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Endowments, power, and democracy: Political economy of multilateral commitments on trade in services

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ENDOWMENTS, POWER, AND DEMOCRACY: POLITICAL ECONOMY OF MULTILATERAL COMMITMENTS ON TRADE IN SERVICES

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ENDOWMENTS, POWER, AND DEMOCRACY: POLITICAL ECONOMY OF MULTILATERAL COMMITMENTS ON TRADE IN SERVICES

By Martin Roy

Abstract

In spite of their growing importance in international trade as well as in bilateral and multilateral trade negotiations, services have only attracted limited attention from researchers interested in determinants of trade policies and trade cooperation. This paper seeks to account for countries' varying levels of market access commitments under the multilateral General Agreement on Trade in Services (GATS). I develop an argument suggesting how levels of democracy and factor endowments are associated with more commitments. The empirical analysis supports these propositions, and also suggests that relative size, as well as regulatory capacity, are positively linked to GATS commitments.

1 Counsellor, WTO Secretariat. The author is grateful to Rolf Adlung, Eric Leroux, Juan Marchetti, Marcelo Olarreaga, Daniela Persin, Roberta Pierrmartini, and JP Singh for useful comments. All errors remain those of the author. Views expressed do not represent those of the WTO Secretariat or WTO Members.
Nowadays, services account for more than half of domestic production in all developed economies as well as in many developing countries. Over the last 20 years, as a result of technological advances as well as more liberal investment policies, trade in services has expanded rapidly. Services now represent an important share of world trade as well as the greater share of world FDI flows, and figure prominently in multilateral, regional and bilateral trade negotiations.

In spite of this, services trade has drawn only limited interest from political scientists, international relations specialists and other scholars doing research on determinants of protection or regionalism, on the relationship between democracy and trade or on the link between conflict and trade. This paper aims to contribute to the literature by focusing on a field of research that has been applied only in a limited manner to services trade: determinants of international trade cooperation and, more precisely, of international trade commitments.

Scholars have for a long time sought to explain levels of protectionism, but few have attempted to explore the determinants of protection and non-cooperation across countries – rather than the distribution of protection within a country –, and therefore to investigate why some countries are more protectionist than others. Even fewer studies have attempted to account not for protection, but rather for variations in international trade commitments. Research in this context has more generally tended to focus on motivations for entering into regional trade arrangements, for seeking membership in international organizations, or for engaging in dispute settlement procedures (Mansfield and Pevehouse 2006, 2008; Busch 2000; Mansfield, Milner and Pevehouse 2008; Mansfield, Milner and Rosendorff 2002). But
not on accounting for varying levels of commitments undertaken by governments in international trade fora. Further, almost all studies about determinants of trade openness or of international cooperation have focused on goods trade.

This paper is about determinants of WTO commitments on trade in services. It seeks to account for the varying levels of market access bindings on services amongst WTO Members under the General Agreement on Trade in Services (GATS). In doing so, it draws from different approaches in political economy and international relations to develop arguments and derive propositions that are then tested empirically.

Why did governments undertake different levels of market access commitments under the GATS? The argument, supported by empirical analysis, suggests two key determinants: democracy and factor endowments. First, the more democratic a country, the more it will undertake binding commitments. In democracy, leaders wish to be re-elected and rely to a greater extent on popular (voters’) support. Accordingly, democracies take greater commitments than non-democracies principally because leaders in democracies: 1) have greater incentives not to resort to additional protectionist policies; 2) use trade commitments to signal good economic policy-making; and, 3) suffer greater audience costs from other Members’ non-cooperation. Second, countries that are relatively more abundant in human capital tend to take more GATS commitments; they will have a comparative advantage in services and services firms will pressure their governments to participate actively in negotiations and undertake commitments so as to ensure that they benefit from more liberal and predictable market access conditions abroad. The empirical analysis also underscores the impact of the WTO accession process, and suggests that the more powerful states, as well as those with greater regulatory capacity, undertake more commitments.
The paper is organized as follows. The following section briefly reviews the GATS and discusses key features of services commitments undertaken under this multilateral agreement. Section 2 puts forward theoretical propositions to account for differing levels of services commitments. Section 3 then introduces the methods used to test these predictions and presents the results. The last section concludes.

I. MULTILATERAL MARKET ACCESS COMMITMENTS ON SERVICES

The entry into force of the General Agreement on Trade in Services (GATS) in 1995 constituted a major achievement because more than 120 GATT Parties agreed to establish a comprehensive set of rules on global trade in services. The Agreement's first novelty rests in its definition of "trade in services". The Agreement covers all measures affecting four modes of supplying services internationally. The modes cover not only trade in the traditional sense (mode 1: cross-border supply), but also involves movement of labour (mode 4), capital (mode 3) and consumers (mode 2):

- Mode 1 or cross-border trade: the supply from a service provider in one country to a service consumer in another country;
- Mode 2 or consumption abroad: the consumer from one country goes to another country to consume the service there;
- Mode 3 or commercial presence: the supply abroad through the establishment of a business entity, such as a subsidiary or branch, in another country;
- Mode 4 or the supply through the temporary presence of natural persons, e.g., a lawyer going abroad to provide legal advice.\(^2\)

The two key obligations of the Agreement are those of market access and national treatment, which imply liberalization or, in other words, exposure to foreign competition. National treatment (Article XVII) is about non-discrimination between domestic and foreign services and service suppliers, while the market access obligation (Article XVI) prohibits 6 types of restrictions, essentially quantitative limitations.

The GATS has the particularity that these two obligations are negotiable and therefore apply differently to different WTO Members. Indeed, the two obligations only apply to the sectors that each Member has inscribed in its schedule of commitments. This means that sectors not committed are not subject to the two liberalization obligations, as regards any mode of supply, leaving Members with discretion to impose any type of non-conforming measure; no sector is a priori committed under such approach. Further, for the sectors that are inscribed in the schedule, Members can attach conditions and limitations, thereby specifying the national treatment- or market access-inconsistent measures that they wish to reserve the right to use.

Commitments scheduled under the GATS do not necessarily reflect the applied level of openness. For example, the lack of commitments in a sector does not mean that the sector is in effect closed to foreign services and suppliers, but rather that there is no legal guarantee, under the WTO, of a minimum level of treatment. In other words, a sector that is not the

\(^2\) The scope of this mode is limited to those natural persons that are service suppliers or that work for a service supplier of a Member other than the country that temporarily hosts these natural persons.
subject of commitments is not necessarily more restricted in practice than scheduled sectors. Governments do not negotiate applied restrictions \textit{per se}, but rather legal guarantees of a minimum level of access. The same is true in goods trade: tariff bindings, a not applied tariffs, are the subject of the negotiations and resulting commitments. The value of commitments rests in that they provide a legal guarantee of a minimum level of access, which is not to be reversed in the future, and which is subject to independent dispute settlement.\footnote{There is no comprehensive information on Members' applied regimes, although efforts to gather such}

An uncommitted sector is one where economic operators have no security of access, where any type of restrictions can be imposed at any time, across any mode, and at any level. Accordingly, the particularity of the GATS, as compared to the GATT for example where national treatment fully guaranteed, is that governments have the possibility to completely opt out of liberalization obligations for a wide range of sectors.

Given the aforementioned liberalization modalities, commitments under the GATS vary significantly from one Member to the other. The main feature of the schedules of commitments of WTO Members under the GATS relates to the extent to which Members have decided to bind a given level of access for certain sectors, or not. Sector coverage represents the most striking difference between schedules of commitments of WTO Members. On average, Members have made commitments in about a third of all services sub-sectors of the GATS classification system, ranging from commitments on more than 120 services sub-sectors – out of a total of about 160 – for such countries as Moldova or Ukraine, to less than 10 for such others as Mali or Fiji. For scheduled sectors, the level of treatment bound is roughly comparable across WTO Members overall, although the precise degree of restrictiveness/openness of commitments is difficult to quantify given the wide variety of restrictions that can be scheduled, the lack of uniformity – and often clarity – in the way
governments describe the restrictions, as well as the fact that some limitations are sector-specific while others apply to all sectors committed (Adlung and Roy 2005; Marchetti and Roy 2008). The following sections put forward and test arguments to account for the varying levels of sectoral commitments in Members' schedules.

II. THE ARGUMENT

A. PREVIOUS WORK ON THE TOPIC

Research to assess the determinants of protection/openness in services trade or of negotiated commitments on services has been limited. Most studies on the topic have focused on a single sector rather than accounting for WTO services commitments across the board.

Harms, Mattoo and Schuknecht (2003) explored the determinants of commitments on financial services as a result of the WTO extended negotiations in this sector, which concluded in 1997. They find that such variables as unionisation, financial sectoral development, membership in negotiating coalitions (e.g., the Cairns group of agricultural exporters), and the quality of prudential regulations exercised an influence on the openness of commitments undertaken in this sector. Valckx (2004) also studies the determinants of liberal commitments in the financial sector and finds that a number of economic and policy variables, including GDP growth and the growth and performance of the banking sector, are key explanatory variables.

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information are underway.
Egger and Lanz (2008)’s research represents the only attempt so far to explain the overall level of commitments under GATS. To build their predictions, they rely on general equilibrium theory of trade and multinational enterprises. In classic models of trade, countries that are relatively scarce in the factors that are used intensively in the production of a good would benefit most from reducing barriers to the import of such goods. They suggest that small countries typically gain most from trade or investment liberalization, and, further, that unskilled-labour abundant (or capital scarce) countries get larger welfare gains from liberalization than skilled-labour abundant (or capital abundant) countries. Assuming that countries would be motivated by the expected welfare gains, Egger and Lanz hypothesize that those that would benefit most from trade and investment liberalization in services – countries that are smaller and abundant in unskilled labour (or capital scarce) – would have undertaken greater market access commitments in their GATS schedules negotiated during the Uruguay Round. While the two variables are significant, they have the opposite effect as that predicted by the theory.

This paper builds upon, but also departs in a number of ways from the work of Egger and Lanz. A key difference relates to the meaning attached to GATS commitments. Egger and Lanz see them as reflecting the restrictiveness of one's services trade regime (p. 1669) and, in this light, assume, for example, that sectors that are not committed in schedules are less liberalized than listed ones, whatever the level of treatment bound for the committed sectors. In contrast, as noted earlier, GATS commitments do not necessarily reflect applied levels of liberalization/restrictiveness, if only because uncommitted sectors are not necessarily more restricted than committed ones. Accordingly, accounting for different levels of GATS commitments is less about the extent of liberalization or protection, and more about the political decision to take legally binding commitments or not – i.e., whether to limit
policy discretion –, in how many sectors. In that context, determinants of GATS commitments can best be analyzed by having recourse to factors reflecting the political environment where decisions to undertake commitments are made. The remainder of this section presents the argument and hypotheses to account for WTO Members' commitments on services.

B. THE ARGUMENT

In accounting for levels of services commitments under GATS, I draw from two streams of research in international political economy, one focusing on endogenous protection and factor endowments, and the other on the impact of democracy on trade policy. While these two sets of factors are often dealt with in isolation, they can be combined within a perspective that focuses on decision-makers' need for political support.

We assume that governments or leaders, who make decisions about multilateral negotiations, are motivated by their interest in maximising political support. The political support that governments seek to obtain takes two forms: support from specific groups and general popular support. Popular support here translates into the capacity for leaders to gain voters' support for re-election, which by definition varies across different types of political regimes. Political support from specific groups can come from those that have export interests and favour open trade, or from industry or lobby groups wishing to be granted protectionist rents. Support from specific groups can take the form of political contributions, for example financial contributions to the electoral campaign.
In what follows, I present arguments linking leaders’ need for political support to endowments and industry demands (sub-section 1) and to the level of democratization (sub-section 2) so as to generate hypotheses about variations in levels of GATS commitments.

1. **Endogenous Protection and Factor Endowments: Economic Determinants of Protection**

Many economists and political scientists explain protectionism through economic incentives flowing from the move to free trade. Various theories of "endogenous protection" are based on models of international trade that yield predictions about who wins and who loses from free trade on the basis of factor endowments. Researchers then suggest how these predicted effects interact with the political system so as to yield policy decisions regarding protection levels. Such studies tend to focus on the distribution of protection across different industries rather than across countries, and have not been applied specifically to services trade.

The median-voter model and the contributions – or protection for sale – model represent two branches of the endogenous protection literature, the first focusing on the influence of public opinion on governments and the other highlighting the decisive impact of interest groups representing industry or sectoral interests. The direct democracy, or median-voter, approach supposes that if the median capital-labour ratio in the economy is low, as is usually the case, the median voter will vote for a tariff policy that favours labour over capital. Since the Stolper-Samuelson theorem predicts that trade restrictions will increase returns to the scarce factor, countries well endowed with capital would impose greater barriers to trade.
than those well endowed with labour. In contrast, in the contributions – or protection for sale – model, which assumes specific factors, organized sectors seek to maximize their own welfare by obtaining protection, and influence politicians through campaign contributions (Grossman and Helpman 1994).

A key difference between the two approaches relates to their assumptions as regards factor mobility across sectors within a country. Interest group approaches along the lines of "protection-for-sale" are inspired by the specific-factors (Ricardo-Viner) model, which, unlike the SS theorem, assumes that factors of production are not fully mobile across sectors. Rather than examine how trade policy is shaped as a result of returns to (and preferences of) owners of factors as per the SS theorem (i.e., different views of capital and labour across all industries), researchers in interest group approaches derive from endowments the preferences of particular industries rather than those of factor owners. Accordingly, capital and labour in the same industry will have the same trade preferences. Those assuming specific factors believe it is quite costly to move factors of production across industries of the national economy, as certain types of land, capital equipment or skills have fairly specific types of uses. Both strands of the literature claim some empirical support (Hiscox 2001; Gawande and Krishna 2003).  

The approach set out here is straightforward. I posit that the stance of political authorities vis-à-vis liberalization commitments on services is influenced by the views of producer groups, which, in turn, are determined by countries' relative endowments, in this case abundance of human capital.
According to standard trade theory, countries will have a comparative advantage in the production of goods that use the inputs that are relatively abundant within the country. Countries have an interest to specialize where they have a comparative advantage and will export the goods that use the inputs that are relatively abundant. Like Hindley and Smith (1984), Feketekuty (1988) or Sapir and Winter (1994), I consider that the principle of comparative advantage generally applies to services trade, despite certain differences between the international exchange of goods and services.  

The fact that services trade under certain modes of supply imply some factor movement (i.e. capital under mode 3 and natural persons - temporarily - under mode 4) does not mean that the determination of comparative advantage based on relative endowments is no more relevant. The supply of services through a commercial presence abroad (mode 3) or through the movement of persons (mode 4) can be seen as a substitute to providing a service cross-border since, in most services sectors, proximity to consumers is determinant for market share, including because of regulatory barriers to cross-border trade. FDI in services predominantly takes place as a way to access foreign markets, rather than a way to take advantage of differences in production costs. Indeed, Lipsey's (2000) analysis of US direct investment suggests that the industry distribution of outward FDI reflects the comparative

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4 Unfortunately, measuring factor mobility is challenging and research has so far yielded varying assessments. See Hiscox 2001, 2002; Ladewig 2006.
6 The Hecksher-Ohlin model, for example, assumes factor mobility across sectors within a country, but factor immobility across countries.
7 The recent rise of services offshoring, where firms establish abroad to take advantage of different costs and then export the service from that foreign base, still represents a limited part of total services trade (WTO 2005, 274-289). Obviously, in the Uruguay Round, this phenomenon was even more limited. The view that the main motive for FDI is market access rather than lower production costs is supported by Brainard (1997). See also Yeaple (2003).
advantage of the investing country rather than that of the host country, arguably because they are incorporated into the technological advantages of its multinationals.\(^8\)

Many services tend to be capital intensive, as opposed to labour intensive. Services also tend to be intensive in skilled-labour, and therefore human capital is a critical source of comparative advantage (Hoekman and Mattoo 2008, 44-46; Markusen, Rutherford and Tarr 2005; Markusen and Strand 2006; Dash 2006). For example, Hoekman and Mattoo (2008) find that, across Indian states, services output per capita is strongly associated with the proportion of tertiary educated.

I consider that countries relatively abundant in human capital will be more supportive of services negotiations. Trade theory predicts that they would have comparative advantage in services and export interests in this area. I posit that these countries' services firms - with high intensity of the abundant factor - get a real increase in returns due to open trade. Wishing to expand their production and maximize their profits by taking advantage of opportunities abroad, these services firms lobby governments to open markets abroad and to provide for greater transparency and stability of trading conditions in foreign markets. Leaders need the support of interest groups to obtain political contributions and ensure their political survival. Such approach is in line with the branch of the endogenous protection literature highlighting industry rather than class cleavages.\(^9\)

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\(^8\) Such results are consistent with the view that direct investment is not principally acting as a way of transferring capital from one country to the other, but represents more a shift in the ownership of particular assets within an economy to firms in another country that possess particular skills or other productive assets (Lipsey 2000).

\(^9\) As noted earlier, endogenous protection models can differ in their assumptions about factor mobility across sectors of an economy. In practice, however, factors are neither perfectly mobile nor immobile, as noted by Hiscox (2002: 2). I take it that the increase in real returns due to trade will be, at least partly, industry-specific and that the lobbying of interest groups will therefore have influence.
Governments abundant in human capital will favour international negotiations on services because these benefit companies active in sectors where the country has comparative advantage. These governments will be willing to undertake more commitments in the sector because concerns about import competition are relatively limited and because undertaking commitments incites other trading partners to do the same. Under the same logic, those countries relatively scarce in human capital are expected to be less forthcoming on services commitments. Fewer companies in these countries pressure the government into negotiating international commitments. Further, these countries are expected to import services, where they have a comparative disadvantage and, even though liberalization is generally welfare enhancing, governments can be expected to face some pressures from import-competing companies arguing for protection and reluctant to see the government contract international obligations limiting the level of protection they can be granted. Therefore, the countries richest in human capital are expected to be more enthusiastic about services agreements and to undertake more commitments, especially since these do not necessarily mean a lowering of barriers. This leads to the first proposition:

**Hypothesis 1:** Countries better endowed with human capital take more services commitments.

2. **Democracy**

Scholars have long investigated the link between democracy and armed conflict, and more recently focused on whether and how countries’ level of democracy or type of political regime affect trade flows and trade policies. Are democracies more inclined to adopt freer
trade policies and to cooperate in international trade relations? And, in the context of this paper, do democracies take more market access commitments?

Various studies have concluded that democracy encourages freer trade or trade cooperation (Mansfield, Milner and Rosendorff 2000; Milner and Kubota 2005; O'Rourke and Taylor 2007; Tavares 2008; Mansfield, Milner and Pevehouse 2002; Kono 2008). Studies on the link between trade and democracy sometimes have different focus: some concentrate on democracy's impact on the level of trade restrictions, and others on its impact on trade cooperation. The underlying arguments also sometimes differ. While some contend that the positive effect of democracy on trade openness depends on the median voter's relative endowments, another stream of studies highlight the role of trade agreements and trade commitments in enhancing policy credibility and improving election prospects. Mansfield, Milner and Rosendorff (2002) found support for the latter set of arguments through their finding that states were increasingly likely to conclude trade agreements as they became more democratic. Here, I build on such arguments and extend their application to multilateral trade cooperation in services, specifically by trying to account for different levels of commitments, rather than focusing on the propensity to enter into bilateral or other preferential trade agreements.

In democracies, governments depend to a greater extent on popular support. They need to obtain voters' support to be re-elected. I assume that voters' approval of leaders depends largely on the economic situation, and that voters as a whole have a general

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10 Bartilow and Voss (2009) argue that democracies do not trade more with each other.
11 For example, Milner and Kubota's argument follows the Stolper-Samuelson theorem, noting that trade liberalization in developing countries benefits those well endowed with labour, the relatively abundant factor. Democratization leads leaders to lower barriers so as to seek support of new groups of voters.
12 See also Milner, Rosendorf and Mansfield 2003.
preference for openness as opposed to protectionism. I argue that the more democratic countries will undertake more commitments principally because they are less inclined to resort to more protectionism, which reduces the cost of undertaking binding international trade commitments, because of the signalling value of commitments, and because democracies have greater interest in commitments so as to reduce the greater costs it would suffer from future non-cooperation.

The first factor linking democracy to multilateral commitments relates to voters' aversion to greater protectionism. Because leaders in democracies have to pay attention to concerns of voters to be re-elected, they will refrain to a greater extent than non-democracies from increasing levels of protectionism so as not to dampen economic growth. Since the most obvious consequence of multilateral commitments is to prevent the introduction of new market access restrictions, democracies more easily accept to undertake commitments. Leaders in non-democracies, in contrast, are not concerned with re-election and, therefore, less preoccupied about the impact that increased protectionism may have on economic growth and voters' attitudes. The lesser the level of democracy, the more leaders rely on support from certain small groups, including unions and/or owners of means of production, and leaders in such regimes are more interested, other things being equal, in maintaining greater capacity to put in place rent producing policies, including future ones. Leaders' political survival in non-democracies depends to a greater extent on capacity to keep support of smaller, select, groups. Groups needed for support may change in the future, and leaders in non-democracies will therefore attach greater value to keeping discretion to use trade policy to grant rents to elicit support of small groups whenever that may be needed.

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13 I take it that economic theory suggest that liberalization enhances general welfare. Experts sometimes disagree about such generalization, but there is a consensual view that protectionism does not
The second reason why democracy leads to more commitments relates to the latter's signalling effect to voters. Despite their general preference for openness rather than for protectionism, voters suspect that leaders may use trade policy to grant protection to groups so as to obtain political support, for example through campaign contributions. Granting too much protection to specific groups has a negative effect on the economy as a whole. To obtain popular support, leaders must manage perceptions of their management of economic policy, which is a key determinant of voters' attitudes towards their re-election. However, voters do not have sufficient information to distinguish between adverse economic shocks and extractive/protectionist policies of leaders. Because of such lack of information, voters may decide not to re-elect a leader during economic downturns even if that leader has not engaged in the granting of protectionist rents to the detriment of the economy (Milner, Rosendorff and Mansfield 2003).

Trade agreements and trade commitments assist leaders in overcoming this problem, as they help convey the message that economic downturns are not a consequence of protectionist policies. Trade agreements serve the purpose of conveying to voters information on how their leaders behave as regards trade policy; they provide a credible commitment in that regard, which voters can believe. Trade commitments and agreements therefore help chances of re-election, therefore providing an incentive for leaders to engage in trade deals. Trade deals are particularly credible in conveying the message that leaders are not abusing the granting of protectionist rents at the expense of the general economic situation because they comprise a strong mechanism – in the WTO more than in preferential agreements – to ensure compliance with obligations and commitments, and to bring to light

promote economic growth. See Bueno de Mesquita, Smith, Siverson and Morrow (2003). Since services trade
any cheating. The dispute settlement mechanism also signals to voters that the commitment not to cave-in to protectionist rent-seekers is a durable one (Milner et al. 2003; Mansfield et al. 2002).

Obviously, the motivation to use trade agreements so as to send a signal to voters about the government's good economic policy-making is much different in non-democracies. The regular occurrence of free, fair and competitive elections in democracies is what provides the motivation for leaders to use trade agreements - i.e., to help chances of re-election. The lower the level of democracy, the less leaders feel the need to enhance their election prospects in such way. They are less concerned about voters and about their attitude towards leaders' management of the economy. Trade agreements and commitments do not therefore serve the same signalling functions as in democracies. Because their political survival rests on small groups, leaders in non-democracies are concerned with keeping the capacity to put in place policies that produce protectionist rents to such groups, now or in the future, and therefore resist commitments that limit such capacity (Mansfield, Milner and Pevehouse 2008).

While researchers working under such approaches have focused on the propensity to conclude preferential trade agreements, the same motivations are relevant for decisions about multilateral services commitments. The need to credibly inform voters that any negative economic situation is not due to governmental mismanagement through protectionist rent-seeking provides incentives for governments to engage more actively in negotiations. Leaders do not want to come out of the negotiations being perceived as a reluctant trade cooperator, too amenable to specific interests that are not in line with general welfare. In the involves supply through foreign investment, we expect openness to be preferred even more than for goods trade.
context of services, the greater is the number of sectors that are uncommitted, the more
governments have ample discretion to accord protectionist rents at any time, of any size, and
through whatever means. In contrast, undertaking commitments in greater numbers of
service sectors sends a signal that discretion as regards the granting of welfare-reducing rents
is constrained, therefore signalling that economic downturns are not attributable to bad
economic and trade policy, which would otherwise be sanctioned at the polls. In effect,
commitments limit the scope for discretion and future rent-seeking policies, as it means that
certain – protectionist – policy options are foregone. Because of electoral pressure, the more
democratic regimes will have greater interest in taking commitments to signal they are
pursuing welfare-enhancing policies, and less interested in keeping room to use trade policy
to grant protectionist rents to specific groups now or in the future. Non-democracies, in
contrast, do not face such motivation for commitments and put greater value on preserving
discretion to cater to specific groups as their political survival may dictate.

A third aspect linking democracy to services commitments through leaders' need for
political support is found in the "audience costs" literature. As noted by Leeds (1999),
democracies, which face higher levels of accountability, are confronted to greater domestic
costs from breaking promises, and find it more difficult to change course suddenly. Leaders
in non-democracies, which are not confronted with similar levels of accountability, do not
face such costs and have more flexibility in reacting to changing circumstances, for example
other countries' opportunistic behaviour or defection. In a services context, this can take the
form of a state suddenly raising barriers substantially in one or many sectors, to the detriment
of investors and exporters from other countries. Democratic states, which experience higher
costs from shifting policies and reacting to others' behaviour with policy changes, therefore
tend to favour agreements that, to a greater extent, prevent against future protectionism, while non-democracies have less incentives to do so.

Finally, it can also be observed that an important feature of – and motivation for – trade agreements, especially the GATS, is to consolidate trade reforms undertaken or underway. Commitments ensure that such reforms will not be overturned in the future.\(^{15}\) Undertaking commitments that consolidate these reforms takes such trade policies out of the political arena, ensuring that these are not an issue in future elections campaigns or are not reversed by the next government. Such considerations are less relevant for autocracies because decisions to initiate reforms, carry them through, and subsequently stick to them, essentially rests with the same centre of power.\(^{16}\)

This leads to the following hypothesis:

**Hypothesis 2:** *The more democratic a country, the greater the commitments undertaken.*

I see the two factors, level of democratization and human capital endowments, as having separate effects, rather than depending on each other. In other words, I expect a positive link between human capital endowments and WTO commitments on services,
notwithstanding the level of democratization at issue, and similarly expect a positive link between the level of democratization and commitments, irrespective of endowments.

III. EMPIRICAL ANALYSIS AND DISCUSSION

A. SPECIFICATION

This section tests the propositions derived from the preceding discussion. Using ordinary least squares (OLS), the basic equation is the following:

$$\logit \ GATSCOM = \beta_1 + \beta_2 \ log \ HUMANCAPITAL + \beta_3 \ DEM + \beta_4 \ Controls + e$$

The dependent variable, $GATSCOM$, represents the proportion of services sectors that is committed in each Members’ schedule of specific commitments under the GATS.\(^{17}\) As indicated in the first Section, the breadth of sectoral coverage is the key characteristic of GATS commitments, as it is where divergences are greatest between states. It is also highly relevant since the lack of a binding commitment means that any type of restriction can be imposed at any given time. Like in Egger and Lanz (2008), the dependent variable appears in a logistically transformed way so as to ensure a normal distribution.

Unlike Egger and Lanz, I look not only at the commitments emerging from the Uruguay Round, but also those resulting from the extended negotiations - on

\(^{17}\) Out of a total of 160 subsectors.
telecommunications and financial services in particular - between 1995 and 1997. That said, the propositions are also tested against commitments taken by original WTO Members, excluding the results of extended negotiations. Details about variable definitions and data sources are found in Table 1 and summary statistics are contained in Table 2.

As regards human capital endowments, I here use the (log of) human capital index (HUMANCAPITAL) from the Human Development Reports, which measure per capita human capital stock. This is a good proxy for endowments in human capital, which is available for a large number of countries and has been used in other studies.19

To test propositions in relation to democracy, I rely on the indicator most widely used, the democracy index from Polity III and Polity IV, constructed by Gurr et al. (1990) and Jaggers and Gurr (1995). This index, ranging from 0 to 10 (the higher, the more democratic), captures such institutional features of political regimes as the presence of a process through which citizens can express preferences about alternative policies and leaders, the existence of constraints on the exercise of power by the executive, and the guarantee of civil liberties. I therefore evaluate whether this variable (DEM) has an independent, positive, impact on the level of GATS commitments. Since what matters is the level of democracy at the time the negotiations are substantively underway - and not simply the level at the tail-end of the negotiations -, the variable DEM consists in the average of the Polity scores for 1990 and 1994 in the case of original WTO Members.20

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18 The decision to undertake the extended negotiations arose from discussions during the Uruguay Round. In a way, these extended negotiations represent a continuation of negotiations that had started - and ended provisionally - during the Uruguay Round.
19 See, for example, Globerman and Shapiro's (2002; 2003) studies on determinants of FDI.
20 Services were included on the agenda of the Round launched in 1986, and negotiations about the content, structure and liberalization modalities of the agreement were intensive from then on and in the following years. In 1990, the Chair of the Negotiating Group on Services sent to Trade Ministers meeting
1. **Control variables**

I also include in the basic specification a number of basic control variables.

(a) **Accessions**

A number of authors have noted that governments that have acceded to the WTO after the Uruguay Round generally undertook more significant commitments than the average level for other WTO Members. Such results can be traced to the different negotiating process in which accessions take place (Jones 2009; Adlung and Roy 2005). Since the new Members benefit from commitments undertaken by all Members in all previous rounds of negotiations, other countries tend to extract a high price for "joining the club". Support from all WTO Members is needed, and the acceding Member cannot seek any concessions from other WTO Members but only negotiate the "price" of its entry ticket. Governments having gone through the WTO accessions process are therefore expected to undertake greater GATS commitments. I include a dummy variable, which has a value of 1 if the government went...
through the process of accession to the WTO, and 0 if not. That said, the model is also later tested on original WTO Members, thereby excluding acceding countries.

(b) Relative Power

A large branch of research in International Relations highlights the role that the distribution of power in the international system plays on state behaviour, including as regards trade. However, predictions on how relative power or size may affect state behaviour in international organizations, and more specifically the undertaking of multilateral commitments, are scarce.

Nevertheless, relative power or economic size can be expected to impact on trade commitments for a number of reasons. One realist view, emphasizing that regimes reflect the relative power of states, suggests that the larger states use their power to extract greater concessions from smaller ones (Krasner 1991). Another view is that for cooperation between countries to take place, there must be a balanced distribution of gains which roughly maintains the pre-cooperation distribution of capabilities (Grieco 1990). This suggests that concessions given in trade fora would instead be reciprocated by proportionate concessions from other countries so that no relative gains are achieved.

Rather than a balanced distribution of concessions or one that is tilted in favour of the more powerful, it may also be that the more powerful or economically important states would become the GATS. See Singh 2008, 95-116.
take greater commitments because of their role in bringing about the regime.\textsuperscript{21} Or they may do so because they face more reactions from other countries, either because they care more about their markets or out of greater relative gains concerns.\textsuperscript{22} To control for this, I therefore include in the specification [the log of] a Member's share of the total GDP of all WTO Members (GDP\textsubscript{share}). Such variable is also a crude measure of power, and it has been used in various other studies (Mansfield and Pevehouse 2006: 148; Steinberg 2002: 347-348).

(c) Additional Controls

First, I include (the log of) total trade (exports + imports) to GDP as a proxy for a country's openness to international trade (Trade/GDP). Countries that are more open, or more dependent on trade, are expected to be more inclined to take commitments. I also include the Chinn-Ito index (KAOPEN), which measures the restrictiveness of capital account, expecting that the more a country imposes such restrictions, the lesser the propensity to take commitments. Generally, in the absence of more precise assessments, the inclusion of these two variables allows us to control for openness to services trade, and for the alternative argument that countries with less restrictions take more commitments.

A variable capturing the macroeconomic environment is also included. Ecogrowth represents the real growth of GDP over the 5 years previous to undertaking commitments. Predicting the impact of economic growth on GATS commitments is not necessarily straightforward. On the one hand, pressures for protection may be greater in difficult

\textsuperscript{21} Historical evidence suggests this is the case for GATS since the US, the leading global power during the Uruguay Round, was a key demandeur for an agreement, along with other such economic powers as the European Union and Japan. See Steinberg 2002; Drake and Nicolaïdis 1992; Singh 2008; Crystal 2003.

\textsuperscript{22} The neorealist paradigm emphasizes that states may opt out of cooperation because of concerns about relative gains, despite the absolute gains that each state would obtain from cooperation. This is because economic gains can translate into power, which is the key currency and basis for one's own security in an anarchic international system. Trade can therefore create a security externality (Grieco 1990; Powell 1999).
economic times, and hence governments may be less inclined to commit to certain levels of trade openness (Harms et al. 2003; Valckx 2004). On the other hand, countries may be more likely to liberalize after experiencing economic difficulties, including because economic crises generate conflict among the ruling elite (Milner and Kubota 2005: 123; Tornell 1998).

Another element that can impact upon decisions about trade commitments is, in contrast to the type of political regime, whether the country has experienced change in its degree of democracy/autocracy during the negotiations. Rodrik (1994) has suggested that trade policy reforms were preceded by changes in political regimes, in whatever direction. Further, change in political regimes may heighten interest in communicating stability through binding international commitments. To account for this, the variable ChangeDEMAUT measures the absolute difference in the values on the Polity's autocracy/democracy index between 1994 and 1990.23

To cover trade policy considerations, I include a measure of a countries' participation in bilateral or regional trade agreements. RTA is a dummy variable coded 1 if a country was engaged in a bilateral or other free trade agreement. This variable is expected to be positively related to the level of GATS commitments since experience with preferential agreements may predispose towards multilateral commitments. Membership in negotiating coalitions can also be determinant. At the multilateral level, the main coalition is the Cairns group of agricultural exporters, which seeks greater access abroad for their exports. Harms et al. (2003) hypothesized that membership in the Cairns Group would be associated with less commitments (for the financial services sector), not more, because they considered that these

23 See Milner and Kubota (2005). The type of political change that matters in this context is change in fundamental aspects of a regime (change towards greater autocratic or democratic aspects), rather than a mere change in the political leadership.
countries would refrain from committing on financial services so as to keep leverage for future negotiations on agriculture. A dummy variable (CAIRNS), with a value of 1 for members of the coalition, is therefore included.

B. RESULTS

Table 3 includes regression results for the model, in parsimonious (1) and less parsimonious (2) specifications. These provide good support for the predictions. The explanatory power is quite good, with a $R^2$ of 0.7, and the key variables, DEMOCRACY and HUMANCAPITAL are systematically significant, and have the expected sign, which provides strong support for the predictions. GDPshare and Acceding are positively and significantly linked to the level of GATS commitments, but the other control variables generally do not exert influence. Similar results occur when acceding Members are excluded from the sample (columns (3) and (4)): again, DEMOCRACY and HUMANCAPITAL remain significant, as does GDPshare. Further, I test whether the results were not due to omitting per capita income from independent variables. I therefore conducted the regressions (columns (5) and (6)) with the log of GDP per capita as an additional variable. In all cases, the key variables remained significant and with proper signs, while GDP per capita did not prove statistically significant. Further, the same variables also remained significant when the sample was limited to developing countries (column 6).

************ TABLE 3 here ************
As noted in section II, a number of authors (Milner and Kubota 2005; O'Rourke and Taylor 2007; Tavares 2008; Kono 2008) have argued that democracy affects trade openness via the preferences of the median voter. Being capital poor, the median voter prefers trade openness in labour abundant countries and protection in capital abundant countries. To test this claim, I interact democracy with factor endowments to see whether democracy leads to more commitments in countries poor in human capital than in those rich in human capital (INT). Similarly, I also interact democracy with GDP per capita (INT2). Neither proves statistically significant (not in Table).

The strong showing of the variable measuring countries' share of world GDP may go against some of the realist perspectives highlighted earlier, although explanations for these results can also be found within the realist paradigm. For one, the fact that more powerful states undertake more commitments may be taken to suggest that relative gains matter in the context of international trade relations. Larger states have an interest in ensuring that other large states make a contribution and do not free ride; doing otherwise would have relative gains – and therefore security – implications. Under such approach, cooperation in the form of market access commitments is seen as a cost because it entails providing greater guarantees of access to one's own market than the other way around. Each state’s initial preference is therefore to take as little commitments as possible while letting others take more, but the reaction from other Members limit free riding. The greater the relative power of a state, the greater the relative gains concerns, and the more other Members react to ensure that consequent commitments are undertaken. The opposite is true for smaller states, who provoke less relative gains concerns, and therefore less reactions. In other words, the greater
the relative power in the system, the less the ability to free ride. The negotiating process tends to produce an outcome where general reciprocity is limited, as concessions are not spread evenly across members, but rather depend on the relative position of each state in the system. An outcome that does not match power differentials creates instability: a powerful state undertaking few commitments would be seen as "benefiting" from the access granted by others and, in a relative gains framework, would pose concerns.

Another possible explanation for the observed relationship between relative size and commitments relates to the role of the more powerful in bringing about the regime. Since the more powerful Members exerted greater influence in defining the key obligations of the Agreement, these are expected to better reflect their offensive and defensive interests, as well as the then prevailing domestic regimes of these states, which makes it easier for them to undertake more comprehensive commitments.

1. **Further robustness tests**

Since the Human Development Index used as a proxy for HUMANCAPITAL is a composite index combining indices of per capita income, education outcome and health status, I also run the regressions with a different measure of human capital (HUMANCAPITAL2), which excludes the GDP per capita element of the index. Results, which are found in Table 4 (columns (1) and (3)), show that this different measure of human capital is significant despite the reduced number of observations – like DEMOCRACY.
In columns (2), (3) and (4) of Table 4, I use a different dataset, where each of the 12 original Member States of the European Union are counted separately.\textsuperscript{25} The results show strong support for the main hypotheses: the coefficients of the key explanatory variables are significant and have the expected sign, including when acceding countries are excluded from the sample (4).\textsuperscript{26}

************** TABLE 4 here **************

2. Taking into Account Different Depths of Commitments.

While the focus of this study is to account for the propensity of states to undertake specific commitments in service sectors, I also test the predictions against a dependent variable that gives greater weight to the type of specific commitments undertaken under the

\textsuperscript{25} The first 12 EU Member States negotiated jointly during the Uruguay Round and their commitments were contained in a single schedule of commitments. However, the commitments of these Member States sometimes differ as their services regime are not identical, in contrast to tariff measures for example. When this alternative dataset is used, the variable (EU) was introduced to control for the possibility that being part of the European Union induced greater commitments than would otherwise have been the case.

\textsuperscript{26} Similar results were obtained when a dependent variable capturing solely the level of GATS commitments at the end of the Uruguay Round was used, excluding therefore commitments resulting from the extended negotiations as well as accessions.
GATS. In doing so, I follow the approach developed by Hoekman (1996), who assessed the content of GATS market access schedules by attaching a value to commitments mode by mode and sector by sector. Full, or unrestricted, commitments (meaning without limitations) were given a score of 1, partial commitments (with some limitation(s)) a score of 0.5, and the lack of commitment for a given mode of supply (an unbound entry) was attributed 0. While such exercise has limitations, in particular the fact that it cannot fully capture the relative quality or restrictiveness of commitments, it nevertheless provides a basic measure of the depth of commitments in the complex world of services trade.

Columns (5), (6) and (7) of Table 4 present regressions results with a dependent variable ($GATSCOM2$) that weighs the sectoral coverage of schedules by the level of market access treatment bound under each mode of supply for each sub-sector committed. For each sub-sector a maximum score of 4 can therefore be obtained, reflecting full commitments under modes 1 through 4. Results provide support for the predictions, namely that democracy and human capital endowments are positively linked to levels of GATS commitments. Results to not vary when the dataset detailing commitments of individual EU countries is used.

3. **Alternative Explanations**

(a) Regulatory capacity

Some researchers have suggested that concerns about regulatory capacity may incite governments to refrain from undertaking services commitments. Hoekman, Mattoo and Sapir
(2007) consider that regulatory concerns help explain the modest levels of commitments under the GATS, where the reciprocal exchange of concessions has been limited, unlike in other parts of the WTO. Noting the greater regulatory-intensity of services, they point to regulators' concerns about commitments' potentially excessive intrusiveness, unpredictability as regards the implications of commitments, and worries regarding the capacity to put in place effective regulations to complement market openings. Egger and Lanz (2008) also point to such concerns.

To our knowledge, there has been no attempt to measure regulatory capacity per se, nor to test its impact on trade or trade commitments. Regulatory capacity can refer to a state's capacity to develop and enforce rules to address changing situations, whether or not such regulations are trade opening or restricting. In the context of services trade, regulatory capacity means (i) better ability to assess the impact and implications of services commitments and (ii) greater capacity to assess regulatory responses that may arise as a result of trade and to implement and enforce complementary measures.

Concerning the first point, while GATS commitments do not impede governments' capacity to regulate in a non-discriminatory manner, the scheduling of commitments under GATS is more complex than under goods trade. This may lead bureaucracies with lesser means and know-how to harbour more concerns about the precise meaning and effect of commitments. The complexity of schedules is attributable to the broader scope of measures subject to market access negotiations under GATS, given that services barriers are not border measures. Complexity also arises from the flexibility provided by the agreement, where Members can undertake different commitments for different sectors and, within each sector or sub-sector, for different modes of supply. As regards the second point mentioned above,
commitments providing for the opening of telecoms to competition, for example, may imply the need to establish universal service policies. Also, commitments on the cross-border supply (mode 1), in particular, may imply, in certain sectors, that governments modify their practices to ensure that prevailing regulatory objectives, such as those relating to the quality of services provided, are still met even if the supplier has no presence in the regulator's territory and its product (the service) is intangible.

To best capture the notion of regulatory capacity in this context, I use the International Country Risk Guide's index of bureaucracy quality, which measures the extent to which bureaucracies have the strength and expertise to formulate and administer policies effectively. I expect it to be positively related to GATS commitments.

************** TABLE 5 here **************

Results in Table 5 provide initial support for the predicted impact of bureaucracy quality ($BURQUAL$), as it proves statistically significant under the main specification, as well as when acceding countries are excluded (columns 1 and 2). The other variables retain statistical significance, even though the introduction of $BURQUAL$ reduces the number of
observations. However, the statistically significant impact of $BURQUAL$ disappears when developed countries are excluded from the sample (column 3). Similar results were obtained by using a different measure of the quality of bureaucracy, namely the index of "government effectiveness" developed by Kaufmann et al. (not in Table). While the Kaufmann index captures information on a wide variety of components of effectiveness ($GOVEFFECT$) from a greater number of sources, it is, however, only available from 1996, that is after most of Members' commitments were contracted. Despite the caveats, these results go some way in supporting the calls of Hoekman et al. for international organizations to provide regulatory assistance to governments so as to support market access commitments.

(b) Veto Players

Another strand of trade research in political economy puts emphasis on institutional structures for sharing decision-making power within countries, which yield varying numbers of veto players. Veto players are institutional and partisan actors whose assent is necessary to change existing policies. An alternative argument would be that a greater number of veto players leads to less GATS commitments; indeed, the greater the number of veto players, the more likely it is that some players reflect the preferences of those losing from entering into trade obligations (Mansfield, Milner and Pevehouse 2008; Henisz and Mansfield 2007). To control for this, I use Henisz's measure of political constraints ($VETOPLAYERS$), which evaluates the number of independent veto points in the political system as well as the distribution of political preferences across and within these branches (Henisz 2000). Results in Table 5 (column (4)) show that the inclusion of a measure of political constraints does not significantly modify the results, with key variables maintaining statistical significance, while
*VETOPLAYERS* is insignificant. In sum, when such other factors as endowments, relative size and democracy are taken into account, political constraints do not have a significant impact on the breadth of GATS commitments.

IV. SUMMARY OF RESULTS AND CONCLUDING REMARKS

The political economy of trade in services remains an underexplored matter. Drawing from different strands of the literature on determinants of international cooperation/protection, this paper sought to account for variations in levels of commitments undertaken under the GATS. Results provide support for the hypotheses derived from the theoretical discussion, which emphasize the impact of democracy and factor endowments. By focusing on services trade, this paper builds upon existing literature on the impact of, respectively, political regimes and endowments/interest groups on trade policies.

First, countries abundant in human capital tend to take more GATS commitments. Since services are intensive in human capital, countries well-endowed in human capital will have a comparative advantage in services and will tend to export the product (services) that use the inputs that are relatively abundant. Companies intensive in human capital will lobby the government and favour the undertaking of commitments because they have interest in more liberal and predictable market access conditions abroad.

Second, the greater the level of democratization, the more GATS commitments are undertaken. This is because leaders in democracies, who wish to get re-elected, have less

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27 A variable capturing interaction between democracy and veto players did not prove statistically significant either.
interest in increasing protectionism and therefore do not suffer costs from commitments that prevent the introduction of new barriers. Democratic leaders also use trade commitments to improve their chances of re-election by signalling to voters that any economic downturn is not the result of a protectionist and rent-providing policy by the government. Further, greater commitments serve to limit the possibility of future non-cooperation from other countries, which creates greater costs for politicians in democracies.

Third, a number of the additional variables used proved quite significant. Not surprisingly, the negotiating process that acceding governments have to go through leads to more GATS commitments. Results also show that relative size is strongly related to the breadth of commitments undertaken. Some support was also found for the argument that deficiencies in terms of regulatory capacity, which I operationalized through an indicator of bureaucratic quality, are associated with less commitments. Such other factors change in political regimes, the level of openness of the capital account, recent economic performance, or membership in such negotiating coalition as the Cairns Group did not prove influential, while general openness to trade (ratio of exports and imports to GDP) and prior experience with RTAs only reached (modest) statistical significance in a few specifications.

Further research may focus on the determinants of cooperation and international commitments, as opposed to solely applied levels of protection. Similar approaches could be used for other areas of international trade negotiations, be it goods trade, procurement, or intellectual property rights. As regards services, while not the focus of this paper, additional research can try to account for countries’ selection of services sectors where commitments are made, as well as on the precise degree of restrictions bound. However, determinants of these second-stage policy decisions are likely to be rooted in sector-specific considerations given
the heterogeneity of considerations across different service sectors, for example as regards degree of tradability, regulatory intensity, or trade restrictions), which makes this an ambitious work programme. In addition, the determinants of applied restrictions in services, should be further investigated, even though explanatory factors would likely be different from those accounting for the propensity to undertake international commitments, and scholars would face challenges related to the current information deficit in this area.


**APPENDIX**

*Table 1: Variable Definitions and Data Sources*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GATSCOM</td>
<td>Proportion of sub-sectors committed in Members' schedules of commitments under the GATS. Source: author.</td>
</tr>
<tr>
<td>GATSCOM2</td>
<td>Measure of GATS commitments weighed according to level of treatment bound under market access for each mode of supply (full, partial, unbound). Source: author.</td>
</tr>
<tr>
<td>DEM</td>
<td>Scores on the Polity III index for democracy for which ranges from 0 to 10 (the higher being the more democratic). For WTO Members, average of scores for 1990 and 1994. For acceding countries, average of the score for the year of accession and that 4 years prior.</td>
</tr>
<tr>
<td>GDPshare</td>
<td>Represents a Member's share of the total GDP of all WTO Members. Source: <em>World Development Indicators</em>. Base year is 1993 for original WTO Members (both for the numerator and denominator). For acceding countries, the base year is one year prior to date of accession.</td>
</tr>
<tr>
<td>ChangeDEMAUT</td>
<td>Measures the absolute change in the level of democracy/autocracy. Combination of scores on the Polity III index for democracy and autocracy (ranging from -10 to 10), the lowest being most autocratic and 10 being the most democratic. Change is measured between 1994 and 1990 for original WTO Members. For acceding countries, change is measured between the date of accession and 4 years prior.</td>
</tr>
<tr>
<td>HUMANCAPITAL</td>
<td>Represents a Member's score on the Human Development Index (the higher the score, the greater the per capita stock of human capital). Source: UNDP (<a href="http://hdr.undp.org/en/">http://hdr.undp.org/en/</a>). For original WTO Members, HUMANCAPITAL is the average of the scores for 1990 and 1995. For acceding countries, the base year is 1995, 2000, or 2005, depending which is closest to the date of accession to the WTO. According to UNDP, data on such five-year spans are most comparable.</td>
</tr>
<tr>
<td>Cairns</td>
<td>Dummy variable coded as 1 if the Member is part of the Cairns group of agricultural exporters, and 0 if not. Source: WTO.</td>
</tr>
<tr>
<td>RTA</td>
<td>Dummy variable coded as 1 if the Member had been party to a bilateral or regional trade agreement notified to the WTO or GATT prior to GATS commitments entering into force.</td>
</tr>
<tr>
<td>Trade/GDP</td>
<td>Ratio of total trade (exports + imports of goods and services) to GDP. Source: <em>World Development Indicators</em>. Base year is 1995 for original WTO Members and year of accession for other WTO Members.</td>
</tr>
<tr>
<td>KAOPEN</td>
<td>Chinn-Ito (2002)'s index to measure a country’s degree of capital account openness (the higher the number, the greater the degree of openness of the capital account). Base year is 1993 for original WTO Members and 1 year prior to accession for those Members having gone through the accession process (2006 being the latest entry).</td>
</tr>
<tr>
<td>Ecogrowth</td>
<td>% change in real GDP from 95 to 89. Source: <em>World Development Indicators</em>. For acceding Members, the % change is calculated from 6 years before accession to the year of accession.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>HUMANCAPITAL2</td>
<td>Represents Members' combined score on the sub-indices of life expectancy and education of the Human Development Index.  Source: UNDP.</td>
</tr>
<tr>
<td>INT</td>
<td>log HUMANCAPITAL X DEM in reverse order (where the highest level of democracy is valued at 0, rather than 10).</td>
</tr>
<tr>
<td>BURQUAL</td>
<td>Bureaucracy quality index of the International Country Risk Guide, 1994. For acceding Members, the value is for the year before accession.</td>
</tr>
<tr>
<td>GDPpercap</td>
<td>GDP per capita in constant US dollars, 1995, from World Bank's World Development Indicators.</td>
</tr>
<tr>
<td>VETOPLAYERS</td>
<td>Henisz's (2000) measure of political constraints, which measures the number of independent veto points in the political system as well as the distribution of political preferences across and within these branches.</td>
</tr>
</tbody>
</table>

Note: expected sign of independent variables in parentheses.
Table 2: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>log HUMANCAPITAL</td>
<td>128</td>
<td>-0.445</td>
<td>0.294</td>
<td>-1.246</td>
<td>-0.069</td>
</tr>
<tr>
<td>logit GATSCOM</td>
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<td>-1.102</td>
<td>1.617</td>
<td>-5.069</td>
<td>2.425</td>
</tr>
<tr>
<td>logit GATSCOM2</td>
<td>141</td>
<td>-1.902</td>
<td>1.489</td>
<td>-5.899</td>
<td>0.803</td>
</tr>
<tr>
<td>Ecogrowth</td>
<td>153</td>
<td>18.324</td>
<td>27.580</td>
<td>-86.312</td>
<td>124.975</td>
</tr>
<tr>
<td>KAOpen</td>
<td>146</td>
<td>0.0232</td>
<td>1.413</td>
<td>-1.798</td>
<td>2.540</td>
</tr>
<tr>
<td>log Trade/GDP</td>
<td>159</td>
<td>4.281</td>
<td>0.583</td>
<td>1.146</td>
<td>5.673</td>
</tr>
<tr>
<td>ChangeDEMAUT</td>
<td>150</td>
<td>2.667</td>
<td>4.894</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>RTA</td>
<td>139</td>
<td>0.849</td>
<td>0.359</td>
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<td>1</td>
</tr>
<tr>
<td>Cairns</td>
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<td>0.128</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ACCEDING</td>
<td>137</td>
<td>0.175</td>
<td>0.382</td>
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<td>1</td>
</tr>
<tr>
<td>log GDPshare</td>
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<td>-3.218</td>
<td>2.250</td>
<td>-7.286</td>
<td>3.455</td>
</tr>
<tr>
<td>DEM</td>
<td>146</td>
<td>4.296</td>
<td>3.900</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>log HUMANCAPITAL2</td>
<td>111</td>
<td>-0.407</td>
<td>0.311</td>
<td>-1.528</td>
<td>-0.066</td>
</tr>
<tr>
<td>log GDPpercap</td>
<td>159</td>
<td>7.290</td>
<td>1.522</td>
<td>4.035</td>
<td>10.473</td>
</tr>
<tr>
<td>BURQUAL</td>
<td>122</td>
<td>2.047</td>
<td>1.116</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>VETOPLAYERS</td>
<td>152</td>
<td>0.367</td>
<td>0.335</td>
<td>0</td>
<td>0.890</td>
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</table>
Table 3: Regression Results for Determinants of GATS Commitments

<table>
<thead>
<tr>
<th>Member sample:</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>all</td>
<td>all</td>
<td>without</td>
<td>all</td>
<td>without</td>
<td>all</td>
<td>without</td>
</tr>
<tr>
<td></td>
<td>acceding Members</td>
<td>acceding Members</td>
<td>Members</td>
<td>developed Members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Log GDP-share} )</td>
<td>0.202*** (0.051)</td>
<td>0.262*** (0.064)</td>
<td>0.240*** (0.056)</td>
<td>0.325*** (0.073)</td>
<td>0.286*** (0.070)</td>
<td>0.333*** (0.077)</td>
<td>0.265*** (0.081)</td>
</tr>
<tr>
<td>( \text{Log Humancapital} )</td>
<td>2.160*** (0.411)</td>
<td>1.880*** (0.596)</td>
<td>2.05*** (0.426)</td>
<td>1.586** (0.646)</td>
<td>2.439*** (0.825)</td>
<td>1.872** (0.909)</td>
<td>1.602** (0.630)</td>
</tr>
<tr>
<td>( \text{DEM} )</td>
<td>0.057** (0.024)</td>
<td>0.071*** (0.024)</td>
<td>0.055** (0.025)</td>
<td>0.070*** (0.024)</td>
<td>0.076*** (0.023)</td>
<td>0.075*** (0.023)</td>
<td>0.066** (0.028)</td>
</tr>
<tr>
<td>( \text{Acceding} )</td>
<td>1.651*** (0.256)</td>
<td>1.908*** (0.293)</td>
<td>1.773*** (0.291)</td>
<td>2.049*** (0.356)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Cairns} )</td>
<td>-0.201 (0.232)</td>
<td>-0.226 (0.224)</td>
<td>-0.259 (0.233)</td>
<td>-0.262 (0.235)</td>
<td>-0.171 (0.277)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{ChangeDEMAUT} )</td>
<td>0.025 (0.024)</td>
<td>0.028 (0.028)</td>
<td>0.026 (0.024)</td>
<td>0.028 (0.028)</td>
<td>0.022 (0.207)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{RTA} )</td>
<td>0.541 (0.334)</td>
<td>0.509 (0.365)</td>
<td>0.541 (0.335)</td>
<td>0.51 (0.367)</td>
<td>0.562 (0.392)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Log Trade/GDP} )</td>
<td>0.216 (0.225)</td>
<td>0.304 (0.233)</td>
<td>0.238 (0.229)</td>
<td>0.307 (0.234)</td>
<td>0.306 (0.257)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Ecogrowth} )</td>
<td>-0.006 (0.005)</td>
<td>-0.005 (0.004)</td>
<td>-0.007 (0.005)</td>
<td>-0.006 (0.004)</td>
<td>-0.003 (0.006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{KAOpen} )</td>
<td>0.002 (0.072)</td>
<td>0.032 (0.065)</td>
<td>0.038 (0.074)</td>
<td>0.052 (0.079)</td>
<td>-0.044 (0.085)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Log GDPpc} )</td>
<td>-0.152 (0.148)</td>
<td>-0.081 (0.174)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{Constant} )</td>
<td>-0.096 (0.246)</td>
<td>-1.456 (1.047)</td>
<td>-0.039 (0.240)</td>
<td>-1.773* (1.041)</td>
<td>-0.089 (1.595)</td>
<td>-1.04 (1.87)</td>
<td>-2.075 (1.247)</td>
</tr>
<tr>
<td>( \text{Observations} )</td>
<td>104</td>
<td>94</td>
<td>87</td>
<td>79</td>
<td>94</td>
<td>79</td>
<td>78</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.71</td>
<td>0.736</td>
<td>0.692</td>
<td>0.699</td>
<td>0.739</td>
<td>0.699</td>
<td>0.669</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors in parentheses; *** significant at 1% level; ** significant at 5% level; * significant at 10% level.
Table 4: Regression Results for Determinants of GATS Commitments: Further Tests

<table>
<thead>
<tr>
<th>Dependent variable: GATSCOM</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member sample:</td>
<td>all</td>
<td>all (with each EU member)</td>
<td>all (with each EU member)</td>
<td>all without acceding (with each EU Member)</td>
<td>all without acceding</td>
<td>all (with each EU member)</td>
<td></td>
</tr>
<tr>
<td>Log GDPshare</td>
<td>0.296***</td>
<td>0.260***</td>
<td>0.281***</td>
<td>0.331***</td>
<td>0.209***</td>
<td>0.268***</td>
<td>0.265***</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.067)</td>
<td>(0.063)</td>
<td>(0.076)</td>
<td>(0.064)</td>
<td>(0.072)</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Log Humancapital</td>
<td>1.874***</td>
<td>(0.593)</td>
<td>1.626**</td>
<td>(0.622)</td>
<td>1.579**</td>
<td>1.344**</td>
<td>1.751***</td>
</tr>
<tr>
<td></td>
<td>(0.593)</td>
<td></td>
<td>(0.622)</td>
<td></td>
<td>(0.620)</td>
<td></td>
<td>(0.606)</td>
</tr>
<tr>
<td>Log Humancapital2</td>
<td>1.199**</td>
<td>(0.524)</td>
<td>1.203**</td>
<td>(0.526)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEM</td>
<td>0.086***</td>
<td>(0.025)</td>
<td>0.064***</td>
<td>(0.024)</td>
<td>0.076***</td>
<td>0.073***</td>
<td>0.063**</td>
</tr>
<tr>
<td></td>
<td>(0.593)</td>
<td></td>
<td>(0.622)</td>
<td></td>
<td>(0.620)</td>
<td></td>
<td>(0.672)</td>
</tr>
<tr>
<td>Acceding</td>
<td>1.834***</td>
<td>(0.306)</td>
<td>1.812***</td>
<td>(0.271)</td>
<td>1.711***</td>
<td>1.792***</td>
<td>1.894***</td>
</tr>
<tr>
<td></td>
<td>(0.288)</td>
<td></td>
<td>(0.288)</td>
<td></td>
<td>(0.226)</td>
<td></td>
<td>(0.279)</td>
</tr>
<tr>
<td>Cairns</td>
<td>-0.296</td>
<td>(0.220)</td>
<td>-0.168</td>
<td>(0.244)</td>
<td>-0.230</td>
<td>-0.254</td>
<td>-0.149</td>
</tr>
<tr>
<td></td>
<td>(0.241)</td>
<td></td>
<td>(0.241)</td>
<td></td>
<td>(0.240)</td>
<td></td>
<td>(0.231)</td>
</tr>
<tr>
<td>ChangeDEMAUT</td>
<td>0.016</td>
<td>(0.024)</td>
<td>0.024</td>
<td>(0.023)</td>
<td>0.012</td>
<td>0.028</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td></td>
<td>(0.023)</td>
<td></td>
<td>(0.028)</td>
<td></td>
<td>(0.025)</td>
</tr>
<tr>
<td>RTA</td>
<td>0.520</td>
<td>(0.452)</td>
<td>0.500</td>
<td>(0.333)</td>
<td>0.425</td>
<td>0.533</td>
<td>0.531</td>
</tr>
<tr>
<td></td>
<td>(0.451)</td>
<td></td>
<td>(0.451)</td>
<td></td>
<td>(0.366)</td>
<td></td>
<td>(0.343)</td>
</tr>
<tr>
<td>Log Trade/GDP</td>
<td>0.276</td>
<td>(0.206)</td>
<td>0.211</td>
<td>(0.211)</td>
<td>0.239</td>
<td>0.335</td>
<td>0.278</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
<td></td>
<td>(0.221)</td>
<td></td>
<td>(0.220)</td>
<td></td>
<td>(0.204)</td>
</tr>
<tr>
<td>Ecogrowth</td>
<td>-0.007</td>
<td>(0.005)</td>
<td>-0.005</td>
<td>(0.005)</td>
<td>-0.006</td>
<td>-0.006</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td></td>
<td>(0.005)</td>
<td></td>
<td>(0.005)</td>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>KAOpen</td>
<td>0.081</td>
<td>(0.073)</td>
<td>-0.001</td>
<td>(0.068)</td>
<td>0.073</td>
<td>0.018</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td></td>
<td>(0.068)</td>
<td></td>
<td>(0.065)</td>
<td></td>
<td>(0.066)</td>
</tr>
<tr>
<td>EU</td>
<td>0.405</td>
<td>(0.073)</td>
<td>0.423</td>
<td>(0.068)</td>
<td>0.433</td>
<td>0.155</td>
<td>0.433</td>
</tr>
<tr>
<td></td>
<td>(0.253)</td>
<td></td>
<td>(0.268)</td>
<td></td>
<td>(0.251)</td>
<td></td>
<td>(0.270)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.943***</td>
<td>(0.959)</td>
<td>-1.401</td>
<td>(0.974)</td>
<td>-1.735</td>
<td>-1.868*</td>
<td>-2.748***</td>
</tr>
<tr>
<td></td>
<td>(0.908)</td>
<td></td>
<td>(0.962)</td>
<td></td>
<td>(1.075)</td>
<td></td>
<td>(1.100)</td>
</tr>
<tr>
<td>R²</td>
<td>0.738</td>
<td></td>
<td>0.769</td>
<td></td>
<td>0.774</td>
<td></td>
<td>0.758</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>0.774</td>
<td></td>
<td>0.677</td>
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<td>0.596</td>
</tr>
</tbody>
</table>

Notes: As for Table 3.
Table 5: Regression Results for Determinants of GATS Commitments: Alternative Explanations

<table>
<thead>
<tr>
<th>Member sample:</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>all without acceding without developed Members all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log GDPshare</td>
<td>0.213*** 0.296*** 0.237** 0.268***</td>
<td>(0.073) (0.082) (0.090) (0.065)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Humancapital</td>
<td>1.675*** 1.367** 1.539** 1.928***</td>
<td>(0.581) (0.621) (0.650) (0.627)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEM</td>
<td>0.056* 0.055** 0.064** 0.081**</td>
<td>(0.029) (0.028) (0.031) (0.035)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceding</td>
<td>2.057***</td>
<td>2.087***</td>
<td>1.901***</td>
<td>(0.348) (0.452) (0.301)</td>
</tr>
<tr>
<td>Cairns</td>
<td>-0.098 -0.132 -0.133 -0.209</td>
<td>(0.214) (0.212) (0.270) (0.232)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ChangeDEMAUT</td>
<td>0.017 (0.025) 0.017 (0.029) 0.016 (0.031) 0.025 (0.024)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTA</td>
<td>0.417 (0.363) 0.419 (0.412) 0.459 (0.462) 0.554* (0.330)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Trade/GDP</td>
<td>0.180 (0.240) 0.284 (0.241) 0.250 (0.292) 0.236 (0.215)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecogrowth</td>
<td>-0.004 (0.005) -0.003 (0.005) -0.004 (0.007) -0.006 (0.005)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAOpen</td>
<td>0.010 (0.072) 0.027 (0.061) 0.004 (0.101) -0.004 (0.072)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BURQUAL</td>
<td>0.277*** 0.236** 0.253</td>
<td>(0.106) (0.113) (0.163)</td>
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<td></td>
</tr>
<tr>
<td>VETOPLAYERS</td>
<td>-0.217</td>
<td>-0.217</td>
<td>-0.217</td>
<td>(0.525)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.005* -2.300** -2.327 -1.458</td>
<td>(1.118) (1.071) (1.413) (1.051)</td>
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<td></td>
</tr>
<tr>
<td>Observations</td>
<td>82</td>
<td>70</td>
<td>67</td>
<td>94</td>
</tr>
<tr>
<td>R²</td>
<td>0.756</td>
<td>0.736</td>
<td>0.685</td>
<td>0.737</td>
</tr>
</tbody>
</table>

Notes: As for Table 3.