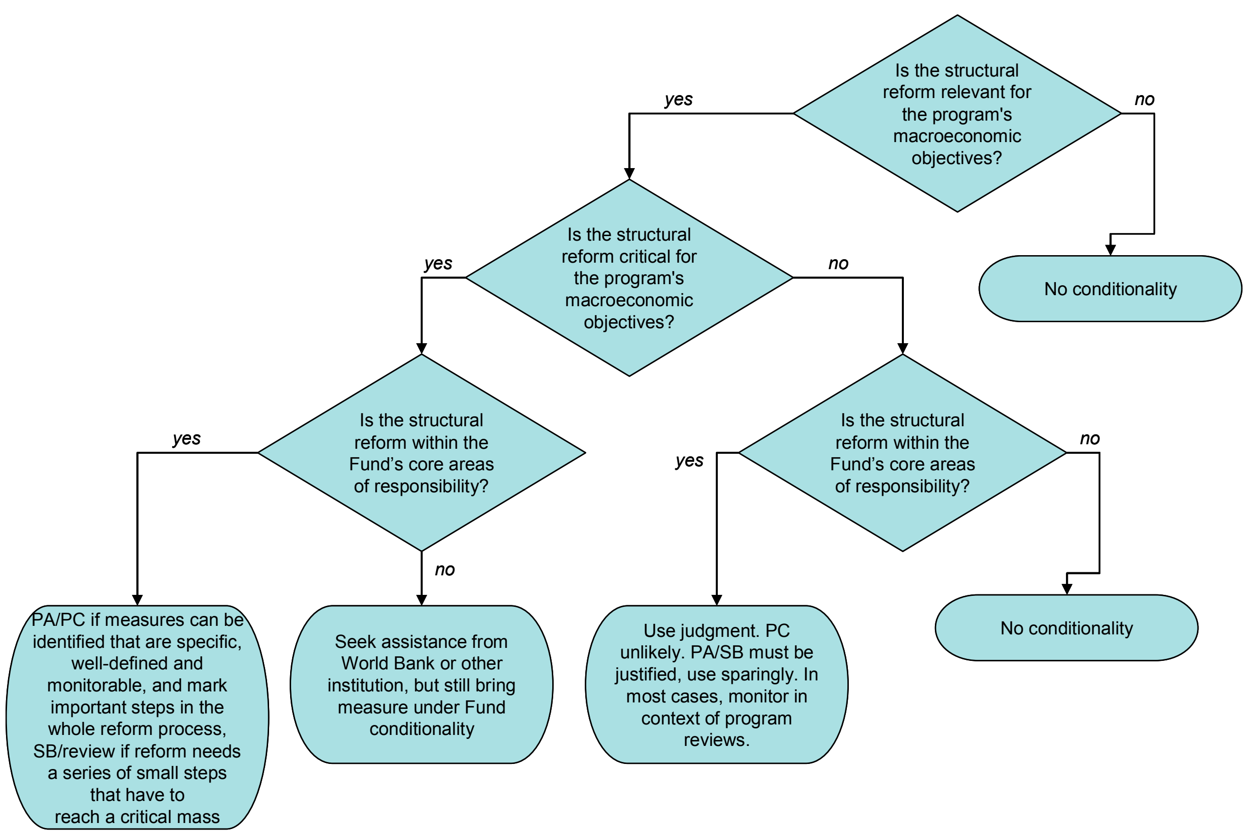
Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1.

21. To check the robustness of the results, we re-ran the model after dropping observations pertaining to the 1996 Article IV consultations because the TRI, which is only available from 1997, may not be a good measure of restrictiveness for earlier years. We also estimated the model without observations from individual EU member countries post-1996, since the IMF's policy, starting in 2000, was to cover trade policy issues in its Article IV consultations with the Euro Area and not in its bilateral consultations with individual EU members. The results are shown in the Annex Tables 1 and 2. In both cases, the basic results were unchanged.

III. Determinants of Trade Conditionality in IMF-Supported Programs

22. We now turn to the factors that determine trade conditionality in IMF-supported programs. Did the IMF impose trade conditionality when it should have and not when it should not have? The 2000 Conditionality Guidelines set out some general principles for determining the appropriate scope of structural conditionality in IMF arrangements (IMF, 2000) (Figure 1). But unlike with surveillance, the guidelines on conditionality did not pinpoint when trade conditionality, specifically, was required.

Figure 1. Principles to Determine the Appropriate Scope of Structural Conditionality



A. Data

23. For the entire IMF membership, we reviewed all program requests (comprising letters of intent, memoranda of economic and financial policies (MEFPs), and associated staff reports) from 1996 through 2007. Altogether a total of 226 programs were considered (including 88 SBA-supported programs, 19 EFF-supported programs, 113 ESAFs/PRGF-supported programs, and 6 PSI-supported programs) for 93 countries. To supplement the information from the program request documents, we used PDR's Monitoring of Fund Arrangements (MONA) database to identify trade conditions that were added after the initial request for all the programs in our sample.[8]

24. Each program request was reviewed for the inclusion of conditionality (in the form of prior actions, structural performance criteria, or structural benchmarks) in the same eleven trade policy areas used in the surveillance review, except that there were no conditions relating to anti-dumping and countervailing measures, PTAs, WTO, and general trade liberalization.[9] Therefore, we ended up with conditions in seven trade policy areas: tariffs; NTBs; export restrictions; export subsidies; state trading monopolies; and customs administration. Conditions on trade in services were hard to identify as most of them were introduced in the context of privatization and/or financial sector reform and were only incidentally related to services trade liberalization. As this was the weakest part of our data, we show the results both with and without trade in services in the definition of trade conditionality in the annex.

25. Out of the 226 programs that were approved during 1996–2007, 147 programs contained trade conditionality in the form of prior actions, structural performance criteria, and structural benchmarks (Table 4). Some programs contained more than one trade condition. In its simplest form, we can define the presence of trade conditionality as a binary variable which takes the value of one if there are one or more a trade conditions in the program, and zero if there are no trade conditions. In Table 4, we present the data in two additional ways:

[8] The MONA database records for each program all conditions inserted during the life of the program. Hence it has the advantage of being comprehensive as it takes into account the multi-year nature of most IMF arrangements. But the categorization of structural conditions in the MONA database is unreliable (for example, conditions classified under "trade regime" were not always found to be related to trade). For this reason, we relied on our own review of program requests (on the assumption that key structural conditions would be included in the initial request most of the time) and only used the MONA database to look for additional trade conditions that were introduced after the initial program request.

[9] As for program conditions relating to general trade liberalization, all IMF-supported programs include in their legal text a continuous performance criterion prohibiting the imposition/intensification of import restrictions for balance of payments reasons. However, this condition is rarely found in the letter of intent or MEFP for the program.

- We can define the presence of trade conditionality as a categorical variable according to the specification of the condition, i.e., prior action, structural performance criterion, or structural benchmark. The top part of Table 4 shows the breakdown of programs with trade conditionality according to the most stringent form of conditionality found. The ordering is that a prior action is more stringent than a structural performance criterion, which is more stringent than a structural benchmark. A program that includes more than one type of trade condition is counted only once, for example, if there is a prior action and a structural benchmark, the condition is counted in the prior action column only. This definition is useful for analytical work, including for the econometric work described below.

- We can also define the presence of trade conditionality as a count variable, i.e., the number of trade conditions in each program. (One could argue that multiple conditions are an indication of the intensity of the conditionality, although this seems to be a rather strong assumption.) The bottom part of Table 4 shows the number of each type of trade condition in all the programs in our sample. The total number of trade-related conditions was 446, which averaged around 3 per program year. Trade conditions are more likely to be specified as structural benchmarks than as prior actions and structural performance criteria. This may partly reflect the difficulties of specifying trade conditions in the form of objectively monitorable measures, but it is more likely to be because most trade policy measures were not considered to be macro-critical to the program.

Table 4. Distribution of Trade Conditionality by Type of Condition

	Prior action	Structural performance criterion	Structural benchmark	Total
Trade conditionality as a categorical variable				
Number	124	53	99	276
Share (percent)	44.9	19.2	35.9	100.0
Trade conditionality as a count variable				
Number	167	83	196	446
Share (percent)	37.4	18.6	43.9	100.0
[Excluding trade in services]				
Trade conditionality as a categorical variable				
Number	119	51	92	262
Share (percent)	45.4	19.5	35.1	100.0
Trade conditionality as a count variable				
Number	160	81	187	428
Share (percent)	37.4	18.9	43.7	100.0

26. Table 5 shows the breakdown of trade conditionality by topic. About 90 percent of all trade-related conditions in our sample were concentrated in a few core areas, notably customs reforms (32.1 percent), tariff reforms (25.3 percent), and export subsidies (12.8 percent).

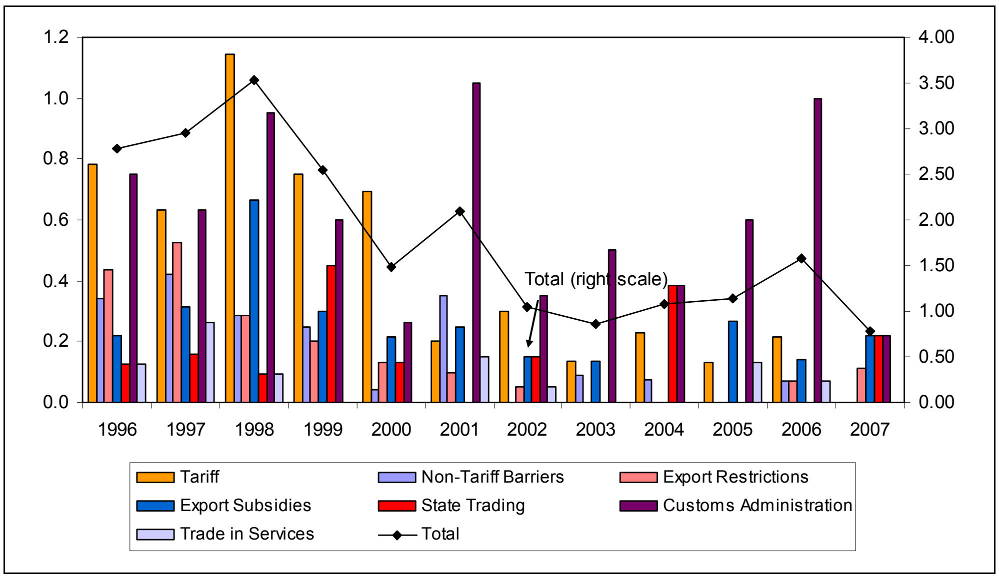
Table 5. Distribution of Trade Conditionality by Topic

Tariff	NTB	Export restrictions	Export subsidies	State trading monopoly	Customs	Trade in services	Total
113	42	42	57	31	143	18	446
(25.3)	(9.4)	(9.4)	(12.8)	(7.0)	(32.1)	(4.0)	(100.0)

Note: Figures in parentheses show percentage shares out of total.

27. Figure 2 presents the number of trade policy conditions per program over time. For each of the seven trade policy areas, we counted the number of conditions found in all IMF-supported programs approved in each year and divided it by the number of programs approved in that year. There is a rise in the number of trade conditions from 1996 to 1998, then a general decrease after that, with the exception of a slight uptick in 2004–06 mostly due to an increase in conditionality related to customs administration.

Figure 2. Average Number of Trade Conditions Per Program



B. Model Specification

28. There is a substantial literature on the determinants of participation and the amount of lending in IMF programs (see Knight and Santaella (1997) and Bird and Rowland (2001) for surveys of early studies). A common approach is to estimate a logit or probit model of participation in IMF-supported programs or a tobit (multinomial probit) model of the amount of IMF lending as a function of macroeconomic variables including GDP per capita, foreign reserves, government debt, and the balance of payments. Przeworski and Vreeland (2000) estimated a system of decision functions of the IMF and program countries using a probit model. More recently, Barro and Lee (2005) introduced political economy variables that were thought to affect the decision of the IMF—for example, the borrowing country's IMF quota, the share of the borrowing country's nationals among the IMF economist staff, and the political and economic proximity of the borrowing country to influential countries such as

the United States. Following these lines of research, we estimate a probit model of trade conditionality with macroeconomic variables.

29. We use a similar specification to the surveillance case with additional variables that could potentially explain the inclusion of trade conditionality in IMF-supported programs:

$$\begin{aligned}\Pr\{TC_{it}\} = \alpha &+ \beta_1 TRI_{it} + \beta_2 INC_{it} + \beta_3 REMOTE + \beta_4 OPEN_{it} + \beta_5 CA_{it} + \beta_6 FISCAL \\ &+ \beta_7 LOAN_i + \beta_8 DUR_{it} + \beta_9 S_t + \beta_{10} WTOM_{it} + \beta_{11} WTOA_{it} \\ &+ \beta_{12} GOV_{it} + \varepsilon_{it}\end{aligned}$$

The dependent variable, *TC*, is zero if country *i* had no trade condition in its IMF-supported program in year *t* and one if it had a trade condition (a prior action, structural performance criterion, or structural benchmark) in its initial program request. We assume that any trade condition applies for the duration of the program; thus if country *i* had a Fund-supported program from 1999–2001 that included trade conditionality, then *TC* for country *i* will be one for those three years. *LOAN* represents country *i*'s access to Fund financing and is measured as the country's IMF loan approved as a share of its IMF quota; *DUR* stands for the actual duration of the Fund arrangement (typically one to three years), and *S* is a dummy variable to capture the IMF's streamlining initiative introduced in 2000 that set out the principles for the inclusion of structural conditionality in IMF-supported programs shown in Figure 1 (IMF, 2000).

30. The intuition behind the inclusion of the explanatory variables *TRI, INC, OPEN, CA, FISCAL, REMOTE, GOV*, the *WTO* dummies, and the area dummies A_k, is similar to that behind their inclusion in the surveillance equation earlier.[10] The variables *LOAN* and *DUR* are included to capture program-specific characteristics. The larger the loan, the more reforms the IMF is likely to call for (or the more conditionality, it is likely to impose, possibly including trade conditionality) to justify the loan. The longer the loan duration, the more likely the IMF-supported program is to contain structural reform measures, including trade reforms.

31. The estimation results are shown in Table 6. As in the surveillance case, the TRI is a strong indicator—the higher the TRI (i.e., the more restrictive the country's trade regime), the more likely it is that the country's IMF-supported program will include one or more trade conditions. The duration of the program also affects the likelihood that trade conditionality is included in the program—the longer the duration, the more likely it is that trade conditionality will be included. This is not surprising since medium-term programs tend to have a larger structural component than short-term programs. The IMF's streamlining initiative significantly reduced the likelihood of trade conditionality. Finally, the probability

[10] Income group dummies are excluded as almost all IMF-supported programs are in middle- and low-income countries.

of trade conditionality is also linked to macroeconomic variables such as per capita income, and the fiscal balance-to-GDP ratio. The higher the per capita income, the less likely it is that trade conditionality will be included in the country's Fund-supported program. Interestingly, the fiscal balance turns out to be negatively related to the probability of trade conditionality, i.e., the better the fiscal balance, the less likely the country's Fund-supported program is to include trade conditionality. This could make sense for certain types of trade conditionality such as customs administration reforms or tariff reforms that are introduced primarily to raise revenue.

Table 6. Probit Model of IMF Trade Conditionality

	Trade conditionality	Trade conditionality excluding trade in services	Conditionality on tariffs only	Conditionality on NTBs only
Aggregate TRI	**0.304*** [0.050]**	**0.324*** [0.048]**	–	–
Tariff TRI	–	–	**0.390*** [0.072]**	–
NTB TRI	–	–	–	**0.954*** [0.179]**
Per capita Income	**-0.294** [0.093]**	**-0.376*** [0.093]**	**-0.409*** [0.133]**	**-0.307** [0.154]**
Remoteness	0.001 [0.006]	0.001 [0.032]	0.001 [0.006]	0.001 [0.001]
Openness	0.032 [0.033]	0.017 [0.032]	0.036 [0.032]	**-0.059* [0.034]**
Current Account	1.597 [1.296]	**1.297* [0.742]**	0.624 [0.597]	**2.600** [1.226]**
Fiscal	**-0.007** [0.002]**	**-0.008*** [0.002]**	-0.003* [0.001]	0.002 [0.002]
Loan to Quota	**-0.136*** [0.031]**	**-0.156*** [0.003]**	-0.031 [0.033]	**-0.069* [0.036]**
Duration of Program	**0.731*** [0.117]**	**0.671*** [0.120]**	**0.259** [0.101]**	0.097 [0.126]
Streamlining Initiative 2000	**-0.471*** [0.138]**	**-0.465*** [0.137]**	-0.502*** [0.129]	**-0.439*** [0.156]**
WTO Member	**-6.828*** [1.155]**	**-6.722*** [1.161]**	-0.395 [0.306]	**-1.159*** [0.357]**
WTO Accession	**-6.556*** [1.166]**	**-6.514*** [1.181]**	0.372 [0.321]	**-1.634*** [0.371]**
Governance	0.308 [0.193]	0.269 [0.192]	**0.778*** [0.185]**	**-0.399* [0.237]**
Dummy for AFR	0.139 [0.455]	-0.306 [0.446]	-0.624 [0.430]	-0.935 [0.612]
Dummy for APD	-0.164 [0.397]	**-0.978** [0.390]**	-0.494 [0.381]	-0.423 [0.491]
Dummy for MCD	0.587 [0.363]	0.217 [0.353]	-0.168 [0.322]	-0.091 [0.447]
Dummy for WHD	0.402 [0.377]	0.208 [0.373]	0.049 [0.366]	0.074 [1.499]
Number of Observations	528	528	528	528

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1

32. Because our specification of trade conditionality (*TC*) does not distinguish between the number and type of trade conditions (being one if there are one or more conditions of any type), we re-ran the model to try to capture varying degrees of trade conditionality. First, we constructed an alternative dependent variable, *TC1*, by counting all the trade conditions for each country in each year, giving equal weight to prior actions, structural performance criteria, and structural benchmarks, and re-estimated the model using a tobit specification. Second, because it may be misleading to (implicitly) weight PAs, PCs, and SBs equally, we constructed another dependent variable *TC2* by assigning a weight of 1 for prior actions and 0.5 for structural performance criteria and structural benchmarks. Third, we return to our original specification of *TC* but drop the assumption that any trade condition applies for the duration of the program. That is, if country *i* had a multi-year program that included trade conditionality, then *TC3* for country *i* will be one only for the first year of the program. The results are shown in the Annex Tables 3–5. In all three cases, the basic results are unchanged.

IV. How Effective Was the IMF's Internal Review Process?

33. This section delves a little deeper into the question of when IMF staff "should" have covered trade policy in surveillance and program discussions. As noted in IEO (2009), the IMF Executive Board's views on how actively involved the Fund should be in trade policy issues have changed over time. PDR was responsible for filtering the Board's and management's views to operational staff through guidance notes and memos and through the internal review process.

34. PDR's criteria for coverage of trade policy issues in Article IV surveillance reports were laid out in IMF (2005a) (Table 7).

Table 7. Coverage of Trade Issues in Article IV Reports—Operational Considerations

Trade issues	When to cover in staff report?
Reform of trade regime	
Merchandise trade	Decision to report based on degree of restrictiveness/distortion of trade regime and importance of policy changes during reporting period; staff could use benchmark levels, e.g., of average tariff rates or an index of the trade policy stance, to determine a "presumption" of coverage.
Services trade	In principle as for merchandise trade reform; special attention to financial services trade, and to trade negotiations at the regional and global level that might affect the regulatory framework for services.
Fiscal aspects and customs administration	Criteria as for other fiscal revenue sources; cover if significant enough to require adjustment in other revenues or in public expenditure.
Spill-over effects	Cover where measurable impact on world prices or exports of other countries; prima facie evidence includes prominence in trade disputes or negotiations.
Multilateral agenda	
WTO negotiations	Report on initiatives in which country plays a central role, either as a proponent or defensively; report on overall strategy if country is a leading player in the multilateral negotiations.
Macro vulnerabilities	Presumption that should be covered if country meets certain criteria related to vulnerability to preference erosion, food terms of trade changes, or the expiry of textile quotas.
Regional trade initiatives	No easy benchmarks, but presumption that should report where trade creation/diversion is significant, the agreement entails regulatory changes in areas of importance from a growth/stability perspective, or there are significant changes in institutions (e.g., the ability of a country to set tariffs or collect customs duties).

Source: IMF (2005a).

35. We examined PDR's comments on 538 briefing papers for 1996, 2000, and 2006 Article IV missions, and 181 briefing papers for missions to negotiate new programs during the 1996–2007. The main observations are as follows.

- The average number of trade policy-related comments by PDR was similar for Article IV and program requests—about two comments per briefing paper.

- Most of PDR's comments (22 percent of 1,163 comments) were related to tariffs and import surcharges.[11] General trade policy comments constituted 17 percent of the total comments; they were mainly requests for the mission to collect information on the country's trade regime. Other trade policy issues that PDR commented on relatively more frequently were PTA issues (15 percent), NTBs (9 percent), and WTO matters (9 percent); comments related to anti-dumping measures, state trading monopolies, and trade in services were relatively scarce (less than 2 percent). Viewed over time, the relative frequency of PDR comments related to tariff policy declined while the relative frequency of PDR comments related to PTA issues increased.

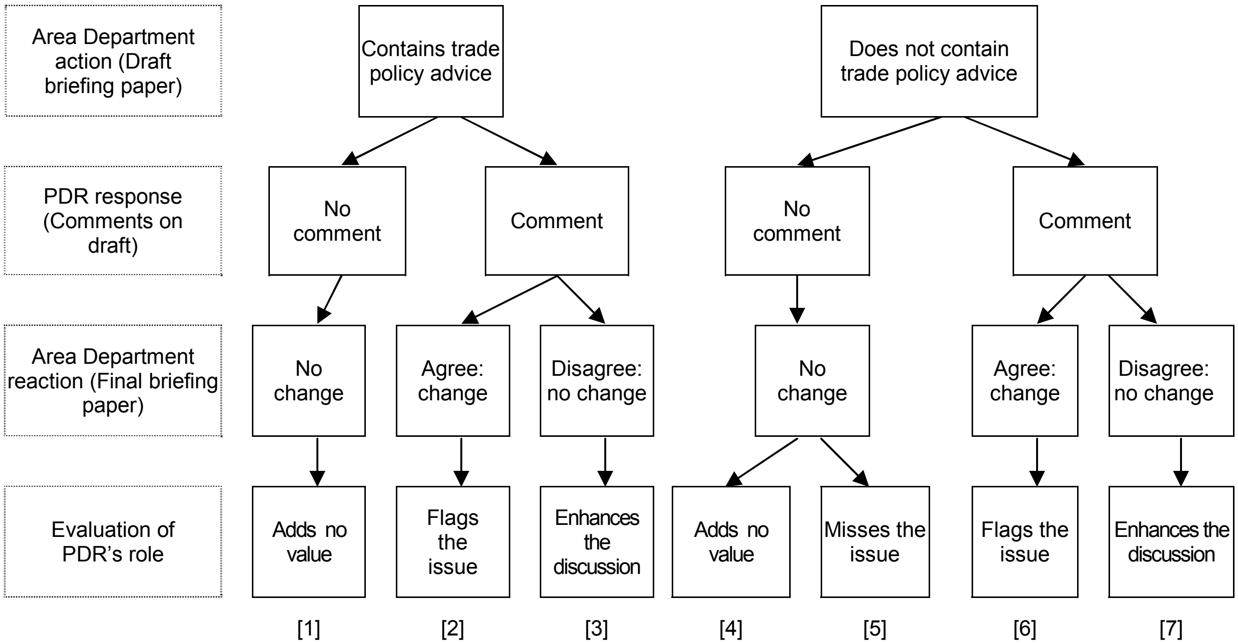
- On average, PDR commented more frequently on trade policy issues in briefing papers for low-income countries than for advanced countries. Out of 60 advanced country briefing papers reviewed, we found 103 trade policy-related comments (i.e., an average of 1.7 comments per paper). The comments for this group of countries were mainly focused on WTO and PTA issues and export subsidies. Out of 123 low-income country briefing papers reviewed, we found 327 trade policy-related comments (i.e., an average of 2.7 comments per paper). The comments for this group of countries tended to be focused on tariff policy, export restrictions, and customs administration.

- The average number of trade policy-related comments by PDR was approximately three per briefing paper before 2000, when the Executive Board called for a more parsimonious application of structural conditionality in IMF-supported programs (IMF, 2000), and approximately two per briefing paper after that. There was no appreciable increase in the number of PDR comments related to trade in services issues after 2005, when staff were encouraged to pay increased attention to the impact of trade restrictions in services including financial services (IMF, 2005b).

36. How do we evaluate PDR's influence on trade policy coverage in the IMF's operational work? In this section we adopt a heuristic approach taking into consideration the interaction between PDR and area departments in the process of finalizing briefing papers for IMF missions. The process is illustrated in Figure 3.

[11] There could be comments on more than one trade policy topic for any given briefing paper.

Figure 3. Interaction between PDR and Area Departments in the Briefing Paper Process



37. When PDR made no (trade policy-related) comments on a draft briefing paper containing no trade policy recommendations there are two possible outcomes: either PDR was correct in agreeing with the mission that there were no trade policy issues worth raising (case 4) or PDR missed a trade policy issue that should have been flagged to the mission (case 5). To distinguish between these two outcomes, we assume that PDR missed the issue if: (i) it had no comments on tariff policy for a country with a TRI tariff sub-index of 4 or 5 (the highest scores); (ii) it had no comments related to NTBs for a country with a TRI NTB sub-index of 3 (the highest score); (iii) it had no comments related to PTA issues for a country with more than five PTAs; or (iv) it had no comments on WTO issues for a country with WTO accession or nonmember status. In the cases (case [3] and [6] above) where the area department stuck to its trade policy recommendation without accepting PDR's comment, we do not make a judgment on who was right but assume that PDR enhanced the discussion by making the mission team look a little further into the issue to defend its position.

38. Table 8 shows the distribution of outcomes based on a review of 488 draft and final briefing papers.[12] In the majority of cases, the mission made the right call as to whether to cover a trade policy issue or not and PDR agreed with the mission's call. On tariff-related issues, PDR flagged the issue in almost one-fourth of the cases. PDR missed the issue in only a small fraction of tariff and NTB-related issues, but could have strengthened its role as a trade policy advisor in PTA and WTO related issues.

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[12] This review includes only briefing papers for which we were able to obtain both the draft and final versions.

Table 8. Evaluation of PDR's Role
(Percent of briefing papers reviewed)

	Tariff	NTB	PTA	WTO
PDR flagged the issue	23.2	7.2	10.7	6.8
PDR enhanced the discussion	29.7	15.0	24.2	13.7
PDR added no value	41.8	73.6	51.0	63.1
PDR missed the issue	5.3	4.3	14.1	16.4
Total	100.0	100.0	100.0	100.0

V. Conclusion

39. This paper offers an overview of the IMF's involvement in trade policy. The key finding is that there seem to be consistent factors underlying the decision to cover trade policy. In surveillance, the degree of a country's trade restrictiveness was the main factor determining whether the country received IMF trade policy advice. In programs, IMF trade conditionality was linked to the degree of trade restrictiveness, as well as to program duration and the streamlining initiative introduced in 2000, which set out the principles for the inclusion of structural conditionality in IMF-supported programs. In the internal review process, PDR seems to have made a reasonable effort to filter the institution's views on trade policy issues to mission teams.

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Annex Table 1. Probit Model of IMF Trade Policy Advice, Excluding 1996 Article IV Observations

	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only
Aggregate TRI	**0.158*** [0.045]**	–	–	**0.183*** [0.050]**	–	–
Tariff TRI	–	**0.359*** [0.073]**	–	–	**0.351*** [0.073]**	–
NTB TRI	–	–	**1.022*** [0.190]**	–	–	**1.034*** [0.201]**
Income	-0.019 [0.110]	-0.021 [0.094]	0.132 [0.134]	–	–	–
Openness	-0.074 [0.074]	-0.018 [0.070]	**-0.539** [0.246]**	-0.093 [0.073]	-0.012 [0.070]	**-0.526** [0.230]**
Current Account	1.485 [1.345]	0.182 [0.576]	-0.246 [1.146]	1.669 [1.308]	0.112 [0.579]	0.059 [0.984]
Fiscal	-0.890 [1.265]	-0.010 [1.100]	-0.191 [1.423]	-0.777 [1.220]	0.011 [1.075]	0.252 [1.479]
WTO Member	-5.744 [4.440]	0.063 [0.421]	-0.499 [0.401]	-5.940 [4.184]	0.046 [0.420]	-0.502 [0.393]
WTO Accession	-5.504 [4.424]	-0.079 [0.438]	**-0.700* [0.400]**	-5.684 [4.168]	-0.113 [0.440]	-0.633 [0.389]
Governance	-0.103 [0.166]	-0.031 [0.148]	-0.289 [0.211]	-0.149 [0.166]	0.022 [0.131]	-0.194 [0.165]
Remoteness	-0.123 [0.369]	-0.343 [0.356]	0.454 [0.533]	-0.199 [0.370]	-0.342 [0.356]	0.349 [0.518]
Dummy for advanced economy	–	–	–	0.354 [0.345]	-0.328 [0.316]	0.335 [0.397]
Dummy for low-income country	–	–	–	0.379 [0.268]	0.015 [0.192]	0.093 [0.258]
Dummy for AFR	0.185 [0.481]	-0.031 [0.445]	0.637 [0.695]	0.021 [0.470]	-0.052 [0.430]	0.470 [0.654]
Dummy for APD	0.161 [0.409]	0.312 [0.379]	0.469 [0.562]	0.062 [0.413]	0.288 [0.368]	0.313 [0.535]
Dummy for MCD	0.556 [0.375]	0.020 [0.351]	0.689 [0.486]	0.525 [0.373]	-0.025 [0.347]	0.634 [0.484]
Dummy for WHD	0.403 [0.370]	0.140 [0.364]	0.691 [0.562]	0.409 [0.388]	0.051 [0.366]	0.743 [0.547]
Number of observations	341	341	341	341	341	341

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1.

Annex Table 2. Probit Model of IMF Trade Policy Advice,
Excluding Individual EU Member Countries After 1996

	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only	Trade policy advice (TP)	Advice on tariffs (T) only	Advice on NTBs only
Aggregate TRI	**0.181*** [0.036]**	–	–	**0.194*** [0.038]**	–	–
Tariff TRI	–	**0.257*** [0.058]**	–	–	**0.251*** [0.058]**	–
NTB TRI	–	–	**0.849*** [0.125]**	–	–	**0.862*** [0.132]**
Income	-0.115 [0.091]	-0.041 [0.076]	0.133 [0.107]	–	–	–
Openness	0.008 [0.015]	0.009 [0.014]	**-0.323** [0.165]**	0.005 [0.015]	0.007 [0.014]	**-0.291* [0.156]**
Current Account	0.602 [0.730]	-0.665 [0.659]	-1.579 [1.335]	0.535 [0.753]	-0.808 [0.687]	-1.140 [1.233]
Fiscal	0.772 [1.133]	-0.375 [0.933]	0.838 [1.158]	0.724 [1.119]	-0.424 [0.925]	1.179 [1.231]
WTO Member	-5.964 [3.846]	-0.013 [0.302]	-0.221 [0.309]	**-6.064* [3.572]**	-0.022 [0.301]	-0.189 [0.310]
WTO Accession	-5.789 [3.826]	-0.004 [0.311]	**-0.535* [0.310]**	**-5.893* [3.550]**	-0.034 [0.312]	-0.459 [0.312]
Governance	0.110 [0.139]	0.069 [0.123]	-0.142 [0.172]	0.124 [0.136]	0.075 [0.112]	-0.050 [0.149]
Remoteness	-0.331 [0.322]	-0.289 [0.294]	0.281 [0.379]	-0.327 [0.317]	-0.271 [0.291]	0.169 [0.374]
Dummy for advanced economy	–	–	–	-0.269 [0.331]	-0.297 [0.298]	0.335 [0.363]
Dummy for low-income country	–	–	–	**0.360* [0.198]**	-0.035 [0.156]	0.094 [0.207]
Dummy for AFR	-0.298 [0.394]	-0.396 [0.356]	0.098 [0.478]	-0.343 [0.383]	-0.342 [0.349]	-0.090 [0.464]
Dummy for APD	0.041 [0.341]	0.079 [0.307]	0.548 [0.391]	0.002 [0.338]	0.127 [0.303]	0.378 [0.382]
Dummy for MCD	0.241 [0.305]	-0.177 [0.273]	0.382 [0.337]	0.154 [0.304]	-0.176 [0.276]	0.329 [0.346]
Dummy for WHD	-0.087 [0.318]	-0.358 [0.299]	0.131 [0.387]	-0.159 [0.323]	-0.402 [0.305]	0.158 [0.392]
Number of observations	455	455	455	455	455	455

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1.

Annex Table 3. Tobit Model of IMF Trade Conditionality with Dependent Variable *TC1*

	Trade conditionality	Trade conditionality excluding trade in services	Conditionality on tariffs only	Conditionality on NTBs only
Aggregate TRI	**0.257*** [0.087]**	**0.296*** [0.087]**	–	–
Tariff TRI	–	–	**0.674*** [0.120]**	–
NTB TRI	–	–	–	**1.712*** [0.335]**
Per capita Income	**-0.728*** [0.250]**	**-0.917*** [0.255]**	**-0.794*** [0.197]**	-0.502 [0.325]
Remoteness	**-0.003* [0.001]**	**-0.004** [0.001]**	-0.001 [0.001]	0.001 [0.001]
Openness	**-0.158** [0.068]**	**-0.150** [0.068]**	0.053 [0.051]	-0.063 [0.079]
Current Account	0.277 [1.768]	0.607 [1.807]	1.077 [1.222]	2.971 [2.256]
Fiscal	0.001 [0.004]	0.001 [0.004]	-0.001 [0.003]	0.008 [0.006]
Loan to Quota	**-0.376*** [0.103]**	**-0.405*** [0.106]**	-0.092 [0.067]	-0.182 [0.130]
Duration of Program	**1.631*** [0.217]**	**1.561*** [0.216]**	**0.586*** [0.162]**	0.203 [0.241]
Streamlining Initiative 2000	**-1.676*** [0.290]**	**-1.629*** [0.290]**	**-1.029*** [0.222]**	**-1.015*** [0.350]**
WTO Member	**-1.530** [0.648]**	**-1.431** [0.645]**	-0.562 [0.447]	**-1.805*** [0.590]**
WTO Accession	-0.698 [0.727]	-0.559 [0.726]	**0.924* [0.507]**	**-2.740*** [0.725]**
Governance	**0.782** [0.385]**	**0.784** [0.383]**	**1.400*** [0.309]**	-0.621 [0.475]
Dummy for AFR	**-5.342*** [0.974]**	**-5.814*** [0.983]**	**-2.654*** [0.721]**	**-2.852*** [1.011]**
Dummy for APD	**-4.519*** [0.884]**	**-5.650*** [0.915]**	**-2.036*** [0.655]**	-1.381 [0.900]
Dummy for MCD	**-2.105*** [0.754]**	**-2.515*** [0.757]**	**-1.666*** [0.541]**	-1.146 [0.763]
Dummy for WHD	**-4.222*** [0.887]**	**-4.322*** [0.884]**	**-1.362** [0.639]**	1.531 [2.944]
Number of Observations	528	528	528	528

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1

Annex Table 4. Tobit Model of IMF Trade Conditionality with Dependent Variable *TC2*

	Trade conditionality	Trade conditionality excluding trade in services	Conditionality on tariffs only	Conditionality on NTBs only
Aggregate TRI	**0.225*****	**0.254*****	–	–
	[0.065]	**[0.065]**		
Tariff TRI	–	–	**0.520*****	–
			[0.085]	
NTB TRI	–	–	–	**1.340*****
				[0.267]
Per capita Income	**-0.455****	**-0.568*****	**-0.568*****	-0.336
	[0.188]	**[0.190]**	**[0.141]**	[0.257]
Remoteness	**-0.003****	**-0.003*****	-0.001	0.001
	[0.001]	**[0.001]**	[0.008]	[0.001]
Openness	**-0.116****	**-0.111****	0.034	-0.046
	[0.051]	**[0.051]**	[0.036]	[0.063]
Current Account	0.054	0.164	0.877	1.388
	[1.304]	[1.291]	[0.925]	[1.725]
Fiscal	0.001	0.001	-0.001	0.007
	[0.003]	[0.003]	[0.002]	[0.005]
Loan to Quota	**-0.283*****	**-0.305*****	-0.071	-0.137
	[0.007]	**[0.080]**	[0.048]	[0.104]
Duration of Program	**1.202*****	**1.163*****	**0.435*****	0.121
	[0.163]	**[0.161]**	**[0.115]**	[0.191]
Streamlining Initiative 2000	**-1.237*****	**-1.189*****	**-0.670*****	**-0.761*****
	[0.218]	**[0.217]**	**[0.158]**	**[0.280]**
WTO Member	**-1.919*****	**-1.883*****	**-0.655****	**-1.562*****
	[0.486]	**[0.480]**	**[0.317]**	**[0.467]**
WTO Accession	**-1.079****	**-1.017***	0.506	**-2.122*****
	[0.545]	**[0.540]**	[0.359]	**[0.570]**
Governance	0.308	0.292	**0.991*****	-0.586
	[0.290]	[0.286]	**[0.220]**	[0.380]
Dummy for AFR	**-4.372*****	**-4.679*****	**-2.159*****	**-1.978****
	[0.733]	**[0.734]**	**[0.514]**	**[0.803]**
Dummy for APD	**-3.504*****	**-4.298*****	**-1.485*****	-0.913
	[0.665]	**[0.684]**	**[0.465]**	[0.720]
Dummy for MCD	**-1.959*****	**-2.205*****	**-1.323*****	-0.748
	[0.567]	**[0.565]**	**[0.385]**	[0.607]
Dummy for WHD	**-3.454*****	**-3.518*****	**-1.048****	0.694
	[0.667]	**[0.660]**	**[0.454]**	[2.339]
Number of Observations	528	528	528	528

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1

Annex Table 5. Probit Model of IMF Trade Conditionality with Dependent Variable *TC3*

	Trade conditionality	Trade conditionality excluding trade in services	Conditionality on tariffs only	Conditionality on NTBs only
Aggregate TRI	**0.287*** [0.072]**	**0.308*** [0.071]**	–	–
Tariff TRI	–	–	**0.406*** [0.115]**	–
NTB TRI	–	–	–	**1.460*** [0.301]**
Per capita Income	-0.178 [0.172]	-0.242 [0.174]	-0.257 [0.206]	-0.224 [0.299]
Remoteness	0.001 [0.001]	0.001 [0.001]	0.001 [0.001]	0.001 [0.001]
Openness	-0.008 [0.050]	-0.016 [0.050]	-0.003 [0.048]	-0.056 [0.061]
Current Account	3.344 [4.416]	3.660 [4.661]	0.599 [0.616]	**3.447** [1.549]**
Fiscal	**-0.006** [0.003]**	**-0.006** [0.003]**	**-0.003* [0.002]**	0.002 [0.002]
Loan to Quota	**-0.118** [0.050]**	**-0.139*** [0.050]**	-0.026 [0.053]	-0.037 [0.060]
Duration of Program	**0.513*** [0.137]**	**0.477*** [0.139]**	0.161 [0.132]	0.150 [0.181]
Streamlining Initiative 2000	**-0.622*** [0.207]**	**-0.601*** [0.207]**	**-0.854*** [0.214]**	-0.331 [0.285]
WTO Member	**-7.040*** [1.589]**	**-7.181*** [1.614]**	-0.380 [0.519]	**-1.315** [0.533]**
WTO Accession	**-7.074*** [1.593]**	**-7.306*** [1.623]**	0.109 [0.525]	**-2.040*** [0.609]**
Governance	0.137 [0.297]	0.168 [0.299]	**0.649** [0.285]**	-0.273 [0.445]
Dummy for AFR	0.094 [0.674]	-0.337 [0.669]	-0.463 [0.684]	-0.331 [0.995]
Dummy for APD	-0.110 [0.616]	-0.825 [0.611]	-0.315 [0.607]	0.109 [0.837]
Dummy for MCD	0.606 [0.525]	0.222 [0.516]	0.057 [0.514]	0.704 [0.705]
Dummy for WHD	0.171 [0.553]	-0.100 [0.549]	0.043 [0.594]	-0.526 [2.500]
Number of Observations	212	212	212	212

Note: 1. Figures in brackets show standard errors.
2. *** p < 0.01, ** p < 0.05, * p < 0.1