Expansion of the Government Procurement Agreement: Time to Concentrate on Depth as well as Width

Junsok Yang
The Catholic University of Korea
yanjuna@catholic.ac.kr

WTO Government Procurement Agreement (GPA) was designed to liberalize and expand trade in government procurement. Revised GPA was implemented in 1996 and the latest revision was completed (but not yet implemented) in 2012, but as a plurilateral agreement. Since the end of the UR, there has been attempts by various WTO members to liberalize trade in the government procurement market - through an expansion of Parties who are signatories to GPA, and through a negotiated agreement on transparency in government procurement. The attempt to expand the Parties who are signatories to the GPA - attempt to increase the width of the coverage of the agreement - has been somewhat successful, but I argue that the goal should be to further liberate the government procurement markets of the current Party members - to reduce thresholds and other barriers which limit market access even to other GPA members, in other words, to increase the depth of coverage. Taking cue from Korea’s FTA, I propose a two-level liberalization of the government procurement market under the GPA: A “light” level which would be the same as the current level of liberalization; and a “deep” level with lower thresholds and less exemptions. I argue that, as seen in Korea, with FTAs, many GPA Parties already have multiple levels of liberalization (i.e, spaghetti-bowl effect of FTAs), but by limiting the levels of liberalization to two, we can seek the best of deep liberalization but reduce the spaghetti-bowl effect.

Keywords: WTO, government procurement, FTA, GPA, deep liberalization
JEL Classification: F13, F15, F53

I. Introduction

GATT and the UR agreements have done much to liberate and promote trade since 1947. However, one area of international trade has always been excluded from liberalization: government procurement. Since GATT, “procurement by governmental agencies for governmental purposes”\(^1\) have been exempt from the provisions of GATT and Uruguay Round (UR) agreements.

\(^1\) GATT Article III.8(a) and elsewhere
Government Procurement Agreement (GPA) was designed to liberalize and expand trade in government procurement. The first version of GPA was implemented in 1981, but it was a plurilateral agreement to be observed by only a subset of GATT members rather than a multilateral agreement. Revised GPA was implemented in 1996, but again, as a plurilateral agreement.\(^2\) Another revision was adopted in 2012, and due to be implemented as soon as the revision passes the National Assemblies and Parliaments of the GPA Party Members.

Since the end of the UR, there has been attempts by various WTO members to liberalize trade in the government procurement market - through an expansion of Parties who are signatories to GPA,\(^3\) and through a negotiated agreement on transparency in government procurement. The latter was presented as one of the “Singapore Issues” in the preparatory negotiations before the Doha Round, but the attempt to include the issue in the Doha Round failed.

The attempt to expand the Parties who are signatories to the GPA - attempt to increase the width of the coverage of the agreement - has been somewhat more successful. Anderson et al. (2011) argues that potential gains in value of GPA market access commitments are very substantial,\(^4\) and that more developing countries should be encouraged to accede to GPA. While not entirely disagreeing with this conclusion, I intend to argue that such goal is, in the end, inadequate. Because the GPA already encompasses most of the largest countries and the largest government procurement markets, the ultimate goal of the GPA should not be to add more Party members, but rather should be to further liberate the government procurement markets of the current Party members - to reduce thresholds and other barriers which limit market access even to other GPA members, in other words, to increase the depth of coverage. Such deepening has already occurred in many countries through various FTAs, including those signed by Korea. Ideally, such further liberalization should be done in the context of GPA negotiations, but given the current political circumstances, FTA can serve as a tool to establish a favorable environment to further reduce barriers among GPA members in the medium-term future.

In Section II of the paper, I will discuss some basic characteristics of GPA. In Section III, I will discuss the post-UR attempts to further liberalize trade in the government procurement market. In Section IV, I will examine the

\(^2\) A short history on the origin and revision of GPA is available in Yang and Kim (2001) pp.33-43

\(^3\) Throughout this paper, we refer to the subset of WTO members who have signed on to GPA and implements the agreement as “Parties” or “Signatories.”

\(^4\) Anderson et. al (2011) pp.14-15, pp.18-21
potential size of the government procurement market - both the estimates in Anderson et al (2011) and my own calculations; and in Section V, I will make the argument that the market size shows that more attention should be paid to further liberalizing the markets of current Party members. Section VI will be a short conclusion.

II. The WTO Government Procurement Agreement

As stated in the introduction, GATT and GATS excludes government procurement made for governmental purposes from MFN and national treatment obligations. GPA was meant to bring market liberalization to government procurement. The Agreement consists of the following main elements:

1. guarantees of national treatment and non-discrimination for the goods, services and suppliers of Parties to the Agreement with respect to procurement of covered goods, services and construction services as set out in each Party’s schedules (‘Appendix I’) and subject to various exceptions and exclusions that are noted therein;
2. minimum standards regarding national procurement processes, which are intended to ensure that the Parties’ procurements are carried out in a transparent and competitive manner that does not discriminate against the suppliers of other Parties; including obligations on
   - the use of technical specifications;
   - allowable tendering procedures;
   - qualification of suppliers;
   - invitations to participate in intended procurements;
   - selection procedures;
   - time limits for tendering and delivery;
   - tender documentation;
   - submission, receipt and opening of tenders, and the awarding of contracts;
   - negotiations by entities with suppliers; and
   - the use of limited tendering;
3. additional requirements regarding transparency of procurement-related information (e.g. relevant statutes and regulations);
4. procedures dealing with modifications and rectifications of Parties’ coverage commitments;

Anderson (2010).
5. requirements regarding the availability and nature of bid challenge (i.e. domestic review) procedures which must be put in place by all Parties to the Agreement; and
6. the application of the WTO Dispute Settlement Understanding in this area.

WTO Government Procurement Agreement (GPA) is a plurilateral WTO agreement, so that it applies only to those members who have signed on to the Agreement. As of September 2012, there are forty-one parties who must adhere to the provisions of the Agreement; nine observers who are currently negotiating accession; and fourteen additional observing countries who are not currently undergoing accession negotiations. The original GPA was negotiated during the Tokyo Round of GATT, but was subsequently revised and expanded during the period of the Uruguay Round (UR), though the revision of GPA was not a formal part of UR. The revised GPA was approved by negotiating Members on 1994 and implemented in 1996. Korea underwent the accession process during the latter period of UR, and participated in the revision negotiation as well. Korea implemented the GPA on January 1997. [Table 1]

Table 1. Members and Observers of WTO GPA (as of Sept. 2012)

| Parties (Signatories) | Armenia (2011), Canada (1996), European Union [(Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden, United Kingdom; 1996), (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic; 2004), (Bulgaria, Romania; 2007)], Hong Kong, China (1997), Iceland (2001), Israel (1996), Japan (1996), Korea (1997), Liechtenstein (1997), The Netherlands with respect to Aruba (1996), Norway (1996), Singapore (1997), Switzerland (1996), Chinese Taipei (2009), United States (1996) |
| Negotiating Observers | Albania (2001), China (2002), Georgia (1999), Jordan (2000), Kyrgyz Republic (1999), Moldova (2000), Oman (2001), Panama (1997), Ukraine (2009) |
| Non-Negotiating Observers | Argentina (1997), Australia (1996), Bahrain (2008), Cameroon (2001), Chile (1997), Colombia (1996), Croatia (1999), India (2010), Malaysia (2012), Mongolia (1999), New Zealand (2008), Saudi Arabia (2007), Sri Lanka (2003), Turkey (1996) |

Data: WTO Government Procurement Website:
http://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm#memobs

Note: 1) Figures in parenthesis () are the year of accession to the revised GPA of 1996.
2) On Oct. 30, WTO announced that Indonesia and Montenegro joined GPA as observers. Because most of this paper was finished, these two additional observers are not included in the procurement size calculations in Section IV.

6 The number of Parties include Aruba, which is considered a part of the Netherlands, and excludes European Union as a separate entity.
lists the current Parties and Observers of the GPA as of September 2012.

The coverage of GPA is limited to the entities (i.e. government agencies) of the central government, sub-central governments (usually regional and provincial governments) and other government agencies (usually utilities and state-owned corporations) which the Party lists in the appendix to the Agreement. Only the listed entities are covered. Such limitation of coverage is probably due to a lack of a common definition of “government procurement.” Given the lack of definition and gray areas concerning what constitutes “government” procurement, the Parties have settled for listing the entities the agreement covers.

The coverage of GPA is further reduced by the use of thresholds as well as various general and bilateral exceptions. Procurements below a certain threshold values may be exempted from the obligations of the GPA. [Table 2] summarizes the thresholds for most GPA Parties, though some Parties maintain different threshold values. While most categories of goods are covered by GPA, for services, Parties may submit positive or negative lists, limiting greatly the types of services which are covered by GPA.

| Table 2. Threshold Values | (thousands of SDRs) |
|---------------------------|---------------------|
| Central Government        | Sub-Central (Regional) Governments | Other Agencies |
| Goods | Services | Construction | Goods | Services | Construction | Goods | Services | Construction |
| 130  | 130    | 5000         | 200   | 200    | 5000         | 400   | 400     | 5000         |

Note: These are the most general values. Some Parties, such as Korea, maintain different threshold values, (Korea maintains a threshold of 1,500,000 SDRs for construction services procured by entities of sub-central government and other agencies), and Korea has not opened services for “other agencies.”

Unlike other UR/WTO agreements, GPA imposes obligations not only on the trade authorities, but on the government procurement procedures for all covered entities of the Parties. Thus, GPA has wider implications than most other UR Agreements. GPA also has two aspects: One is a market opening aspect, and the other is a governance and transparency aspect. Acceding to GPA obligates the Party to make sure that all the government agencies covered by GPA meets the transparency, governance and procedural requirements as set by the GPA. Thus, acceding to the GPA can be a useful tool for upgrading transparency and governance for developing countries.7

The 1994 revised GPA included provisions to start negotiations by the year
1999\textsuperscript{8} to improve the Agreement and achieve the greatest possible extension of its coverage among all Parties on the basis of mutual reciprocity, having regard to the provisions relating to developing countries.\textsuperscript{9} The negotiations to revise the text of the GPA began as scheduled in 1999, and was substantially completed in late 2006.\textsuperscript{10} Then the Parties began to formally negotiate the coverage of the Agreement through request/offers. Because the coverage of GPA is limited to those agencies listed in each Party’s appendix, and because coverage can be further reduced through thresholds, positive or negative lists for services, as well as general and bilateral exemptions, the coverage of each Party have to be negotiated among the Parties. While the Parties had hoped that the coverage negotiations would be completed by Spring 2007, it was actually completed at the end of 2011. Thus, the entire GPA negotiations were completed in December 2011, and the revised GPA was formally adopted on March 2012. The revised GPA is due to be implemented after ratification by Members.

While the text of the GPA was revised, it is questionable whether the content and obligations of the GPA were modified or strengthened in a significant manner. Anderson (2010) summarizes the important improvements in the revised GPA text as follows:

1. Revision of wording of the provision to make them more streamlined, easier to understand and user-friendly;
2. Updating of the text to take account of current procurement practices, including e-procurement;
3. Adjustments in conditions imposed on procurement authorities to reflect current procurement practices - for example, reducing the notification periods when electronic tools are used;
4. More explicit recognition of GPA’s significance for governance and development; and
5. More clear exposition on the transitional measures (special and differential treatment) for development countries in the accession process, including explicitly pointing out possibility of negotiations in such areas as price preferences, offsets, phased-in addition of specific entities and sectors, and

\textsuperscript{7} Anderson et al. (2011) pp.24-31.
\textsuperscript{8} “Not later than the end of the third year from the date of entry into force of this Agreement and periodically thereafter”
\textsuperscript{9} 1994 GPA Article XXIV:7(b).
\textsuperscript{10} http://www.wto.org/english/news_e/news06_e/gproc_8dec06_e.htm
phase-in of thresholds; as well as the possibility of delaying the application of any specific obligations up to five years.

However, the revision of the wording was intended to make the reading and interpretation of the document easier, and not to add any market opening obligations. Thus, other than some updating dealing with e-procurement and obligations dealing with special and differentiated treatment, 2012 GPA does not add any market opening obligations.

Also, preliminary examination of the proposed appendices of Parties show that, while there are some minor differences between the entities covered in 1994 revised GPA and the new revision of GPA, they seem roughly similar. For Korea, the list of entities reflect changes in government structure since 1996, with privatized (former) government-owned corporations eliminated from the list. However, subway-related regional government-owned or controlled corporations have been added to the list, and under sub-central (regional) governments, purchases by “gu” level governments of major metropolitan cities have been added to the list.

### III. Expansion of the GPA

It can be argued that government procurement is the last major aspect of international trade which is not covered by WTO disciplines. As a result, since the end of UR there has been attempts to extend WTO disciplines into government procurement. The attempt has taken place through two methods: Establishing an agreement on Transparency in Government Procurement in the Doha Round; and bringing more Party members to GPA.

In the first WTO Ministerial in 1997, the Ministers picked four “new” trade issues for potential inclusion into the next round of WTO negotiations. One of these issues were transparency in government procurement. The Ministers agreed to “establish a working group to conduct a study on transparency in government procurement practices, taking into account national policies, and, based on this study, to develop elements for inclusion in an appropriate agreement; and ... undertake exploratory and analytical work ... on the simplification of trade procedures in order to assess the scope for WTO rules in this area.”

---

11 Which turned out to be the Doha Development Agenda.
However, there was little enthusiasm for this topic for the WTO Members in general. The issue failed to make the agenda in the DDA. Among the problems mentioned were:

1. Jurisdiction: It was unclear whether the WTO rules should extend to all government procurement related laws, rules and regulations, or to just those procurements which were open to foreign suppliers. Some members argued that, if former, WTO would be extending its rules above its mandate of dealing with international trade related issues. However, other members argued that if latter, the strength of the rules would be so weak to be effectively useless. The matter of jurisdiction was made even more complex when the possibility of using the Dispute Settlement Mechanism to enforce the provisions of the transparency in government procurement was discussed.

2. Lack of market liberalization: WTO negotiations require much time, effort and resources. However, some members felt that it was not worth the effort and resources if negotiations did not result in concrete market liberalization that they could bring to their constituents in their home countries. Thus, these WTO members had no desire to commit to negotiations in transparency in government procurement unless it involved market liberalization in some way.

3. Suspicion about market liberalization: Some WTO Members had reservations against liberalizing government procurement markets. Some WTO Members, contrary to Members described above, were concerned that while the Members advocating negotiations in transparency in government procurement were saying that rules would not force liberalization of the procurement market, the advocating Members would use the negotiations to plant the seeds for liberalization after the New Round negotiations were completed, or in the next round. Thus, these Members did not want to start any multilateral discussions dealing with government procurement.

As seen, even though most WTO Members did believe that imposing transparency and efficient governance in government procurement were desirable goals, many Members were wary of it being discussed in a multilateral forum such as the WTO, and even further wary about the possibility of using DSM

12 1997 WTO Ministerial Statement Paragraph 21.
13 These issues were described in more detail in Yang (2000a) and Yang and Kim (2001).
Expansion of the Government Procurement Agreement

371

© 2012 Journal of East Asian Economic Integration

to enforce domestic procurement rules. On the other hand, other Members felt that putting in the effort to negotiate an agreement on government procurement was not worth the bother unless the agreement dealt with market liberalization in some concrete way. The Members could not find a mutually acceptable common ground.

The second approach to liberalize the government procurement market was to expand the membership of GPA, in effect increasing the width of GPA coverage. WTO and the GPA Parties have been trying to expand the membership since 1996, and the results have been, at best, mixed. Fourteen countries have acceded to the GPA as Party members since 1997, but eleven of these countries were European Union countries whose accessions to the GPA were tied to the accession to the European Union. Chinese Taipei have became a Party in 2009, but acceding to the GPA was a condition of their accession to WTO in their bilateral accession negotiations. Thus, only two entrants have became a Party of the GPA without the accession being a part of a larger process: Iceland became a Party in 2001 and Armenia in 2011.

While the attempt to add more Party members to the GPA have been lackluster, there has been somewhat more success for countries which were observers. Nine countries, including China, have joined the GPA as an observer since 1997 and have begun negotiations to accede to the GPA as a Party. China has joined the GPA as an observer in 2002 and is currently engaged in accession negotiations, but like Chinese Taipei, acceding to GPA was a condition of accession to WTO. However, most of these countries are small, and the negotiations have been slow, in large part because their negotiations were occurring at the same time as the revision of the GPA. If we exclude China, the GDP of the currently negotiating observers account for less than 0.5% of the global GDP.

Along with China, India has gained a lot of attention for joining the GPA as an observer, but it should be noted that being an observer, by itself, involves no obligation on the country. Of the current non-negotiating observers, Croatia, Mongolia and Saudi Arabia are obligated to accede to GPA as condition of their accession to WTO, but it is not clear when they will start their GPA accession negotiations. There is no indication that India, or any of the non-negotiating observers, including long-time observers Australia and New Zealand, who do not seem to be in any hurry to accede to the GPA.\textsuperscript{14}

\footnotesize{\textsuperscript{14} Macedonia was also obligated to accede to GPA as a condition of its WTO accession, but it has joined GPA as an observer only in October 2012.}
As stated in the last section, while GPA is an agreement to remove trade barriers in the government procurement market, it is also a mechanism to improve transparency in national government procurement procedures. Yang and Kim (2001) reported that one of the key results of Korea’s accession to GPA was the reform of the government procurement system, including the establishment of the “Act on Contracts to Which the State is a Party,” which implements the provisions of GPA. Lamy (2010) Anderson (2010), Anderson et. al (2011) all emphasize the potential benefits for developing countries of using GPA as a model for domestic reform of government procurement procedures.

While the advantages deriving from GPA for raising transparency is certainly valid, it is questionable whether the gains in transparency will be an incentive for more developing countries to accede to GPA. As noted above, Transparency in Government Procurement was one of the four Singapore Issues but the issue did not find sufficient support among WTO Members to be included in the DDA. Given the concerns expressed by WTO members concerning transparency in government procurement, it seems doubtful that non-signatories will be enthusiastic about acceding to the GPA solely on the basis of improving their procurement mechanism and transparency. Thus, it is doubtful that GPA can widen its coverage (i.e. increase its membership) in the near future. If the GPA members want to further liberalize the global government procurement markets, some other method will likely be needed.

There is an attempt to incorporate trade of services in government procurement markets into GATS agreement in the Doha Round GATS negotiations, but there had been little progress, even before the general stop in Doha Round negotiations. WTO Members seem much more interested in other subjects such as service trade safeguards and service subsidies, and discussions on incorporation of government procurement in GATS have been relegated to the back seat.15

There is another inherent problem in trying to increase the number of Parties in GPA. While there are only 41 Party members, they already encompass the majority of global procurement markets, and with some notable exceptions such as Brazil, Mexico and South Africa, it is questionable if addition of more Parties will lead to significant increase in the liberalization of the government procurement markets in regard to the size of the market. I examine this problem in the next section.

15 Some of the issues are discussed in Kim, Chae and Yang (2000).
IV. Size of the Government Procurement Market

The size of the government procurement market has always been somewhat of a mystery. There is no reliable number available, but most observers estimated that government procurement accounts for about 10-25% of national GDP. OECD (2001) attempted to estimate the size of the contestable government procurement market (government procurement which can potentially be opened to foreign suppliers), and the size was estimated to be 2.83 trillion US dollars for 1998, approximately 7.1% of the global GDP. OECD calculated this number by taking the total government expenditure figures, then subtracting labor costs (most of which, presumably, were wages and salaries to bureaucrats and government workers) and military expenditures (whose liberalization would be politically and militarily sensitive).

Even among GPA Parties, the size of the government procurement market has been uncertain. While the Article XIX:5 of GPA requests the Parties to submit statistics on the size of the government procurement markets for the entire country, as well as statistics classified by covered government agencies and regional governments, and, awards by suppliers’ country of origin (if available), most Parties have been careless about submitting these statistics. However, probably due to the revision and renegotiation of GPA, the largest Parties have submitted statistics during the latter 2000s. Anderson et. al (2011) have used the data to estimate the potential size of national government procurement markets for observers of the GPA. Some of their results are reported in [Table 3]. Their methodology utilizes results from OECD (2001). The estimated size of the total government procurement market is derived from OECD (2001) which estimated that the aggregate size of the government procurement market is 15-20% gross of GDP; while the amount of government procurement market likely to be covered initially by GPA is estimated using the GPA commitment estimates of EU and US, whose GPA-covered procurement to GDP was estimated to be 2.5% and 6.4% for 2007 based on the statistics that these two economies have reported to the WTO and World Bank data. These ratios were applied to national GDPs for 2008 to derive the figures on [Table 3].
Table 3. Size of Government Procurement Markets of Current / Potential GPA Accession Candidates / Other WTO Members / Countries

| List of Countries | Estimated Size of Total Government Procurement Market (USD billions) | GP Market Likely to be Covered Initially by GPA (USD billions) |
|-------------------|---------------------------------------------------------------------|------------------------------------------------------------|
| Countries which have applied for GPA Accession | Albania, Armenia, China, Georgia, Jordan, Kyrgyz Republic, Moldova, Oman, Panama, Ukraine | 728.6 - 974.4 | 121.4 - 310.9 |
| Countries with Commitments to Join the GPA in respect to WTO Accession Protocols | Croatia, The Former Republic of Macedonia, Mongolia, Saudi Arabia | 83.9 - 111.8 | 14.0 - 35.8 |
| Countries without GPA Accession Commitments | Argentina, Australia, Brazil, Chile, Colombia, COMESA, India, Indonesia, Mexico, New Zealand, Peru, Russia, South Africa, Turkey, Vietnam | 1464.8 - 1953.1 | 244.1 - 625.0 |

Source: Anderson et. al (2011) Table 1.

Anderson et al (2011 p.15) note that the figures in the table are intended as “order of magnitude indicators.” Also, the countries included in Anderson et al (2011)’s analysis include countries which are currently not involved in GPA in any way, such as Brazil and South Africa. Anderson et al. (2011) notes that the decision for “countries without GPA Accession Commitments” to accede to GPA is up to the individual countries. So far, there is no indication that these non-involved countries would accede to GPA in the near future. Thus, excluding the last row of [Table 3], the total government procurement market for countries more likely to accede to GPA is 812.5 - 1086.2 billion USD. According to the World Bank, the global GDP for 2008 was 61.21 trillion dollars. Thus, the total government procurement market for these countries account for 1.3 - 1.8% of global GDP - not a small number by any means, but not a greatly large number either, especially since the bulk of the market is due only to China. The government procurement market of the countries in the third row, which are not likely to accede to GPA in the near future, account for further 2.4 - 3.2% of the global GDP, but it is unclear whether these countries

16 summing the figures from third column, first and second rows.
will ever accede to GPA. Of course, the size of the market likely to be actually liberalized by GPA, as seen in the last column, is much smaller due to thresholds and exemptions.

While GPA Parties number only 41 countries and regions, they include most of the major economies. In terms of GDP, the GPA Parties account for 62% of the global GDP (fallen from a high of 81% in mid-1990s) in 2011, and if we include observers who are currently negotiating, these GPA members account for 73% of the global GDP (down from a high of 84% in 2002). The current percentage is likely to be low due to the global economic crisis of 2008, which has substantially reduced the proportion of GPA Parties in the global GDP. The proportion of global GDP held by non-negotiating GPA observers and countries which are not involved in GPA account for only 27% of global GDP in 2011. These countries accounted for only 23% of global GDP in 2007, just before the global economic crisis hit. [Graph 1] shows the percentage of global GDP accounted for by Parties (lowermost line), Parties and negotiating observers (middle line) and Parties and all observers (top line). As seen, up to mid 2000s, WTO Parties held about 80% of the global GDP, and Parties and all observers accounted for 90% of global GDP. These figures have fallen to 62% and 82% respectively in 2011, due to rapid growth of some developing economies, and the on-going shock from the global economic crisis of 2007. While these figures may not rise to the highs of mid-2000s, they are expected to recover somewhat when the global economy struggles through the global financial crisis.

Graph 1. Percentage of GDP of GPA Parties and Observers

Source: Author’s calculation based on World Bank data.
Given that GPA Parties and negotiating Observers already account for 70-85% of global GDP, there is a question on how much the coverage of GPA can increase if the Parties rely solely on attracting new Party members to expand the size of the government procurement market covered by GPA. Thus, I attempted to get a very rough estimate of the size of the global government procurement market which is contestable, and the size of the contestable government procurement market for GPA Parties and Observers.

Following OECD (2001), I first took the GDP figures from the World Bank. The World Bank also offers figures on government expense (expenditure on labor, goods and services) as a proportion of GDP, and expenditure on goods and services as a proportion of government expense. Thus, by multiplying these two figures, one can derive expenditure on goods and services as a percentage of national GDP. However, these figures include military-related expenditures. However, figures on the percentage of national GDP spent for military expenditures are also available from the World Bank. Thus, I subtracted government military expenditures from the GDP, then used the government expenditure and expenditures on goods and services figures to estimate the civilian government spending on goods and services\(^\text{17}\). Not all the figures were available for all countries in all years. [Appendix A] describes the data availability and the replacement data I have used in more detail. [Graph 2] shows the results of my calculations on the proportion of contestable government procurement markets accounted for by GPA Parties and Observers.

While the missing data makes the figures in [Graph 2] somewhat suspect, the trend seen in [Graph 2] generally support the conclusions of [Graph 1]; namely that the size of the government procurement market in countries, which are not GPA Parties or Observers, are growing, but limited. GPA Parties and Observers already account for more than 80% of the contestable global government procurement market.

Thus, I make the argument that WTO Parties and Observers should start putting more emphasis on further opening their own procurement markets rather than concentrate on attracting new members. Then the question to ask is whether there is room for current Parties and Observers to further open their government procurement markets. In other words, is there significant trade barriers remaining applicable to other GPA Parties?

In the previous sections, I have mentioned that thresholds protect procurements

\(^{17}\) In effect, I have assumed that the proportion of government expenditure spent on goods and services are the same in the military sector and the non-military government sector.
of under certain amounts from foreign suppliers, including those of GPA Parties. Further, there are many general and bilateral exemptions, the most wide-ranging of which may be set-asides for SMEs, which is applied by diverse range of GPA Parties such as US, Japan and Korea. Trionfetti (2000) found, using OECD, IMF, and Eurostat data, that there is a home bias for government procurement - where the import share of expenditure in government expenditure is lower than the import share of expenditure in private expenditure. Kang and Yang (2003) and Yang (2008b) found similar home bias effect in global data included in GTAP5 and GTAP6\textsuperscript{18}.

Further, using the statistics reported by WTO Parties, I have tried to find the percentage of procurements in WTO Parties which are below the threshold levels. I report those numbers in [Table 4] and [Appendix B]. However, many WTO Parties have not submitted statistics, and even for those WTO Parties which have submitted statistics, they often do not report the amount of procurements under threshold levels, or total amount of government procurement.\textsuperscript{19} The Parties which report procurement amount below the threshold usually do so only for central government entities and not for sub-central (regional) entities or other government agencies. As a result, the percentage of government procurement below the thresholds as reported in [Table 4] and [Appendix B] (2012 Journal of East Asian Economic Integration)

\textsuperscript{18} GTAP is a global computable general equilibrium model, which includes data on 87 countries and regions; and 57 industries.

\textsuperscript{19} These Parties report only the value of those procurement which are covered by GPA.
are, at best, incomplete. However, they can serve as indicators on the role of thresholds as market barriers.

Table 4. Average Percentage of Government Procurement below the Threshold

| Party                  | Percentage of Government Procurement Below Thresholds* | Years of Data Availability | Coverage                                      |
|------------------------|--------------------------------------------------------|----------------------------|-----------------------------------------------|
| US                     | 3.27                                                   | 1996-2009                  | Central government entities only              |
| EU                     | 83.97                                                  | 1997-2007                  | Central government and regional governments included |
| Hong Kong, China       | 1.13                                                   | 2009-2011                  | Central government and other agencies (HK has no sub-regional government) |
| Japan                  | 66.99                                                  | 1997-2010                  | Central government entities only              |
| Korea                  | 23.37                                                  | 2002-2004, 2010           | Central government entities only              |
| Norway                 | 5.61                                                   | 2006-2009                  | All entities                                 |
| Singapore              | 8.27                                                   | 2006-2007                  | Central government entities only              |
| Chinese Taipei         | 40.27                                                  | 2009-2011                  | Central government entities only              |

Note: * by Value (Average of values for available years). For further explanation, see <Appendix B>. Data: Author’s calculation, based on statistics reported by WTO Parties to WTO, available at http://www.wto.org/english/tratop_e/gproc_e/gpstat_e.htm

While the figures are incomplete, they indicate that, for some Parties, substantial percentage of government procurement is below the threshold value and protected from market opening provisions of GPA. In EU, more than 80% of government procurement by central and sub-central governments is below threshold value. In Japan, nearly two-thirds of central government entity procurement is below the threshold value. While the reason why these economies have so much of their procurement below the threshold value is unclear, from looking at just the numbers, they represent substantial room for further liberalization.

On the other hand, for Parties such as US and Hong Kong, China, the percentage of their government procurement under thresholds is admirably low. However, for US, the figure only considers central government entities. While accurate figures are not available, based on OECD (2001) as well as other studies, the value of procurement by US state governments is probably as large or larger than the value of procurement by US central (Federal) government entities.
Because the purchasing by individual states are smaller than the central government, it seems likely that the percentage of procurement below threshold value is higher for most sub-central (regional) governments than the central government, and this situation would apply to the US as well. Thus, procurements below threshold value for regional governments are probably another area where further trade liberalization can be pursued.20

As seen, GPA already encompasses most of the largest government procurement markets as Parties or Observers. For those few largest government procurement markets which have not yet joined GPA, with the exception of China, they do not seem particularly interested in acceding to GPA in the near or medium term future. Also, as seen in the negotiations leading up to the Doha Round, the majority of WTO members do not seem very interested in joining or establishing new WTO-based international disciplines in government procurement. Thus, at least in the near term future, it seems doubtful whether major non-observers will join GPA either as a Party or as an Observer. Given these problems, enlarging the coverage of GPA through adding new Parties seem to be a limiting strategy.

Thus, new focus should be paid to further increasing liberalization of the current GPA Parties - that is, to deepen the coverage. As seen in the previous section, for many Parties, the current threshold acts to limit liberalization for much of their government procurement markets. I have explicitly mentioned lowering thresholds for central and sub-central (regional) governments, but attempts to eliminate general and bilateral exemptions should certainly be considered as well. There are many general and bilateral exemptions to liberalization such as the set-asides for SMEs which limit competition from abroad. While these measures may protect domestic SMEs, it also means that foreign SME suppliers will be effectively shut out of foreign procurement markets, making GPA less appealing as a tool to encourage foreign trade of SMEs.

In the next section, I suggest possible methodologies for deepening the coverage.

V. Deepening the Coverage: Using FTAs as Test Cases

In Yang (2008a) and Yang (2010), I have argued that the current Korean

20 However, in countries which have strong sub-central (regional) governments such countries which are Federal unions, sub-central governments may pose strong political opposition.
negotiations in government procurement can cause a spaghetti bowl effect since, especially for countries which have obligations deeper than GPA, the individual thresholds and exemptions can differ considerably. [Table 6] lists the thresholds of those FTAs with obligations and privileges deeper than GPA. As seen, while roughly similar, they do have significant differences which leads to a possibility of a spaghetti bowl effect.

In Yang (2008a) and Yang (2010), to avoid these potential spaghetti bowl effect, I had proposed a two-and-a half track negotiation approach. If Korea and its negotiation partner wants to include government procurement in its FTAs, Korea would offer its FTA negotiation partners three options: 1) GPA level liberalization (where both Parties agree to a liberalization level compatible to GPA); 2) a single GPA-plus level of liberalization (where both Parties agree to a liberalization level beyond GPA, but not necessarily at the same levels, as explained below); and 3) “the half-track level” where Korea and its negotiating partner would offer complete national treatment to the suppliers of the other partner, but no requirement to change any laws or regulations for Korea or its negotiating partner. I intend to argue that GPA Parties use a mixture of options 1) and 2) to increase the depth of GPA coverage: Interested GPA Parties and interested observers should start negotiations to lower the amount of thresholds and remove various exemptions so GPA can have a deeper level of liberalization. However, acknowledging that deeper levels of liberalization may not be acceptable to some current GPA Parties and also recognizing that deeper level of liberalization may act as deterrent to potential new applicants to GPA, the GPA would maintain current levels of liberalization. Parties can opt to stay at the old levels of liberalization, or agree to the deeper level. Thus, there would be two groups of Parties in the WTO - those who opt for “lighter” level of liberalization and those who opt for the “deep” level of liberalization. The deep Parties would have the option of offering deep liberalization levels to all Parties, or just to other deep Parties. During negotiations for deeper liberalization, GPA Parties may choose a level of liberalization similar to option 3) listed above.

Arguably, the countries which have signed FTAs which include government procurement are already operating such a two-tiered (or multiple-tiered) system. In order to more fully explore these options, I first explain the three options as explained in Yang (2010), and then see how they are operating in Korea through various Korean FTAs. [Table 5] lists current Korean FTAs completed, under negotiations or under study; and whether the completed FTAs include
government procurement, and whether the liberalization levels go beyond the level of GPA.

Table 5. Current Status of Korean FTAs

| Country | Negotiations Begun | Agreement Signed or Negotiation Completed | Effective Date | Share of Global GDP (2009) (%) | Share of Korean Trade (2007-2011) (%) | GPA status | Inclusion of Government Procurement in FTA with Korea | GP Liberalization Beyond Levels of GPA |
|---------|-------------------|-----------------------------------------|----------------|-------------------------------|--------------------------------------|------------|-----------------------------------------------|---------------------------------|
| FTAs In Effect | | | | 56.36 | 35.46 | | |
| Chile | 1999.09 | 2003.02 | 2004.04 | 0.28 | 0.81 | NN | O | Yes**** |
| Singapore | 2003.10 | 2005.08 | 2006.03 | 0.32 | 2.78 | P | O | Yes |
| EFTA | 2004.12 | 2005.07 | 2006.09 | 0.68 | 0.80 | P | O | No |
| ASEAN | 2004.11 | 2006.08 | 2007.06 | | | | |
| (Goods) | 2004.11 | 2007.11 | 2009.05 | | | | |
| (Services) | 2004.11 | 2009.06 | 2009.09 | | | | |
| (Invest.) | | | | | | | |
| India | 2006.01 | 2009.08 | 2010.01 | 2.38 | 1.80 | NN | X | - |
| US | 2006.06 | 2007.04 | 2012.03 | 24.18 | 10.03 | P | O | Yes**** |
| EU | 2006.07 | 2009.10* | 2011.07 | 28.15 | 10.97 | P | O | No**** |
| Peru | 2009.01 | 2011.08 | 2011.08 | 0.22 | 0.24 | NP | O | Yes**** |
| Negotiation Completed | | | | 1.47 | 0.68 | | |
| Turkey (Goods Only) | 2010.03 | 2012.08 | - | 1.06 | 0.51 | NN | X*** | - |
| Colombia | 2009.12 | 2012.06 | | 0.41 | 0.17 | NN | O | Yes**** |
| Under Negotiation | | | | 25.50 | 50.89 | | |
| Canada | 2004.11 | - | | 2.30 | 0.99 | P | | |
| Mexico | 2005.09 | - | - | 1.52 | 1.16 | NP | | |
| GCC21 | 2007.11 | - | - | 1.51 | 9.90 | NN/ON/ NP** | | |
| Australia | 2008.10 | - | - | 1.59 | 2.89 | NN | | |

© 2012 Journal of East Asian Economic Integration
Table 5. Continued

| Country     | Negotiations Begun | Agreement Signed or Negotiation Completed | Effective Date | Share of Global GDP (2009) (%) | Share of Korean Trade (2007-2011) (%) | GPA status | Inclusion of Government Procurement in FTA with Korea | GP Liberalization Beyond Levels of GPA |
|-------------|-------------------|-----------------------------------------|----------------|--------------------------------|--------------------------------------|------------|-------------------------------------------------|----------------------------------------|
| New Zealand | 2008.05           | -                                       | -              | 0.22                           | 0.24                                 | NN         |                                                 |                                        |
| China       | 2012.05           | -                                       | -              | 8.59                           | 20.34                                | ON         |                                                 |                                        |
| Indonesia   | 2012.07           | -                                       | -              | 0.93                           | 2.43                                 | NP         |                                                 |                                        |
| Vietnam     | 2012.08           | -                                       | -              | 0.17                           | 2.47                                 | NP         |                                                 |                                        |
| Japan^      | 2003.10           | -                                       | -              | 8.67                           | 10.45                                | P          |                                                 |                                        |
| Under Study |                  |                                         |                | 6.96                           | 4.29                                 |            |                                                 |                                        |
| MERCOSUR    | -                 | -                                       | -              | 3.35                           | 1.54                                 | NP         |                                                 |                                        |
| Israel      | -                 | -                                       | -              | 0.34                           | 0.22                                 | P          |                                                 |                                        |
| Mongolia    | -                 | -                                       | -              | 0.01                           | 0.03                                 | NN         |                                                 |                                        |
| Central America^22 | - | -                        | -              | 0.30                           | 0.75                                 | NP         |                                                 |                                        |
| Malaysia    | -                 | -                                       | -              | 0.33                           | 1.75                                 | NN         |                                                 |                                        |
| Russia^2^   | -                 | -                                       | -              | 2.10                           | -                                    | NP         |                                                 |                                        |
| SACU ^23    | -                 | -                                       | -              | 0.53                           | -                                    | NP         |                                                 |                                        |
| Total (GDP includes Korea) |                  |                                          |                | 91.73                          | 93.85                                |            |                                                 |                                        |

Data: Ministry of Foreign Affairs and Trade (Korea) FTA website (http://www.fta.go.kr)
Notes: ^ Negotiation suspended since 2004; ^2 Listed in 2010 but no longer listed - presumably, studies did not find reasons to start negotiations. P = GPA Party; NP = Non-Participant (neither Party nor Observer in GPA); ON = Negotiating Observer; NN = Non-negotiating Observer; *: With the exception of Singapore (Party), Malaysia and Indonesia (Non-negotiating observers); **: Oman (Negotiating observer), Bahrain and Saudi Arabia (Non-negotiating observers); ***: Services, Investment and Other Issues to be negotiated after implementation of goods component of FTA; ****: Includes public works concessions and BOT contracts, which is not covered in 1994 GPA. Sub-totals exclude countries already covered by regional FTAs.

21 Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE
22 Panama, Costa Rica, Guatemala, Honduras, El Salvador, Dominican Republic
23 South African Customs Union which includes Botswana, Lesotho, Namibia, South Africa and Swaziland.
24 BOT contract stands for “Build-Operate-Transfer” contracts, where a private supplier contracts to build certain public works, operate it for a fixed number of years (taking revenues and profits...
The first option, the GPA level liberalization, is simple, and is designed for FTA partners which are not Parties of the GPA. Korea and its negotiating Partner would agree on a liberalization level similar to GPA. On Korea’s part, it would offer its FTA partner the exact same privileges as GPA, so that Korea can group the partner along with GPA Parties. Korea-EFTA FTA and Korea-EU FTA have such levels of liberalization.\textsuperscript{25}

The second option - going beyond the liberalization level of GPA - is meant for (but not limited to) FTA partners who are Parties of the GPA, where Korea and FTA partner can agree to go beyond the liberalization levels of the GPA. This option is where the problems with spaghetti-bowl effect exist, since each FTA can negotiate different levels of liberalization beyond the range of GPA. To solve this problem, I had proposed that Korea establish a single level of liberalization and offer it to all its FTA partners who are willing to go beyond the GPA levels. If the partner cannot offer a strict reciprocity and quid-pro-quo; i.e. if the partner cannot strictly match all the details of Korea’s level of liberalization, then Korea would just accept the liberalization level as offered. In effect, Korea would be making a trade-off between slight increases in liberalization levels versus simplicity in regulatory implementations of the government procurement-related FTA obligations. Such approach may make negotiations actually somewhat easier since the negotiators do not have to worry about strict quid-pro-quo but rather seek a balance of interest. Even if Korea is seen to have “given” more liberalization than it has “gotten”, it is unclear if such “unbalanced” liberalization will actually be harmful to Korea, since trade liberalization, even in government procurement, is generally thought to be beneficial to the liberalizing country. Of the current Korean FTAs, Korea-Chile FTA, Korea-Singapore FTA, KORUS FTA, Korea-Peru FTA, and Korea-Colombia FTA follow this pattern, though currently, the thresholds for these FTAs are different for each FTA. [Table 6] lists the differences in thresholds for FTAs which go beyond the levels of GPA.

Note also that Korea-Chile FTA, KORUS FTA, Korea-EU FTA, Korea-Peru FTA and Korea-Colombia FTA includes public works concessions and BOT contracts in the FTA coverage, while Korea-Singapore FTA, Korea-EFTA FTA

to compensate for the building costs), and then transferring the ownership of the public works to the government after the fixed number of years.

\textsuperscript{25} Though Korea-EU FTA, unlike GPA, explicitly includes BOT contracts. Note that, while option 1) is meant for non-Parties to GPA, the two FTAs which apply this option are with GPA Parties, signaling that some GPA Parties are satisfied with the current level of liberalization in GPA.
Table 6. Thresholds of Korea FTAs (thousands of SDR$^{26}$ unless noted)

|                  | Central | Sub-Central | Other Agencies |
|------------------|---------|-------------|----------------|
|                  | Goods   | Services    | Const.         | Goods | Services | Const. | Goods | Services | Const. |
| 1994 GPA (Korea) | 130     | 130         | 5000           | 200   | 200      | 15000  | 450   | Not included | 15000  |
| 2012 GPA (Korea) | 130     | 130         | 5000           | 200   | 200      | 15000  | 400   | 400       | 15000  |
| Chile            | 50      | 50          | 5000           | 200   | 200      | 15000  | 450   | Not included | 15000  |
| Singapore        | 100     | 100         | 5000           | 200   | 200      | **     | 400   | **        | **     |
| US               | *       | *           | 5000           | ***   | ***      | ***    | ***   | ***       | ***    |
| Peru             | 95      | 95          | 5000           | 200   | 200      | 15000  | 400   | 400$^\wedge$ | 15000  |
| Colombia         | 70      | 70          | 5000           | 200   | 200      | 15000  | 400   | 400$^\wedge$ | 15000  |

Note: * USD 100,000 for US, 100 million Korean won for Korea (approximately USD 90909 at 1100 won per dollar); **: to be negotiated later; ***: not included in FTA - thus, GPA applies; $^\wedge$: to be implemented when 2012 GPA is implemented.

and GPA does not.

The third option (”half-track”) is to apply national treatment to FTA partners without imposing any additional requirements on the laws and regulations of the FTA partner. In other words, under this option, the supplier from Korea would be treated just like the supplier of the FTA partner when bidding for procurement of the FTA partner government entity; under the procurement laws and regulations of the FTA partner “as written.” Thus, this option does not impose any requirements on the FTA partner to change its laws and regulations on government procurement beyond giving Korean supplier the same status as a domestic supplier. If the entity of the FTA partner discriminates against the Korean supplier, the Korean supplier would have recourse in dispute settlement mechanism for government procurement in the FTA partner country. Of course, Korea would have to apply the same standard to the supplier of the partner country. This option is, at the same time, both lighter and deeper liberalization than GPA and the current Korean FTAs. It is a deeper liberalization in the sense that the partner country’s supplier is treated exactly the same as Korean suppliers with no thresholds. However, it is also lighter liberalization in the sense that Korea and the FTA partner do not impose any additional laws,

$^{26}$ 1 SDR = 0.65 USD as of Oct. 31, 2012
regulations or transparency measures on its government entities and purchasers, and thus avoids the spaghetti-bowl effect. This option is not currently used in Korean FTAs, but it is similar to government procurement chapter of Australia-New Zealand Closer Economic Relations (CER) Agreement.

As noted, Korea’s FTAs are currently a mixture of GPA-level liberalization and GPA-plus level liberalization but with different levels of thresholds and openness. Thus, if Korea follows FTAs strictly, it currently has at least six levels of openness at the central government level. Due to the possibility of confusion, it is worth asking whether Korea should actually apply the different individual thresholds in practice. Korea has only one level of openness at the sub-central government level and for other government agencies because it has been extremely reluctant in further liberalizing government procurement at those government levels. However, it is clear that Korea is willing to live with multiple levels of openness for government procurement.

What I propose for GPA is a simplified version of what we see in Korean FTAs - namely, GPA will establish a two-level liberalization. The first level is the same as the current level of GPA liberalization with same thresholds and obligations. For convenience, we will call this the “light” level. This “light” level is the same as option 1) discussed above in the context of Korean FTAs. The second level will be a “deep” level, with lower (or perhaps no) thresholds, and with additional liberalization such as liberalization of public works concessions and BOT contracts. GPA Parties would negotiate to establish an appropriate deeper level of liberalization. Ideally, the negotiations would be limited to thresholds, elimination of exemptions, and the expansion of entities listed in the Agreement. Transparency and procedural requirements of GPA would be retained as is.

Once the subset of WTO Parties agree on a deeper level of liberalization, this subset of Parties can apply the deep level of liberalization with each other. Whether the Parties with deep liberalization levels would like to apply the deep levels to GPA Parties with only light levels of liberalization would be left up to the individual Party. Some Party may prefer to apply deeper thresholds without reciprocity, while others may prefer to maintain reciprocity and apply deeper standards only to other deep Party members. Parties who are subject to “light” levels of liberalization could choose to move to “deep” levels of liberalization whenever they want, giving them more flexibility than the five year transition period currently given to developing countries seeking to accede to the GPA in the revised 2012 GPA. This “deep” liberalization is similar to...
option 2) in the context of Korean FTAs.

Note that the light level of liberalization is maintained. Since most existing WTO Members do not seem to be interested in acceding to GPA at the present, it is doubtful that deeper requirements would attract new Party members to GPA. Thus, the light level is maintained in part to allow new WTO Members to accede to GPA without excessive burden. Note also that if the deep GPA Parties agree to eliminate thresholds and exemptions altogether, it would be the same as option 3) discussed above in the context of Korean FTAs.

What this “double level” of GPA liberalization allows us to do is to allow GPA to increase the width of liberalization through the light level, but begin to deepen liberalization as well, since as I have mentioned in Sections III and IV, we are approaching the limits of widening the coverage of GPA. FTAs have been establishing precedence for such double-level liberalization though perhaps more FTAs are required to induce WTO Parties to consider the double level liberalization. The idea should be explored by GPA Parties and WTO Members for the next round of GPA revisions.

I note that, while the option of two-track liberalization has not come up within the context of GPA, most GPA Parties are already dealing with multiple tracks of liberalization, through various FTAs and bilateral exceptions to liberalization in GPA. If the GPA Parties agree to pursue a deeper level of liberalization, the obvious place to start would be through comparing the degree of market liberalization and thresholds in the FTAs that these Parties have already implemented with each other, and try to agree on a common thresholds and conditions based on the conditions set out in the existing FTAs, then formalize the deeper liberalization conditions through the WTO GPA.

VI. Conclusion

In this paper, I have argued that GPA Parties should undergo a strategy of deepening the current levels of GPA liberalization. While the number of Parties and Observer seems few, the current GPA Parties and observers encompass most of the global government procurement market, and with a few exceptions such as Brazil, there does not seem to be many major government procurement markets left to incorporate into GPA.

27 Such multiple levels of accession was suggested by Lee et al (2004) for trade facilitation, and have later been suggested as special and differential treatment for developing countries for various WTO agreements in books such as Stiglitz and Charleton (2006).
Further, while Anderson et al (2011) makes the argument that GPA allows reform of domestic government procurement regime and regulations, the WTO Members have shown, through their lack of enthusiasm for transparency in government procurement negotiations before the Doha Round, that they are not interested in using WTO as a tool for domestic government procurement reforms. Thus, I have argued that the strategy of widening the GPA Parties is a limiting strategy.

On the other hand, because GPA allows so many exemptions including thresholds, there seems to be room for further liberalization in the government procurement markets of current GPA Parties. I have argued that GPA Parties should pursue two levels of liberalization - current levels as “light” level of liberalization; and a deeper level of liberalization. While deeper liberalization is desirable, I believe that the light level of liberalization is still necessary to attract more members to GPA, and to give GPA Parties who do not want to liberalize further, some breathing room.

Using Korea as an example, I have shown that FTAs already allow many countries and GPA Parties to have two-level liberalization. In fact, Korea has more-than-two-level liberalization since each FTA has slightly different thresholds and conditions for liberalizing the government procurement market. The two-level strategy I have laid out may sacrifice some gains (or losses) from reciprocity, but allows the Parties to avoid the spaghetti bowl effect with multiple thresholds and conditions for access to the government procurement market.
Data Appendix A. Government Expenditure on Goods and Services as Percentage of GDP

This appendix describes how I have calculated the percentage of government expenditure on goods and services as a percentage of GDP to calculate the figures used in [Graph 2]. As stated in the main text, the relevant equation is:

\[
\text{share} = (1 - m) \times \text{exp} \times \text{goods} \& \text{services}
\]

where \(\text{share}\) = percentage share of government expenditure on goods and services (as percentage of GDP)

\(m\) = share of military expenditures in GDP (available from the World Bank Database)

\(\text{exp}\) = government expenditures as percentage of GDP (available from World Bank Database) and

\(\text{goods} \& \text{services}\) = government expenditures on goods and services as percentage of \(\text{exp}\) (available from World Bank Database).

Thus, the variable “share” is non-military expenditure on goods and services, and assumes that shares of government expenditure on goods and services for military and non-military (civilian) expenditures are the same. I have made this assumption following OECD (2001) because military purchases are less likely to be open generally to foreign suppliers, and thus is not contestable to foreign suppliers. The amount of national expenditures used to calculate [Graph 2] was derived by multiplying “share” variable for each country and each year with the appropriate GDP figures. Then the percentage figures of national expenditures were calculated using the amounts derived, including that of the world. [Table A-1] shows the calculated value of “share” for all years and countries used in [Graph 2]. Readers should use [Table 2] to see which countries belong to GPA Party, Non-negotiating observers, and Negotiating observers.
| Country               | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Average |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| World                | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 3.83 | 3.52 | 3.72 | 3.44 | 3.54 | 3.45 | 3.34 | 3.24 | 3.53 | 3.58 | x      | 3.52   |
| Armenia              | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 8.47 | 6.85 | 7.02 | 5.79 | 5.98 | 2.43 | 2.91 | 2.91 | x    | 5.29   |
| Canada               | x    | 1.98 | 1.93 | 2.04 | 1.93 | 1.81 | 1.72 | 1.51 | 1.56 | 1.51 | 1.48 | 1.57 | 1.57 | 1.52 | 1.48 | 1.41 | 1.43 | 1.36 | 1.48 | 1.55 | 1.51 | x      | 1.62   |
| European Union       | x    | x    | x    | x    | 3.38 | 3.13 | 3.12 | 2.89 | 3.03 | 3.13 | 3.03 | 2.87 | 3.12 | 3.31 | 3.38 | 3.56 | 3.27 | 3.54 | 3.40 | 3.32 | x      | 3.22   |
| Hong Kong SAR, China | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 7.62   |
| Iceland              | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 8.04   |
| Israel               | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 10.27  |
| Japan                | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 1.18   |
| Korea, Rep.          | 3.22 | 3.17 | 3.12 | 2.93 | 2.69 | 2.16 | 2.17 | 2.19 | 2.34 | 1.78 | 2.19 | 2.07 | 2.01 | 1.87 | 1.85 | 1.96 | 1.27 | 1.37 | 2.30 | 2.14 | x      | 2.22   |
| Liechtenstein        | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | x      |
| Aruba                | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | x      |
| Norway               | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 3.18   |
| Singapore            | 4.62 | 4.29 | 4.40 | 4.09 | 3.92 | 4.40 | 4.33 | 4.38 | 4.92 | 5.04 | 5.02 | 5.41 | 5.38 | 5.28 | 4.85 | 4.86 | 4.62 | 5.19 | 6.02 | 5.52 | 4.51 | x      | 4.81   |
| Switzerland          | x    | 5.52 | 5.84 | 6.03 | 5.74 | 5.99 | 6.28 | 6.24 | 6.34 | 6.13 | 5.74 | 1.57 | 1.67 | 1.72 | 1.65 | 1.60 | 1.51 | 1.43 | 0.98 | x    | x    | x      | 4.00   |
| Taiwan               | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | x      |
| United States        | x    | x    | x    | x    | x    | x    | x    | x    | x    | 2.39 | 2.64 | 2.90 | 3.04 | 3.04 | 3.09 | 3.06 | 3.46 | 3.70 | 3.82 | x    | x    | x      | 3.11   |
| Albania              | x    | x    | x    | x    | 4.39 | 2.29 | x    | 2.48 | x    | x    | 3.53 | 2.57 | 2.54 | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | 2.97   |
| China                | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x      | x      |
| Georgia              | x    | x    | x    | x    | x    | x    | x    | x    | 7.96 | 4.72 | 4.42 | 1.92 | 2.41 | 2.42 | 1.96 | 3.20 | 3.50 | 4.66 | 7.93 | 7.24 | 5.54 | 4.08 | x      | 4.43   |
| Jordan               | 1.12 | 1.55 | 1.44 | 1.99 | 1.75 | 1.67 | 1.53 | 1.47 | 1.90 | 1.66 | 1.60 | 1.65 | 1.45 | 1.60 | 1.83 | 1.54 | 2.04 | 1.56 | 1.62 | 3.17 | 2.31 | x      | 1.74   |
| GovtExp ( % of GDP) | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Average |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| jrgyv public        | x    | x    | x    | x    | x    | 7.85 | 7.57 | 8.46 | 7.87 | 6.73 | 6.07 | 5.22 | x     | x     | x     | x     | 3.70 | 4.34 | 4.66 | 5.44 | 5.09 | x     | 6.08   |
| oldova              | x    | x    | x    | x    | x    | x    | 3.63 | 2.88 | 2.17 | 2.86 | 2.29 | x     | 1.79 | 4.77  | 5.12 | 6.01 | 5.86 | 6.35 | 7.26 | 6.98 | x     | 4.46   |
| nan                 | 16.19| 15.39| 15.95| 15.70| 15.91| 13.34| 13.31| 13.79| 12.46| 11.78| 12.83| x     | x     | x     | x     | x     | x     | x     | x     | x     | 14.32 |
| nama                | 3.68 | 3.31 | 3.18 | 3.15 | 2.95 | 3.52 | 2.75 | 3.51 | 3.34 | 3.23 | x     | x     | x     | x     | x     | x     | x     | x     | x     | x     | 3.26   |
| craine              | x    | x    | x    | x    | x    | x    | 2.78 | 4.94 | 3.85 | 3.78 | 4.33 | 3.66 | 4.38  | 4.27  | 4.17 | 4.16 | 4.89 | 4.55 | x     | 4.15   |
| gentina             | x    | x    | x    | x    | x    | x    | x    | x    | x     | x  | 0.78 | 0.72 | 0.83 | x     | x     | x     | x     | x     | x     | 0.78   |
| astoria             | x    | x    | x    | x    | x    | x    | 2.21 | 2.49 | 2.50 | 2.47 | 2.54 | 2.48 | 2.56  | 2.55  | 2.64 | 2.56 | 2.58 | 2.65 | x     | 2.52   |
| uhraim              | 4.89 | 4.69 | 4.59 | 4.85 | 4.29 | 2.85 | 3.02 | 2.85 | 2.49 | 2.86 | 1.63 | 3.61  | 4.23  | 3.49 | 3.30 | 5.01 | 4.76 | 4.73 | x     | x     | x     | 3.79   |
| uneroon             | 2.40 | 2.39 | 1.96 | 1.37 | 1.48 | 1.82 | x    | x    | 2.43 | 2.70 | x    | x     | x     | x     | x     | x     | x     | x     | x     | x     | 2.07   |
| tile                | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 1.77 | 1.80  | 1.73  | 1.57 | 1.65 | 1.71 | 1.65 | 1.79 | 1.75 | 2.06 | 2.04 | x     | 1.77   |
| slombja             | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 1.31  | 1.44  | 1.46  | 1.09 | 1.14 | 1.12 | 1.14 | 1.27 | 1.10 | 1.19 | 0.15 | x     | 1.13   |
| oatia               | x    | 12.01| 14.68| 12.78| 12.92| 11.54| 9.97 | 8.54 | 9.02 | 8.18 | 9.05 | 7.44  | 3.20  | 2.69  | 2.51 | 2.62 | 3.11 | 3.25 | 3.26 | 2.88 | 3.03 | x     | 7.13   |
| dia                 | 2.05 | 1.93 | 1.79 | 2.01 | 1.90 | 1.97 | 1.70 | 1.64 | 1.65 | 1.77 | 1.71 | 1.82  | 1.79  | 1.65  | 1.84 | 1.64 | 1.54 | 1.61 | 1.77 | 1.51 | x     | 1.77   |
| alaysia             | x    | x    | x    | x    | x    | x    | 2.64 | 2.53 | 2.01 | 2.75 | 2.39 | 3.31  | 2.88  | 3.25 | 3.43 | 3.36 | 3.57 | 3.60 | 3.33 | 3.80 | 3.06 | x     | 3.06   |
| mongolia            | x    | x    | 4.09 | 3.19 | 4.25 | 3.41 | 3.51 | 4.28 | 4.94 | 4.57 | 5.06 | 6.27  | 5.57  | 8.69  | x    | x    | 5.94 | 8.51 | 6.59 | 5.15 | 5.31 | x     | 5.25   |
| nw Zealand          | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 10.01 | 8.48  | 8.73  | 8.11 | 8.66 | 9.27 | 9.60 | 9.44 | 10.02| 9.02 | x     | 9.13   |
| ati Arabia          | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x     | x     | x     | x     | x     | x     | x     | x     | x     | x     | x     |
| i Lanka             | 4.38 | 4.65 | 4.29 | 3.71 | 4.22 | 5.72 | 5.13 | 4.19 | 4.11 | 3.44 | 4.70 | 4.47  | 2.96  | 2.50  | 2.71 | 2.23 | 2.58 | 2.12 | 2.65 | x     | x     | x     | 3.72   |
| urkey               | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | x    | 1.85  | 1.78  | 1.84  | 2.72 | 2.40 | x     | x     | x     | 2.12   |

*ta: Author’s calculations using data from World Bank Database.*

*ixe: x = not available*
Note that, for several entries, the value of “share” is not available. “Share” was not calculated in cases where one or more of variables “m”, “exp”, or “goods&services” were not available. In calculating the annual figures for [Graph 2], if the figure for “share” was not available for a certain country in a certain year, the average value for the country was used instead. Note that for some countries, no data on “share” variable was available. For Aruba and Saudi Arabia, I have used the world percentage figures in place of national percentage figures. For China, I have used the “share” figure for East Asian developing countries; and for Hong Kong, China and Taiwan, I have used the “share” figures for East Asian countries.
Data Appendix B. Percentage of Total Government Procurement Value below Threshold

In [Table 4] I have reported the average percentage of total government procurement value below threshold for eight countries or regions, but have noted that not all data was available for all years. First, the data is available only for eight countries or regions because not all GPA Parties have submitted statistics on their government procurement markets; and even when countries submit statistical reports, not all of them report the values of government procurement under thresholds. [Table B-1] reports the annual value of total government procurement below threshold where available. Data is not available because the country or the region did not submit a report, or the report did not include figures on the value of government procurement under threshold.

Table B-1. Government Procurement Percentage Below Threshold (1996-2011)

|        | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Ave |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| US     | 4.04 | 4.75 | 4.48 | 4.58 | 8.23 | 3.36 | 2.77 | 1.77 | 2.32 | 2.44 | 1.60 | 0.95 | 1.21 |      |      |      | 3.27|
| EU     | -    | 89.35| 88.87| 88.78| 84.77| 84.15| 83.51| 78.11| 80.74| 82.31| 80.68| 82.41| -    |      |      |     | 83.97|
| Hong   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Kong,  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| China  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Japan  | -    | 63.22| 64.10| 67.81| 69.08| 68.53| 67.13| 68.44| 67.19| 70.83| 67.45| 66.16| 63.90| 68.09| 66.99|      |
| Korea  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Norway | -    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 18.19|
| Singapore |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Chinese |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Taipei |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |

Note: - data not available.

Note also that the figures for most countries are for central governments only. The reporting requirements are looser for sub-central governments and other agencies, so Parties need not report values below thresholds for sub-central governments and other agencies. However, EU figures include those of sub-central governments; Hong Kong, China’s figures include those of other government agencies (but not sub-central governments); and Norway includes figures for all entities including central, sub-central governments and other agencies.
References

Anderson, R. D. 2010. “The WTO Agreement on Government Procurement (GPA): An Emerging Tool of Global Integration and Good Governance” downloaded from WTO website. A version of this paper has been published in Law in Transition Online Autumn(October) 2010, European Bank for Reoinstriction and Development.

Anderson, R. D., P. Pelletier, K. Osei-Lah and A. C. Müller. 2011. “Assessing the Value of Future Accessions to the WTO Agreement on Government Procurement (GPA): Some New Data Sources, Provisional Estimates and an Evaluative Framework for Individual WTO Members Considering Accession” WTO, downloaded from the WTO website.

Kang, M. and J. Yang. 2003. The Effect of WTO GPA on the Korean Economy, Seoul: Korea Institute for International Economic Policy. (in Korean)

Kim, J. D., W. Chae and J. Yang. 2000. Strategies on WTO Negotiation in GATS Rules. Policy Analysis I 00-08, Seoul: Korea Institute for International Economic Policy. (in Korean)

Lamy, P. 2010. “Opening Remarks at WTO Symposium on the Agreement on Government Procurement: Developmental and Trade Significance, Changing Context and Future Prospects” Presented on Feb.11, 2010 at Geneva Switzerland, and downloadable from http://www.wto.org/english/news_e/sppl_e/sppl147_e.htm

Lee, C. S., H. J. Lim, J. H. Park, and J. Yang. 2004. Capacity Building of Developing Countries for Making the Rules of Trade Facilitation. Policy Analysis 04-07, Seoul: Korea Institute for International Economic Policy. (in Korean)

OECD. 2001. “Government Procurement: A Synthesis Report” TD/TC/ WP(2001) 17/FINAL Paris: OECD.

Stiglitz, J. E. and A. Charleton. 2006. Fair Trade for All: How Trade Can Promote Development, Oxford: Oxford University Press.

Trionfetti, F. 2000. “Discriminatory Public Procurement and International Trade” World Economy, vol. 23, issue 1, pp. 57-76.

Yang, J. 2000. “Agreement on Transparency in Government Procurement,” 2000 in C. I. Yoon et al. Analyses and Policy Implications of the WTO New Issues Policy Analysis I 00-11, Seoul: Korea Institute for International Economic Policy. (in Korean)

Yang, J. 2008a. “Effective Korean FTA Negotiation Strategy for Opening the Government Procurement Market: Korea’s Thresholds and the Spaghetti Bowl Effect”, The Journal of Korea Association of Procurement and Supply Management vol. 8, no. 2, pp. 57-80. (in Korean)

Yang, J. 2008b. “Estimating the Tariff Equivalents of Trade Barriers in Government Procurement”, Journal of International Trade and Industry Studies, vol. 13, no. 3, pp. 1-25. (in Korean)

Yang, J. 2010. “Korean Free Trade Agreement Negotiations in Government
Procurement: Results and Policy Suggestions” *Journal of Public Procurement*, vol. 10, no. 3 pp. 335-367. Fall; based on a paper presented at the International Public Procurement Conference 2010 held in Seoul, Korea, Aug. 27, 2010.

Yang, J. and H. Y. Kim. 2001. *Multilateral Discussions in Government Procurement and Implications for Korea*, Policy Analysis 01-07, Seoul: Korea Institute for International Economic Policy. (in Korean)

World Bank Data Website (http://data.worldbank.org/)

---

**About the Author**

**Junsok Yang** is an associate professor at the economics department of the Catholic University of Korea. He is also an associate in Jacobs & Associates, a consultancy which specializes in improving business environments in developing countries through regulatory reform. His areas of interest include international trade policy, trade facilitation, international trade in government procurement, international finance, development economics, and regulatory reform dealing with market liberalization. He received his B.A. from Cornell University (Ithaca NY, USA), and his M.A and PhD from Yale University (New Haven, CT. USA). Before joining the Catholic University, he was a research fellow at Korea Institute for International Economic Policy. He has worked with the Korean government on OECD Regulatory Reform Review of Korea (1998-9), WTO Trade Policy Review (2000), preparation leading to Doha Development Round negotiations in trade facilitation, and the Daegu Initiative and Green Initiative of the APEC SME Working Group. He has also served as an expert reviewer for APEC IAP Review for New Zealand (2003), the Philippines (2005), and Chinese Taipei (2007) where he reviewed and made recommendations on each economy’s trade and investment regimes. He has also written various articles for journals and institutions such as the World Bank and UN-ESCAP (ARTNeT).

First version received on 5 November 2012
Peer-reviewed version received on 3 December 2012
Final version accepted on 17 December 2012