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GOVERNMENT PROCUREMENT:
WHAT'S IN IT FOR DEVELOPING
COUNTRIES?**

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ABSTRACT

Multilateral Disciplines on Government Procurement: What's In It For Developing Countries?*

This paper assesses existing multilateral rules on government procurement from a developing country perspective. It summarizes the economics of discriminatory procurement and investigates to what extent data on procurement reported by members of the WTO Government Procurement Agreement (GPA) reveal changes in sourcing patterns and national purchasing practices over the 1983–92 period. Available data suggest that changes in procurement practices – or the lack thereof – are largely consistent with what theory would predict. Large countries have not been induced to change sourcing patterns, while small countries appear to have become more open. As most developing countries are relatively small in economic terms, this suggests that there may be potentially large welfare gains for developing countries from accession to the GPA.

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NON-TECHNICAL SUMMARY

Governments concerned with maximizing the use of scarce financial resources have developed various procedures and mechanisms in an attempt to ensure that agents (public entities) procure goods and services in accordance with the objectives of principals (taxpayers or voters). A common element in such procedures is to mimic the working of the market by requiring that public entities seek competitive bids from potential suppliers of goods and services. The cost-minimizing objective underlying competitive bidding requirements for public entities is frequently complemented by other objectives that may work against cost minimization. These may include a desire to: promote the development of domestic industry or technology; support particular types of enterprises (e.g. small- and medium-sized firms); or safeguard national security. A result of such objectives is that procurement practices often discriminate against foreign suppliers. There are also a variety of efficiency rationales for discrimination in procurement and limiting the number of bidders for a contract. Thus, although the welfare cost of 'buy national' policies can be high, this is not necessarily the case.

If many countries pursue discriminatory purchasing, the end result for the world as a whole, independent of the national welfare implications, is likely to be inferior in welfare terms to a cooperative outcome where governments agree to refrain from discrimination or to abide by rules that must be met for discrimination to be permitted. Recognizing this, governments have negotiated multilateral rules of the game for public procurement. After years of discussion in the OECD, a multilateral agreement on government procurement was concluded under GATT auspices in 1979 which aims to liberalize access to procurement markets on a reciprocal basis.

The Government Procurement Agreement (GPA) extended basic GATT obligations such as non-discrimination and transparency to the tendering procedures of specified government entities. The Agreement has been renegotiated twice, most recently during the Uruguay Round. As a result, its coverage was extended substantially to include services and purchases by local government entities and public utilities. Membership of the GPA remains very limited, however, suggesting that non-members perceive the net benefits of joining to be too small. Possibilities include a perception that export opportunities are too minor to shift the political balance in favour of liberalization; a belief that discrimination is in the national interest; simple uncertainty regarding the impact of GPA rules; or a belief that procurement markets are already open.

This paper assesses existing multilateral rules on government procurement from a developing country perspective and asks what might be done to make the GPA more attractive to such countries. This has become important, as major trading nations such as the United States have made expanded membership a priority trade policy issue. After a summary of the key elements of the GPA, the paper surveys some of the major contributions in the literature, analysing the possible rationale for (and effects of) discriminatory procurement. It then goes on to investigate to what extent data reported by GPA signatories on procurement by covered entities reveal changes in sourcing patterns and national purchasing practices over the 1983–92 period. Despite all their weaknesses the available data suggest that changes in procurement practices – or the lack thereof – are largely consistent with what theory would predict. Large countries have not been induced to change sourcing patterns following membership of the GPA. Small country members of the GPA are, as expected, more open to foreign suppliers, and appear to have become more so over time. As most developing countries are relatively small in economic terms, this suggests that there may be potentially large welfare gains for developing countries from accession to the GPA.

Developing countries should seriously consider using the opportunity of converting mounting external pressure to abide by multilateral rules in this area to adopt good policies (that is, use it to counteract political economy constraints that prevent the unilateral adoption of such practices). At the same time, negotiating leverage can be used to seek changes in GPA rules that allow for transparent divergences from the non-discrimination principle if this is deemed desirable by a government. While the negotiating leverage of developing countries is limited – most markets are relatively small, and additional liberalization resulting from membership may be limited because of the non-existence of local industry and reliance on official development assistance – some countries have large procurement markets. Moreover, in the WTO context there is value attached to binding (locking-in) liberal policy stances, so that even open countries have some negotiating leverage. Unfortunately, there is inadequate information to determine whether and to what extent developing countries discriminate in ways that matter to foreign suppliers; and if so, what the welfare costs are of such policies. Research on this issue and on the costs and benefits of the GPA's non-discrimination rule is urgently needed if attempts to expand developing country membership are to be successful. The existing set of GPA disciplines already provides various opportunities to diverge from the non-discrimination rule, however, and can be very helpful for governments that seek to limit the scope for rent seeking and corruption in public purchasing.

I. Introduction

All over the world governments agencies procure goods and services as inputs into the production of public goods and services--education, defense, utilities, infrastructure, public health, and so forth. The size of the associated public procurement "markets" is often very large, depending on the economic system of a nation and its GDP. Governments concerned with maximizing the use of scarce financial resources have developed various procedures and mechanisms to attempt to ensure that agents (public entities) procure goods and services in accordance with the objectives of principals (taxpayers or voters). A common element in such procedures is to mimic the working of the market by requiring that public entities seek competitive bids from potential suppliers of goods and services. Starting in the 1980s an increasing number of governments have pursued more far-reaching efforts to enhance the efficiency of public services by directly subjecting production units to competitive forces. Examples include privatization of state-owned enterprises; encouraging entry into sectors traditionally reserved for public entities (e.g., utilities) and contracting out of activities to the private sector.

The cost minimizing objective underlying competitive bidding requirements for public entities is frequently complemented by other objectives that may work against cost minimization. These may include a desire to: promote the development of domestic industry or technology; support particular types of enterprises (e.g., small and medium-sized firms); or safeguard national security. A result of such objectives is that procurement practices often discriminate against foreign suppliers. Indeed, such discrimination may go beyond the public sector *per se*.¹ Even if such non-economic objectives do not play a role, competitive tendering will not always result in least cost procurement. As discussed in Section II below, there are a variety of economic rationales for discrimination in procurement and limiting the number of bidders for a contract that are consistent with cost minimization. Thus, although the welfare cost of "Buy National" policies can be high, this is not necessarily the case.

¹ Regulations may also bias incentives of private firms away from sourcing from foreign suppliers. The policies used in this connection include trade barriers and financial incentives that are conditional upon local content. Policies may also prohibit foreign sourcing for national security reasons. This paper focuses only on non-defense public procurement.

Independent of the national welfare implications of discriminatory purchasing, if many countries pursue such practices the end result for the world as a whole is likely to be an uncooperative equilibrium that is inferior in welfare terms to a cooperative outcome where governments agree to refrain from discrimination or to abide by rules that must be met for discrimination to be permitted. Recognizing this, governments have attempted to negotiate multilateral rules of the game for public procurement. During the Tokyo Round of multilateral trade negotiations, an agreement on government procurement was concluded that aims to liberalize access to procurement markets on a reciprocal basis. Some governments have concluded that discriminatory procurement procedures are ineffective in satisfying the purported objectives and have unilaterally eliminated discriminatory procurement regulations (e.g., New Zealand). Others have pursued liberalization of procurement markets in a regional context. Thus, procurement practices have played a prominent role in the European Community--for much of their purchasing activities EU Members are now formally prohibited from discriminating against tenders from foreign firms, be they located in other EU Member States or outside Europe. Procurement has also been an important issue in bilateral trade relations, especially for the United States. A number of US laws require USTR to monitor foreign procurement policies that impact negatively on US firms, and procurement figures prominently in USTR's annual Trade Practices report. Bilateral and regional developments increase the incentives to pursue multilateral attempts to reduce the scope for discriminatory procurement practices as the associated preferential agreements may have a detrimental impact on third parties.

The 1979 Tokyo Round Government Procurement Agreement (GPA) extends basic GATT obligations such as nondiscrimination and transparency to the tendering procedures of specified government entities. The GPA has been renegotiated twice, most recently during the Uruguay Round. As a result, the coverage of the Agreement was extended substantially. However, membership of the GPA is very limited. GPA signatories are restricted to Canada, the European Communities, the EU-15, Israel, Japan, Korea, Norway, Switzerland, and the United States.² The

² The European Communities refers to the Community's institutions. Formally, there are 23 signatories to the Uruguay Round GPA, as each EU Member State has signed the Agreement individually in addition to the European Communities. Two signatories of the Tokyo Round GPA (Hong Kong and Singapore) decided not to accede to the Uruguay Round Agreement because of insistence on sector-specific reciprocity and MFN

US has made expansion of membership a priority issue, linking this to the broader issue of corruption.³ The fact that few countries joined after 1979 suggests that the GPA has not worked well. Non-members may perceive that the net benefits of joining are too small for a number of reasons. Possibilities include a perception that export opportunities are too minor to shift the political balance in favor of liberalization; a belief that discrimination is in the national interest; simple uncertainty regarding the impact of GPA rules (the costs and benefits of membership have never been analyzed let alone quantified in a GATT report); or a unilateral decision to deregulate and subject public entities to market disciplines. Although countries in the last category can easily accede to the GPA insofar as discrimination provisions have been abolished, membership will bring compliance costs due to the (re-)imposition of costly bureaucratic "red tape" (Walker, 1996).⁴ Conversely, existing GPA members may perceive many developing countries to be too small to be "interesting" or consider that there are no significant additional market access opportunities relative to the status quo.

The objective of this paper is to assess existing multilateral rules on government procurement from a developing country perspective. The paper is structured as follows. Section II summarizes the key elements of the GPA. Section III surveys some of the major contributions in the literature analyzing the possible rationale for--and effect of--discriminatory procurement with a view to identifying variables that empirical work could focus on. Section IV investigates to what extent data reported by GPA signatories on procurement by covered entities during 1983-92 reveal changes in sourcing patterns and national purchasing practices. Section V discusses the implications of the findings for developing countries' incentives to accede to the GPA and for monitoring the implementation of the expanded disciplines that were negotiated during the Uruguay Round. Section V concludes.

exemptions invoked by major countries. However, Singapore is reportedly in the process of acceding.

³ "This Administration is determined to ... push initiatives to clean up government procurement practices around the world" (Financial Times, May 1, 1995, p. 5). In April 1996, largely at the insistence of the US, OECD members agreed not to allow firms to write off bribes against tax obligations (Oxford Analytica, April 18, 1996).

⁴ As discussed below, GPA requirements may be redundant in cases where external market disciplines apply. EU attempts to subject privatized utilities to multilateral rules may be an additional disincentive for countries with market-based policies to join (Bronckers, 1996).

II. The WTO Agreement on Government Procurement

The GPA applies to "any law, regulation, procedure, or practice regarding any procurement by entities covered by this Agreement, as specified in Annexes 1-5" (Article I).⁵ The concept of 'procurement' covers all contractual options, including purchase, leasing, rental and hire-purchase, with or without the option to buy. A so-called positive list is used to determine the reach of the Agreement: it applies *only* to entities that are listed in an Annex. There are three 'entity Annexes': Annex 1 lists covered central government entities; Annex 2 lists sub-central government entities; and Annex 3 lists "all other entities that procure in accordance with the provisions of this Agreement." Annex 3 is a catch-all category, that includes bodies such as utilities. Entities that are listed in Annex 3 may be partially or totally private. The term entity is nowhere defined, reflecting a lack of consensus on what constitutes a 'public undertaking'.⁶

The entities that are listed in the three Annexes are subject to the rules and disciplines of the GPA with respect to their procurement of goods and services *if*: (1) the value of the procurement exceeds certain specified thresholds (see Table 2);⁷ *and* (2) the goods or services that are involved are not exempted from the coverage of the Agreement. As far as *goods* are concerned, in principle *all* procurement is covered, unless specified otherwise in an Annex. Procurement of *services* is subject to a positive list: only the procurement by covered entities of services explicitly scheduled in Annexes 4 and 5 are subject to the GPA's rules, and then only insofar as no qualifications or limitations are maintained in the relevant Annexes.

⁵ This section draws on a more detailed discussion of the GPA's disciplines in Hoekman and Mavroidis (1995).

⁶ Article XXIV:6(b) allows for the removal of entities included in one of the Annexes subsequent to "the effective elimination of government control or influence" over the entity. The most common way this might occur is through privatization. If there is an objection to the removal, dispute settlement procedures may be invoked. Signatories may explicitly exclude procurement made by entities if there is competition. Thus, e.g., Japan has stated in its Annex 3 that "This Agreement shall not apply to contracts which the entities award for purposes of their daily profit making activities which are exposed to competitive forces in markets."

⁷ Valuation is to take into account fees, premia, commissions, and indirect taxes. In the case of the EU a fictive VAT rate of 13 percent must be included (Messerlin, 1994).

The primary obligation imposed by the GPA on covered entities is nondiscrimination. This extends not only to imports but also to subsidiaries of locally established foreign firms.⁸ Price-preference policies, offsets and similar policies are therefore in principle prohibited. The Agreement provides for three methods of tendering: open (i.e., competitive call for tender), selective, (tendering restricted to pre-qualified suppliers), and limited (approaching potential suppliers individually).⁹ The first two methods are preferred. Entities must publish an invitation to participate for all cases of intended procurement, except for the case of limited tendering, stating the mode of procurement, its nature and quantity, dates of delivery, economic and technical requirements, amounts and terms of payment etc. Entities are obliged to award contracts to the tenderer who "has been determined to be fully capable of undertaking the contract" *and* who is (a) either the lowest tender; or (b) the tender which in terms of the specific evaluation criteria set forth in the notices or tender documentation is determined to be the most advantageous.

The nature of procurement is such that most of the time, unless rapid action can be taken, violations of the Agreement will not be contested as firms will not have an interest in bringing cases. Accordingly, the GPA requires members to establish bid-protest or "challenge" mechanisms. These must provide for rapid interim measures to correct breaches of the agreement and to preserve commercial opportunities. Such measures may involve suspension of the procurement process and correction of the breach of the Agreement, or compensation for the loss or damages suffered.¹⁰ To facilitate application of the WTO dispute settlement procedures, Article XVIII requires that "Each entity shall, on request from a supplier of a Party, promptly provide pertinent information concerning the reasons why the supplier's application to qualify was rejected, why its existing qualification was brought to an end and why it was not selected; and to an unsuccessful tenderer, pertinent information

⁸ Each Party "shall ensure" that its entities do not discriminate between locally-established suppliers "on the basis of degree of foreign affiliation or ownership" or "on the basis of the country of production of the good or service being supplied".

⁹ Negotiations may be used if entities have indicated their intent to do so, or when it appears from the evaluation that no tender is obviously the most advantageous in terms of the specific evaluation criteria set forth in the notices or tender documentation.

¹⁰ The latter may be limited to costs for tender preparation or protest.

concerning the reasons why its tender was not selected and on the characteristics and relative advantages of the tender selected as well as the name of the winning tenderer".

A limited number of provisions pertain to developing countries. Although in principle no discrimination is allowed in favor of domestic firms by covered entities, Article V:4 allows developing countries to negotiate "mutually acceptable exclusions from the rules on national treatment with respect to certain entities, products, or services that are included in their lists of entities." Such negotiations may also be initiated *ex post*, after signing the agreement (Article V:5). Some scope therefore exists for, e.g., maintaining a price preference policy. However, the option is limited to *certain* entities, products or services, and is therefore inherently limited by the relative negotiating power of the country seeking accession. Article XVI of the GPA allows developing countries, at the time of accession, to negotiate conditions for the use of offsets (e.g., domestic content requirements), thus explicitly allowing for *de facto* discrimination against foreign suppliers. However, offset requirements may only be used for qualification to participate in the procurement process and not as criteria for awarding contracts, and conditions are to be objective, clearly defined and non-discriminatory. Thus, if a firm offers local content that greatly exceeds the minimum required offered by its competitors, this may not be a factor in awarding contracts.

III. Implications of Discriminatory Procurement: A Selective Literature Survey

Discriminatory procurement policies are often considered to be *prima facie* evidence of protectionism, as governments explicitly favor domestic suppliers of goods and services. This does not imply that a price preference policy of 10 percent is equivalent to a 10 percent tariff, because demand by the private sector for imports may not be affected by the policy. As long as the government is a fraction of total demand for the products concerned, the tariff equivalent will only be a fraction of 10 percent. Indeed, as pointed out by Baldwin and Richardson (1972), if domestic and foreign products are perfect substitutes and the government is not too large, increased demand by the government for domestic output will be exactly offset by greater private sector imports, so that the

policy has no effect on equilibrium prices and production of the domestic industry.¹¹ This result continues to obtain if there is imperfect competition (oligopoly) as long as goods are perfect substitutes (Miyagiwa, 1991). Indeed, imports might actually increase as a result of discriminatory policy if domestic firms are induced to cut back sales to the private sector in an attempt to raise prices. If the government demand is a large share of total domestic demand for a product, exceeding local production, domestic prices will be bid up, and output will expand. However, prices of imports will fall and private sector imports will increase.

In general the "neutrality" results found by Baldwin/Richardson and Miyagiwa hinge on preference policies being linked to market prices (Mattoo, 1996). If this is not the case, neutrality is much less likely. Account should also be taken of the possible negative dynamic effects of discrimination on the efficiency of domestic firms.¹² Insofar as the discrimination leads to a gradual rise in the cost of procurement because domestic firms have less incentive to minimize costs and innovate, the probability that discrimination will impact on market price and hence on sales by importers may rise.

Although generalization is clearly not possible, these studies suggest that as long as government demand is not too large relative to total demand for a product and procurement concerns goods and services for which substitutes are readily available, there is not much cause for concern about discriminatory purchasing policies. An implication is that if discrimination is ineffective, there is little reason not to join the GPA. Conversely, insofar as it is useful to a government to favor local suppliers for "political" reasons, inducing it to abide by the nondiscrimination principle may be difficult precisely because it is not very costly. Although foreign firms will have an interest to push for the expansion of nondiscrimination disciplines insofar as imports are reduced, the neutrality and ineffectiveness arguments suggest that membership may be limited because procurement is largely a

¹¹ As noted by Deardorff and Stern (1985), domestic "middlemen" will always have an incentive to import a good and resell it to the government after processing it enough to qualify as domestic. The same forces therefore apply if goods are imperfect substitutes. Thus, difficulties of determining the origin of products will always reduce the effectiveness of discriminatory policies that are not enforced at the border. The level of tariffs and NTBs applied at the border will be the main constraint on such arbitrage activities.

¹² This point was suggested by Stephen Johnston.

"non-issue." If potential market access gains in non-member markets are either too small to be interesting and/or discrimination is not a binding constraint, foreign and domestic industries may not have much of an incentive to change the status quo.

While there may be some validity to this argument, matters are clearly more complex. Other contributions to the literature on procurement emphasizing issues of market structure, principal-agent problems and asymmetric information provide potential economic rationales for discrimination, and thus for not joining the GPA. McAfee and McMillan (1989) note that discriminatory procurement policies may be welfare improving, depending on the market structure of the industry and the type of good involved, by reducing average expected procurement costs. Thus, *if* domestic firms have a competitive disadvantage in producing the product, *and* only a limited number of firms (foreign and domestic) bid for the contract, a price preference policy may induce foreign firms to lower their bids. In effect it then acts as a profit-shifting device, ensuring that procurement favoritism increases national welfare. In the absence of a preference policy, in such a context foreign firms may exploit their cost advantage by bidding just below what they expect domestic firms to bid, which will be substantially higher than their actual cost. Branco (1994) has shown that even if the cost structure of domestic and foreign firms are identical and account is taken of the social cost of distortionary taxation, discrimination may be rational simply because foreign profits do not enter into domestic welfare. If it is recognized that in the small numbers context assumed by these models prices will exceed marginal costs, shifting demand to domestic firms may also reduce price-cost margins as domestic output expands (Chen, 1995). In a similar vein, Laffont and Tirole (1991) demonstrate that favoritism in procurement may be pursued by regulators (a procuring entity) because of the greater ease (lower cost) of collecting side payments from domestic firms.

Such economic arguments for preferences hold in small numbers/imperfectly competitive settings where there are profits and rents to be shifted. This does not necessarily imply that if there are many potential suppliers, discrimination is ineffective and reliance on open competitive bidding will ensure that the "market" price is paid. If the products that are procured are intangible or there are problems in monitoring and enforcing contract compliance (i.e., contracts are incomplete) there may be a rationale for restricting competition through discriminatory policies. Difficulties of contract

enforcement provide an incentive for procuring entities to restrict competition and pay quasi-rents to contractors to increase the likelihood of performance (by creating opportunity costs--the threat of losing future repeat business) (Rothenberg, 1993). Such situations are more likely to arise if services are an important dimension of what is being procured. Given that services are often the largest category of purchases by governments--increasingly so in countries that have been pursuing outsourcing and contracting--this has potentially far-reaching implications.

Breton and Salmon (1995) argue that in such cases the size of the quasi-rent that must be offered to a supplier (the excess cost that must be incurred by the procuring entity) increases as the number of potential bidders rises (because the probability for each supplier of not getting repeat business increases). Minimizing expected costs of procurement in such a setting will often require limiting the number of potential suppliers. Breton and Salmon (1995) argue further that governments are generally bound by the "principle of democracy" which implies that all "domestic" suppliers must have equal opportunities to bid, as all are taxpayers/citizens. Foreign suppliers are not, giving governments a motive to exclude them in instances where the number of domestic suppliers is greater than the minimum needed for least cost procurement.¹³ Problems of asymmetric information and contract compliance may imply that entities have a natural preference to choose suppliers that are located within their jurisdictions as this can reduce monitoring costs/quasi-rents. Proximity incentives will make it more difficult for foreign firms to bid successfully, even in the absence of formal discrimination. The policy issues that then arise are how entities decide whether suppliers are local "enough" and what if any are the barriers against establishment (direct investment) by foreign suppliers.¹⁴

The foregoing arguments apply generally and do not depend on whether or not a procuring entity is public or (partially) privately owned or operated. However, if procuring entities are subject to market disciplines (i.e., they compete with other suppliers and do not receive financing from the

¹³ If the number of potential domestic suppliers is less than the minimum required, there is no need for discrimination. Indeed, encouraging foreign bids is then necessary to reduce expected procurement costs.

¹⁴ See Hoekman (1993) for a discussion of rules of origin in the services and the investment context. Affiliates of foreign companies that have established in a country may still find it difficult to contest procurement markets. While establishment may be necessary, it is not sufficient to ensure national treatment.

government) and there are no regulations requiring discrimination against foreign suppliers, any discrimination that occurs is likely to be economically rational. It is in instances where market forces do not reign that procurement rules may be necessary. As governments deregulate, foster entry and privatize activities, the need for GPA-type regulatory oversight and bureaucratic control diminishes.

While there are a variety of situations under which discriminatory procurement may enhance national welfare and lower procurement costs, simulation studies suggest that welfare gains are likely to be modest at best. Greater profits of domestic firms and/or cost savings to public entities will tend to offset by increased prices. As a result, the potential cost savings are reduced (Deltas and Evenett, 1996).¹⁵ Given that in most instances the optimal policy will be difficult to determine and generally will vary depending on the specifics of the situation,¹⁶ in practice favoritism can be expected to be more costly than a policy of nondiscrimination. In many situations the information required to judge if diverging from nondiscrimination is beneficial will not be available. Nondiscrimination has therefore been argued to be a good rule of thumb (Deltas and Evenett, 1996; Hoekman and Mavroidis, 1995; Mattoo, 1996).

If account is taken of the rent seeking distortions that may be induced by discriminatory policies and the social cost of corruption/bribery, the case for nondiscrimination is strengthened. Such costs can be significant, and the rents involved may underlie much of the opposition in a country against the adoption of nondiscriminatory procurement rules. While care must be taken to distinguish the corruption issue from the economic rationale for discrimination in procurement, nondiscrimination will generally reduce discretion and enhance transparency of the procurement process and thus reduce the scope for rent-seeking. Indeed, transparency arising from the procedural requirements of the GPA may well be the primary benefit of membership for developing countries--even if strict nondiscrimination is not pursued. Multilateral surveillance and enforcement will help to guarantee

¹⁵ Much depends in this connection on how the government's objective (social welfare) function is defined, in particular the relative weights put on domestic industry profits as opposed to expected procurement costs. The latter will generally be a multiple of the former.

¹⁶ Branco (1994) explores some of the implications for the design of tender procedures, and concludes that current practice--i.e., first price sealed bid auctions and uniform preference policies--does not satisfy the necessary conditions for optimality.

such transparency and induce entities to abide by the established rules of the game. The GPA has a more credible enforcement mechanism than other WTO agreements, requiring members to establish domestic bid-protest challenge procedures (Hoekman and Mavroidis, 1995).

What does all this imply for measuring the impact of discriminatory policies and the incentives to adopt a rule prohibiting such practices (i.e., accede to the GPA)? The following factors would appear relevant:

1. Size of countries and market structure The larger are countries, the greater the number of potential domestic suppliers and the potential need for strategic discrimination along McAfee and McMillan (1989) lines declines. As the size of the market increases, so does the probability that domestic firms attain minimum efficient scale. Moreover, even if discrimination is pursued it is likely to reduce national welfare relatively little (the Baldwin/Richardson argument). Insofar as Breton/Salmon-type incomplete contract problems arise, the natural tendency to source from national firms will be re-enforced. Thus, large countries can be expected to continue to source predominantly from national suppliers even if they accede to the GPA.

Small countries, in contrast, will generally have fewer national firms that can provide the goods needed by the government, especially specialized, capital-intensive items such as telecommunications or heavy electrical equipment. Domestic firms are likely to be higher cost producers, especially if they produce nontradables or if policies are pursued to foster domestic production (e.g., through trade protection). Discrimination may help to reduce expected procurement costs if there are few foreign bidders, but in general cost-minimization and ineffectiveness considerations, as well as the issues raised by Breton/Salmon should induce welfare maximizing small countries to expand the set of bidders by not discriminating. If accession to the GPA allows domestic political economy constraints that inhibit unilateral adoption of more transparent procurement practices to be offset, greater reliance on foreign sourcing should result in welfare gains. As noted by Mattoo (1996), multilateral monitoring and the enforcement/transparency mechanisms of the GPA should help constrain rent-seeking.

2. Relative size of government demand The share of government purchases in total national consumption of a product is an important determinant of the impact of discrimination on domestic

welfare and the volume of imports. The smaller the share, the smaller the aggregate impact. An implication for the trading system is that the focus of negotiating attention should be on products where government demand is large. An implication for national policymakers is that discrimination is not effective and should not be pursued if public sector demand is small. A question for research is to determine whether a distinction is in fact made in the application of discriminatory procurement depending on the relative importance of public sector demand.

3. *Type of products* The greater the substitutability of domestic and foreign products, the more ineffective is discrimination, *ceteris paribus*. If asymmetric information and principal-agent problems arise, a procuring entity may have a good reason to reduce the number of bidders, which in practice may imply discrimination against foreign suppliers. More generally, procuring entities may be justified in pursuing limited tendering, engage in negotiations, link contracts over time, or split contracts. These practices are frowned upon by the GPA and are subject to conditions.¹⁷

4. *Governance and ownership structure* The greater the extent to which public entities operate in a competitive environment and are subject to hard budget constraints (that is, do not obtain direct or indirect financing from the government), the less likely are inefficient purchasing decisions. Many governments have privatized state-owned enterprises and allowed entry by private sector firms into public good-type activities (e.g., telecoms, power). In such cases cost minimization is pursued through more direct means, and procurement rules become redundant. Instead, what may be needed are competition laws and policies to ensure that entities with a dominant position do not abuse their market power or engage in restrictive business practices. That is, the problem shifts from combating waste and corruption to one of preventing collusion.

¹⁷ Limited tendering procedures, under which an entity contacts specific suppliers individually, is only permitted if there was no response to a call for tenders, in cases of urgency, for additional deliveries by an original supplier, or in case of additional construction services not intended to be included within the original contract. Limited tendering procedures may not be used "with a view to avoiding maximum possible competition or in a manner which would constitute a means of discrimination among suppliers of other Parties or protection to domestic producers or suppliers" (Art. XV GPA). Negotiated procedures may only be used if entities have indicated their intent to do so in a call for tender, or when it appears from the evaluation that no tender is obviously the most advantageous in terms of the specific evaluation criteria set forth in the notices or tender documentation. Elimination of participants in this context should be carried out in accordance with the criteria set forth in the tender documentation (Hoekman and Mavroidis, 1995).

While these factors must be taken into account when analyzing the impact of procurement policies and the incentives for countries to join the GPA, they are rarely considered. Instead, research has sought to determine the extent to which discriminatory policies are applied; compare government and private sector imports; or calculate tariff equivalents. The last two approaches center on the quantity and price impact of procurement policies. Price-comparison exercises to calculate tariff equivalents are difficult to undertake, however, as the shadow prices of imports for public entities are not observable (Deardorff and Stern, 1985). The few available empirical studies therefore mostly focus on the quantity impact, using a methodology suggested by Baldwin (1970). Baldwin assumes that in the absence of discriminatory policy, government entities would behave the same way as private firms.¹⁸ Thus, under total nondiscrimination the government's demand for imports of a good i as a share of its total consumption (m_i) would equal that of the private sector as a whole. If total government demand is G_i , hypothetical public sector imports would be $m_i G_i$, and if the government does not collect tariffs on its own imports, the impact of a discriminatory procurement policy can then be estimated as:

$$P_i = \frac{m_i^{ps} G_i - M_i^G}{\eta_i m_i^{ps} G_i} \quad (1)$$

where the assumed non-discriminatory level of imports is using the private sector import share is m_i^{ps} G_i , M_i^G are actual government imports, η_j is the price elasticity of demand for imports, and P_i is the implied preference margin for good i . The ratio between hypothetical and actual imports has also been used by Lowinger (1976) to devise an "index of discrimination" $I^D = (m_i^{ps} G_i / M_i^G) \times 100$.

Using 1958 data for the U.S. and an elasticity of -2, Baldwin (1970) estimated that the preference margin (equation 1) was some 20 percent. After adjusting for the fact that certain large import items such as oil were not subject to discriminatory policies, the margin for the residual set of covered goods increased to some 40 percent.¹⁹ More recent estimates of preference margins in 1992 for a number of countries using the Baldwin/Richardson method give an estimated preference margin

¹⁸ No allowance is made for deregulation, privatization or contracting activities by the public sector, or to differentiate between entities on the basis of the extent to which competition exists.

¹⁹ Lowinger (1976) repeated this exercise using data for 1963 and calculated virtually identical numbers.

for U.S. purchases of 16.3 percent (Table 1).²⁰ Preferences in Western Europe and Australia/New Zealand range from 38.9 percent to 49.5 percent, while aggregate Japanese preference margins are 18.2 percent. Canadian purchases appear relatively unbiased.²¹

Estimates of preference margins using the Baldwin/Richardson methodology are obviously sensitive to the assumption that other things being equal the government would import the same share of a good as the private sector, and that all differences can be attributed to formal or informal preference policies. One source of bias that arises in this connection is that private sector imports may be distorted because of tariffs and NTBs. Alternatively, private sector demand for certain products may be very low or even zero because government is the dominant supplier of the output that embodies particular products (defense; utilities; certain types of transport services; etc.). There may be good political reasons to discriminate that do not arise in a private sector context; Breton and Salmon's principle of democracy is an example. A desire to promote activities that are deemed to generate beneficial externalities (e.g., R&D) can also be mentioned in this connection.²² The extent to which this approach overstates preference margins remains to be determined. One way to do so would be to investigate shifts in purchasing patterns by entities in countries that have eliminated formal preference policies and pursued wide-ranging privatization and deregulation (e.g., New Zealand).

IV. Operation of the GPA, 1983-92

The GPA requires signatories to report annual statistics on procurement by covered entities to the GATT Committee on Government Procurement.²³ Such data reporting was intended to help

²⁰ Data reported subsequently in this paragraph are from Francois, Palmetier and Nelson (1996).

²¹ Estimates for the US in the late 1950s and early 1960s suggest the index of discrimination was in the 600-700 percent range (Baldwin, 1970; Lowinger, 1976).

²² See Branco (1996) for an analysis of the use of discriminatory procurement aimed at fostering the development of "high" technologies. Of course, procurement *per se* may not be the optimal policy to support such activities.

²³ The Committee oversees the operation of the GPA. It comprises representatives from all member countries, who meet periodically in Geneva.

parties determine how well the Agreement was functioning, in part by providing comparable cross-country information on sourcing practices. However, these data are not published, and do not appear to have ever been used for analytical purposes. Signatories began reporting statistics for the year 1983. The most recent year available is 1993. However, because for some countries the latest year available is 1992, the analysis that follows is restricted to the 1983-92 period. During this period the GPA applied only to the procurement of goods by central government entities. As a result, most procurement activities by the public sector broadly defined were excluded. Francois et al. (1996) note that in 1993 purchases by federal, state, and local authorities in the U.S. exceeded \$US 1.4 billion, equivalent to some 20 percent of GDP. Out of this, federal procurement was \$445 billion, of which 68 percent went to defense (goods, services, and employee compensation). Of the remaining \$141 billion, worker compensation comprised 48 percent, leaving \$73 billion. Most of this was used to procure services. Goods accounted for only \$14.4 billion, or 3 percent of total federal purchases. At the state and local level the dominant category of expenditure (excluding wages) are structures (construction activities).

Coverage

Table 3 reports data on the magnitude of procurement by entities covered by the GPA in 1992. The aggregate amount of purchases by such entities was some US\$ 62 billion.²⁴ This compares to an average of some US\$ 35 billion during 1983-85 (Table 5). In nominal terms, procurement under the GPA therefore increased by 78 percent. Taking account of inflation in OECD countries during 1983-92, in real terms the coverage of the GPA expanded by 25 percent. To some extent this growth is an artifact, as the GPA initially exempted purchases with a value of less than SDR 150,000. This was lowered to SDR 130,000 during the first renegotiation of the GPA, which entered into force in February 1988. This 13 percent reduction in the threshold increased the potential coverage of the GPA, but by how much cannot be determined.

²⁴ Data on entity procurement reported to the GATT are in SDRs. They have been converted to US dollars using the average annual exchange rates reported in the IMF International Financial Statistics.

The largest procurement market, by a substantial margin, opened up under the GPA is that of the United States. Average annual purchases by covered U.S. entities reported to the GATT was some US \$29 billion in 1992. This compares to procurement of \$16 billion by EU-12 entities, \$9.2 billion by Japan, and \$1.6 billion by Canada. It is helpful to relate these numbers to the size of each party. Useful yardsticks in this connection are: (i) total expenditures by all levels of government as reported in the national accounts; (ii) total non-defense-related central government expenditures on goods and services; and (iii) capital expenditures by the central government. The first measure of government expenditures includes all spending--interest payments, wages, net transfers, defense, etc. The second is a more appropriate benchmark, but information on this variable is not available for all countries. Data on capital investment expenditure exclude recurrent spending and include construction (not covered by the GPA until 1996), but are better in terms of country coverage than those on expenditure on goods and services.

In relation to all these yardsticks, U.S. coverage is very high compared to the other large GPA members (Table 4). Relative to total government expenditures the average coverage ratio of GPA procurement across all countries is 1.6 percent. Denmark has the highest coverage (3.5 percent), followed by Norway, Finland and the United States. Singapore and Israel have the lowest coverage--around 0.3 percent. France and Japan are at the average, while Germany and Italy have the lowest coverage ratios of the large countries.²⁵ Relative to total central government expenditures on goods and services, the coverage of the GPA never exceeds 5 percent for the countries for which data are available. Denmark, Finland, Norway and the U.S. continue to have the highest coverage ratios, all varying in the 4-5 percent range. Most other GPA countries have coverage ratios in the 2 percent range.

Capital expenditure for GPA members is on average some 12 percent of total non-defense expenditures on goods and services (Table 4). Coverage ratios relative to capital expenditures should therefore on average be 8 times higher than expenditures on goods and services. However, for a number of countries, GPA coverage relative to capital expenditure increases much more than this. Indeed, for some it exceeds total reported capital expenditure--e.g., Canada and Denmark. Large

²⁵ Data on Hong Kong were not available.

countries such as France, Germany, Italy, Japan and the UK tend to have below average coverage on this measure. The extent to which the U.S. is an outlier among the large players is most obvious when using the capital expenditure yardstick. On all measures, Germany and Italy have the lowest ratios, suggesting that these are countries that may have sought to limit the coverage of their GPA obligations. The United States and the Nordic countries, in contrast, appear to have made the most far-reaching commitments as far as the coverage of the GPA is concerned. Finally, it is noteworthy that Israel and Singapore have scheduled substantially less than OECD countries. This is presumably a reflection of the scope offered by the GPA to developing country signatories to make limited commitments.

Foreign Sourcing

To what extent has the GPA led to an increased share of procurement going to foreign firms? As noted previously, the size of a country should influence the market shares of foreign firms. The data reveal that smaller countries do, on average, procure much more on international markets than do large countries. If Canada, the EU, Japan and the U.S. are excluded, about 60 percent of purchases by covered entities exceeding the threshold went to national suppliers. This compares to more than 90 percent for the large players. Unfortunately, EU statistics define "domestic" as intra-EU sourcing. It is not surprising, therefore, that reported self-sufficiency ratios for the EU-12 are above 98 percent on average during 1983-92. Three EU countries source disproportionately from non-EU sources: Denmark, Ireland, and the Netherlands (Table 5). All three are relatively small countries, and two have a reputation as being liberal-minded on trade policy. However, the extent of non-EU sourcing remains limited, averaging around 16 percent. In interpreting these statistics it should be noted that no distinction is made between domestic firms "proper" and foreign firms that have established a local presence. To the extent that large countries attract a greater amount of foreign direct investment, the high self-sufficiency ratios may therefore be somewhat misleading.²⁶

²⁶ Although the government may be indifferent between sourcing from a "pure" domestic firm and a partly or wholly foreign-owned firm that is established on its territory, the latter may have a higher import content than the former. Available data on sourcing of transnational corporations suggest that the import intensity of affiliates tends to be higher than that of local competitors (UNCTC, 1988).

In the EU, Japan and the U.S., the share of domestic firms in total above threshold procurement by covered entities remained virtually unchanged during 1983-92. The average weighted share across all GPA members is relatively constant; the unweighted average falling by three percentage points, from 74.6 percent to 71.2 percent (Table 5). For the smaller countries, however, with the exception of Singapore and Switzerland, the share of procurement from national sources has declined over time. For some countries the decline is quite significant. For example, in Norway the share fell from the 60 percent range to around 20 percent in 1990.²⁷ Finland reports a drop from very high levels of domestic sourcing (around 95 percent) to the 70 percent range. Canada experienced a 10 percentage point fall, from 90 to 80 percent. The available data for Austria also suggest a significant decline. The same is true for Sweden, where in recent years the share of domestic sourcing fell from 50 to 35 percent. Finally, Hong Kong, already very open in the early 1980s, further reduced the share of domestic sourcing over 1983-92. Although it is impossible to attribute such changes in sourcing patterns to the GPA--regional developments also played a role, e.g., the NAFTA in North America, efforts to liberalize EU procurement markets, and unilateral deregulation and privatization policies--the finding that smaller GPA members became less "nationalistic" in their purchasing decisions appears to be robust.²⁸ But for most of the large players there has been no change.

Thresholds and Limited (Single) Tendering

Data are reported for two other indicators of the "performance" of the GPA. The first concerns the share of contracts awarded that exceed the threshold; the second is the share of contracts that are awarded without allowing for competitive bidding. Both dimensions are important in judging the relevance of the GPA, as signatories may circumvent obligations by splitting contracts so as to

²⁷ However, more recently, the share of domestic sourcing rose back to previous levels, as is reflected in the 1990-92 average reported in Table 3. The development of the Norwegian oil fields may explain part of the large drop observed in the 1980s.

²⁸ Singapore is an interesting case where the opposite holds, however. Almost 60 percent of procurement by covered entities went to national suppliers during 1983-92. The trend over time has been to increase the share of domestic firms--the average annual growth rate in this share being 6.4 percent). In part this may reflect inward foreign direct investment.

remain below the threshold, and may use single tendering methods to avoid having to publicly tender contracts. It is for these reasons that a reporting requirement was imposed for such procurement.²⁹

During 1983-92, the share of contracts that exceeded the threshold tended to increase. In 1983-85, some 39 percent of all procurement by covered entities fell above the threshold; by 1991-92, it had risen to 49 percent (Table 5). This can be explained in part by the reduction in the threshold in 1988, from SDR 150,000 to SDR 130,000. Weighted by procurement of entities, however, the opposite trend emerges: during 1983-85 almost 60 percent of all contracts exceeded the threshold; by the early 1990s it had fallen slightly to 57 percent. To a large extent this reflects developments in the U.S. There is an interesting pattern in the procurement data reported by the EU and the U.S. The former steadily increases the share of contracts exceeding the threshold, and the latter steadily decreases it. As the U.S. had a much larger proportion of procurement above the threshold than the EU in the early 1980s (80 compared to 40 percent, respectively), the two gradually converged. As of 1990-92, the share of above threshold contracts for both EU and U.S. entities averaged around 57 percent.

There is a great variance across signatories in the share of above-threshold procurement. It ranges from an average of around 10 percent (Denmark) to over 90 percent (Israel). Some of the countries that appear to have the highest coverage ratios in relation to yardsticks such as total government expenditure on goods and services--e.g., Denmark, Finland--score below average on the share of procurement subject to GPA rules. Abstracting from the EU-12, if the share of above threshold procurement is above average in the early 1980s, it tends to fall over time. Examples are the U.S. and Hong Kong. The converse also occurs. Thus, Norway and Austria start with the majority of contracts below the threshold, but see the above-threshold proportion increase substantially (Table 5). The most that can be said on the basis of the available statistics is that it appears that on balance purchasing practices were not used to circumvent GPA obligations.

²⁹ Of course, as discussed in Section III, entities may have good reasons for pursuing such practices.

Under the GPA, open competitive tendering procedures are in principle to be used for all contracts that exceed the threshold.³⁰ As noted earlier, limited tendering procedures involving an entity contacting and negotiating with potential suppliers individually is only allowed under certain conditions and members are required to report data on their use of this method. The issue became important in U.S.-Japan trade relations in the 1980s following U.S. complaints that the use of limited tendering was excessive (Stern, Jackson, Hoekman, 1986). The use of limited tendering varies across signatories, from a reported low of zero (Singapore) to a high of over 30 percent on average for France, Italy, Switzerland and Hong Kong (Tables 3 and 5). Across all signatories the weighted and unweighted average share of limited tendering was about 13 percent. The share of limited tendering has been falling over time for the EU-12 (decreasing some 7 percent per year on average during 1983-92), but rising for the U.S. However, just as the absolute coverage of the GPA in terms of value of procurement is much higher for the U.S. than the EU, the share of limited tendering is lower for the U.S. than the EU. Thus, the initial position of the U.S. is more liberal, but the trend is for the EU to "improve" and the U.S. to "regress." By 1992 the EU had caught up with the U.S. in terms of use of limited tendering--both standing at 10 percent. This is largely the result of a significant decline in the use of this method by France and Germany during the 1980s.

Japan's use of limited tendering has been rising over time, from around 12 percent during 1983-85 to 21 percent during 1990-92. Of the triad, Japan is clearly the worst "offender" as far as use of limited tendering is concerned. However, Hong Kong and Switzerland make even more intensive use of such procurement mechanisms. Interestingly, all three are large net exporters under the GPA, obtaining much more business in partner countries than they award to suppliers from partner countries (Table 6).

Pattern of Trade Under the GPA

Some information on the pattern of trade under the GPA can also be derived from the GATT data (Table 6). Given the very large imbalances that are sometimes reported, the data should be

³⁰ So-called selective tendering procedures, under which only pre-qualified suppliers may submit a tender, may also be used, as long as foreign firms are able to pre-qualify.

regarded as indicative only. The largest "importers" of procurement are not surprisingly the EU and the U.S., accounting for some SDR 390 and SDR 490 million, respectively, in 1991. Other relatively large importers include Canada, Singapore, and Sweden, each sourcing over SDR 100 million from other signatories. Japan is an outlier given its economic size, importing less than SDR 100 million, and exporting some SDR 370 million. Other large net exporters include Hong Kong, Norway, and Switzerland. Austria, the EU, Israel, and Singapore are large net importers. Indeed, Israel and Singapore report virtually no exports at all. If true (i.e., the data are reliable), this suggests that there may be a problem for developing countries in penetrating OECD procurement markets.

V. Issues and Implications for Developing Countries

The foregoing has discussed a number of dimensions of the GPA and procurement issues more generally. Unfortunately, adequate information does not exist allowing a discussion of questions such as: are developing countries discriminating in a way that matters to foreign suppliers; if so, are significant welfare costs incurred; if yes, why are more efficient policies not adopted unilaterally; what can a multilateral instrument do to offset the constraints that apply? Research on these issues is urgently needed if attempts to expand developing country membership of the GPA are to be successful. Surprisingly little is known about the significance of procurement favoritism in developing countries. More prominent in the policy debates is the allegation that corruption is a major factor restricting access to markets and raising procurement costs. But here also the absence of hard data is noteworthy. What follows focuses on three of the many questions that can be investigated: (1) what leverage do developing countries have in asking for concessions from existing GPA members; (ii) what are the potential gains for developing countries from accession; and (iii) what might be sought in terms of changing the current rules of the game.

Potential Negotiating Leverage

Estimating the potential size of non-member (developing country) procurement markets is perhaps the easiest way to arrive at a judgement of developing country leverage. The United States appears to believe that such markets are large and that existing discriminatory practices imply that

GPA membership would open up significant export opportunities. This perception has led to rise in the prominence of government procurement in US trade policy.³¹ Any estimate of the potential size of developing country procurement markets must be very tentative. Table 7 reports data on government expenditure in developing economies. Total central government expenditures on goods and services by non-OECD non-GPA signatories is some US\$ 300 billion. This includes conservative estimates for a number of large countries that do not report data--e.g., India, Indonesia, Pakistan, and South Africa.³² Data on expenditures by sub-central government entities in developing countries is neither comprehensive nor disaggregated. If it is assumed that purchases by such entities equal to central government expenditures, the total will be at least \$600 billion. Assuming further that half of all contracts are below the threshold, we are left with \$300 billion. Compared to the value of procurement currently covered by the GPA, this is not a trivial amount. However, much of this will not be available to foreign suppliers for the reasons similar to those noted earlier.

Existing thresholds are likely to be more binding in developing countries in that average size of contracts can be expected to be less than in a high-income country (Israel and Korea have above average thresholds). Many services will require establishment or a local presence, which may be prohibited or restricted. Most developing countries have much less in the way of national suppliers than industrialized nations, so that the scope for discrimination in favor of domestic industries is therefore more restricted.³³ It is also important in this connection to recognize that many expenditures by developing country governments are financed by official development assistance funds, both bilateral and multilateral. The greater the dependence on aid, the less scope there will be for exporters to improve market access conditions.

³¹ Mickey Kantor, the then US Trade Representative, made the issue one of the key agenda items that is to be discussed at the December 1996 WTO Ministerial meeting Singapore. See, e.g., Financial Times May 1, 1995; Oxford Analytica, January 15 and April 18, 1996.

³² The average ratio of expenditure on goods and services to total central government expenditures of all the developing countries reporting both variables was used to estimate data for missing countries.

³³ For example, in the 1980s, investments in the power sector accounted for one quarter of total public investment in developing countries. In most cases the associated capital equipment could no be procured domestically even if governments pursued discriminatory purchasing policies.

Official bilateral development aid is usually tied to procurement from the donor country; the recipient cannot subject purchases using such finance to international competition. Absent agreement from donors to eliminate tying of aid, such projects will be exempt from GPA rules. As far as procurement financed through multilateral development assistance is concerned, the guidelines required by multilateral development banks are very similar to the rules of the GPA in relying on the use of international competitive bidding (ICB).³⁴ In principle the greater the share of official aid in government purchases of goods and services, the less resistance there should be to signing the GPA, as ICB is either already required or the aid is tied. However, clearly much depends on the (implicit) objective function of the government. It may also be that the greater the constraints imposed by outside providers of financial resources, the more important it becomes for entities to retain discretion regarding the allocation of the remaining share of procurement.

Available data on the relative importance of aid flows as a share of government expenditure suggest that aid finances a significant share of total purchases of goods and services by developing country governments (Table 7). The ratio of multilateral flows to expenditure is about 18 percent for low income countries, while total aid (including bilateral) is equivalent to 35 percent of total expenditures on goods and services. For lower middle income nations, total aid accounts for 16 percent of expenditures; for upper middle income economies the figure drops to 6 percent. This suggests that for poor countries in particular, much procurement cannot be subjected to preferential policies, even if governments would prefer to do so. This significantly reduces the potential benefits for foreign suppliers interested in selling goods and services in these markets and thus potential negotiating leverage. Nonetheless, it can be recalled that what matters in the WTO context is not so much the actual policy stance, but the extent to which countries bind (lock-in) their policies. Even relatively open countries therefore have some negotiating leverage.

Potential Gains

The possible benefits of accession to the GPA are twofold. The first comprises the efficiency gains of lower cost procurement; the second consists of improved access to procurement markets in

³⁴ A major exception is that they allow for price preferences for local suppliers (see below).

the rest of world. For many countries the second source of benefit is likely to be smaller than the first. However, after the expansion of the GPA in 1996, the size of covered procurement markets increased substantially. Sub-central governments and many utilities became subject to multilateral disciplines and the Agreement was extended to cover many services and construction. It is very difficult to estimate *ex ante* how much additional procurement has been brought under the GPA's umbrella. In part this is because it is not always clear whether specific services are covered, or whether the MFN rule applies (many countries made commitments conditional upon reciprocity). It is also necessary to have information on average contract sizes across entities and types of goods and services. Thresholds for services are higher than for goods; and those for sub-central entities higher than for central government bodies (see Table 2). Moreover, many GPA members have included strict reciprocity conditions in their commitments which may significantly affect market access conditions for certain suppliers (Hoekman and Mavroidis, 1995).

An attempt can be made at guesstimating the potential size of aggregate procurement markets of GPA members. Total central government non-defense expenditures on goods and services of GPA signatories is about US \$2.1 trillion (Table 4). Available data suggests that total expenditures on goods and services by sub-central government bodies adds at least another \$1 trillion. Not all of this is available for international competition. In particular, the average size of non-central government contracts may be lower than those of central government entities. If it is assumed that one-third of total outlays could be subjected to GPA rules, the total potential market is therefore at least \$1 trillion per year. Applying the historical GPA rate for the share of procurement of goods below the threshold, some \$500 billion could be open to international competitive bidding (ICB). However, as can be seen in Table 2, thresholds for non-central government entities are significantly higher than for goods, and those for construction contracts are usually at least SDR 5 million. A more realistic figure is therefore US\$ 300 billion.

The conceptual considerations summarized in Section III suggest that greater sourcing of services from foreign enterprises will often require establishment and the ability of providers to access a market. In practice, market access conditions may discriminate against foreign suppliers generally, not just in the procurement context. Indeed, under the General Agreement on Trade in Services

national treatment and market access for a particular service activity is not necessarily guaranteed.³⁵ This implies that the priority issue from a negotiating perspective should be to liberalize access to service markets by extending the reach of the GATS. If this is not done, very little of the additional access to procurement markets for services agreed to in the Uruguay Round is likely to materialize.

How large the welfare gains of the GPA may be is not possible to say as there have not been any attempts to determine the costs of the status quo and the net impact of adopting GPA rules. Abstracting from the economic merits of the nondiscrimination rule, the procedural transparency-related provisions of the GPA should be of great potential value in reducing the scope for rent-seeking and corruption. Case studies have shown the cost of corruption to be high, leading to excess costs per project that are in the 25-50 percent range (Wade, 1982; Manzetti and Blake, 1995). Although difficult to quantify, corruption and rent-seeking has been shown to be detrimental to an economy's growth performance as the most efficient suppliers are not allocated contracts, resource allocation is distorted, and governments impose excess tax burdens or more commonly, pursue deficit/monetary financing (Mauro, 1995; Murphy et al., 1993). Although the issue of corruption extends far beyond procurement, rent-seeking in the public purchasing context is particularly prominent because foreign interests are often affected.

Abstracting from differences in cultural norms across countries, anti-corruption strategies must reduce the magnitude of the benefits that can be granted by officials, increase the costs of bribery for the private sector, and limit the market power of officials (Rose-Ackerman, 1995 a,b). Of the various strategies and suggestions made in the literature, the following are particularly relevant for procurement: effective deterrents through ex post punishments that exceed the gains realized (including banning firms caught in attempts to engage in bribery from bidding for contracts for a number of years); the creation of external monitoring devices and institutions (including encouragement and protection of "whistle blowers"); public transparency-enhancing mechanisms (published audits by independent auditors; a free press); privatization and hard budget constraints; requirements to use standardized products and/or goods that have well-established market positions;

³⁵ See Hoekman (1995) for a description and analysis of the GATS.

use of general retail/wholesale market prices for goods similar to those to be procured as comparators; and creation of incentives for losers of corruption to complain.

Although the GPA lacks an explicit corruption standard or norm, it is consistent with or embodies many of these options.³⁶ Particular emphasis is put on creating incentives for losers to "blow the whistle." As argued by Alam (1995), the opportunities for losers to take countervailing actions can be a key factor constraining rent-seeking activities. In the procurement context, the set of losers is small and given the sunk costs of participation in the bidding process there is an incentive to protest if expected returns outweigh expected costs of protesting. In discretionary, non-transparent procurement systems losing firms have little incentive to protest against irregularities because of the power of procuring entities to black list them. Under the GPA the scope for this is limited as sealed bids are required. Of great importance in this connection are the challenge procedures that are required by the GPA. This provides firms with an opportunity to protest before the procurement decision process is completed, as well as thereafter. The mechanism's primary weakness arises from the wide discretion that is given to adjudicating bodies to determine penalties. The GPA allows these to be limited to the costs of bid preparation if this is desired. Multilateral monitoring and the threat of initiation of WTO dispute settlement procedures will also help to ensure that entities abide by the GPA's substantive and procedural disciplines.

Possible Negotiating Issues

Low income developing countries may find it difficult to insist on reciprocal concessions from GPA members as negotiating leverage is a function of the size of the incremental market access that aspiring members can offer. However, middle income countries will generally have both larger markets and are less dependent on official aid. Such countries will therefore have some bargaining power, especially if a concerted stance is taken. Abstracting from cross-issue linkages--e.g., seeking lower tariffs on labor-intensive "sensitive" export products--as these are difficult to achieve outside a

³⁶ Corruption occurs at the interface of interaction between the private and public sectors. A type of activity involving only private entities that can also reduce social welfare is collusion. The GPA has nothing to say about collusion between bidders, this presumably being the domain of competition law (antitrust).

multilateral trade round, attempts could be made to allow the use of price preferences by developing countries. Although much more empirical research is required to determine the economic importance of the ability and possible modalities of favoring domestic firms, price preferences have the advantage of being transparent and less distortive than other types of discriminatory policies that are often pursued (e.g., outright bans on participation by foreign bidders; local content or offset requirements). "Tariffing" such policies through an agreement that price preference schemes are permitted would also provide a better focal point for future multilateral negotiations to reduce discrimination. As noted above, such preferences are allowed subject to certain conditions and limits by multilateral financial institutions such as the World Bank. Provisions for their use are also included in the UNCITRAL Model Law on Procurement.³⁷ Many developing countries have incorporated such preferences into their legislation. Of course, the use of such preferences should be optional and not create a preference margin that exceeds that currently implied by existing policies in a nation.³⁸ Recognition of the potential legitimacy of price preferences may do much to alter the incentives for accession. Sufficient negotiating leverage would appear to exist to pursue this possibility.

V. Concluding Remarks

Governments desiring to minimize procurement costs have options that go beyond the adoption of efficient purchasing practices. Other options include privatization and allowing entry into markets serviced by public entities where such entry is feasible. The potential benefits of such initiatives are recognized by many governments (see e.g., World Bank, 1995). Procurement disciplines are second-best if not redundant if market forces can be applied to the activities of public entities, independent of the degree of state ownership. If entities are subject to competition (markets are contestable) there is much less cause for concern if entities pursue discrimination. However, clearly governments (both central and local) will remain important purchasers of goods and services.

³⁷ United Nations Committee on International Trade Law. See Beveglieri-Zampetti (1996) for a discussion.

³⁸ For a lengthier discussion of the possibility of allowing price preferences, see Hoekman and Mavroidis (1995).

Indeed, as more activities are contracted out by government agencies, the need rises for transparent and efficient procedures to allocate contracts.

The foregoing has illustrated the need for further research to determine the costs and benefits of alternative procurement rules. This is currently inhibited by the weaknesses of the available data on procurement and on the practices that are applied. Little is known about the composition of procurement, the import propensity of government entities at various levels as compared to the private sector, the extent to which actual procurement costs diverge from market price-based comparisons, differences in procurement efficiency across similar entities/contracts as a function of ownership and market structure, the nature of the products that are purchased, or the incidence of re-opening of negotiations after contracts have been awarded.³⁹ Nor is a judgement possible regarding the extent to which procedures are consistent with GPA rules.⁴⁰ Little is also known about the practices and policies that are applied by both developing and industrialized countries. Thus, it is very difficult to establish the extent, let alone the impact, of discriminatory procurement.⁴¹

Despite all their weaknesses the available data suggest that changes in procurement practices--or the lack thereof--are largely consistent with what theory would predict. Large countries have not been induced to change sourcing patterns following the entry into force of the GPA. Small country members of the GPA are as expected more open to foreign suppliers, and appear to have become more so over time. This suggests that better market access opportunities could emerge if greater participation by developing countries could be achieved, as these are mostly small relative to OECD countries. However, other characteristics of developing countries suggest that the magnitude of these opportunities may be limited, and that not too much should be expected even if such economies join

³⁹ This is potentially a significant loophole in any procurement regime as it may reflect or induce corruption and collusion between the entity and a favored supplier, who will bid low to win the tender in the knowledge that the contract will be renegotiated *ex post*. This is alleged to be a prevalent practice in some European GPA Members (Financial Times, November 23, 1994, p. 2).

⁴⁰ In the EU, many members states have been slow to implement EC Directives relating to procurement, and the directives are often violated. In 1994 the Commission of the European Communities initiated some 250 legal actions against members states or entities for inconsistency with procurement rules (*Ibid.*). Such a surveillance role is not given to the GATT Committee.

⁴¹ See Evenett (1996) for a recent attempt to discern from aggregate trade data the extent to which biased procurement may have influenced bilateral trade flows.

the GPA. Nonetheless, even if a country already has an open procurement regime, there is value to binding this multilaterally.

Potentially large welfare gains for developing countries of accession to the GPA certainly exist, and non-members should seriously consider using the opportunity of converting external pressure in this area to adopt better policies (that is, use it to counteract political economy constraints that prevent the unilateral adoption of such practices) and to seek changes in GPA rules that allow for transparent divergences from the non-discrimination principle if this is deemed desirable by a government. While more research is required on the economic costs and benefits of the GPA's nondiscrimination rule, the existing set of GPA disciplines already provides various opportunities to diverge from the nondiscrimination rule, and can be very helpful for governments that seek to limit the scope for rent seeking and corruption in public purchasing.

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Table 1: Estimated Preference Margins for Core Government Purchasing, 1992
(Baldwin/Richardson approach)

Country	Machinery	Other Goods	Trade, transport, communication	Utilities	Other Services
Canada	--	--	--	--	39.6
United States	18.4	17.9	--	18.8	42.6
Western Europe	--	9.2	13.7	14.9	48.3
Japan	--	32.0	26.2	34.0	46.6
Australia	49.8	49.7	--	--	41.5
New Zealand	13.9	19.7	49.8	--	50.0
Korea	30.6	20.8	--	--	48.2

Note: -- denotes a preference margin that is less than or equal to zero.

Source: Francois, Palmetier and Nelson (1996).

**Table 2: Thresholds for Coverage of Procurement Under the GPA
Special Drawing Rights (SDR)**

Category of procurement	SDRs
Central Government Entities	
Goods	130,000
Services except construction services	130,000
Construction services	5,000,000 ¹
Sub-central Government Agencies	
Goods	200,000 ²
Services except construction services	200,000 ²
Construction services	5,000,000 ³
All Other Entities That Procure in Accordance With the Agreement*	
Goods	400,000 ⁴
Services except construction services	400,000 ⁴
Construction services	5,000,000 ³

* In general public enterprises or public authorities such as utilities.

¹ Israel: 8.5 million; Japan 4.5 million (with architecture services: 450,000)

² US and Canada: 355,000; Israel: 250,000

³ Israel: 8.5 million; Japan and Korea: 15 million

⁴ Canada and Israel: 355,000; Japan: 130,000.

Table 3: Procurement Under the Code, 1991-1992 (US \$ million and percent)

	Value of Total Contracts (A)	Value of Contracts > SDR 130,000 (B)	Value of Limited Tendering (C)	Value Available For ICB D = (B-C)	Share of ICB in Total = D/A	Share of B going to Domestic Firms
Austria	433	239	38	201	46.5	41.5
Belgium	407	238	28	210	51.5	100.0
Canada	2,399	1,014	119	895	37.3	81.0
Denmark	1,645	220	34	186	11.3	71.9
Finland	833	182	1	181	21.8	69.1
France	3,279	2,939	837	2,102	64.1	96.5
Germany	2,055	1,332	509	823	40.0	99.1
Hong Kong	363	264	94	170	46.8	2.5
Ireland	208	72	7	65	31.1	81.2
Israel	68	62	9	54	78.5	25.6
Italy	1,994	1,219	354	865	43.4	96.7
Japan	9,507	4,280	964	3,317	34.9	85.1
Luxembourg	34	11	3	8	23.7	96.6
Netherlands	1,281	491	178	313	24.4	79.6
Norway	775	412	76	336	43.4	28.8
Singapore	30	19	0	19	62.6	65.1
Sweden	1,162	436	60	377	32.4	41.3
Switzerland	815	313	219	94	11.5	45.5
U. K.	5,740	3,120	312	2,809	48.9	99.5
U.S.	29,120	20,074	3,418	16,657	57.2	91.7
Total	62,154	36,939	7,258	29,681		
Average unweighted					40.6	69.9
Average weighted					47.7	89.0

Source: WTO Secretariat, Annual reports to the Government Procurement Committee, 1984-94.

Table 4: GDP and Central Government Expenditure in 1992 (US \$ million and percent)

	Gross Domestic Product	Total Expenditure	Total Non-defense Expenditure on Goods and Services	Capital Expenditure	Value of Total Contracts	Value of Total Contracts/GDP (%)	Value of Total Contracts Relative To:		
							(A)	(B)	(C)
Austria	185,235	40,282	29,842	4,750	433	0.23	1.08	1.45	9.12
Belgium (**)	218,836	64,197	44,540	4,973	407	0.19	0.63	0.91	8.19
Canada	493,602	128,155	96,959	1,965	2,399	0.49	1.87	2.47	122.12
Denmark	123,546	47,219	35,782	1,539	1,646	1.33	3.49	4.60	106.92
Finland	93,869	30,020	23,045	1,912	834	0.89	2.78	3.62	43.58
France (**)	1,319,883	256,711	178,104	19,273	3,279	0.25	1.28	1.84	17.02
Germany (**)	1,789,261	215,669	149,629	35,832	2,055	0.11	0.95	1.37	5.74
Ireland	43,294	16,986	13,236	1,269	208	0.48	1.23	1.58	16.43
Israel	69,762	25,270	13,001	3,500	68	0.10	0.27	0.53	1.95
Italy (**)	1,222,962	335,439	232,725	17,983	1,994	0.16	0.59	0.86	11.09
Japan (**)	3,670,979	479,158	332,436	58,360	9,507	0.26	1.98	2.86	16.29
Luxembourg	12,638	2,394	1,784	364	34	0.27	1.43	1.92	9.44
Netherlands	320,290	92,698	75,644	6,505	1,281	0.40	1.38	1.69	19.70
Norway	112,906	25,399	19,276	1,255	775	0.69	3.05	4.02	61.76
Singapore	46,025	8,889	3,424	2,272	30	0.07	0.34	0.89	1.34
Sweden	220,834	75,172	61,158	3,386	1,162	0.53	1.55	1.90	34.31
Switzerland	90,649	8,973	5,784	1,096	252	0.28	2.81	4.36	22.99
U. K.	903,126	338,259	211,108	33,755	5,740	0.64	1.70	2.72	17.00
U. S.	5,920,199	1,037,354	631,924	56,354	29,120	0.49	2.81	4.61	51.67
Total		3,228,246	2,159,399	256,343	61,227				
Unweighted Average						0.42	1.64	2.60	30.35

(*) Average of the sum of 1991 and 1992 total contracts; (**) Estimates; Switzerland, 1984; Hong Kong has been excluded because of data inconsistencies.

Source: WTO Secretariat, Annual reports to the Government Procurement Committee, 1984-94; IMF Government Finance Statistics Yearbook, 1995.

Table 5: Indicators of GPA Performance, 1983-1992 (US \$ million and percent)

	Value of Covered Procurement		Share of Limited Tendering		Share of Procurement Covered Domestically		Share of Procurement that Falls above SDR Threshold	
	1983-1985	1990-1992	1983-1985	1990-1992	1983-1985	1990-1992	1983-1985	1990-1992
Austria	179.4	403.9	43.2	43.2	51.3	1.5	46.9	43.5
Belgium (*)	129.9	407.2	10.3	8.6	100.0	100.0	40.0	57.5
Canada	968.5	2,163.9	9.7	7.4	92.3	77.4	42.9	46.0
Denmark(*)	447.9	1,651.7	4.0	1.4	95.6	79.8	5.8	12.6
Finland	256.3	800.8	0.3	0.1	95.7	69.1	39.4	18.1
France (*)	937.9	3,089.5	33.3	29.6	97.6	97.2	35.1	85.5
Germany (*)	845.6	2,029.3	13.3	24.0	97.2	99.1	24.9	61.7
Hong Kong	154.5	348.6	22.1	28.2	5.8	3.2	67.7	71.2
Ireland (*)	47.8	185.8	1.8	5.6	100.0	84.8	20.6	29.1
Israel	30.1	67.9	5.0	3.3	13.7	25.6	84.0	91.1
Italy (*)	382.4	1,937.5	1.0	5.9	99.2	97.8	5.0	60.5
Japan	3,379.4	9,274.1	12.3	21.0	86.1	85.5	37.4	43.7
Luxembourg (*)	14.9	35.8	39.8	23.9	100.0	97.8	30.9	28.4
Netherlands (*)	547.1	1,407.7	16.8	13.5	98.7	86.4	12.1	37.7
Norway	384.7	721.4	7.1	8.3	48.6	40.4	44.5	58.9
Singapore	48.5	31.0	0.0	0.0	45.1	67.3	57.9	51.1
Sweden	624.4	1,200.5	4.0	4.8	43.7	43.6	27.9	36.9
Switzerland	265.0	806.2	25.1	27.7	35.7	38.3	43.8	39.8
U. K. (*)	1,329.7	5,375.0	13.7	6.6	99.4	98.2	29.3	49.0
U. S.	24,080.8	28,891.2	11.5	9.6	86.3	90.4	80.1	66.8
Memo: EU countries	7,967.2	16,119.4	19.0	15.0	98.3	94.9	21.2	54.1
Average unweighted			13.1	13.0	74.6	71.2	38.8	49.5
Average weighted			13.3	14.1	86.1	87.3	59.7	57.4

(*) Average of 1984-85.

Source: WTO Secretariat, Annual reports to the Government Procurement Committee, 1984-94.

Table 6: Contracts Awarded in 1991 (SDR million)

Imports from:	Exports to:	Austria	Canada	EU	Finland	Hong Kong	Israel	Japan
Austria								
Canada				14.4				7.0
EC		0.1	1.4				0.0	0.1
Finland			0.1	11.9		0.8		0.5
Hong Kong			1.4	41.0	0.4		0.1	9.5
Israel		2.6			0.1			
Japan		20.4	13.2	88.9				
Norway		1.8	0.3	36.9	0.5		0.4	0.3
Singapore								0.7
Sweden		0.4	0.7	64.3	23.3		0.4	7.8
Switzerland		1.5		97.9				13.5
US		8.9	124.5	35.4	0.9		27.4	39.7
Total		33.23	141.6	390.8	25.0	0.8	28.4	79.0

Imports from:	Exports to:	Norway	Singapore	Sweden	Switzerland	US	Total Under Code	Others
Austria								
Canada						124.3	145.6	5.4
EC		0.2		1.7	12.0	30.8	48.6	3.7
Finland		0.5		1.8		2.3	17.0	0.0
Hong Kong			8.2	0.7	2.1	29.9	93.3	97.4
Israel						6.2	8.9	
Japan		3.9		15.8	10.6	214.9	367.7	93.8
Norway				97.3	13.6	7.4	158.6	1.9
Singapore						0.2	0.9	0.3
Sweden		12.4			0.3	29.2	138.8	46.4
Switzerland				0.4		44.1	157.4	10.4
US		0.4	117.9	8.5	26.6		708.8	
Total		17.3	126.2	126.2	65.20	489.3	1,845.6	259.2

Source: WTO Secretariat, Annual reports to the Government Procurement Committee, 1984-94.

Table 7: Government Finance and Official Development Assistance (US \$ million and percent)

	GDP 1992 (A)	Total non- Defense Expenditure on Goods and Services (B)	Capital Expenditure	Multilateral Development Bank Loans 1992	Development Assistance Committee Loans 1992	Ratio Multilateral Development Bank Loans/Total Non-Defense Expenditure (B)
Average of Low Income Countries (N=46)	23,704	2,053	1,637			
Total Low Income Countries	1,090,384	94,447	75,296	17,076	32,931	18.1
Average of Lower Middle Income Countries (N=42)	31,151	2,237	921			
Total Lower Middle Income Countries	1,308,362	93,960	38,682	13,972	15,337	14.9
Average of Upper Middle Income Countries (N=16)	80,384	6,602	1,496			
Total of Upper Middle Income Countries	1,286,158	105,631	23,943	6,135	1,239	5.8

Notes: Multilateral Development Bank loans refer to loan approvals; Development Assistance Committee data pertains to net disbursements and includes bilateral assistance.

Source: World Bank, Asian Development Bank, Inter-American Development Bank, African Development Bank and OECD DAC, Annual Reports; IMF Government Finance Yearbook, 1995.