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THE ROLE OF PUBLIC PROCUREMENT POLICY IN DRIVING INDUSTRIAL DEVELOPMENT

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The role of public procurement policy in driving industrial development

Kamala Dawar Consultant

Seung Chul Oh UNIDO



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1. Introduction

Government or public procurement is the formal process through which official government agencies obtain the necessary goods, services and work to carry out government activities. Interest in how governments spend public resources has increased over the past decade, along with the value of public spending. Since 2006, public procurement has increased 10-fold, and the World Bank expects this growth trajectory to continue. China's government procurement market, for example, totalled approximately USD 88 billion in 2008, more than triple the amount in 2003. The EU's procurement market was worth over EUR 1.500 billion, over 16 per cent of the EU's total GDP in 2004, and grew to over EUR 2.150 billion in 2008. These values are so large because a wide range of government or public entities are now routinely expected to procure the vast array of goods and services necessary for providing citizens services as diverse as education, security, public health, utilities, infrastructure and renewable energy facilities.

It has been estimated that public procurement accounts for around one-fifth of global gross domestic product.⁵ Table 1, which presents OECD data from cross-national studies, suggests that government procurement typically comprises around 10 per cent to 15 per cent of total economic activity,⁶ and in many developing countries it is even higher.⁷ In the UK, for instance, the public sector spent a total of GBP 242 billion on procurement of goods and services in 2013/14. This sum accounted for 33 per cent of the UK's public sector spending⁸ and 13 per cent of GDP.⁹ The World Bank's estimates suggest that developing country governments spend approximately USD 820 billion a year, or 50 per cent of their budgets on the procurement of goods and services.¹⁰ The share for middle income or developing economies is likely to be higher still. Table 2 presents the value of key sectors of government procurement markets that

¹ Government procurement generally covers two main types of public expenditure: consumption expenditure and expenditure on capital formation, that is, investment expenditure The OECD. The Size of Government Procurement Markets. 2015.

² See, for example, V. Tanzi and L. Schuknecht. Public Spending in the 20th Century A Global Perspective. Cambridge: Cambridge University Press, 2000.

Benchmarking Public Procurement. 2016. World Bank Group. piv. Available at: http://bpp.worldbank.org/~/media/WBG/BPP/Documents/Reports/Benchmarking-Public-Procurement-2016.pdf

Benchmarking Public Procurement 2016. World Bank Group piv Available at:

⁴ Benchmarking Public Procurement. 2016. World Bank Group. piv. Available at: http://bpp.worldbank.org/~/media/WBG/BPP/Documents/Reports/Benchmarking-Public-Procurement-2016.pdf

⁵ PwC. 2014. SMEs' access to public procurement markets and aggregation of demand in the EU. Study commissioned by the European Commission DG Internal market and Services.

⁶ See OECD Ftn 1.

⁷ See: EC DG Internal Market Government Procurement Indicators. 2008.

⁸ Lorna Booth. Public Procurement. House of Lords Briefing Paper Number 6029, 3 July 2015.

⁹ Department for Business, Innovation and Skills) (2012a) *No Stone Unturned in Pursuit of Growth*. BIS, London. Cited in Barbara Morton, Gregg Paget, Carlos Mena. What role does Government Procurement play in manufacturing in the UK and internationally and how? Cranfield University October 2013. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/283898/ep24-government-procurement-manufacturing.pdf

Benchmarking Public Procurement. 2016. World Bank Group. piv. Available at: http://bpp.worldbank.org/~/media/WBG/BPP/Documents/Reports/Benchmarking-Public-Procurement-2016.pdf

opened up under the World Trade Organization's Government Procurement Agreement, and highlights how government procurement is a large and growing business for those firms able to bid on these lucrative contracts.

Table 1 OECD estimates of general government procurement as a percentage of GDP and as a share of government expenditures

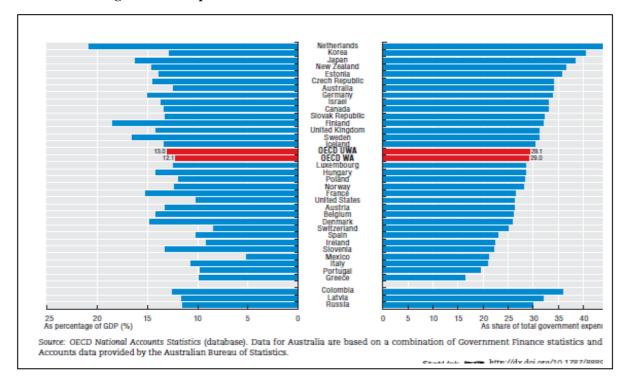


Table 2 Value of procurement markets in key countries under the WTO GPA

Parties/Specific Sectors	European Union (2007)	Japan (2008)	United States (2008)	TOTAL
Construction Services	USD 125.7 billion	USD 11 billion	USD 287 billion	USD 423.7 billion
Pharmaceutical Products, Health Services and – Related Entities	USD 15.1 billion	USD 1.46 billion	USD 120 billion	USD 136.56 billion
Computer and Related Services	USD 46.5 billion	USD 2.1 billion	USD 1.6 billion	USD 54.83 billion
Telecommunication Services	USD 4.1 billion	USD 531 million		
Chemical Products	USD 21 billion	USD 7.2 billion	USD 2.24 billion	USD 23.25 billion
Fuels and Petroleum Products	USD 4.5 billion	-	USD 12.3 billion	USD 16.8 billion
Machinery and Associated Products	USD 14 billion	USD 329 million	USD 518 million	USD 14.85 billion
Textile, Clothing and Footwear	USD 4.4 billion	USD 19 million	-	USD 4.42 billion
Plastic and Rubber Products	USD 903 million	USD 3 million	USD 53 million	USD 959 million
Wood Products	USD 195 million	USD 62 million	-	USD 257 million
TOTAL	USD 236.4 billion	USD 15.51 billion	USD 423.71 billion	USD 675.63 billion

Source: R. Anderson, K. Osei-Lah, Anna Caroline Muller, "Assessing the value of future accessions to the WTO Agreement on Government Procurement (GPA): Some new data sources, provisional estimates, and evaluative framework for individual WTO members considering accession", Public Procurement Law Review, 34, 2011, p. 19.

Given the size of procurement budgets, the decision-making processes governing how to spend this money must ensure that the spending is for the public good if it is to inspire trust. In recent years, international best practice principles and guidelines have been developed by institutions such as the United Nations Commission on International Trade Law (UNCITRAL), with its Model Law on Procurement¹¹, and the World Trade Organization's Government Procurement Agreement ¹², as well as public interest groups such as Transparency International. The principles contained therein promulgate the benefits of transparency, integrity and efficiency for domestic public procurement systems. Efficient use of such public funds is usually of fundamental importance for economic development, and even more so for economies with scarce resources. Cost savings achieved through more efficient, transparent or competitive procurement can be substantial. The manner in which public contracts are awarded and

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https://www.uncitral.org/pdf/english/texts/procurem/ml-procurement-2011/2011-Model-Law-on-Public-Procurement-e.pdf

https://www.wto.org/english/tratop_e/gproc_e/gpa_1994_e.htm

managed is an important indicator of government's general efficiency and integrity, and this has positive ripple effects on attracting investments and facilitating sustainable development. Optimizing the use of scarce resources through fair and transparent rules and procedures also affects the perceptions of civil society, foreign investors and government. Public procurement systems are therefore an essential good governance tool and a big business opportunity.

1.1 Government procurement: laws and policies

National government procurement law is typically comprised of a series of detailed rules on tendering procedures and technical specifications, along with deadlines for the preparation, submission and receipt of tenders. It also includes guidelines on the evaluation of tenders and awarding of contracts, rules on post-contract information and publications and a domestic bid challenge system or dispute resolution mechanism to support compliance. Most procurement systems aim to promote competition and value for money. However, there are often other contending objectives at work operating in a procurement system. 13 These contending policy objectives range from objectives as diverse as promoting allocative efficiency, customer satisfaction and integrity; to distributing wealth, avoiding risk and promoting uniformity.

Clearly, there is not always compatibility among the various objectives government procurement policy can potentially serve. Ultimately, a degree of policy trade-off therefore seems inevitable. It is unlikely, for example, to simultaneously attain value for money and the redistribution of wealth through preferential procurement policies or 'offsets'. ¹⁴ Requiring the best price for the best available quality could mean choosing a large foreign supplier over a small local firm or disadvantaged community. Equally, the experience and expertise required to identify the best value available in, for instance, a complex communications technology market, will necessarily detract from short-term efficiency because the tendering process will require additional time and resources. It may involve training in a process as diverse as market research, tender design and contract negotiation. Consider also, as Arrowsmith argues, 15 how transparency in government procurement is necessary to ensure that procurement decisions are based only on considerations regarded as 'legitimate' within the system, and encourages supplier participation. Yet as Schooner points out, transparency is rarely even considered in the private sector, let alone valued at a premium because it often proves antithetical to accepted

¹³ S. Schooner, "Desiderata: Objectives for a System of Government Contract Law" 11 Public Procurement Law Review. (2002)

¹⁴ The WTO GPA defines offsets as "measures used to encourage local development or improve the balance-ofpayments accounts by means of domestic content, licensing of technology, investment requirements, counter-trade or similar requirements." https://www.wto.org/english/docs_e/legal_e/gpr-94_02_e.htm

15 Sue Arrowsmith, "Towards a Multilateral Agreement on Transparency in Government Procurement", 47 Int'l &

Comp. L.Q. 793, 796 (1998).

commercial practices. However, there tends to be widespread agreement that when public funds are being spent, policies should be in place to ensure adequate transparency and consequently the integrity of the procurement system. ¹⁶

Similar trade-offs emerge in relation to due process and access to redress. A challenged tenderer will often suspend the completion of the contract. Nevertheless, the right to challenge a bid is one of the most effective monitoring and self-policing mechanisms of a procurement system. Open competition could compromise welfare and efficiency if the required tender process takes several months to complete when the contracted project is an urgent requirement of society, such as building health facilities or emergency road repairs.

In sum, the move towards faster and more commercial behaviour by procuring entities is not easy, partly because of the need for greater transparency and public accountability from the state as the representative of citizens, ¹⁷ as well as the role of secondary or horizontal policy objectives implemented through procurement contracts.

1.2 Linkages between public procurement and industrial strategy

Given the large sums spent on public purchasing, the government of every state is itself an actor in the market, and often a relatively large one at that. Government activities in the marketplace, the purchase of goods and services or sometimes the marketing thereof impact and in some cases shape the market itself. Governments have therefore explored the possibility of using government purchases to not only promote redistribution among different segments of the population, but also to develop an industrial strategy, to introduce innovation technologies or foster environmental protection through products or services that have a reduced environmental impact. Procurement policy is typically viewed as a legitimate tool to stimulate domestic production and consumption. By concluding contracts that target particular sectors or groups in society, the government can push forward policies to redistribute wealth, promote industrial strategies or ensure sustainable development.

¹⁶ Schooner *Ibid*.

¹⁷ S. Schooner, "Commercial Purchasing: the Chasm between the United States Government's Evolving Policy and Practice", Ch. 8 in S. Arrowsmith and M. Trybus (eds.), Public Procurement: the Continuing Revolution (London: Kluwer Law International 2002).

1.3 Structure of the paper

This paper deals with public procurement as a means of industrial strategies to support industrial development, and examines the correlation between public procurement and industrial strategies. The remainder of the paper is structured as follows. Section 2 explores six country case studies, which are relevant in terms of their practice of using public procurement policy to drive industrial development. These six countries have been selected based on their GDP per capita level: under USD 5,000 for India and Jamaica, between USD 5,000 and USD 10,000 for South Africa and Brazil, and over USD 20,000 for the Republic of Korea and the United Kingdom.¹⁸

Based on these case studies, Section 3 describes common public procurement strategies and policies adopted by these countries to promote industrial development. The countries' strategies are classified according to four general features: 1) support for the participation of small and medium-sized enterprises (SMEs) in government procurement; 2) government intervention to promote industrial innovation through public procurement; 3) promotion of green public procurement with the aim of reducing the environmental impact and improving sustainability, and 4) export promotion to assist SMEs in expanding their markets to foreign public procurement markets.

Section 4 describes international and regional legal frameworks, as well as several dispute cases between contractors and procuring agencies. It argues that international procurement agreements such as the plurilateral WTO GPA or regional trade agreements can provide policy space for signatory parties' industrial development, and at the same time, also limit parties' discretion which varies between the different agreements. This section in particular highlights that there is sufficient flexibility under the GPA to support domestic industries through public procurement without violating the cornerstone principles of national treatment and non-discrimination, for example, by either excluding strategic entities or markets from the coverage of the agreement or retaining some discretion to take exceptional measures related to security, the environment, human health, etc. It also demonstrates that regional or bilateral FTAs offer more flexibility than the WTO GPA to promote local industrial innovation through public procurement in view of more flexibly adjustable set-aside or domestic content requirement rules. Furthermore, to showcase practical examples of limits to the discretion, specific dispute

¹⁸ The GDP per capita of the six countries in 2016 was derived from the World Economic Outlook Database April 2017 of the International Monetary Fund: USD 1,723 for India, USD 4,931 for Jamaica, USD 5,721 for South Africa, USD 8,727 for Brazil, USD 27,539 for the Republic of Korea and USD 40,096 for the United Kingdom. *Available at:* <a href="http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weorept.aspx?sy=2015&ey=2016&scsm=1&sort=country&ds=.&br=1&c=223%2C199%2C534%2C343%2C112%2C542&s=NGDPDPC&grp=0&a=&pr.x=102&pr.y=15

cases on preferential procurement by governmental discretion are presented as well as that the findings were a breach of non-discrimination trade rules under the GATT and WTO.

The final section, Section 5, depicts distinct perspectives on the pros and cons of the preferential procurement policies identified in Section 3, with a special focus on offsets for SMEs and local preference programmes. These reviews need to be sufficiently considered when policymakers introduce policies and measures in their country to promote industrial strategies through public procurement. The section also addresses the common challenges observed in the case study countries in terms of the general effectiveness of using government procurement to promote specific industrial strategies and of identifying the impacts of individual policy interventions through procurement contracts on a target, arising from a lack of reliable information and data on the costs and benefits. Bearing this in mind, recommendations are provided to deal with the data availability issue. Pilot studies need to be conducted to assess cost-benefit estimates as an integral part of any preferential procurement policy and building databases to allow for formal accounting of preferential procurement programmes.

2. Global practices in public procurement policymaking

2.1. Case study 1: India

2.1.1 Local context

Studies carried out in 2012 estimated that the value of India's public procurement market was more than USD 300 billion—25 per cent to 30 per cent of its GDP¹⁹—and thus an important factor in the Indian economy. India's public procurement system is decentralized and comprises a multiplicity of entities at different levels of government. India does not have a general procurement law that is applicable throughout the country.

Although no federal legislation exists on procurement, some states (Karnataka, Rajasthan and Tamil Nadu) have passed laws to regulate public procurement²⁰. A bill is pending before the Indian legislature – the Public Procurement Bill 2012²¹, which seeks to harmonize India's public procurement laws and regulations.

¹⁹ CUTS Report. Government Procurement in India Domestic Regulations & Trade Prospects. CUTS 2012.

²⁰ Ibid.

²¹ http://finmin.nic.in/the ministry/dept expenditure/ppcell/58 2012 LS EN.pdf

- Constitution of India Article 298 of the Constitution²² stipulates that executive power of the union and of each state shall extend to any trade or business activities and to the acquisition, holding and disposal of property as well as the conclusion of contracts for any given purpose. This Article gives the government the power to enter into contracts.
- The General Financial Rules 2005²³ (GFR), developed by the Ministry of Finance, govern the procedures for public procurement in India. All government procurement must adhere to the principles outlined in the GFR. The GFR are a compendium of general provisions to be followed by all Government of India offices when dealing with financial matters. The key principles are efficiency, the economy, transparency, fair and equitable treatment of suppliers, and the promotion of competition in public procurement. In principle, the GFR only lays out the framework and principles of procurement to be adhered to; the procurement process is decentralised and the respective ministries and agencies are thus expected to expound the specifics of their individual processes in compliance with the general principles of the GFR²⁴.
- Delegation of Financial Powers Rules 1978 (DFPR)²⁵ These rules are issued by the Department of Expenditure in the Ministry of Finance, delegating the government's financial powers to various subordinate authorities.
- Guidelines issued by the **Directorate General of Supplies and Disposal** (DGS&D) Where a ministry or department does not have the required expertise to procure goods, the DGS&D may carry out the procurement function. It is a central purchase organization and keeps a registry of manufacturers/suppliers. It also concludes "rate contracts" for goods identified as "common use items" and those needed on a recurring basis by various central government ministries or departments. It prepares lists of eligible and capable suppliers of commonly purchased goods.
- As no general procurement law exists, the terms of any procurement contract will be governed by the provisions of the **Indian Contract Act 1872**; the **Sale of Goods Act 1930** is applicable where the contract relates to the sale of goods.

²³ http://finmin.nic.in/the_ministry/dept_expenditure/gfrs/GFR2005.pdf

²² (Constitution of India, 1950) Art. 298.

²⁴ Seth & Rajesakran, Chapter 3, The Government Procurement Review - Edition 3 (published in May 2015 – editors Jonathan Davey and Amy Gatenby).

²⁵ http://finmin.nic.in/the_ministry/dept_expenditure/notification/dfpower/index.asp

The GFR provides specific tendering processes²⁶ to be followed; however, this is dependent on the value of the goods. They include:

• Purchase without quotation

- Purchase by purchase committee: purchases in this case may be authorized on the
 recommendation of a local purchase committee which, prior to the recommendation,
 surveys the market and ascertains the reasonableness of the rate, quality and
 specifications while identifying the appropriate supplier.
- **Purchase through tender**: different types of tender processes exist open tender, limited tender, single tender
- **Two bid systems**: this is specifically used to purchase capital equipment, high value plants, machinery, etc., of a complex and technical nature. The quotation is presented in two parts the 'Technical Bid' and the 'Financial Bid'.

E-procurement has been introduced in the Indian public procurement system. The Central Public Procurement Portal (https://eprocure.gov.in/eprocure) launched by the National Informatics Centre (NIC) on behalf of the Department of Expenditure, Ministry of Finance, and the Government of India, is known as the Government e-Procurement System of NIC (GePNIC). This is generic software that can be used by central government departments and agencies. Various procurement activities such as goods, works and services can be processed through this portal. The facilities provided on the procurement portal include online registration of procurement entities and vendors; tender creation and publishing; online bid submission, resubmission and withdrawal of bids; online tender opening; publication of technical and financial evaluations; awarding of the contract.

2.1.2 Public procurement policies for industrial development

Apart from the regular function of procuring goods and services for the government, the Government of India also utilizes procurement as a tool to promote and sustain economic growth and socioeconomic development.

²⁶ Rules 149-154 GFR 2005.

a. Domestic preferences for development

The National Manufacturing Policy of India emphasizes the fact that 'Government procurement is a major policy instrument for strengthening the manufacturing industry and development of technological competence.'²⁷ In September 2014, India's Prime Minister launched the 'Make in India' initiative as part of a wider set of initiatives devised to transform India into a global design and manufacturing hub. Its aim is to raise the contribution of the manufacturing sector to 25 per cent of GDP by 2020. To help achieve this goal, India has expanded the industries available for foreign direct investment, including defence, railways and aerospace. While 'Make in India' promotes local manufacturing, it does not explicitly mention local content requirements.

As one of its guiding principles, Make in India linked itself to the National Manufacturing Policy (NMP) that was announced in 2011 under the previous administration. Clause 8 of the policy statement, entitled "Leveraging Infrastructure Deficit and Government Procurement" highlights government procurement as a major policy instrument for "strengthening the manufacturing industry and development of technological competence". The NMP further notes that government procurement based on local value addition requirements will be used in sectors where it can help "create the volumes and scales which would enable the development of domestic manufacturing capabilities". Industries that are specifically mentioned for this are "critical" technology areas: LED, solar energy equipment, IT hardware, IT-based security systems and fuel-efficient transport equipment such as hybrid and electric automobiles. Apart from these, infrastructure industries, which have a significant government presence, have been identified as critical to NMP, including power, roads and highways, railway, aviation and ports. Furthermore, NMP also includes a provision for purchase preferences for green products in government procurement.

Around the same time that the NMP was launched, sectoral policies with local value addition in government procurement were introduced. The National Solar Mission (NSM) was introduced in 2010 and thus predates the NMP. One of the aims of the NSM was to reduce the costs of solar energy generation through "domestic production of critical raw materials, components and products". ²⁹ To this end, the NSM requested solar power developers to procure solar photovoltaic cells and modules wholly manufactured in India. In this regard, the NMP strengthened the underlying purpose of the NSM to develop and accelerate the growth of the local manufacturing sector.

²⁷ India National Manufacturing Policy 2011 available at http://dipp.nic.in/English/Policies/National_Manufacturing_Policy_25October2011.pdf

²⁸ http://dipp.nic.in/English/Policies/National_Manufacturing_Policy_25October2011.pdf

http://www.mnre.gov.in/solar-mission/jnnsm/introduction-2/

In 2012, the Department of Electronics and Information Technology (DEITY) launched a policy to provide preference to domestically manufactured electronic products in government procurement (PMA)³⁰. The DEITY and Department of Telecom have since determined the following products as part of PMA: desktop PCs and dot matrix printers, tablet PC, laptop PC, smart cards, LED products, biometric access control/authentication devices, biometric fine print sensors, biometric iris sensors and telecom. The lowest quoted price is termed L1 and the rest of the bids are ranked in ascending order of price quoted, as L2, L3, L4, and so on. If the L1 bid is from a domestic manufacturer, the said bidder will be awarded full value of the order. If the L1 bid is not from a domestic manufacturer, the order's value awarded to the L1 bidder will represent the balance of the procurement value after reserving a specified percentage of the order's total value for an eligible domestic manufacturer. Thereafter, the lowest bidder among the domestic manufacturers, whether L2, L3, L4 or higher, will be invited to match the L1 bid in order to secure the order's procurement value earmarked for the domestic manufacturer. In case the first eligible bidder (i.e. domestic manufacturer) fails to match the L1 bid, the bidder (i.e. domestic manufacturer) with the next highest bid will be invited to match the L1 bid, and so on. However, the procuring agency may choose to divide the order amongst more than one successful bidder as long as all such bidders match L1 and the criteria for allocating the tender quantity amongst a number of successful bidders is clearly articulated in the tender document itself. In case all eligible domestic manufacturers fail to match the L1 bid, the actual bidder holding the LI bid will secure the order for the full procurement value. Only those domestic manufacturers whose bids lie within 20 per cent of the LI bid would be given the opportunity to match the LI bid.31

A further development in 2012 was the introduction of the Public Procurement Bill 2012 by the Ministry of Finance (MoF). This bill contains a provision that the central government may announce a "national offsets policy" at a later date. As defined in the bill, "offset" includes "any condition imposed on a bidder in relation to a particular procurement so as to encourage local development by means of domestic content, transfer of technical knowhow, licensing of technology, skill development, counter- trade, investment or other similar requirements."32 While the bill stalled in 2014 when the new government came to power, the Public Procurement Division of the MoF is currently working on re-introducing the bill to Parliament.³³

³⁰ http://meity.gov.in/esdm/pma 31 http://deity.gov.in/esdm/pma

http://finmin.nic.in/the_ministry/dept_expenditure/ppcell/58_2012_LS_EN.pdf

³³http://indianexpress.com/article/business/business-others/nda-set-to-revive-upas-public-procurement-bill/

b. Industrial strategy – Procurement for innovation

Generally, the policy mandates that government procurement shall entail local value addition to create the volume and scale to enable the development of domestic manufacturing capabilities; in particular, capabilities in critical technological areas like LED, solar energy equipment, IT hardware and IT-based security systems and to fuel efficient transport equipment such as hybrid and electric automobiles. Such contracts will be required to include provisions on *local value addition*.

c. Procurement for sustainable development

As regards sustainability and green procurement, the policy also mandates purchase preferences to be given to green products in government procurement contracts. The process to be followed is in line with the specification of clear definitions/eligibility criteria for what can be categorized as 'clean and green'. The system for defining and implementing greener and cleaner technology shall be consistent with the objectives of the national action plan on climate change and the strategy for inclusive sustainable development.

d. Procurement for SME promotion

Cottage industries³⁴: the central government has reserved all items of hand spun and handwoven textiles (khadi goods) for exclusive purchase from the Khadi Village Industries Commission (KVIC). It has also reserved all items of handloom textiles required by central government departments for exclusive purchase from KVIC and/or the notified handloom units of ACASH (Association of Corporations and Apex Societies of Handlooms).

Micro and small enterprises (MSEs): central government ministries, departments and public sector undertakings are to procure a minimum of 20 per cent of their annual value of goods or services from micro and small enterprises³⁵. To reduce transaction costs of doing business, MSEs should be provided with tender sets free of charge, and they are exempt from payment of earnest money. Included is also a list of 358 items that must be procured from MSEs. However, defence procurement contracts are not included under this order. India's annual goal of procurement of 20 per cent from MSEs includes sub-contracts to MSEs by large ones. Further, any department having problems implementing the 20 per cent quota may approach a Review Committee for exemption from the quota.

³⁴ Rule 144 GFR 2005

³⁵ Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 - http://dcmsme.gov.in/pppm.htm

Facilitating and supporting domestic SME entry to international standard procurement contracts: the Government of India has also created institutional support to guide and help SMEs. The National Small Industries Corporation (NSIC) provides assistance to SMEs. NSIC is a national organization with infrastructure and expertise to render assistance to SMEs in their various operations. Small-scale industries (SSIs) registered with the NSIC or with the Director of Industries for the States are treated as registered suppliers with all government procuring entities. No separate registration is required and no further verification of qualifications is necessary in any pending procurement. Copies of bid invitations are supplied free of charge to SSIs on the registration lists as well as to the NSIC for wider circulation among SSIs. Copies of drawings and specifications are also supplied to SSIs free of charge, even if they would generally be offered at a cost. This is to assist SSIs in marketing and to decrease their costs of contracting. During public opening of bids, a representative of NSIC is permitted to be present and to take down information. This information is communicated to SMEs that may have submitted bids but is also useful for other SMEs that may want to participate in future procurements. Also, SMEs are exempt from payment of bid guarantees when submitting their offers. They are also not required to submit a performance guarantee when the contract is awarded to them. Not only does this simplify bid submission and contract procedures, it also helps reduce their working capital requirements, and thereby improve their inclusiveness.

2.2. Case study 2: Jamaica

2.2.1 Local context

In the 2014/15 fiscal year, Jamaica's total public procurement expenditure was USD 566,208,943, accounting for approximately 30 per cent of GDP. Table 3 presents the expenditure of public resources on different categories of procurement.

The legal framework for public procurement in Jamaica has evolved over the years ³⁶. An Electronic Procurement Strategy was devised in 2007, which was followed by a comprehensive public procurement policy in 2008, along with public procurement regulations. These were complemented by a Procurement Appeals Board in 2012. However, once passed, the Public

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³⁶ Prior to 1996, Jamaica operated a centralized procurement system coordinated by the Central Supply Division (CSD) of the Ministry of Finance. Operations were regulated by the Financial Administration (Supplies) Regulations 1963 (under the Financial Administration and Audit Act), the Contractor General Act 1983 supplemented by directives from the Ministry of Finance. In 1996, after the CSD ceased operations, a transition was made to a decentralized system, whereby entities managed their own purchasing and acquisition processes. Under this new system, procurement continued to be regulated by the guidelines of the Ministry of Finance. The process under the CSD had a number of shortcomings, some of which include the fact that there were no rules for consultancies, also, there was a perception of subjectivity in the selection of contractors, and most importantly, there was no comprehensive document that contained all procurement rules. The paper delivered at the XI Annual Conference on Government Procurement in the Americas October 28-30, 2015 Santo Domingo, Dominican Republic by Cecile Maragh – Senior Director, Procurement and Asset Policy, Ministry of Finance and Planning, Jamaica.

Procurement Act 2015 sought to replace the previous fragmented legislative framework with a comprehensive law.

Table 3 Public procurement expenditure in Jamaica for fiscal year 2014/15

Procurement	No. of	Total Value of Contracts		
Category	Contracts	JD	USD	
Consultancy Services (local and foreign)	378	1,459,998,134.99	12,166,651.12	
Goods	5127	48,427,301,974.17	403,560,849.78	
Services	2108	8,492,902,924.84	70,774,191.04	
Works	1285	8,791,493,188.89	73,262,443.24	
Insurance Services	34	773,377,033.84	6,444,808.62	

Source: Paper delivered at XI Annual Conference on Government Procurement in the Americas October 28-30, 2015 Santo Domingo, Dominican Republic by Cecile Maragh – Senior Director, Procurement and Asset Policy, Ministry of Finance and Planning, Jamaica

Jamaica introduced e-procurement into its public procurement process in July 2015, with the aim of significantly improving efficiency and transparency in the acquisition of goods, services and works. It provides an electronic system for government procuring and tendering agencies and suppliers and automation of activities performed by these parties, by integrating them in a single portal.³⁷

International agreements

Although Jamaica is a member of the World Trade Organization (WTO), it is yet to sign the plurilateral agreement, the Agreement on Government Procurement (GPA). This implies that Jamaica has not yet fully opened its public procurement market to foreign vendors.

CARICOM – As one of the members of CARICOM³⁸, Jamaica is also subject to Article 239 of the Revised Treaty of Chaguaramas, which obligates member states to "elaborate a Protocol relating [...] to [...] Government Procurement." This has led to the drafting of the Framework Regional Integration Policy on Public Procurement (FRIP) and the Regional Integration Electronic Public Procurement System, to be implemented across CARICOM member states, geared towards the liberalization and integration of the regional market for trade in goods and services.

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³⁷ http://www.iadb.org/en/projects/project-description-title,1303.html?id=ATN%2FKK-12694-JA

³⁸ The Caribbean Community (CARICOM) is a grouping of 20 countries: 15 member states and five associate members. The members include Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Anguilla, Bermuda, the British Virgin Islands, the Cayman Islands, and the Turks and Caicos Islands have associate member status, and Aruba, Colombia, the Dominican Republic, Mexico, Puerto Rico, and Venezuela maintain observer status.

EC-Cariforum EPA – The CARIFORUM Economic Partnership Agreement was initiated between the CARIFORUM states³⁹ and the European Community and its member states. The Public Procurement provisions fall under Chapter 3 of Title IV covering trade-related issues. The Cariforum Public Procurement chapter includes articles on the following matters: definitions; scope; transparency; methods of procurement; selective tendering; rules of origin; technical specifications; qualification of suppliers; negotiations; opening of tenders /awarding contracts; information on contract awards; time limits; bid challenges; implementation periods; review clauses; and cooperation.

The scope of the public procurement provisions set out in Article 167 of the CARIFORUM EPA is relatively narrow. The CARIFORUM EPA does not contain explicitly substantive provisions on how eligibility for public procurement is determined. The chapter is not subject to dispute settlement. Parties are only obligated to ensure that the procurement of their procuring entities is carried out in a transparent manner in accordance with the procedural provisions of the CARIFORUM EPA Article 168.

2.2.2 Public procurement policies for industrial development

In addition to the pursuit of competition and value for money, the Government of Jamaica also takes the approach that public procurement can be used as a national economic driver to stimulate growth within specific industries in the economy and to encourage more equitable growth. The aim is to facilitate the achievement of socio-economic objectives and allow for local or community-based procurement and to increase opportunities for small domestic industries.

a. Domestic preferences for development

"Procurement is a significant area of government spending and its potential to encourage Jamaican business, particularly MSMEs, to increase their formal participation in this market, improve product and service quality, raise business standards, and facilitate entry into international markets, will be fully supported."

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³⁹ Antigua and Barbuda, The Commonwealth of The Bahamas, Barbados, Belize, The Commonwealth of Dominica, The Dominican Republic, Grenada, The Republic of Guyana, The Republic of Haiti, Jamaica, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and The Grenadines, The Republic of Suriname, The Republic of Trinidad and Tobago.

⁴⁰ "Economy" principle in 5.1 (i) of the new GOJ Public Sector Procurement Policy document.

Development of the manufacturing sector – The Government of Jamaica has a policy⁴¹ to encourage the development of Jamaica's manufacturing industry. Procuring entities are permitted to apply a margin of preference in bid evaluations in favour of domestically manufactured goods, when these are competing with bids offering imported goods. A domestic margin of preference is applied by first classifying bids according to whether the offered goods are locally manufactured or imported. Once a determination is made which is the lowest priced bid in all classes of bids, an amount of 10 per cent is then added to the CIF or CIP prices of imported goods. The general principles the procuring entity should be guided by when applying domestic margins of preference in the evaluation of goods are:

- a) The goods being procured are "manufactured goods" involving assembly, fabrication, processing, etc., where a commercially recognized final product differs substantially in terms of the basic characteristics of its components and raw materials;
- b) The goods offered by foreign and domestic bidders are identical or compatible with respect to quality, size, capacity and performance;
- c) There is a qualified domestic bid which, regardless of the bidder's nationality, has offered goods assembled or manufactured in Jamaica, which has domestic value in the manufacturing costs of not less than 30 per cent of the ex-factory price of the offered product;
- d) A domestic margin of preference is added to the CIF value of foreign bids and not subtracted from domestic ones. The nationality of the bidder is immaterial, but the domestically manufactured goods offered in the bid must meet the minimum domestic value-added criterion. Domestic value-added comprises domestic labour, the domestic content of materials, domestic overheads and profits – from mining until final assembly.

Preferential treatment for national bidders – Low value contract preference for national bidders - Section 23(4) of the Public Procurement Act 2015 provides that where the estimated value of procurement is lower than the procurement method threshold, a procuring entity may limit participation in open bidding procurement proceedings to national bidders. The current threshold is USD 40 million⁴².

Development of construction industry – The policy of the Government of Jamaica encourages the development of Jamaica's construction industry. It is, therefore, permitted to apply a domestic margin of preference to bid evaluations in favour of domestic firms in international

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⁴¹ Government of Jamaica, Handbook of Public Sector Procurement Procedures Volume 2 of 4 Procedures for the Procurement of Goods, General Services & Works, Revised 2014.

http://www.mof.gov.jm/documents/documents-publications/document-centre/file/553-increased-approval-thresholds-for-public-sector-procurement.html

competitive bidding. To be eligible for this preference, domestic firms must be purely local firms in Jamaica, or joint ventures of domestic firms with no more than 10 per cent subcontracting to foreign firms. Joint ventures between foreign and domestic firms do not qualify for the application of such preference. The procuring entity may apply preference margins to the procurement of works such as civil engineering and building construction; land-clearing and levelling; site clearing projects; and similar activities. The preference is applied by adding 10 per cent to the price quoted by a foreign bidder for comparison with a qualified domestic bid.

b. Procurement for SME promotion

Participation of SMEs - Micro and small businesses are significant contributors to employment in Jamaica. In 1990 and 1996, these enterprises accounted for 18.3 per cent and 18.1 per cent, respectively, of the employed labour force. Employment in SMEs has increased significantly since 1996, which is reflected in employment contributions among own account workers which constitute the vast majority of these enterprises. According to the 2011 Statistical Institute of Jamaica (STATIN) Labour Force Survey, the Own Account Worker category (i.e. any person who operates a business but did not employ paid help) accounted for 35.9 per cent of the employed labour force. 43 A 2003 IDB study estimates that the average micro and small business in Jamaica met just over one-third (36 per cent) of the requirements of formality, a statistic which supports the finding that informality in the economy is reflected in informality among MSEs The study also showed that the smaller the firm, the higher the degree of informality, that is, MSEs have higher degrees of compliance relative to own-account businesses. A 2008 survey revealed that 44 per cent of MSMEs surveyed claimed to be registered with the Companies Office of Jamaica (COJ) and only a slightly larger share (49 per cent) indicated that they were not registered. The study also showed that 43 per cent of MSMEs were registered to pay general consumption tax (GCT) and 49 per cent were not. Preliminary data on GCT returns show that an estimated total of 6,920 micro enterprises and 3,541 small businesses filed GCT returns in 2010. 44 The 2008 survey focused on government-funded enterprise support services, but a lack of awareness of these services among MSMEs has limited the access to these services. Only 8 per cent of MSMEs surveyed indicated that they have used

⁴³ Information drawn from the Planning Institute of Jamaica: Economic and Social Statistics of Jamaica (ESSJ) 2011. STATIN explains that an own account worker includes any person who operates a business (for profit) who does not employ any paid help. If the business operator had help from unpaid workers, he/she would still be classified as an 'Own Account Worker'. However, if he/she had both paid and unpaid help, he/she would be classified as an 'Employer' in the Labor Force Survey. The own account worker as used in the Labor Force Survey is therefore not the same as a 'Sole Trader'. See http://jis.gov.jm/media/MSME-ENTREPRENEURSHIP-POLCY.pdf

⁴⁴ Economic and Social Statistics of Jamaica (ESSJ) 2010. Planning Institute of Jamaica cited in http://jis.gov.jm/media/MSME-ENTREPRENEURSHIP-POLCY.pdf

government support services and the majority (67 per cent) of respondents who gave reasons for not using these services cited lack of awareness as the main factor, while approximately 59 per cent indicated that they would be encouraged to In 2009, a special policy was introduced to encourage and stimulate the growth of SMEs by increasing their participation in government procurement opportunities. Procuring entities have been encouraged to set aside 15 per cent of their total annual procurement for SMEs. In addition, a domestic preference of up to 10 per cent is now permitted.

Facilitating and supporting domestic SME entry to international standard procurement contracts – International competitive bidding handicap for national bidders – section 23(5) of the Public Procurement Act 2015 provides that the participation of a national bidder in international competitive bidding shall not be required to be on the same basis as that of a foreign bidder, and a national bidder shall not—as a condition for participation—be required to take any action or observe any procedure or formality that is not required of a foreign bidder.

c. Building the basis for encouraging innovative solutions to procurement needs

As of yet, there is no policy on promoting innovation through procurement contracts. The most relevant developments are the 2015 'Start-Up Jamaica' (SUJ) initiative, which seeks to provide mentorship and other business support for aspiring new technology entrepreneurs. Under this initiative, the government partnered with an accelerator company, Oasis500, which is based in Jordan and trains and funds start-up tech companies. Oasis500 is committed to providing USD 30,000 to each entrepreneur selected, allocated in a combination of 50 per cent cash and critical mentorship, training, and other business support. Three start-up companies were selected in 2015 to participate in the 100-day acceleration process offered by Oasis500. ⁴⁵ This policy focus could represent the foundation for a future strategy to promote innovative solutions to Jamaica's procurement needs.

2.3. Case study 3: South Africa

2.3.1 Local context

Currently, procurement is of particular significance in South Africa's public sector and has been used as a policy tool to correct past discriminatory and unfair practices that occurred during the apartheid era⁴⁶.

⁴⁵ http://mstem.gov.jm/business-leaders-urged-mentor-start-jamaica-entrepreneurs

⁴⁶ Apartheid was the ideology supported by the National Party (NP) government and was introduced in South Africa in 1948. Apartheid called for separate development of the different racial groups in South Africa.

Due to South Africa's history of discrimination, unfair practices and marginalization of people, various groups in society were denied the privilege of being economically active within the government procurement system. Procurement is therefore central to South Africa's government service delivery system. It promotes objectives for social, industrial or environmental policies⁴⁷.

There is no single, coherent piece of legislation guiding public procurement in South Africa. A number of statutes and regulations exist that deal with specific aspects of public procurement. The principal piece of legislation regulating public procurement in South Africa is the Constitution of the Republic of South Africa of 1996. It requires that when an organ of the state contracts goods and services, it must comply with the principles of *fairness*, *equitability*, *transparency*, *competitiveness and cost-effectiveness*⁴⁸. Other important legislation includes:

Public Finance Management Act (1999) – This act provides the overarching framework for supply chain management in the national and provincial government. It assigns overall responsibility for setting up a procurement system to the accounting officers of national departments or provincial government bodies, and sets out the responsibilities of the National Treasury. The PFMA is implemented through the regulations published under it - the National Treasury Regulations (Treasury Regulations).

Municipal Financial Management Act (2003) – The act aims to ensure that local government finances are managed in a sustainable manner. It also sets out to establish norms and standards for supply chain management.

Preferential Procurement Policy Framework Act (PPPFA) 2000 – The act gives effect to the government's priority of empowering historically disadvantaged persons, by giving them preferential treatment in procurement activities. It provides a framework for the implementation of the provisions and requirements laid out in sections 217(2) and 217(3) of the Constitution. It enshrines the obligation of the government to award preferential procurement points to enterprises owned by historically disadvantaged persons and for certain government priorities. The act also provides for exemptions to preferential procurement in certain sectors and industries. It is implemented through the regulations published under it, namely the Preferential Procurement Policy Framework Act Regulations 2011.

⁴⁷ Bolton, P., Government Procurement as a Policy Tool in South Africa, Journal Of Public Procurement, Volume 6, Issue 3, 193-217.

⁴⁸ Section 217 Constitution of the Republic of South Africa.

Broad-Based Black Economic Empowerment Act – The act empowers the Minister of Trade and Industry to issue codes of good practice on black economic empowerment that may include, inter alia, 'qualification criteria for preferential purposes for procurement and other economic activities'.

Although there are no specifically prescribed procurement procedures, various methods of carrying out procurement are available. These include quotations or bidding procedures. The treasury regulations allow regulated entities to procure goods and services by other means in specific cases where it may be impractical to invite competitive bids and that are subject to certain conditions.

Finally, the South African government has an e-Tender portal and has created a centralized database of approved suppliers. It has been implemented as part of the government's efforts to fight corruption and make government procurement more efficient and cost-effective. The procurement process must now be managed through the e-Tender portal, and no tenders can be submitted in paper.

2.3.2 Public procurement policies for industrial development

a. Procurement for SME promotion

The preferential points system under the PPPFA allows the state organs to set specific goals to address the socio-economic issues that South Africa faces due to its past. In 2011, the Preferential Procurement Regulations were revised ⁴⁹. The revision of the Preferential Procurement Regulations of 2011 was largely influenced by the need to provide for a mechanism to empower certain categories (small medium and micro enterprises (SMME) also classified as exempt micro enterprises (EMEs) or qualifying small enterprises (QSEs), cooperatives, township and rural enterprises) through procurement.

The revised regulations introduce the prequalification criteria, allowing the advancement of these selected categories of people by limiting competition to them only. This restricts the inclusion of well-established companies, unless they meet further requirements of subcontracting to these groups should they (established company) be successful. The revised regulations also require all those with the ability to deliver the required service to demonstrate the element of subcontracting to the categorized groups at a tendering stage. Finally, the regulations have increased the threshold of categorized groups to ZAR 50 million, thus giving smaller enterprises greater chances of competing in the economy in a meaningful way.

https://www.salga.org.za/Documents/Municipalities/Guidelines%20for%20Municipalities/Revise-preferential-procurement-regulations.pdf

b. Domestic preferences for development

The focus on local content has witnessed the signing of the Local Procurement Accord on 31 October 2011 under the New Growth Path⁵⁰ adopted by the government. The accord targets 75 per cent of public and private procurement to accelerate job creation and the attainment of the Industrial Policy Action Plan's goals. The action plan aims to promote long-term industrialization and diversification beyond traditional commodities and non-tradable services, expanding production in value-added sectors with high employment and growth opportunities. The emphasis is placed on labour absorbing production and the services sectors, increasing access of historically disadvantaged people and regions to the economy, and building South Africa's contribution to industrial development beyond its borders⁵¹.

Under the regulations, the Minister of Trade and Industry has the discretion to designate the industries to which local content should apply. When government entities procure goods from those industries, the requirement is that the specified percentage of what is being procured must be locally manufactured or produced. The regulations are applicable to procurement activities carried out by 'organs of the state'. This is defined in the Black Economic Empowerment Act as:

- (a) A national or provincial department as defined in the Public Finance Management Act
- (b) A municipality as outlined in the Constitution
- (c) Parliament
- (d) A provincial legislature
- (e) A constitutional institution listed in the Public Finance Management Act.

Pursuant to these regulations, several industries, sectors, and sub-sectors have so far been designated for local production with minimum local content thresholds as shown in Table 4 below.

 $[\]frac{50}{51} \frac{\text{http://www.gov.za/about-government/government-programmes/new-growth-path}}{\text{https://www.idc.co.za/images/download-files/IPAP2014.pdf}}$

Table 4 Minimum local content thresholds by industry in South Africa

Industry/sector/sub-sector	Minimum threshold for local content
Buses (Bus Body)	80%
Textile, Clothing, Leather and Footwear	100%
Steel Power Pylons, Monopole Pylons, Steel Substation Structures, Powerline Hardware, Street Light Steel Poles, Steel Lattice Towers	100%
Canned / Processed Vegetables	80%
Pharmaceutical Products:	
OSD TenderFamily Planning Tender	70% (volumes)50% value
Rail Rolling Stock	65%
Set Top Boxes (STB)	30%
Furniture Products:	
Office FurnitureSchool FurnitureBase and Mattress	85%100%90%
Solar Water Heater Components	70%
Electrical and telecom cables	90%
Valves products and actuators	70%
Residential Electricity Meter:	
Prepaid Electricity MetersPost Paid Electricity MetersSMART Meters	70%70%50%
Working Vessels/Boats (All types):	60%
Components Conveyance Pipes	• 10% - 100% 80% - 100%
Transformers and Shunt Reactors:	
 Class 0 Class 1 Class 2 Class 3 Class 4 	 90% 70% 70% 45% 10%
• Components and conversion activities Solar PV Components:	• 50% - 100%
 Laminated PV Modules Module Frame DC Combiner Boxes Mounting Structure Inverter 	 15% 65% 65% 90% 40%

Two Way Radio Terminals and Associated Equipment:	
Portable RadioMobile RadioRepeater	60%60%60%
• Components	• 20% - 100%
Rail Signaling:	• 65%
• Components	• 40% - 100%
Wheely bins:	
Fire Fighting Vehicle	
Crew CabinSuper StructureAssembly	100%100%100%
Steel Products and Component for Construction	
Steel Value-added Products	1000
Fabricated Structural SteelJoining/Connecting Components	100%100%
• Frames	• 100%
Roof and Cladding	• 100%
• Fasteners	• 100%
Wire Products	• 100%
Ducting and Structural pipeworkGutters, downpipes & lauders	100%100%
Steel Value-added Products	300,0
PlatesSheets	100%100%
Galvanised and Colour Coated Coils	• 100%
Wire Rod and Drawn Wire	• 100%
• Sections	• 100%
Reinforcing bars	• 100%

Source: Department of Trade and Industry, RSA52

c. Social and environmental issues

There is a constitutional imperative to employ public procurement as a means to address past discriminatory policies and practices. The Constitution makes provision for the enactment of national legislation to prescribe a framework within which the policy of preferential procurement must be implemented.

The B-BBEE Act requires every organ of the state and each public entity, as defined therein, to apply any relevant code of good practice issued in terms of the B-BBEE Act in developing and implementing a preferential procurement policy. It is these codes that determine the B-BBEE

⁵² http://www.thedti.gov.za/industrial_development/ip.jsp

status of any procuring entity and, hence, that determine the preference points allocated to any bidder in terms of the preferential procurement framework.

When bidders submit their tender proposals, they need to submit a certificate that has been calculated in accordance with a scorecard prescribed under the Codes of Good Practice⁵³ (which are issued under the B-BBEE Act). The certificate indicates what level Black Economic Empowerment (BEE) contributor the tenderer is, and, depending on their level and the value of the contract, they score a certain number of points out of 10 or 20 in terms of the regulations. These points are then added to the points scored for price for purposes of calculating an overall score.

Studies indicate that there has been an increase in wealthy black Africans since 2007, with a 113 per cent increase to 4,900 individuals with a net worth of over USD 1 million. In March 2015, research indicated that black South Africans hold at least 23 per cent of the top 100 companies listed on the Johannesburg Stock Exchange at the end of 2013. The shares held by black investors include 10 per cent held directly, largely through BEE schemes, and 13 per cent through mandated investment – mostly through individuals contributing to pension funds, unit trusts and life policies. Another study shows that empowerment deals and schemes concluded by the JSE's 100 largest companies have collectively generated ZAR 317 billion of value for beneficiaries – ZAR 108 billion of which has been generated by BEE deals alone.⁵⁴

However, the black African population has recorded the lowest growth in wealth out of all previously disadvantaged groups. Data from the New World Wealth South Africa 2015 Wealth Report shows that BEE and affirmative action policies are effective in elevating the previously disadvantaged groups — but black Africans are not the ones reaping the most benefit. ⁵⁵ According to NWW, there are approximately 46,800 millionaires living in South Africa, with combined wealth holdings of USD 184 billion. The number of Indian millionaires in South Africa has increased by over 400 per cent since 2000 to reach approximately 6,500 at the end of 2014, whilst the number of African millionaires in South Africa increased by 280 per cent over the same period to reach only 4,900 millionaires. While the country has seen the number of black African millionaires increase by 277 per cent over the past 15 years, it is actually the Indian population that has recorded the largest increase in wealth. The Indian community makes up 14 per cent of local South African millionaires, but only 3 per cent of the national population. Africans, on the other hand, make up 80 per cent of the national population, but only

 $^{^{53}} https://www.thedti.gov.za/economic_empowerment/\% = request.getContextPath()\%\%3E/news2013/code_gud_practice10102013.pdf \ ; https://www.thedti.gov.za/economic_empowerment/docs/B-BBEE_phase2.pdf$

⁵⁴ https://businesstech.co.za/news/business/94401/how-many-black-south-africans-benefit-from-bee/

⁵⁵ New World Wealth South Africa 2015.

10 per cent of local South African millionaires. White South Africans still account for nearly 70 per cent of the total millionaire population.⁵⁶

Much of the available information on the impact of the BEE programme is crucial. One study has concluded that the BEE only benefits a small elite and calls for an end to the 'extortion' of the BEE system.⁵⁷ It is argued that the BEE benefits approximately 15 per cent of the black population, with "a small group of beneficiaries having their way at the cost of the many". Moreover, "BEE is a key reason why economic growth in South Africa lags so far behind other emerging countries." The remaining 85 per cent of the black population have very little prospect of ever gaining BEE ownership deals, management posts, preferential tenders or new small businesses to run.⁵⁸ It is further submitted that the BEE does not simply bypass the 85 per cent majority, it actively harms that 85 per cent by reducing investment, growth and jobs and making it very much more difficult for the poor to climb the economic ladder to success.⁵⁹ "BEE is a key reason why economic growth in South Africa lags so far behind other emerging countries." The indirect expropriation of existing firms through the 51 per cent BEE deals—which is now increasingly required under empowerment rules—will deter direct investment, reduce the growth rate and make it still more difficult for some 8.7 million unemployed South Africans, which is up from 3.7 million in 1994 to find jobs.⁶⁰

It has also been alleged that political connections often matter more than business skills in BEE deals. A costly bureaucracy has been established to enforce racial targets, which even black-owned firms have to contend with. Posts are left vacant for want of qualified black staff. Some businesses re-employ white professionals as freelance consultants to plug skills shortages without falling foul of the law. The basic finding is that while firms are actively responding to BEE requirements, they are also doing so within a fairly static macro-structural context. Ownership, control and management initiatives reflect a minimal change approach whereby firms are adding previously disadvantaged individual (PDI) partners at the margin, with the PDIs looking very much like old white owners, directors and managers. This limits the number of beneficiaries of BEE. It also exacerbates the constraints on the number of people in these groups – especially manifesting in added pressure on skilled groups. A number of firms are also not developing vertical connections through the economy that might open opportunities for

⁵⁶ Ibid.

⁵⁷ Anthea Jeffery, Head of Policy Research at the Institute of Race Relations (IRR). https://businesstech.co.za/news/general/87154/bee-benefits-blacks-the-least

⁵⁸ Western Cape Premier Helen Zille. https://businesstech.co.za/news/general/87154/bee-benefits-blacks-the-least
⁵⁹ Ibid.

⁶⁰ https://businesstech.co.za/news/general/87154/bee-benefits-blacks-the-least

⁶¹ www.economist.com/news/briefing/21576655-black-economic-empowerment-has-not-worked-well-nor-will-it-end-soon-fools-gold

entrepreneurs in the SMME sector. Those firms that are developing vertical connections have to create capacities to bridge the existing network divides. The payoff seems very high in these initiatives, especially for those at the bottom of the economy, where gains are felt in 'found', trained and screened talent, new jobs and new enterprises.⁶²

2.4. Case study 4: Brazil

2.4.1 Local context

Public procurement is very important for the Brazilian economy. Government procurement plays a role in the economy in terms of public spending as well as a policy tool, mobilizing production chains with great potential to spur development.

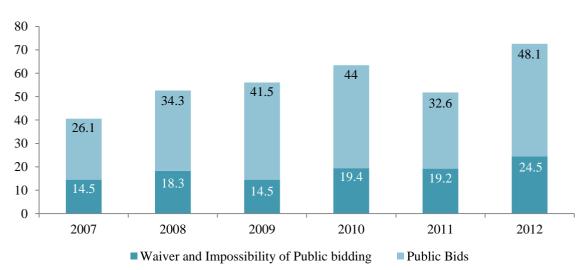


Figure 1 Value of federal government purchases in Brazil (BRL billion)

Source: Ministry of Planning, Brazil

There are a number of laws that deal with public procurement in Brazil:

- Federal Constitution Section XXI, Article 37: this section of the Constitution provides that unless otherwise specified by law, public works, purchases, services and disposals must be contracted by public bidding procedures. This provides the general framework for public procurement in Brazil.
- Law 8,666/93 This is the Public Procurement Law, and it regulates public procurement procedures and contracts entered by the government.

⁶² Matthew Andrews John F. Is Black Economic Empowerment a South African Growth Catalyst? (Or Could It Be...) Research Working Papers Series Kennedy School of Government - Harvard University. June 2008 RWP08-033.

- Law 8,987/95 The Concession Law. This law governs the process for the award of concession contracts. The law was essentially enacted to reduce government investment in certain industries where private companies could provide the services, with government regulating and performing oversight functions, thereby allowing government to focus on other important industries. The law made the concession process more flexible, which would not have otherwise been the case under the Procurement Law.
- Law No. 10,520/02 This law introduces the reverse auction system (Pregão)
- Law 11,079/04 This law specifically deals with public private partnerships (PPPs) it modifies and complements the Concessions Law. The PPP Law established general rules for the bidding and contracting of PPPs while creating two new types of concessions the sponsored concession and the administrative concession. The law also introduced the possibility of government subsidies to allow for implementation of concessions. Using the vehicle of PPPs, the government was also able to ensure that there was no increase in public debt.

Apart from the general public procurement regulations, some industry-specific legislation exists, including:

- i. Law 9,472/97 This law establishes the organization of the National Communications Agency (*Agência Nacional de Telecomunicações*) (ANATEL) and authorizes the agency to create its own public procurement process and system.
- ii. Law 9,478/97 This law created the National Oil Agency (ANP) and authorizes the agency to create its own public procurement process and system.
- iii. Decree 2,745/98 This decree authorizes Petrobras (the Brazilian state-owned oil and gas company) to comply with a simplified tender procedure. It provides special public procurement rules for Petrobras, which are more flexible than the bidding procedures provided by the Public Procurement Law.
- iv. Law 9,961/00 This law created the National Supplementary Health Agency (ANS) and authorizes the agency to create its own public procurement norms.
- v. Decree 7,174/10 According to Brazilian legislation, laws can also be made by presidential decree. In this case, the decree was issued to regulate the purchase of IT goods and services.

- vi. Law 12,462/11 This law provides for the establishment of the "RDC" system ("RDC Law") (a Portuguese acronym for "Special Procurement System"). This provides for a different public procurement procedure for procurements related to the sports events held in 2016 (Olympic and Paralympic Games), and the related infrastructure; and the National Development Programme (*Programa de Aceleração do Crescimento*) (PAC), which is a governmental programme created to stimulate national development through infrastructure works;
- vii. Law 12,598/12 This law specifies the process and system that needs to be followed to deal with procurement for the purchase and development of defence systems.

The available procurement processes in Brazil include competition; price survey; invitation to tender; public contest (which is used for technical, artistic or scientific work); public auction of government assets; and reverse auction (Pregão). E-procurement also exists within the Brazilian public procurement system. The system known as COMPRASNET was created in 2001. It is highly regarded as a benchmark e-procurement system by the World Bank, the Inter-American Development Bank and the OECD. In fact, in 2003, Peru modified COMPRASNET's source code directly to build a platform for its own e-procurement system. Guatemala followed suit, modelling its e-procurement system on COMPRASNET.

International agreements

Brazil is neither a party nor an observer to the World Trade Organization Agreement on Government Procurement (GPA). However, it is a member of the common market *Mercosur*, a sub-regional bloc made up of the following members: Argentina, Brazil, Paraguay, Uruguay and Venezuela (Venezuela was suspended on 1 December 2016). Under the umbrella of *Mercosur*, Brazil has also concluded free trade agreements with Israel, Egypt, the State of Palestine and Lebanon. Brazil has signed 20 bilateral investment agreements (BITs) between 1994 and 2015, however, none of the BITs have entered into force.

2.4.2 Public procurement policies for industrial development

a. Domestic preferences for development

Brazilian laws contain certain basic provisions meant to provide domestic preferences in public procurement.

i. The Basic Productive Process (BPP) is the minimum set of operations, in a manufacturing establishment, which characterizes the effective industrialization of a given product. National products are defined as those produced in accordance with a

Basic Productive Process (BPP) or with rules of origin established by the federal government, which must follow MERCOSUR minimum standards.

- ii. **Preferential treatment for domestic businesses:** it is crucial to highlight that Article 170(IX) of the Constitution only extends the benefit of preferential treatment to companies registered in Brazil and with a head office in Brazil. Further, the General Law on Micro and Small Businesses (Supplementary Law No. 123 of 14 December 2006) provides that small enterprises controlled by a foreign holding company are not eligible to benefit under the preferential procurement rules. For foreign companies to be able to take part in national tendering, they must be legally established in Brazil, i.e. the companies must be incorporated as Brazilian companies. In the case of international tendering, foreign companies must have legal representation in Brazil or be associated with a Brazilian firm. The purpose of this is to incentivize companies to set up their businesses in Brazil; when the company is based in Brazil, the country benefits from added employment creation and additional tax opportunities.
- iii. 'Made in Brazil' goods and services: Law No. 8,666/93 indicates that in the case of equivalent offers, preference may be given to goods and services produced in Brazil, produced or supplied by Brazilian companies, and produced or supplied by companies that invest in technology development in Brazil. According to Decree No. 7546/11, the preference margins for specific products, services and industries are determined by the newly created Inter-ministerial Commission for Public Procurement (CI-CP), and Law No. 12,349/10 provides that the definition of the actual margins must be based on studies that take into account a number of criteria, including job and income generation, effect on tax revenues as well as technology development and innovation taking place in Brazil. Therefore, it is instructive to note that this is not a blanket preference for goods and services made in Brazil, but the law has created a process to determine and prioritize strategic criteria for these preferences.

b. Procurement for SME promotion

According to Article 170(IX) of the Brazilian Constitution, preferential treatment may be granted as a general principle for economic activity to small enterprises organized under Brazilian law and which have their headquarters and management structure in Brazil. The purpose is to stimulate the development of small businesses in Brazil, and ensure their participation within the procurement market. Law No. 123/2006, which grants preferential treatment to micro-enterprises ("ME") and small-enterprises ("EPP") in many circumstances,

including public bidding procedures; therefore, an ME or EPP will have priority rights over an ordinary enterprise under certain conditions. This law was amended by Law No. 147/2014, going a few steps further by introducing two important changes, namely that public procurements up to BRL 80,000 must be carried out by means of bidding procedures exclusive to MEs and EPPs, and that upon a successful bid, a public administration may require bidders to subcontract MEs and EPPs for the provision of services or the supply of certain products.

Reis and Cabral investigated procurement preference programmes in Brazil and found that SMEs benefited as a result of this type of intervention, measured by their involvement and success rates in contract competitions. Their research results indicate that after the introduction of preference programmes favouring SMEs in Brazil, their participation and their odds of winning and being awarded public contracts increased. The new legislation seems to be effective in terms of reducing entry costs for SMEs. However, although small and micro enterprises have been winning more bids in the past few years, their increased presence has not led to savings when favoured firms are compared to non-favoured firms. Anpad also finds that compared to non-favoured firms, SMEs are more likely to have their contracts terminated due to poor performance during the execution phase. This result suggests that SMEs might face additional constraints in fulfilling contractual obligations with government purchasing units. Alternatively, public managers might be biased against SMEs and spend more time and effort monitoring and enforcing contracts involving favoured firms.

c. Procurement for innovation and technological development

Law No. 12,349/10 also allows for procurement contracts in the technology and communication industry to be restricted to goods and services developed in Brazil. Law No. 8,248/1991 and Decree No. 7,174/2010 provide, among other requirements, for a preference for products and services developed with local technology and manufactured according to the BPP, which governs the acquisition of IT products and services.

d. Social and environmental issues

Sustainable development and environmental issues have been included in the Brazilian government's political agenda and have been translated into public policies. These include:

⁶³ Public Procurement Strategy: Examining the Impact of a Preference Program for Small and Micro and Enterprises Autoria: Paulo Ricardo da Costa Reis, Sandro Cabral http://www.anpad.org.br/admin/pdf/2014_EnANPAD_APB295.pdf

- i. National Sustainable Development: Law No. 12,349/10 added a new objective to Brazil's procurement policy: in addition to seeking the most advantageous offer for the administration and ensuring equality under the law, public tendering must now promote national sustainable development. The Brazilian government created the Action Plan for Sustainable Production and Consumption (PPCS), launched in 2011. The plan links economic, social and environmental aspects of development⁶⁴.
- ii. The National Policy on Climate Change establishes that preference in public procurement should be given to processes and technologies that reduce carbon emissions and make better use of energy, water and other natural resources.
- iii. The National Policy on Solid Residues states that priority should be given to the acquisition of recycled and recyclable products and that social and environmental sustainability should be taken into consideration in the acquisition of goods and services and in the agreement of major construction contracts.
- iv. Instruction Number 01 from 2010 complements the Law of Public Tender (8.666/93). It states that aspects of environmental sustainability—such as energy efficiency, reduced water consumption, use of renewable energy, waste management, biodegradability and traceability—should be included as criteria for the purchasing of goods and contracts for services and public works.
- v. The Programme of Affirmative Action sets out rules for the active inclusion of afro descendants, women and disabled persons when contracting personnel. The Programme of Affirmative Action suggests that preference in procurement should be given to companies who prove that they have adopted policies of positive action toward disadvantaged groups.
- vi. Law 11.947/2009 sets out the principle of healthy meals in the state school meals system. Its understanding of healthy food is 'a diet which has a variety of safe products and respects culture, tradition and nutritious eating habits'. This law stipulates that 30 per cent of school meals have to be bought directly from small family farmers. Each farmer can sell up to BRL 3,000 annually and organic produce can be up to 30 per cent more expensive than non-organic products.

⁶⁴ http://web2.unep.fr/globaloutlook/ShowPolicy.aspx?PolicyId=140&LngId=1

2.5. Case study 5: The Republic of Korea

2.5.1 Local context

In 2016, the Republic of Korea's public procurement accounted for 15 per cent (KRW 57.5 trillion) of the annual budget, worth KRW 386.4 trillion. An interesting trend seen in the Republic of Korea's procurement system is early execution of the annual procurement budget expenditure. Approximately 60 per cent to 70 per cent of the procurement budget is released in the first half of the year. This move is attributable to the sluggish economy, and is an attempt to boost domestic consumption and support economic recovery. Table 5 below illustrates the overall performance and volume of domestic procurement in the Republic of Korea over the last few years.

Table 5 Domestic procurement performance

(Unit: KRW 100 million)

				(OIIII. IXIXW		2016
Categories	2011	2012	2013	2014	2015	(est.)
Procurement Services	339,812	347,346	383,733	339,479	362,453	374,800
- Domestic procurement	179,378	199,369	224,618	225,396	240,168	250,800
- Foreign procurement	6,875	4,631	4,790	5,087	3,963	5,000
- Construction works	150,329	140,085	150,890	105,789	114,348	115,000
 Architectural design and construction supervision service 	3,230	3,262	3,435	3,207	3,974	4,000
Commodity Stockpiling	3,628	5,628	6,354	3,160	2,656	3,200
Supervision and Review for Construction Works	134,187	114,278	132,628	148,505	191,667	197,00
- Construction management	24,003	31,064	27,444	12,215	23,716	24,500
- Total project cost review	101,735	72,890	82,062	116,031	110,583	111,000
- Construction cost review	8,449	10,324	23,122	20,259	16,582	19,000
- Design relevance review	-	-	-	-	40,786	42,500
Public Procurement TOTAL	477,627	467,25	522,715	491,144	556,776	575,000

Source: Public Procurement Service of Korea (PPS)

The Republic of Korea' public procurement system is highly centralized in the Public Procurement Service (PPP), a central procurement agency which is responsible for concluding contracts of goods, services and construction works on behalf of public organizations. PPP was established as the Provisional Office of Foreign Supply in 1949 and has carried out its current roles since 1961. PPS maximizes the efficiency of the government's budget execution by minimizing procurement costs through centralized procurement.

The legal framework of public procurement in the Republic of Korea has been strengthened by the enforcement of various laws. In 1995, the government enacted the Act on Contracts to Which the State is a Party (the State Contract Act), which applies to all procurement activities of central governments. The Act on Contracts to Which the Local Government is a Party (the Local Government Contracts Act) entered into force in 2005 applies to procurement activities of local governments. Government procurement activities are further regulated by other laws, including (i) the Government Procurement Act 1995, (ii) the Defense Acquisition Program Act 2006, (iii) the Framework Act on the Construction Industry 1997 and (iv) the Fair Transactions in Subcontracting Act 1983.

In 1995, the Republic of Korea joined a plurilateral agreement, the Agreement on Government Procurement (GPA), as a member of the WTO, which entered into force in January 1997. This implies that the Republic of Korea opened the public procurement market to foreign vendors, who had also joined the WTO GPA. The Republic of Korea complies with global standards, operates international tendering and other procedures in accordance with the main WTO GPA principles of transparency and non-discrimination. Currently, the 2014 Revised WTO GPA applies to 45 central government entities, 67 sub-central government entities (16 metropolitan government entities and 51 local government entities in metropolitan governments) and 25 government-invested companies in the Republic of Korea. The threshold level above which the 2014 Revised WTO GPA is applied in the country differs by the abovementioned categories of concession entity, as shown in Table 6 below.

Table 6 ROK's WTO GPA minimum concession

(Unit: SDR)

Categories	Central Government Entities	Sub-Central Gove Metropolitan Government	- Local Covernment			
Goods	130,000	200,000	400,000	400,000		
Services	130,000	200,000	400,000	400,000		
Construction Services	5,000,000	15,000,000		15,000,000		
Build-operate- transfer (BOT)	5,000,000	15,000,000		-		

Source: Public Procurement Service of Korea (PPS)

The most predominantly used contract scheme in the Republic of Korea is the Multiple Award Schedule (MAS) introduced by the Enforcement Decree of the Act Concerning Government Procurement in 2006. The MAS contract system (or Multiple Supplier Contract System) is based on the American MAS system. The MAS contract is a unit-price contract for products frequently used across the public sector. It allows the same products to be delivered by two or more contractors that meet the given criteria and quality standard. The main reason for the introduction of the MAS was to tackle problems resulting from the lack of diversity of supplied

products, the long time needed to complete the tendering process and the poor quality of goods entailed in the lowest price competitive tendering system. This scheme increased the diversity of products and consequently, expanded buyers' choice options by contracting various vendors and increasing participation of companies. Currently, about 6,000 companies are participating in the Republic of Korea's MAS contract system.

The Republic of Korea's nationwide digitalization of e-procurement began in 2002 due to the country's high-speed internet connectivity and advanced IT infrastructure capability. The government established a full-scale e-procurement system called 'Korea On-Line E-Procurement System' (KONEPS) in 1997. This advanced e-procurement system allows for procurement procedures to be faster and easier, and at the same time, increases transparency. KONEPS is recognized globally and the e-procurement system is being imitated by many countries. The share of KONEPS in total government procurement volume recorded 62.6 per cent in 2015. Since 2015, there are 50,366 public organizations and 320,983 suppliers that use KONEPS.

The Republic of Korea's public procurement is deemed one of the main factors leading to the country's successful economic development. Strategically, the government's aim is to achieve economic efficiency and "value for money" through public procurement. In addition, promoting economic growth, industrial innovation and development and job creation are core objectives the government intends to attain through public procurement. This has become a notable feature in the Republic of Korea's public procurement system, especially since the 1990s. To achieve these objectives, the government places an emphasis on the following four policy directions:

- "Future-oriented public procurement" boosting industrial competitiveness and promoting the development of new industries, inter alia,
 - paradigm shift towards "quality-first procurement" to enhance the quality of products and create initial markets for new technology and high-tech products in the public sector
 - o green public procurement
 - o developing the service industry (especially the software industry), ICT industry and construction industry through public procurement
- "Employment-friendly public procurement" encouraging job creation through public procurement

- "Social value-oriented public procurement", inter alia,
 - o allowing easier entry and broader market opportunities for SMEs
 - supporting other socially-disadvantaged businesses like social enterprises and enterprises owned by women and the disabled
- "Global public procurement" supporting the expansion of domestic SMEs' entry into international procurement markets.

2.5.2 Public procurement policies for industrial development

- a. Strengthening industrial competitiveness and stimulating new growth industries
 - Paradigm shift towards "quality-first procurement" enhancing the quality of
 products and creating initial markets in the public sector for new technology and
 high-tech products.

Excellent Government Supply Products⁶⁵: The scheme designating "Excellent Government Supply Products (EGSPs)" was introduced in 1996 to support the government's public procurement policies. The Public Procurement Service (PPS) designates outstanding SME products in seven categories (ICT, electric and electronic, construction and environmental, chemical and fabric, machinery, office equipment, science and medical) through application and evaluation processes 66. The system's main objectives are to upgrade the quality of public procurement goods and to provide support to SMEs and venture companies facing difficulties in supplying their products in public procurement markets. In general, SMEs and venture companies with new innovative products, certified products, patents, utility models or special merits are supported. Looking at it from an industrial development aspect, certification of qualified procurement products as EGSPs is a very useful mechanism to encourage firms to develop new advanced products and create new markets for public procurement. Once selected, the validity of EGSPs is effective for three years initially. There is a possibility to extending it, if all conditions have been successfully achieved (supply performance, quality and technological aspects). PPS supports the selected firms through a form of "direct contracting" and preferred purchasing, which means that the product can be supplied instantly without any administrative procedures during the validity of this agreement. Moreover, PPS promotes sales of EGSPs through advertising and promotion via the e-procurement central purchasing system. Recently, the scope of EGSPs has further expanded to foster development in areas of promising manufacturing industries that require strategic upbringing. Some of the products in new growth

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⁶⁵ Public Procurement Service & KDI School of Public Policy and Management, Republic of Korea: KSP Modularization project - Korean Government's Procurement Experience (2012), p. 84.

⁶⁶ OECD, Public Procurement for Innovation – Good Practices and Strategies (2017), p. 125.

industries that are now included in EGSPs are ICT convergence products, parts and materials. New industry products (e.g. robots, medical equipment, parts and materials, 3D displays, security sector (CCTV, fire detection system)) have increased on the list of EGSPs, whose share was 12.1 per cent in 2013, 15.3 per cent in 2014 and dramatically jumped to 24.3 per cent in 2015. Moreover, preference is given to the products of government-funded R&D projects during the designation process of EGSPs. This is to create further public demand for such products. Overall, this system is recognized as a successful procurement policy by completely shifting the paradigm of public procurement from costs of a product towards emphasizing the quality of a product and triggering the development of new technology products and new industries. In fact, since the introduction of EGSPs in 1996, the purchase amount of EGSPs had jumped approximately 117 times until 2007. As of July 2015, a total of 1,128 product models have been designated as EGSP⁶⁷.

Set-aside for new technology products and SME-developed technology products⁶⁸: A certain quota is reserved for products manufactured with domestically developed new technology. New technology-certified products are expected to account for 20 per cent of the procurement of the specific product type for which new technology products are available, not 20 per cent of total procurement. There is also a set-aside for products manufactured with new technology developed by SMEs. Central and local governments and public enterprises should fulfil 10 per cent of their SME-product purchase from SME-developed technology products (10 per cent of the procurement of the specific product type for which SME-developed technology products are available, not 10 per cent of the total procurement).

Improvement of MAS contract system⁶⁹: Although the MAS contract system was widely used in the Republic of Korea, accounting for 68.7 per cent of all contracts, 52.5 per cent of the supply amount and 89.3 per cent of all items in 2007, controversies related to the system emerged. One of the most serious issues was that it was operated like a *de facto* direct contracting system. By weakening the competitiveness and violating the transparency of public procurement, the system was unable to ensure sufficient quality of procured goods. As a result, the MAS was modified to involve a two-stage competition system in which a final contractor was selected from a group of two or more contractors, who had been pre-selected for the procurement of goods exceeding a given amount in the first stage. Later, the applicable threshold amount was doubled to KRW 100 million from the first KRW 50 million. In addition,

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⁶⁷ OECD, Public Procurement for Innovation – Good Practices and Strategies (2017), p. 125

⁶⁸ OECD, Public Procurement for Innovation – Good Practices and Strategies (2017), p. 125

⁶⁹ Public Procurement Service & KDI School of Public Policy and Management, Republic of Korea: KSP Modularization project - Korean Government's Procurement Experience (2012), p. 44-45

the government made entry into public procurement markets easier to offer more opportunities for new technology products. This was achieved by easing the requirements of entering the MAS market. Specifically, for new technology products like the Internet of Things, the requirement of total number of suppliers decreased from 3 to 2, and the requirement of trade performance decreased from KRW 30 million to KRW 20 million. The purpose was to expand demand for new technology products in the public market. Overall, in addition to its widespread use, the MAS contract system has evolved as a notable procurement tool to provide more opportunities for quality products and new technology products in the Republic of Korea, strategically dealing with the critical challenges that have emerged by introducing a two-stage competition system and easing the requirements for entering the market.

Public Procurement for Innovation: A system called "Public Procurement for Innovation (PPI)" was introduced by the government. With the introduction of PPI, companies can propose the contents of their innovative technologies and products in a pre-order stage, making it possible to select and confirm the contractor/supplier even before placing an order. Therefore, PPI encourages firms to develop technological innovation products and services based on the needs of public institutions, and this process supports the development of initial markets.

Quality Management Office⁷⁰: As an effort to secure the quality of procurement products, the Quality Management Office was established in 2007 under the Public Procurement Service. It is in charge of quality management of procured goods and carries out delivery and quality inspections to actively respond to the changing procurement environment and customers' expectation of quality. In fact, since its establishment, the quality of procured goods increased significantly, prompting the customer satisfaction rate to keep increasing from 78 per cent in 2010 to 85.6 per cent in 2015.

Self-Quality Assurance System⁷¹: The "Self-Quality Assurance System" was adopted in 2010. It is an advanced quality improvement system to provide incentives like exemption from delivery inspection for a certain period for selected suppliers with an excellent quality management capacity. By adopting evaluation criteria focusing on quality improvement activity, better quality of procured goods and reduction of losses from defects have been realized. In 2011, the "Self-Quality Assurance Company Selection and Management Guideline" was introduced, pilot-operated for 17 months until September 2012 and subsequently implemented. The number of items subject to self-quality assurance was increased from 231 in 2012 to 430 in 2013, and 22 self-quality assurance companies were appointed (52 items).

⁷⁰ Public Procurement Service, Republic of Korea: 2013 Annual Report, p. 26.

⁷¹ Public Procurement Service, Republic of Korea: 2013 Annual Report, p. 27.

ii. Development of green technology and industry through green public procurement

The government has been encouraging firms to develop green technology products through green public procurement. To support green technology and industry, the government promoted the creation of such virtuous cycles: establishment of a public market \rightarrow expansion of R&D and the private market \rightarrow development of green technology and industry. The most representative measures targeting the creation of a green public market include:

Minimum Green Standard: in 2010, the government introduced the "Minimum Green Standard", which promotes energy efficiency, standby power, recycling and other environmental factors. Suppliers who met the minimum standard were only allowed to participate in the public procurement market. In 2012, 75 products were selected to meet the Minimum Green Standard. The number of such products increased to 100 in 2013.

Introduction of incentives: the government provides various incentives to green industries to strengthen the application of the Minimum Green Standard and to accelerate the development of green technology products. More incentives are offered to companies by relaxing the delivery performance requirements, reducing the warranty burden, separating orders for green construction materials and guaranteeing long-term contracts.

Infrastructures of green-purchasing: the government has expanded the infrastructures of green-purchasing by establishing an integrated public green-purchasing information network to provide further information on green products, setting up standards for green products and introducing guidelines for green products procurement.

In addition to these measures, a considerable increase in the size and share of green products in government procurement has been witnessed. About 10.6 per cent (KRW 1,398.9 billion) of the total purchase was composed of green products in 2007, jumping to 20.1 per cent (KRW 4,014.2 billion) in 2012. Based on the government's powerful initiatives, public procurement has become a pivotal driver in the creation of early markets for green products and further in the development of green technology and industry in the Republic of Korea. The measures introduced by the government such as the Minimum Green Standard, various incentives and infrastructures of green-purchasing are mostly integral in the policy framework to fulfil green public procurement which, in general, is timely and effective.

iii. Development of service industry through public procurement

The development of the service industry is also an important focus of public procurement in the Republic of Korea.

Increased use of MAS contracts: the government has increased the use of MAS contracts in service products as a way to provide the most promising and often used service products to public institutions. The service products include collective insurance for public officials, healthcare, education programmes, school field trips, SW, etc. To support the early integration of MAS contracts in the service industry and for the convenience of public agencies, a separate category of service products has been included in the national online comprehensive shopping mall, KONEPS.

Development of the SW industry: the strategic objective was to extensively develop the domestic SW industry through public procurement in the Republic of Korea. The government enforced the "Software Industry Promotion Act" in 1999 to contribute to the improvement of the SW industry. Utilizing domestic SW in public institutions was highly encouraged to foster competitiveness and the advancement of the SW industry. First, as shown in Table 7 below, unit-price contracts for domestic SWs have been increasingly used to ensure an appropriate delivery price for them.

Table 7 Number of unit-price contract in the software industry

Year	2013	2014	2015	2016e
No. of unit-price contracts	173	240	359	450

Source: Public Procurement Service of Korea (PPS)

The government permitted and strengthened separate contracting of SW. This allows the system of SW to be separately ordered and contracted instead of using an ordering system for the entire batch of software, hardware, networks, etc. Basically, separate contracting is mandatory for certain kinds of SW included in SW projects from central government entities with a value higher than KRW 0.7 billion and KRW 0.5 billion from sub-central government entities, with only some exceptions in case of a significant cost increase or project delay, etc. This innovative contracting mechanism for SW projects provides more opportunities for SMEs to compete, participate in tendering processes and to receive orders. It also enhances the companies' technological expertise and competitiveness. The rate of separate contracting of SW increased from 41.3 per cent in 2015 to an expected 50.0 per cent in 2016. In addition, the government introduced the "SW split order", which covers two aspects: i) SW design and ii) SW

implementation. This order system induces focused specialization and expertise of SW companies. SW businesses with a value higher than KRW 1 billion must follow the split order system under the "Enforcement Decree of Software Industry Promotion Act" enforced in 2000.

Table 8 Share of purchase of SW and other service products in the past 5 years

Year	2010	2011	2012	2013	2014	Average
Services	2.8	2.8	3.1	3.7	3.8	3.2
Domestic Procurement	17.3	17.9	19.9	22.5	22.5	22
Share (%)	16.2	15.8	15.6	16.4	16.9	16

Source: 2015 Annual Report, Public Procurement Service of Korea (PPS)

iv. Innovation of ICT industry through public informatization business

Advanced evaluation criteria: the government has improved the ordering system in the public informatization business by reducing the evaluation portion of the non-technical sector (e.g. costs) and strengthening the evaluation of the technical sector when evaluating a request for proposal (RFP). The improved ordering system entails 70 per cent technical evaluation and 30 per cent costs when selecting SW developing service business or computer system development projects. It differs, for example, from the evaluation criteria of ICT equipment, which entails 50 per cent technical evaluation and 50 per cent costs.

Project Management Office: the Republic of Korea has improved expertise on ICT contracts and the purchasing convenience of the demand-agency by introducing the concept of a supporting agency, i.e. the Project Management Office (PMO). PMOs support and manage the entire process of public informatization projects including planning, drafting RFP, development, operation and evaluation to ensure successful implementation of the projects. The number of public informatization projects outsourced by PMOs gradually increased from 20 cases in 2012, 34 in 2013, 60 in 2014, 84 in 2015 and an expected 100 cases in 2016.

Lowering entry requirements for domestic ICT equipment: the Republic of Korea promoted the entry of domestic ICT equipment into the public procurement market by easing the requirements for delivery performance.

In addition to these efforts, the public informatization business contracted by PPS jumped to KRW 2,121.5 billion (3,766 contracts) in 2013 from KRW 1,617.1 billion (2,935 contracts) in 2010.

v. Strengthening the competitiveness of the construction industry through construction purchase order systems that trigger technology development

Integrated evaluation system: the lowest price system, in which the bid winner was decided based on the lowest price, was replaced by the adoption of the "Integrated Evaluation Policy" in 2013 to ensure overall harmonization of price and technology competitiveness. Under this new policy, the bidder's competency is evaluated based on construction skill and capabilities, construction performance and social responsibility along with price. The contract is awarded to the bidder with the highest score in the evaluation. This evaluation policy applies to public construction work with a value higher than KRW 30 billion. The government underwent a 2-year trial period from 2014 to 2015, and enforced this policy starting from 2016.

Technical Proposal Tendering System: another type of construction contract system exists, the "Technical Proposal Tendering System". Under this system, the ordering organization provides the basic design or working design of the construction. The bidder must then submit bidding documents and the necessary technical proposals which, for example, include measures to reduce the costs of construction, a construction management plan, etc. This system has two sub-types: 1) one type for cost reduction, and 2) one type for performance improvement. The latter applies the best technology rather than saving costs by meticulously evaluating the proposed measures to improve the quality of the final construction. It is notable that among the construction management services offered by PPS, the bidding on technical proposals increased from 62 per cent in 2013 to 70 per cent in 2014, and was expected to grow to 80 per cent in 2016.

Building Information Modelling: PPS has led the way towards applying the BIM (Building Information Modelling) design in the public procurement sector. BIM is a very advanced computational designing model that is used within the construction process. It allows transformation of a 2D construction design into a 3D model, which makes it possible to visualize the entire process of planning-design-construction-operation-maintenance in three dimensions. Based on this 3D model, BIM then analyses the construction data (e.g. facility replacement term, energy consumption, insulation, etc.). This analysis is expected to save energy and construction costs. PPS has progressively increased the adoption of the BIM design by applying it to all turnkey projects over KRW 50 billion in 2011, and making it mandatory for all construction works managed by PPS by 2016.

Development of new construction technology: to stimulate the further development of new construction technology, the construction performance of companies that developed or applied new technology are evaluated for participation in public construction projects. Recently, the scope of the construction projects to which this evaluation is applied has been expanded to all public construction projects that amount to more than KRW 20 billion, including highly complex projects like bridge construction.

b. Promoting and enhancing job creation through public procurement

Mandatory employment rules for qualified technicians: the government has imposed mandatory employment rules for qualified technicians. This applies to construction work with a value of less than KRW 30 billion, construction technology services and contracts of goods (lump-sum contracts). Before signing the contract, the buyer needs confirmation of whether the company has employed legal technical manpower. This regulation forces companies to hire a sufficient number of technicians to sign public procurement contracts, and at the same time, by employing qualified technicians, the quality of the procurement materials is expected to improve as well.

Incentives for leading employer: companies recognized as "leading employers" are entitled to incentives during the bidding process. They enjoy preferential treatment when competing for MAS contracts stage 2 against other vendors. Moreover, they are preferred when extending the validly of Excellent Government Supply Products. The government also provides benefits to companies with outstanding youth and women employment. They are given preference in the process of bidding/signing contracts as well as when they compete for the designation of Excellent Government Supply Products. To this end, the government reflects their performance in terms of youth and women employment when evaluating the qualification for their procurement goods and services.

Promotion of suppliers' job creation: the government has also created an employment portal on KONEPS to support the recruitment of around 320,000 registered suppliers. Also, "KOPPEX job fairs" are hosted to support recruitment. Overall, the government is actively supporting employment creation through both online and offline channels.

c. Promotion of SMEs and socially-disadvantaged enterprises

i. Support for easier access by SMEs to the public procurement market

In line with the government's objective to achieve rapid economic development, support for SMEs has become one of the government's top priorities in public procurement.

Set-aside for SME products⁷²: public entities must fulfil 50 per cent of their procurement from SMEs where SME products are available.

Group Direct Contracting and competition among SMEs for set-aside products⁷³: the Republic of Korea used to implement a scheme called "Group Direct Contracting" for small and medium enterprise cooperatives, which gave priority to SME cooperatives that are compliant with the Small & Medium Cooperatives Act in the procurement of goods, and which under given conditions, the use of the direct contracting method is possible. However, the participating SMEs settled, and neglected to pursue further technological development and market exploration. Consequently, problems arose such as weakened competitiveness, entry barriers of new technology products to public markets, unfair allocation and assignments, and problems between sub-contractors and SMEs under cooperatives. The government decided to abolish "Group Direct Contracting" as problems outweighed the benefits and transparent competition. Hence in 2007, a new system was introduced by the Act on Facilitation of Purchase of SME-Manufactured Products and Support for Development of their Markets to promote clean competition and protect the development of competitive SMEs in the public procurement market. The new system called "Competition among SMEs for Set-aside Products" was to designate set-aside products to be procured through competition among SME manufactures only. Currently, there are 226 products targeted for inter-SME competition only. Moreover, in order to prevent excessive price competition, there is a set limit price of 85 per cent for those designated set-aside products.

Excellent Government Supply Products and MAS contract system: The government is in charge of designating Excellent Government Supply Products. This provides SMEs with a broader marketing opportunity and stimulates the development of new technology. Along with its economic advantages, the MAS contract system also offers better access to public markets for SMEs that supply good quality products as well as further chances to promote their products in domestic and overseas markets. As only qualified SMEs are selected in the MAS contract system, it plays an important role in supporting SMEs that produce new technologies and environment-friendly products.

Preferences for SMEs in various public procurement sectors: The maintenance, repair and operation (MRO) businesses in public markets used to be given to affiliates of conglomerates. However, it is now only being offered to SMEs to promote shared growth. Moreover, it has

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⁷² OECD, Public Procurement for Innovation – Good Practices and Strategies (2017), p. 125.

⁷³ Public Procurement Service & KDI School of Public Policy and Management, Republic of Korea: KSP Modularization project - Korean Government's Procurement Experience (2012), p. 44.

become mandatory for public institutions to award procurement contracts to SMEs as joint contractors when operating ICT projects. In order to increase the purchase of PCs from SMEs, the government supported the establishment of a joint after-sale service (AS) network for all PCs that SMEs supply to provide maintenance or repair services for the warranty period. The weak AS system has been one of major reasons purchasing PCs from SMEs has been avoided. Through this endeavour, the share of purchasing PCs from SMEs has increased from 23.4 per cent in 2007 to 28.7 per cent in 2012. To expand opportunities for SMEs to receive more orders in public construction works, the government eased the performance evaluation of SMEs for small and medium construction works and established a separation order system for construction materials.

Support for start-ups in procurement markets: The government has provided more bidding opportunities for start-ups in the procurement market. In particular, the government supports start-ups established less than 5 years by easing market entry requirements for them and establishing a customized online shopping mall for start-ups only. For example, the government has relaxed the requirements of delivery performances for start-ups in their 2-5 years since establishment from 3 to 2 cases.

Over the last years, the purchases from SMEs in both goods and construction services have shown striking increasing trends as indicated in Table 9. In addition to their contribution to industrial innovation and development, it is also observed that both the system of EGSPs and the MAS contract system have played a significant role to offer better access to public markets for SMEs. In particular, it was revealed that the MAS contract has created eye-opening marketing opportunities for start-ups. As shown in Table 10 below, the amount of MAS contracts with start-ups has increased dramatically, jumping to KRW 3 trillion in 2015 from only KRW 50.7 billion in 2013. This demonstrates that the MAS contract in public procurement has been successfully supporting the development of start-ups.

Table 9 SMEs' share amount in goods purchased and construction works (%)

Categories	2007	2009	2010	2011	2012	2103	2014	2015
SMEs' share (Goods Purchased)	66.5	70.9	75.2	77.6	76.6	78.1	77.4	79.9
SMEs' share (Construction Works)	-	39.9	46.7	51.8	49.7	49.3	60.5	61.5
TOTAL SMEs' share		54.0	60.2	66.3	65.6	66.5	71.8	73.9

Source: Public Procurement Service of Korea (PPS)

Table 10 Amount of MAS contracts with start-ups

Year	2013	2014	2015
Number of MAS contracts	19	134	700
Performance amount (KRW)	50.7 billion	629.9 billion	3 trillion

Source: Public Procurement Service of Korea (PPS)

In addition to these two systems, the system of Competition among SMEs for Set-aside Products that replaced the scheme of Group Direct Contracting is also regarded as an effective policy to support SMEs in public procurement markets in terms of facilitating the entry of both competitive SMEs and new technology products to public markets while ensuring transparent competition among SMEs.

ii. Encouraging participation of socially-disadvantaged enterprises

Preferences for local enterprises: the government has been placing an emphasis on providing more opportunities for local firms in non-metropolitan areas in public procurement markets while competition among all enterprises is being maintained. Tendering is exclusively open for local firms from the same local province in regards to construction works with a value of less than KRW 700 million or electricity construction with a value of less than KRW 500 million. Moreover, in regards to major national projects, it is mandatory for a certain percentage of local firms to participate (e.g. 40 per cent for Innovative City projects). At the same time, the products of local enterprises are prioritized in the selection process of construction materials. Preferential allocation ratios for the products of local enterprises have increased from 11 per cent in 2013 to 20 per cent in 2014 to more than 50 per cent in 2016. Preferential treatment is also offered to bidders who provide sub-contracts to local companies. Consequently, the total purchases from local firms in non-metropolitan areas have increased from 59.4 per cent in 2007 to 66.8 per cent in 2012.

Preferences for other socially-disadvantaged enterprises: a form of "direct contracting" is offered for women-owned businesses, disability-owned businesses and social enterprises to support easier entry to the public market. This special type of contract refers to a contract in which the contracting entity is selected without a bidding process or competition. The scope of direct contracting for such businesses has increased from KRW 20 million to KRW 50 million. Preferential treatment is also given to them in case of qualification examinations or designations of Excellent Government Supply Products. Moreover, products such as toner or copy paper produced by social enterprises were developed as items for public MRO (maintenance, repair and operation) and MAS (Multiple Award Schedule), and an online shopping mall for social

enterprises only was established. Although small, the share of purchases from women-owned businesses more than doubled in almost ten years, increasing from 3.8 per cent in 2007 to 8.3 per cent in 2015. The share of disability-owned businesses and social enterprises has only insignificantly increased as illustrated in Table 11 below.

Table 11 Share of purchases from women-owned businesses, disability-owned businesses and social enterprises (%)

Categories	2007	2009	2010	2011	2012	2103	2014	2015
Share of women- owned business	3.8	3.9	4.4	5.4	5.9	6.3	7.5	8.3
Share of disability- owned businesses	-	-	-	-	-	1.3	1.5	$2.0^{1)}$
Share of social enterprises	-	-	-	-	-	0.1	0.2	0.51)

Source: Public Procurement Service of Korea (PPS) / 1) 2016 e

iii. Special financial supports for SME participation in public procurement

In order to provide financial support for SME participation in public procurement, special schemes were introduced.

Advance Payment System: the "Advance Payment System", in which the PPS transfers the payment for goods to the suppliers (SMEs) in advance, has been introduced and expanded. In 2007, the amount of advance payment performances was around 65.9 per cent (KRW 8 trillion 715.3 billion) of total procurement contracts and jumped to 69.2 per cent (KRW 13 trillion 804 billion) in 2012.

Network Loan Service: the "Network Loan Service" was introduced in 2006. It differs fundamentally from regular types of loans offered in the market based on an evaluation of a company's financial indicators. This service is offered to SMEs that have concluded a total amount of procurement contracts with the PPS and gives those SMEs the opportunity to receive a loan worth 80 per cent of the value of the procurement contract from banks. The loan is to be used as purchasing funds necessary for the implementation of contracts and paid back—including the interest—once the contract has been fulfilled. The loan interest rate is minimum one per cent lower than that of a regular one. The provision of a network loan does not require any separate collateral or guarantee. The operational mechanism of the loan is as follows: upon the conclusion of a contract, the PPS provides the bank with all the necessary information to execute the network loan. At the same time, a bank account for payments from the PPS is opened with the same bank. After the contract is delivered, the money the supplier company

receives is deposited into the same account. When the loan is paid off, any other financial issues between the bank and the supplier follow their separate agreement. The network loan is the first loan of this type to be introduced in the Republic of Korea's public sector⁷⁴.

The network loan is similar to two other types of loans available to government procurement supplier companies – the advance payment and the public procurement loan. However, their targets are different. Advance payment is provided to a supplier in case of a construction or manufacturing contract with a value of minimum KRW 30 million or a service contract with a value of no less than KRW 5 million. It is more advantageous for a supplier company to obtain advance payment, as no interest needs to be paid unlike in the case of the network loan. On the other hand, the network loan allows for an extension of the payment period by up to two months, which can be a significant benefit for companies with a short-term liquidity problem. Finally, in case of contracts with public agencies, SMEs also have the option of obtaining a public procurement loan offered by the Small and Medium Business Administration. Although this type of loan has similarities with the network loan, its scope and target is broader ⁷⁵ (for further details, see Table 12).

Table 12 Comparison of advance payment, network loan and public procurement loan

Categories	Advance Payment	Network Loan	Public Procurement Loan		
Main Operating Agent	-	Public Procurement Service	Small and Medium Business Administration		
Target	The construction or commodity manufacturing contract with an amount of KRW 30 million or the service contract with an amount of no less than KRW 5 million	Exclusive contract from the total amount contract of the Public Procurement Service (excluding facility construction)	Contracts with public agencies (115 public agencies) (including the unit price contract)		
Contract Confirmation	Public Procurement Service	Public Procurement Service	Public Agency		
Security Conditions	Cash or guarantee	Guarantee not required	Evaluated with the credit evaluation rank		
Maximum Payment Rate	70% of the contract amount	80% of the contract amount	80% of the contract amount (excluding the amount paid in advance)		
Money Collection	Making an adjustment when the contract expires	Collecting the money with the money for delivery	Complying with separate agreement		
Participating Agency	-	Public Procurement Service	115 public agencies		
Enforcement	-	August 2006	September 2006		
Application Procedure	-	3 stages Public Procurement Service → Public Procurement Service →(bank↔company)	4 stages Company→credit evaluation agency→public agency→(bank↔company)		

Source: Korean Government's Procurement Experience (2012) by the Public Procurement Service of Korea (PPS) and KDI

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⁷⁴ Public Procurement Service & KDI School of Public Policy and Management, Republic of Korea: KSP Modularization project - Korean Government's Procurement Experience (2012), p. 107.

⁷⁵ Public Procurement Service & KDI School of Public Policy and Management, Republic of Korea: KSP Modularization project - Korean Government's Procurement Experience (2012), p. 107.

d. Facilitating domestic SME entry into international procurement markets

i. Creating favourable conditions for global public procurement of SMEs

Entry into the WTO GPA and Conclusion of FTAs: first, the Republic of Korea has been trying to expand international procurement markets through the WTO GPA and its FTAs (Free Trade Agreement). By becoming a signatory party of the WTO GPA, the Republic of Korea was able to realize various positive effects. Through the GPA, companies in the Republic of Korea were able to expand their markets and gain more export opportunities. To help domestic companies realize benefits from global procurement markets, the "Practical Understanding and Application of WTO GPA" and the "Concession Table of Other Countries" were published by the PPS.

While the WTO GPA meant an important step towards the liberalization and globalization of the Republic of Korea's government procurement market, it also brought a number of challenges, such as increased competition for domestic companies, or the possibility of entry of unqualified foreign companies in the local government procurement market. To deal with these challenges and prepare for the opening of the government procurement market, the Government Procurement Market Opening Response Team (later transformed into the WTO Response Team) was established in 1993. The team, which operated until 1996, was responsible for surveys and analyses of procurement systems in other countries and for the preparation of recommendations on adjustments of the regulating and legal framework in relation to the procurement of goods and facility construction.

Excluding the preparation of the legal basis of the government procurement market opening, the Republic of Korea had to also strengthen the competitiveness of local companies domestically as well as internationally and prevent the entry of foreign companies with insufficient qualification. To this end, several types of measures were implemented. During the preparation phase to enter the GPA, the Republic of Korea was able to negotiate that SME business products would not be opened to international competition. The Annex of the 2014 Revised WTO GPA stipulates that the agreement does not apply to any set-asides for SMEs. Specific set-asides for SMEs applied to the Republic of Korea in the GPA are described in Table 13 below. In practice, the related laws address the set-asides for SMEs more specifically, for example, the Provision 1-2 of Article 4 of the State Contract Act stipulates that cases where products from a SME are manufactured and purchased pursuant to the Act on Facilitation of Purchase of SME-Manufactured Products and Support for Development of their Markets, shall be excluded from transactions subject to a government procurement contract concluded based on international tendering procedures, and the Act on Facilitation of Purchase of SME-

Manufactured Products and Support for Development of their Markets specifies the programmes to support SMEs in the public procurement market, including "The System of Competition among SMEs for Set-aside Products" as mentioned in Chapter 2-C above. Other measures focused on boosting the competitiveness of domestic companies included strict application of the rule of the country of origin (so that non-GPA member countries were not able to place their bids), calculation of prices for foreign goods including all related expenses (e.g. transport cost, VAT, tariffs, etc.), the necessity to operate an A/S network with quality corresponding to that provided by domestic companies, etc. In addition, pre-qualification and screening tests to secure high quality of procured items from foreign companies were carried out.

Table 13 Set-asides for SMEs applied to ROK in the 2014 Revised WTO GPA

Groups	Details on set-asides for SMEs
Annex 1 (Central Government Entities)	The Agreement does not apply to any set-asides for SMEs according to the Act on Contracts to Which the State is a Party and its Presidential Decree.
Annex 2 (Sub-Central Government Entities)	The Agreement does not apply to any set-asides for SMEs according to the Act on Contracts to Which the Local Government is a Party and its Presidential Decree.
Annex 3 (Other Entities: Government-Invested Companies)	The Agreement does not apply to any set-asides for SMEs according to the Act on the Management of Public Institutions, the Rule on Contract Business of Public Institutions and Quasi-governmental Institutions, the Local Public Enterprises Act and the Enforcement Regulations of the Local Public Enterprises Act.
Annex 6 (Construction Services)	The Agreement does not apply to any set-asides for SMEs according to the Act on Private Participation in Infrastructure.

Source: APPENDIX I in ROK section in the 2014 Revised WTO GPA

Another significant factor influencing the government procurement market in the Republic of Korea is the existence of FTAs (Free Trade Agreements). Depending on the definition and scope of a particular FTA, the effect on government procurement can be strong because more flexible government procurement provisions beyond the WTO GPA can be adopted. Currently, the Republic of Korea has 15 FTAs with its major trading partners: Chile, Singapore, EFTA (Switzerland, Norway, Iceland and the Principality of Liechtenstein), ASEAN, India, the EU, Peru, the U.S., Turkey, Australia, Canada, China, New Zealand, Viet Nam and Columbia. The focus in terms of procurement market access in these FTAs was to enjoy the effect of the government procurement market opening through FTAs with non-GPA members or to expand the scope of the market opening by lowering the minimum concession through FTAs with GPA

members. The procurement market was opened reciprocally in 10 FTAs out of the 15 FTAs the Republic of Korea had signed up to: Chile, Singapore, EFTA, the EU, Peru, the U.S., Australia, Canada, New Zealand and Columbia. Among these countries, Chile, Peru, Australia and Columbia are non-GPA members. As shown in Table 14 below, in many FTAs such as with the U.S., Singapore and Canada, as well as some non-GPA members like Chile, Peru and Columbia, the minimum concession in goods and services is set lower than that of the WTO GPA, which means a further expansion of market opening in comparison to the WTO GPA. In the Republic of Korea-US FTA, government procurement is regulated in more detail. While the Agreement requires compliance with the WTO GPA, it also contains a separate agenda on the opening of the government procurement market. Specifically, the range of the market opening was expanded by lowering the minimum concession in goods and services from 130,000 SDR (Special Drawing Rights) in the GPA (equivalent to KRW 230,000,000) to KRW 100,000,000, while sub-central government entities and government-invested companies are excluded in the Agreement from market access commitment. It is expected that the government will continue to increase the number of countries with which a government procurement agreement is concluded through FTA negotiations.

Table 14 ROK's minimum concession in the WTO GPA and FTA government procurement

(Unit: 10 thousands SDR)

WTO GPA and	Central Government Entity			Sub-C	Central Gov	vernment En	tity	Government-Invested Company		
ROK's FTA	Goods	Services	Construction Services	1 Good	s Service	Constru Services		Goods	Services	Construction Services
Revised										
WTO	13	13	500	20/40	20/40	1,500		40	40	1,500
GPA ¹⁾	13	13	300	20/40	20/40	1,500		40	40	1,500
(2014)										
Chile	5	5	500	20	20	1,500		45	-	1,500
Singapore	10	10	500	20	20	1,500		40	-	1,500
EFTA			he WTO GPA							
U.S.	100 2)	$100^{3)}$	500	-						
EU	complia	ance with the	he WTO GPA							
Peru	9.5	9.5	500	20	20	1,500	40	-	1,500	
Columbia	7	7	500	20	20	1,500	40	40	1,500	
Australia	13	13	500	20	20	1,500	45	-	1,500	
Canada	7	7	500	-						
New	13	13	500							
Zealand	13	15	300	-						

1) Source: APPENDIX I in ROK section in the 2014 Revised WTO GPA

2), 3): million KRW

Bilateral and multilateral international cooperation: second, the government has been strengthening cooperation with countries that have a higher potential of entering procurement markets. Starting with the U.S. in 2002, the PPS signed bilateral MOUs on procurement

cooperation with 24 countries until 2015. The initial MOUs in the early years focused on eprocurement cooperative measures to support the overseas adoption of a KONEPS-based eprocurement system. Recently, procurement cooperation has expanded to all aspects of procurement, including exchange of information on procurement policies such as framework agreements and SME support policies, anticipating increased participation of domestic procurement businesses in foreign markets and public procurement exhibitions. At the same time, the Republic of Korea has been active in joining multilateral cooperation bodies. It has joined the "MMGP (Multilateral Meeting on Government Procurement)" with the U.S. GSA, Canada's PWGSC, Britain's ERG, Italy's CONSIP and Chile's COMPRA, which was established in 2009 as a cooperation network among central government agencies in major regions and is held regularly. It is aimed at sharing experiences and discussing current issues with regard to government procurement. The government also participates in "MENA (Middle East and North Africa) - OECD Network on Government Procurement" established in 2012, which supports progress with public procurement in 18 countries from the MENA region⁷⁶. In 2015, PPS established the "Asia Pacific Public Electronic Procurement Network" jointly with the Asian Development Bank. It is a regional platform of 30 Asia Pacific countries to cooperate and discuss key emerging issues in public procurement. The network focuses on spreading eprocurement, increasing cross-border commerce and supporting the implementation of an eprocurement system in developing countries in the Asia Pacific region⁷⁷.

ii. Offering support services for competitive SMEs to enter international procurement markets

The government has been promoting the export of procurement products from competitive domestic SMEs with high potential.

Support for "G-PASS Companies": The government has screened, evaluated and selected a group of prospective companies called "G-PASS Companies" with the appropriate level of performance, technology and competitiveness. The selected group of "G-PASS Companies" that have demonstrated potential in the international procurement markets receive intensive support from the government. More specifically, the government operates an IPM (International Procurement Market) support centre to provide customized support for each company, and offers specific information on markets (e.g. weekly publication of "Public Agency Bidding Information in Other Countries"), public procurement systems and non-tariff barriers of target countries as well as on competitiveness analysis. The government also supports the "G-PASS Companies" in the registration of suppliers in foreign public markets such as the U.S. MAS. In

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 $^{^{76}}$ Public Procurement Service, Republic of Korea: 2013 Annual Report, p. 42.

2013, about 95 companies benefited from this scheme, 200 firms in 2014 and the number of firms had jumped to 370 by the end of March 2017. To facilitate the entry of companies from the Republic of Korea into the global procurement market, an international cooperation team was created within the PPS.

Exploitation of overseas procurement markets through public private partnership: the government supports the exploitation of overseas procurement markets through public private partnership. For this purpose, business delegations are dispatched with government support to major target countries, emerging economies and countries that have already opened their procurement markets for companies from the Republic of Korea through FTAs. The government also supports SMEs' participation in overseas public procurement exhibitions. "Information on entering the overseas procurement markets" is available in the comprehensive shopping mall, KONEPS. Finally, coordinated support among the related ministries and institutions is provided to create synergies in endeavours to exploit overseas procurement markets. PPS provides foreign procurement information and arranges consultations with foreign public buyers. The Korea Trade-Investment Promotion Agency (KOTRA), operating under the Ministry of Trade, Industry and Energy, provides local support through its overseas offices and finally, the Small and Medium Business Administration (SMBA) provides support in the form of export financing and branch offices.

Online marketing service system: the government established a global online procurement market platform called "Global Korea Market". It is an online marketing service system operated by PPS, and provides strategic matching services between foreign buyers and firms in the Republic of Korea based on the analysis of buyers by region and product and supports transaction arrangements. In 2015, it was solely used to advertise procurement goods online available in the Republic of Korea. In 2016, it became possible to provide matching services and in 2017, transaction arrangements will be introduced for the actual payment and delivery of the procurement goods.

An increasing trend of exports to international procurement markets has become apparent in recent years as shown in Table 15 below. Overall, it can be said that the government effectively supports the entry of domestic SMEs in overseas procurement markets through its diverse policy efforts.

Table 15 Value of exports to international procurement markets

Year	2012	2013	2014	2015	2016e
Export Amount (USD)	80.63 million	133.84 million	200 million	300 million	400 million

Source: Public Procurement Service of Korea (PPS)

iii. Support for SME exports in IT and SW industries by exporting the e-procurement system KONEPS

With KONEPS gaining increasing global recognition, it has already been exported to 5 countries including Viet Nam, Mongolia, Costa Rica and Tunisia. About KRW 25.5 billion was earned by exporting KONEPS and the export to other countries is currently underway. SMEs in the IT and SW industries have been participating in the export together with conglomerates which are main suppliers of the entire e-procurement system.

2.6. Case study 6: The United Kingdom

2.6.1. Local context

The UK public procurement budget amounts to around GBP 150 billion per annum or 14 per cent of GDP. The main bodies dealing with procurement law and practice are organized on a regional basis. The Office of Government Commerce deals with central public procurement while the Office of the Deputy Prime Minister is in charge of local government purchasing policy. In Scotland, Wales and Northern Ireland, the procurement agencies are the Scottish Executive, Value Wales and the Central Procurement Directorate, respectively. Procurement in the UK is unique as it is regulated by two different legal systems. Public procurement is subject to the EU Treaty principles of non-discrimination, free movement of goods, freedom to provide services, freedom of establishment.

Public procurement activities in the UK must conform to the requirements of the EU Procurement Directives and the UK Procurement Regulations that translate the Directives into national law.⁷⁸

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⁷⁸ Available at http://www.ogc.gov.uk/procurement - the bigger picture policy and standards framework.asp.

Table 16 Key facts and figures in the UK

Key Facts and Figures in Uni	Key Facts and Figures in United Kingdom								
Overview	-	Total procurement 274,600,000,000€		Procurement % GDP 14%		Contracting authorities 5,000			
Procedures applied	Open 45%	Restric ted 37%	Negotiated prowith call 8%			Direct award 4% Other 1%			
Share of contract notices by buyer	National 13%		Regional/local		Body governed by public law 34%	Other 14%			
Contract type	Services 62%		Works 9%		Supplies 30%	Framework agreement 43%			
Ex ante conditionality criteria as of 2014	EU rules Fully met		Transparency Fully met		Training Fully met	Admin. capacity Fully met			
E-procurement adoption	E-notification Voluntary		E-access Voluntary		E-submission Voluntary	Uptake rate 31%			
Perceived corruption	Corruption wide Businesses 46%	espread in	society Individual 64%	s	Corruption widespread At national level 38%	ead in procurement At local/regional level 37%			
TED indicators	Value of tenders 90,349,740,982€		Of total pr	ocurement	# contract notices 10,159	# contract awards 7,681			
Other indicators	Received Single 10%	bid	# days for 83.6	decision	Price only criteria 7%	MEAT criteria 93%			
Other indicators	Won by foreign 2%	firms	Related to	EU funds	Joint purchase 21%	Central purchasing Yes, CCS			

The EU rules are contained in a series of directives that are updated from time to time. Member states have to issue national legislation (regulations) to implement the EU rules into domestic law by certain deadlines.

Public Sector Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. The national legislation implementing this Directive is the Public Contracts Regulations 2015. The regulations deregulate and simplify the rules on where most procurement is to be spent and activity to take place. Procurement for public sector bodies, such as local governments, health and education, is also subject to the Public Contracts Regulations.

Concessions Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the awarding of concession contracts. The national legislation implementing this Directive is the Concession Contracts Regulations 2016. These regulations provide rules for the awarding of concession contracts above certain financial thresholds by public authorities and utilities.

Utilities Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services industries and repealing Directive 2004/17/EC. The national legislation implementing this Directive is the Utilities Contracts Regulations 2016. These regulations provide modernized rules for the procurement of goods, services and works above certain financial thresholds by contracting entities ("utilities") operating in the water, energy, transport and postal services industries.

The overriding procurement policy requirement is that all public procurement must be based on value for money. The UK is an EU (and worldwide) leader in e-procurement, despite the fact that neither e-notification nor e-submission is mandatory ⁷⁹. More than 50 per cent of all contracts are currently published online, with the exception of sensitive military contracts. The government procurement portal includes a searchable database of contract notices called 'Contracts Finder', as well as a pipeline to allow potential bidders to prepare for upcoming procurements. It also hosts a 'Spend Analysis Tool' with regularly updated information on procurement organized by category and supplier. In addition to the UK-wide site, the Public Contracts Scotland, Sell2Wales and e-Sourcing NI sites also exist, providing similar data for Scotland, Wales and Northern Ireland, respectively.

International and regional agreements

The UK has opened its procurement market internationally as a member of the European Union and a signatory of the WTO GPA. The UK is currently a signatory party to the 2014 Revised WTO GPA through its membership in the EU. The U.S. government Accountability Office estimates the EU's procurement market at USD 1.6 trillion, the U.S. procurement market at USD 1.7 trillion, and the aggregate value of the other WTO GPA parties at USD 1.1 trillion. The EU WTO GPA schedules indicate that EU member state government contracts awarded in connection with activities in the fields of drinking water, energy or fuel for the production of energy, transport or telecommunications are not subject to the obligations of the agreement.

As a member state of the EU, the UK has signed the EU-Canada CETA, the most up-to-date example of a deep integration RTA. This agreement includes a comprehensive procurement chapter, complemented by a chapter on transparency and corruption control, and another on trade and sustainable development. Under the CETA procurement chapter, the EU guarantees

⁷⁹ Public procurement – Study on administrative capacity in the EU. United Kingdom Country Profile - http://ec.europa.eu/regional-policy/sources/policy/how/improving-investment/public-procurement/study/country-profile/uk.pdf
⁸⁰ The United States and European Union are the two largest markets covered by key procurement-related agreements.

⁸⁰ The United States and European Union are the two largest markets covered by key procurement-related agreements. Report to Congressional Requesters. US Government Accountability Office. GAO-15-717. p1.

⁸¹ The General Notes and Derogations from the Provisions of Article III of Appendix I of the EC.

Canadian suppliers reciprocal access to the European procurement market. For its part, Canada has opened up its provinces', territories' and municipalities' procurement to the EU, going well beyond what Canada offered in the WTO Government Procurement Agreement or under NAFTA. The Canadian commitments further cover the procurement of federal entities, provincial and territorial ministries and most agencies of government as well as "Crown corporations" and regional, local and municipal governments and entities. Some limitations have been retained with regard to the Provinces of Ontario and Québec. 83 The agreement provides legal certainty because both Ontario and Québec previously imposed "local content" requirements based on established practice rather than on any black letter law or regulation.

The CETA's procurement chapter is viewed as WTO GPA+, as it builds on WTO GPA rules governing the procurement procedures, transparency and information, eligibility, administrative and judicial remedies. In addition to greater market accession, there is more detailed wording on a single electronic procurement website, which corresponds to existing intra-EU arrangements. This seeks to facilitate effective access of firms, especially of SMEs, to procurement opportunities in Canada. The EU-Morocco Association Agreement, on the other hand, is an example of a shallow procurement agreement. Article 41.1 merely states: "The Parties shall set as their objective a reciprocal and gradual liberalization of public procurement contracts." Article 41.2 stipulates that the Association Council shall take the steps necessary to implement paragraph 1. However, these are not specified nor is any specific timeframe suggested.

2.6.2. Public procurement policies for industrial development

a. Procurement for SME promotion

The UK government has several policy objectives related to the growth of small businesses and innovation. It aims for one-third of central government purchases to come from small businesses by 2020. Public procurement of contracts with a value of GBP 10 million or more, and with a duration of 12 months or longer, should support skills development and the government's commitment to create 3 million new apprenticeships by 2020.

The Small Business Research Initiative (SBRI) was first established in the UK in 2001 to increase access of SMEs to public sector procurement, and to support the procurement of R&D

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⁸² These are state-owned corporations that are administered "at arm's length" from the government.

⁸³ In these two provinces, certain types of energy utilities are excluded from the commitments. In the area of public transport, the government procurement market access for European rolling stock in the Canadian Provinces and Territories will be unlimited, again with the exception of Ontario and Québec, which retain some limitations. Both provinces have accepted the replacement of the "local content" requirement by a more flexible "local value" condition. This allows the European bidders not only to take into consideration the value of parts and components (as would be the case with 'local content'), but also labour costs linked to the assembly of the final product and services, such as maintenance or after sales.

with a potential to procure the innovation generated in the R&D contract. The SBRI plays two major roles; the first can be described as 'operational effectiveness' where the government acts as a 'lead' customer for new products and services. The second role is to support 'strategic objectives', i.e. to provide a route to market for innovations that support broad policy objectives, with the solution being developed through SBIR by providing broader opportunities for the market. Initially a voluntary guideline, the SBRI has required since the 2005 Budget that every government department contract a minimum of 2.5 per cent of external R&D with small businesses.

b. Domestic preferences for development

The Public Contracts Regulations include specific UK rules to support growth by improving suppliers' access to public contracts below the EU thresholds ("sub-threshold contracts"). These rules include requirements for advertising all public contracts below the EU thresholds, but over certain other threshold values, on 'Contracts Finder'. They also include a requirement for contracting authorities to take account of Crown Commercial Service (CCS) guidance on the selection of suppliers and the awarding of contracts, and to ensure that suppliers pay their subcontractors within 30 days as is already required of contracting authorities.

The *Procurement Policy Note – Supporting Apprenticeships and Skills Through Public Procurement Action Note 14/15*⁸⁴ stipulates that where apprenticeships and skills development have been determined to be sufficiently linked to the subject matter of the procurement contract, in-scope organizations should include a requirement for the supplier to provide evidence in the relevant procurement documentation of its commitment to developing and investing in skills, in particular commitment to the creation of apprenticeships under the contract.

The Procurement Policy Note – Supporting Sustainable Skills Development through Major Construction and Infrastructure Projects Action Note 06/15⁸⁵ requires public procurers of major construction and infrastructure projects with a capital value of over GBP 50 million to use public procurement to foster increased investment in training and apprenticeships. It states that in procurements for major construction or infrastructure projects over GBP 50 million, in-scope organizations should include a requirement for the supplier to provide evidence in the relevant procurement documentation of its commitment to developing and investing in skills, and should ensure that any commitments made by suppliers are included in the contract and are acceptable, and consider whether to build these into any related incentivization mechanisms and monitor the

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⁸⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/456805/27_08_15_Skills_Apprentic ceships_PPN_vfinal.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/418713/PPN_06-15_Skills_and_Infrastructure_Projects.pdf

outcomes as part of their normal contract management procedures. The goal behind this policy note is to build a more skilled and productive workforce and to reduce the risks of supply constraints and increasing labour cost inflation.

c. Social and environmental issues

- Equality Act 2010 This provides an obligation to comply with the public sector equality duty when conducting public procurement.
- Energy Efficiency Directive Article 6 requires central government departments in EU member states to purchase highly energy efficient products, services and buildings, as set out in Annex III of the directive.
- Public Services (Social Value) Act 2012 The act requires relevant procurement departments to consider in the pre-procurement stage how what is to be procured could improve the social, environmental and economic well-being of the area in which the contract will be applied and how it might ensure any such improvements. There is an obligation to ensure that relevant government departments buy more sustainable and efficient products and engage with suppliers to understand and reduce the impacts of their supply chains, including embedding the Government Buying Standards (GBS) in departmental and centralized procurement contracts within the context of the government's overarching priorities of value for money and streamlining procurement processes; improving and publishing data on supply chain impacts, initially focusing on carbon, but also water and waste; and setting detailed baselines for reducing these impacts.
- Public-Private Procurement Compacts The objective of this scheme was for large public and private organizations to join forces to buy products and processes that help reduce the carbon footprint of private and public actors. Organizations would not only bundle their demand, but also develop joint roadmaps of future demand, sending clear signals to the industry to both induce the generation of new innovations and to accelerate the diffusion of new products and services. The signatories of the Procurement Compact commit themselves to changing their buying behaviour, i.e. to increasing the sustainability standards in their purchases and to introducing the carbon targets in future requests for quotes.

d. Green public procurement

The UK has launched several initiatives for a greener and more innovative public procurement in recent years. In its Sustainable Development Strategy (2005), the UK government sought to become the EU leader in 'sustainable public procurement' by 2009, 86 and aimed to achieve this goal by including the use of public procurement to ensure that information and communication technology would be carbon neutral by 2012. 87 The UK is also the country that most systemically promotes public procurement of innovation. 88 Although it had certain sectoral policies relating to public procurement of innovation in place from the 1970s, a systematic approach to public procurement of innovation was only developed in recent years.

On the basis of the Sustainable Development Strategy (2005), 89 the report 'Procuring the Future', which delivered the findings and recommendations of the UK Sustainable Procurement Task Force, suggested that the UK take a systematic approach to green procurement. 90

Defra's ⁹¹ Sustainable Products and Consumers team is responsible for the UK's sustainable public procurement policy and product specifications, as well as for the achievement of the UK target in the EU's Green Public Procurement initiative. This policy is designed to allow purchasers across the public sector to take account of environmental factors when buying goods, services or works. The UK's green public procurement scheme covers product groups which have a high impact on the environment, such as construction, food and catering services and transport. It complements the eco-label scheme, which provides suppliers of products and services with an environmental benchmark for production and performance. It required 50 per cent of procurement tenders to be 'green' by 2010. According to a PwC study, this goal had already been far exceeded, as 75 per cent of all procurement purchases in the UK in 2009 had already incorporated green criteria. 92 The procurement scheme sets minimum 'core' criteria as well as 'comprehensive' best practice specifications for a range of product groups. Core criteria address the most significant environmental impacts while comprehensive criteria are intended

CSR Europe, Sustainable Public Procurement, 2 (2009).Available p. at www.csreurope.org/.../20091001_csr_europe_helpdesk_for_epson__sustainable_public_procurement__final.pdf, 26. 87 *Ibid.*, at 28.

⁸⁸ Edler, Bedürfnisse als Innovationsmotor, p. 68 (2007).

CSR Sustainable Public Procurement, Europe, p. www.csreurope.org/.../20091001_csr_europe_helpdesk_for_epson__sustainable_public_procurement__final.pdf. ⁹⁰ Available at http://www.defra.gov.uk/publications/files/pb11710-procuring-the-future-060607.pdf, p. 24.

⁹¹ Defra is the UK government department responsible for the environment, food, farming and rural affairs.

⁹² PricewaterhouseCoopers, Significant and Ecofys: Collection of statistical information on

Green Public Procurement in the EU. p. (2009).Available at ec.europa.eu/environment/gpp/pdf/statistical_information.pdf.

for procurers who wish to purchase the best environmentally-friendly products available. 93 Although these criteria are voluntary for public agencies, they seem to be well complied with.

The online progress review from the London Mayor's Green Procurement Code measures each public agency's progress in green procurement. This is a self-assessment tool covering requirements for green procurement such as training staff and including green procurement requirements in job descriptions, policy strategies, standard specifications and identifying key suppliers. The review measures both the systems and processes in place to implement green procurement and the achievements in green procurement against targets. ⁹⁴

e. Public procurement of innovation

Systematic public procurement efforts to trigger innovation are fairly recent in the UK. 95 According to Edler, the UK is a model of 'good practice' for public procurement of innovation in other countries. 96 The 2003 Technology Programme of the UK Department for Trade and Industry (DTI) provided the first systematic effort to stimulate individual markets to innovate the goods and services used by governments and to catalyse the market. DTI produced several reports on promoting innovation in procurement⁹⁷ and worked with the Department for Business Innovation and Skills to provide support for R&D and innovation through, for example, the Technology Strategy Board. Government funding is provided for venture capital through the UK Innovation Investment Fund, while tax relief is available for technological R&D. This policy was later developed to encompass procurement policies. By 2008, the White Paper 'Innovation Nation' had committed each government department to create an Innovation Procurement Plan (IPP) as part of its commercial strategy, setting out how the department plans to embed innovation in its procurement practices and to seek to use innovative procurement mechanisms. 98 Through its 'Forward Commitment Procurement' programme, the UK actively pursues a pre-procurement approach to assess the market's future innovation demand and to communicate potential procurers' needs to potential suppliers as well as suppliers' knowledge of potential technological solutions back to procurers. A similar initiative to work with the

⁹³ Available at http://www.actionsustainability.com/news/227/Targets-and-benefits-of-Green-Public-Procurement-in-the-UK/.

⁹⁴ The Mayor of London's Green Procurement Code, available at www.greenprocurementcode.co.uk/?q=node/48
⁹⁵ Edler, Bedürfnisse, pp. 83, 154.

⁹⁶ Edler, Bedürfnisse, p. 83.

⁹⁷ See e.g. Capturing Innovation guidance, available at www.ogc.gov.uk/embedded object.asp?docid=1001717;; Embedding Innovation in Procurement Practice - DTI 5 Year Programme, available at http://www.dti.gov.uk/fiveyearprogramme.html and The OGC Report: Competition and Long-Term Capacity Planning in the Government Marketplace, available at www.ogc.gov.uk/embedded object.asp?docid=1001394.

⁹⁸ UK Government Department for Business Innovations and Skills, 2008: 'Innovation Nation' - Procuring for innovation, innovation for procurement, White Paper, online: http://www.bis.gov.uk/assets/biscore/corporate/migratedd/publications/i/innovation percent20procurement percent20plans.pdf.

market in developing specifications for green products and technologies with the purpose of bringing about innovation in these areas has been adopted in Sweden.⁹⁹

Notable examples of using public procurement for innovation in the UK include the purchasing strategy of the National Health Service (NHS), using the expertise of the NHS Institute for Innovation and Improvement and the National Innovation Centre (NIC). The NHS provides universal health coverage to all UK citizens and is therefore a mass purchaser of a wide range of goods and services relating to hospitals, health centres and emergency services. The overall strategy is for the main providers of health care to identify and evaluate innovative health-related ideas, and work with the idea owners to develop the product or process so it can be used by the NHS.

Forward Commitment Procurement (FCP) is a procurement model that was introduced in 2006 and designed to satisfy future outcome-based needs instead of purchasing for immediately perceived needs. The purpose of the scheme is to resolve the problem that arises when an organization requires a product or service that is either not available on the market or is too expensive to purchase. The main feature of the FCP is thus early communication with the market and the credible commitment to the market that solutions—should their prototype fulfil the requirements—will be ordered and bought. This helps lower the level of perceived risk associated with investing in innovation by increasing the confidence that there will be a market for the product or service once the solution is proven.

f. Public procurement for green innovation

Although the UK has taken major initiatives both for green public procurement and for public procurement of innovation, a systematic approach to public procurement for green innovation does not yet exist.

Within the framework of the mentioned 'Forward Commitment Procurement' programme, an Environmental Industries Sector Knowledge Team works alongside the business-led Environmental Innovations Advisory Group to identify and implement practical measures to tackle barriers to innovation in the environmental industries sector. This approach involves providing advance information on future needs, identifying and engaging with potential suppliers and, most crucially, incentivizing them. The 'Forward Commitment Procurement' programme offers incentives to potential suppliers through a commitment to purchase a product or service at some point in the future, which does not yet exist commercially, against a specification that current products do not meet, at a sufficient scale to ensure the investment

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⁹⁹ Fraunhofer, op cit. p. 24.

needed can be made available and the manufacture of products that meet the cost and performance targets in the specification.

The UK's HM Prison Service (HMPS) is an example of the application of the Forward Commitment approach. The HMPS identified a need for zero waste mattresses because the disposal practices were unsustainable. The 'Innovation in the sustainable supply and waste management of mattresses and pillows' project is a pre-procurement exercise to inform the specification for possible future procurement calls. That is, it is not a call for tenders or a pre-qualification exercise. Rather, the objective is to foster engagement with suppliers with innovative ideas that go beyond the current separated processes of supply and disposal, which is also linked to a known procurement need.

In responding to the demand of the White Paper 'Innovation Nation', certain departments, such as the Department of Energy & Climate Change, have included both innovation and green criteria in their procurement strategy. ¹⁰¹ An integrated approach to public procurement for green innovation did not exist at the time of writing. Individual examples on good practice for future initiatives exist. ¹⁰² One is the Renewable Heat Initiative for research and development of renewable heat technology. ¹⁰³ The government first developed the requirements for the technology in consultation with energy industry trade associations, NGOs and potential developers. It then issued an EU-wide tender in 2010 setting out specific criteria: the technology was to be applicable to different ways of heating, different scales in buildings, and commercially viable by 2012. ¹⁰⁴ The steps of the tendering process were set out transparently on the internet. ¹⁰⁵ A first policy review was planned for 2014. ¹⁰⁶ The government launched a public procurement initiative because it felt that the private sector would not sufficiently invest into

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the prison environment last on average only 17 months. Arrangements for disposal are dealt with separately by each prison area under local disposal contracts. The vast majority are sent to landfills with the remainder classed as clinical or hazardous waste and disposed of through high-level incineration. This is costly and environmentally unsustainable and out of step with HMPS and wider government waste policy and targets. See The Office of Government Commerce, Finding and Procuring Innovative Solutions, available at http://www.ogc.gov.uk/documents/Finding and Procuring Innovative Solutions (3).pdf.

Www.decc.gov.uk/assets/decc/About%2520us/workingwithdecc/procurement/1 20091102104256 e @@ DECCInnovationProcurementPlan.pdf+Innovation+Procurement+Plan+2009+DECC&hl=en&gl=ch&pid=bl&srcid=ADGEESghv-G7JAXesY7EsA1bQDZ5caGyueS1_es0wglSEXV74_busCeb7l-

OyucFef94lueyYxH4TT2Wnjd9F8zQXpAHRnKPsxhZ3petIWUvXJSpv9yFHAEilVgjzhA_meayjxbrow3&sig=AHIEtbQofT1-eBXaQJQ_TRtvUbrCPiFqsw&pli=1.

This is also suggested by the *Procuring the Future* report, p. 24, available at http://www.defra.gov.uk/publications/files/pb11710-procuring-the-future-060607.pdf.

Available at

www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/incentive/incentive.aspx 104 Available at www.decc.gov.uk/en/content/cms/consultations/rbi/rbi aspx

¹⁰⁴ Available at www.decc.gov.uk/en/content/cms/consultations/rhi/rhi.aspx 105 Available at

 $www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/incentive/incentive.aspx~^{106} Ibid.$

innovation of this technology on its own to achieve the UK's target of 15 per cent renewable energy in the energy mix by 2020.¹⁰⁷

The UK government has also used public procurement for the development of a carbon capture and storage (CCS) pilot power plant. The aim was to support private developers in dealing with technical and commercial risks and uncertainties in the development and deployment of CCS technologies. The issued tender contained funding for research on CCS technology and setting up pilot CCS sites. Clearly defined criteria specified that the pilot plant was to use post-combustion capture technology and store the sequestered CO₂ in offshore geological sites. Furthermore, the technology was to sequester 90 per cent of CO₂ and entail the entire project cycle (capture, transport and storage) by 2014, while reaching an electrical output of at least 300 MW. Finally, the project was to be built in the UK. 109

A hydrogen fuel-cell and carbon abatement technology demonstration fund was also launched in 2006. GBP 15 million of this fund has been allocated to technology demonstration of fuel cell and hydrogen technologies. Transport-related applications benefit from a share of this funding. The UK government also provides funding of initially GBP 20 million to support a new programme aimed at accelerating market penetration of lower carbon vehicles and reducing the barriers companies face in moving from prototype demonstrations of lower carbon technologies to full commercialization. This programme provides financial support for public procurement of fleet demonstrations of lower carbon vehicles (and, where appropriate, supporting infrastructure). The programme builds on the model of contractual forward commitments, in which commitments to purchase vehicles are linked to the achievement of predetermined cost and performance criteria. An additional GBP 10 million research and development fund was launched in March 2011, designed to accelerate growth in low carbon transport technologies and support the emergence of green auto manufacturers in the UK. The new fund was part of a package of government measures to encourage domestic entrants into the low carbon vehicle industry and to overcome the financial difficulties experienced by a number of green car startups.

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¹⁰⁷ Ibid

¹⁰⁸Available at http://www.berr.gov.uk/files/file42478.pdf. See also

http://webarchive.national archives.gov.uk/+/http://www.berr.gov.uk/whatwedo/energy/sources/sustainable/ccs/ccs-demo/page40961.html

¹⁰⁹ UK Department for Business Enterprise & Regulatory Reform, *Competition for a Carbon Dioxide Capture and Storage Demonstration*, Project Information Memorandum, p. 8 (2007).

Table 17 Comparison of public procurement policies targeting domestic industry development among case study countries

Categories	India	Jamaica	South Africa	Brazil	Republic of Korea	The United Kingdom
Domestic Preferences	National Solar Mission: requirement for procuring solar photovoltaic cells and modules manufactured in India Preference for domestically manufactured electronic products: desktop PCs and dot matrix printers, tablet PCs, laptop PCs, smart cards, LED products, biometric access control/ authentication devices, etc.	Domestic Margin of Preference in favour of domestic firms: a. Manufacturing industry: addition of an amount of 10% to the CIF or CIP prices of imported goods b. Construction industry: for pure local firms or joint ventures of domestic firms, an addition of 10% on the price quoted by a foreign bidder in the procurement of civil engineering and building construction; land-clearing and levelling; site clearing projects Preferential treatment for national bidders: allowed to limit participation to national bidders for procurement contracts lower than the threshold (currently USD 40	Designation of sectors for the application of local content rule	Preferential treatment only to companies registered in Brazil and with headquarters in Brazil Preference for 'Made in Brazil' goods and services produced in Brazil; produced or supplied by Brazilian companies; produced or supplied by companies that invest in technology development in Brazil		Improving supplier access to public contracts below the EU thresholds: requirements for advertising all public contracts below the EU thresholds and suppliers' payment of their subcontractors within 30 days Supporting apprenticeships and skills: a requirement for the suppliers' commitment to create apprenticeships Supporting sustainable skills development: requirement for commitment of the suppliers of major construction and infrastructure projects over GBP 50 million to develop skills
		million)				
SME Promotion	Preferential treatments for SMEs: a. Procurement of a minimum 20% of annual	Preferential treatment for SMEs: encouragement of 15% of set-aside of	Preferential treatment for selected categories a. In principle, limited competition only	Preferential treatment for micro enterprises (ME) and small enterprises (EPP):	50% of set-aside of public entities' total procurement for SMEs where SME products are	Increasing access of SMEs to public procurement by the Small Business
	value of goods or services	procuring entities' total	amongst SMMEs, co-	a. Exclusive bidding	available	Research Initiative

central government ministry	annual procurement for SMEs (permission of a domestic preference of up to 10%)	operatives township and rural enterprises b. Requirement for subcontracting to the categorized groups c. Increase of the threshold of categorized groups to ZAR 50 million	only for MEs and EPPs for public procurements up to BRL 80,000 b. Requirement for bidders to subcontract MEs and EPPs for certain services or products	among SMEs for set- aside products MAS (Multiple Award Schedule) contract system Preferences for SMEs in various industries: a. Exclusive purchase from SMEs in MRO businesses b. Mandatory for SMEs to be awarded contracts as joint contractors in ICT projects c. Support for purchase of PCs from SMEs through joint AS network	(SBRI): procurement of a minimum of 2.5% of external R&D from SMEs for every government department since 2005
				d. Easing performance evaluation of SMEs for small and medium construction works Support for start-ups of, in particular, less than 5 years by easing market entry requirements Special financial supports to SMEs such as advance payment system, Network Loan Service	

Industrial Innovation (Public Procurement of Innovation)	Requirement to contain provisions for local value addition in contracts in critical technological areas: LED, solar energy equipment, IT hardware and IT-based security systems and fuel efficient transport equipment such as hybrid and electric automobiles	Start Up Jamaica (SUJ) initiative: provision of training and funds for start-up tech companies, which can form the basis for a future strategy to promoting innovative solutions to Jamaica's procurement needs		Requirement for procurement contracts in the technology and communication industry to be restricted to goods and services developed in Brazil Preference for IT products and services developed with local technology and manufactured according to the basic productive process	Facilitating domestic SME entry to international procurement markets through selection of "G-PASS Companies", online marketing service system, etc. Designation of Excellent Government Supply Products in mostly the manufacturing industry Preferential procurement for new technology-certified products and SME-developed technology products: a. Encouragement of 20% of set-aside of procuring entities' procurement of the specific product type for which new technology products are available b. 10% of set-aside of procuring entities' procurement of the specific product type for which new technology products are available b. 10% of set-aside of procuring entities' procurement of the specific product type for which SME-developed technology products are available Easing the requirements of entering MAS market for new technology products "Public Procurement for Innovation (PPI)": proposal of the contents of innovative products in the pre-order stage	The 2003 Technology Programme: provision of support such as government funding and tax relief for R&D and innovation to stimulate individual markets to innovate the goods and services used by the government "Forward Commitment Procurement (FCP)" programme: a pre- procurement approach to assess future innovation demand of the market Innovation Procurement Plan by each government department
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				SW industry: separate	
				contracting of SW, "SW	
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				Spire States	
				C	
				Construction industry:	
				integrated evaluation	
				system, technical proposal	
				tendering system, building	
				information modelling	
Environmental			Preference for processes	Operation of "Minimum	Green public
protection and			and technologies that	Green Standard"	procurement scheme:
-			Ü	Green Standard	•
sustainable					a. Covering
development			emissions and make	Introduction of	construction, food and
(green public			better use of energy,	incentives: relaxing	catering services, and
procurement)			water and other	delivery performance	transport, which have
			natural resources	requirements, reducing	high environmental
			(National Policy on	warranty burden,	impact
			Climate Change)	separating orders for green	b. requirement for 50%
			Chinate Change)	construction materials and	of procurement tenders
			D.:: 4 6		
			Priority of acquisition of	guaranteeing long-term	to be 'green' by 2010
			recycled and recyclable	contracts	(already exceeded by
			products (National		75% in 2009)
			Policy on Solid	Expansion of	c. setting minimum,
			Residues)	infrastructures of green-	'core' criteria as well as
			Environmental	purchasing:	best practice
			sustainability (energy	establishing an integrated	'comprehensive'
			efficiency, reduced water	public green-purchasing	specifications
			consumption, use of	information network,	specifications
				,	Public-Private
			renewable energy, waste	setting up standards for	
			management, etc.) as	green products,	Procurement
			criteria for the	introducing guidelines for	Compacts: a scheme for
			purchasing of goods and	green products	large public and private
			the contracts for services	procurement	organizations to join
			and public works		forces to buy products
			*		that help reduce the
					carbon footprint of both
					-
					actors

3. Overview of common public procurement strategies and policies across countries supporting industrial development

This section outlines the typical public procurement strategies and policies adopted across the countries (including the case study countries above) to support industrial development, which will serve to provide policymakers in developing countries with a more structured understanding of possible role public procurement policy can play in driving industrial development in their countries.

3.1 SME promotion

SMEs ¹¹⁰ constitute the overwhelming majority of all enterprises in both developed and developing countries and are therefore considered the engine of an economy. In the EU, 99.8 per cent of enterprises in the non-financial sector are SMEs and 92 per cent of the total business sector is estimated to be micro-enterprises with fewer than 10 employees. ¹¹¹ SMEs in the EU accounted for 56 per cent of gross value added (GVA), 67 per cent of employees within the business sector (excluding agriculture, fisheries and financial services) and 58 per cent of combined company turnover.

Governments are typically keen to support SMEs as a vital component of promoting economic growth, job creation and economic and social cohesion. A review of the available literature indicates there is empirical evidence to warrant SME support policies. In developed countries, SMEs are generally considered to have an edge over their larger competitors in terms of innovative solutions, better customer care and after-sales service, as well as a more flexible and responsive approach to changing customer needs. SMEs are more adaptable and responsive to the needs of purchasers as well, can support the creation of new supply markets and respond well to supply market dominance and fragmentation. Moreover, there are benefits to local economies from local sourcing. There are also potential benefits from SME participation in government procurement such as a decreased influence of established networks of larger firms,

¹¹⁰ There are varying definitions of SMEs: OECD/UNIDO (2004) assert that SMEs are defined in the literature most commonly by reference to employment due to the simplicity of the measure and the ease of collection of data (the OECD and U.S. generally use a measure of under 500 employees, the EU 250).

thtp://ec.europa.eu/enterprise/policies/ SMEs Create More and Better Jobs?" [Online]. Available at http://ec.europa.eu/enterprise/policies/ sme/facts-figuresanalysis/performance-review/files/supporting-documents/2012/do-smes-create-more-and-better-jobs_en.pdf.

¹¹² Cited in Caroline Nicholas and Michael Fruhmann. Small and Medium-Sized Enterprises Policies in Public Procurement: Time for a Rethink? Journal Of Public Procurement, Volume 14, Issue 3, 328-360 Fall 2014.

¹¹³ Zheng, J., Walker, H. & Harland, C. (2006). "The Role of SMEs in Public Procurement: A Review of Literature and Research Agenda." [Online]. Available at http://www.ipsera.com/assets/documents/57.pdf.)

¹¹⁴ Caldwell, N. D. et al. (2004). "Promoting Competitive Markets: The Role of Public Procurement." In K. V. Thai et al. (eds.), *Challenges in Public Procurement: an International Perspective* (pp. 315- 334). Boca Raton, FL: PrAcademics Press.

¹¹⁵ Caroline Nicholas and Michael Fruhmann. Small and Medium-Sized Enterprises Policies in Public Procurement: Time for a Rethink? Journal Of Public Procurement, Volume 14, Issue 3, 328-360 Fall 2014.

which may seek to exclude SMEs through collusive or corrupt bidding practices or otherwise. In developing countries, the role of SMEs is equally crucial for contributing to the revival of local businesses and the provision of local access to services, as well as employment opportunities for remote communities.¹¹⁶

Given the significant value of procurement markets, the public sector should be an important market for small businesses. However, Nicholas and Fruhmann note that the existing data suggest that SMEs' share in the public procurement market is below their proportion of total enterprises: in the EU, for example, SMEs secured between 31 per cent to 35 per cent of contracts by value in 2006 and 2007, and 42 per cent in 2008 (EU, 2009), and between 53 per cent and 78 per cent of contracts by volume. ¹¹⁸

There are various reasons for the relatively low levels of SME participation in bidding for public procurement contracts. They include:

- Lack of information / transparency. SMEs have fewer resources to spend to seek out new tenders to bid for than large and incumbent firms
- Bidding firms incur threshold administrative or 'fixed' costs that disproportionately affect SMEs¹¹⁹
- Onerous supplier and contractor registration requirements
- Detailed bid information and documentary requirements
- Costs of supplying a performance bond or guarantee
- Costs of inspection requirements during bidding
- Protracted bid qualification, evaluation and award procedures
- Lengthy payment intervals after contract award require interim cash flows
- Complex contract dispute resolution procedures
- Government procurers risk averse when dealing with SMEs¹²⁰

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¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ A 2010 study concluded that in the U.S., costs per employee due to regulation appear to be at least 36 per cent higher in small firms than in medium sized and large firms, a disproportion in compliance costs that is particularly true in the manufacturing sector.

Procurement instruments to promote SMEs

Government interventions to support SMEs include:

i. Set-asides

- A quota as a percentage of designated government procurement contracts or total spending is reserved or 'set aside' for a targeted category of bidders that meet the preferential qualification criteria such as SME status. This can be applied on a mandatory or voluntary basis, depending on a country's specific context.
- Also, for designated categories of products or services or procurement contracts below specified thresholds, exclusive purchase systems from SMEs only can be introduced.

ii. Other preferential treatment for SMEs in tendering

- For designated categories of products or services, a subcontract with SMEs can be required of the contract winners.
- For designated groups of SMEs or start-ups, market entry requirements such as delivery performance requirements can be eased.
- A simplified contract award process for recurring high volume purchases can be
 introduced to ensure active participation of SMEs in public procurement by mitigating
 bidding-entailed costs and administrative burdens. Governments can set up a light touch
 process for high volume purchases like stationery and other utilities that are in use
 constantly and which need to be replenished continuously.

iii. Bid price references

- Bids from eligible SMEs are a given margin of preference and if the lowest evaluated bidder is a SME, it is awarded the contract.
- Bid preference schemes frame evaluation criteria that provide additional points or weightings as part of a 'bid score card', depending on the extent to which the preference targeted group is integrated into the bid submission.

iv. Financial support to SMEs

• Advance payments to qualifying SMEs: In some instances, government procurement policy has been to approve the release of a larger percentage of procurement funds upon

¹²⁰ Government procurers may specify more stringent financial or experience requirements that exclude newer and financially weaker SMEs. Through the application of such qualification criteria, procurers also reduce work for themselves by not having to evaluate a larger number of bids from SMEs.

awarding of contracts to contractors who would otherwise not be able to fund the execution of the contract or would not have access to finance facilities which would enable them to execute the contracts. Thereby certain classes of companies that would otherwise have been unable to compete for contracts because of their low capital base or lack of access to credit facilities can participate in government procurement bids.

• **Financial loan schemes**: Government procurement intervention in this case is similar to advance payments, but this form of support entails providing financial loan schemes that support SMEs in order for them to be able to bid for and execute procurement contracts.

v. Capacity building and awareness-raising

Capacity building includes training and skill development for the execution of procurement contracts, and increasing awareness entails disseminating information about the availability of contract opportunities.

3.2 Promotion of innovation among domestic industries

Innovation is generally considered an essential component of economic growth and development.¹²¹ By decreasing the necessary inputs or costs of a given quantity of production, allowing the development of new and superior products, and creating markets which did not exist previously, innovation is the foundation of long-term economic growth.¹²² It is common, therefore, for governments to develop policies they believe will promote innovation.

Innovation can be defined as 'the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations'. ¹²³ Public procurement of innovation is commonly referred to as the procurement of pre-commercial goods and services, i.e. those that have not yet significantly appeared on the market. ¹²⁴ It may be either general or specific: there may be a general policy of the government to give preference to tenders or suppliers that are able to demonstrate innovation in their product (e.g. reducing the weighted 'cost' of a product in a competitive tender by a specified amount to reflect innovative technology) or, alternatively, a specific effort to bring about the development of a product or

¹²³ OECD/Eurostat, *Oslo Manual*, p. 46 (2005).

¹²¹ Rosenberg, Innovation And Economic Growth, OECD (2004).

¹²² Ibid.

¹²⁴ See National IST Research Directors Forum Working Group on Public Procurement, *Pre-Commercial Procurement of Innovation*, p. 17 (2006).

market (e.g. smart technologies that reduce power consumption during peak hours). 125

Procurement instruments to promote industrial innovation

Government interventions to promote industrial innovation include:

i. Tender preferences

- Governments can include requirements in the tender specifications for innovative solutions to the contract requirements, for example, i) requirements for development with local and/or new technology in designated sectors or products/services which can also be combined with the application of "set-aside" rules, ii) requirements for local value addition in designated industries or products/services, iii) explicit preferences for the use of alternative energy solutions, etc.
- Governments can also designate goods and services that satisfy certain pre-set quality criteria and provide preferences for them in public procurement.
- In view of providing explicit domestic preferences for designated industries or products/services, requirements for local production with minimum local content thresholds can be included to the contract requirements, and for procurement contracts lower than specified thresholds, tendering can be restricted only to national bidders or suppliers locally registered.

ii. Public procurement of innovation through public private dialogue

Governments can work with private companies in a dialogue to address specific contractual needs that do not exist in the commercial market. This negotiated tender process would target firms that are capable of undertaking innovative production designs and techniques. However, this may undermine transparency and competition in procurement processes and be susceptible to corruption and conflicts of interest.

iii. Release of resources for innovative contractors

Government procurement policy can approve of the release of a larger percentage of procurement funds upon awarding of contracts to innovative contractors who, due to the costs associated with innovation, would otherwise not be able to access the necessary financing to execute the contracts.

¹²⁵ Fraunhofer Institute, Innovation and Public Procurement. Study for the European Commission (No ENTR/03/24) (2005) p. 15.

iv. Capacity building and awareness-raising

Government interventions can be capacity building to develop skills necessary for designing innovative commercial solutions for government procurement needs, and raising procurers' and firms' awareness of innovation needs in contract design and firms' responses through information dissemination.

Figure 2 illustrates the general adoption patterns for many innovative products. After discovery by a small minority of consumers (or producers), an innovative product, process or service will, if successful, begin a process of wider diffusion. By putting the governments' substantial financial pull behind technologies at the innovation or early adoption stages, the government may be able to push an innovative product further along the path of adoption within the private market.

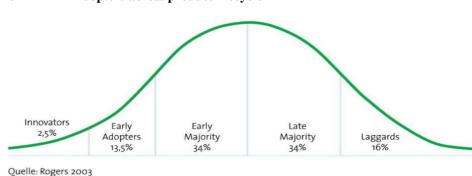


Figure 2 Adopters across product lifecycle 126

Public procurement is often viewed as a key driver for innovation, particularly in the manufacturing and construction industries and generally in relation to the achievement of sustainable development. Different industrial strategy policy objectives for promoting innovation emerge depending on the type of procurement a government undertakes. According to the literature, there are three main types of public procurement relevant for promoting innovation and industrial strategies:

• Direct procurement refers to situations in which a government agency or representative makes purchases for use by that body, and where the need for the product is largely confined to the public. Much of the procurement carried out by national defence agencies, such as the procurement of military vehicles and hardware, would fall into the category of direct procurement.

¹²⁶ Rogers, E. M., *Diffusion of Innovations*, New York: Free Press, p. 5 (2003).

- Co-operative procurement corresponds to situations in which the public entity makes purchases of innovations also sought after by segments of the private sector. An example of such purchases would be government vehicles using alternative fuels or drive systems, where it is foreseeable that there could also be a private market for these goods. In such a situation, it is possible that public procurement of a product that may be innovative, environmentally friendly, or both, could also spur demand and adoption in the private market, leading to a greater diffusion of this technology
- Catalytic procurement refers to situations in which the ultimate users of the technology
 will be private industry or consumers, and the state merely promotes the development of
 this innovation financially, such as might be the case for innovative kitchen appliances.
 Here, the government may have identified an un-serviced niche in the market and
 sought to bring about the development of superior technologies to pursue certain
 policies, like greater home energy efficiency.

3.3 Green public procurement for sustainable development

Governments are increasingly seeking to procure goods, services and works with a reduced environmental impact throughout their life cycle compared to goods, services and works with the same primary function that would otherwise be procured. 127 Indeed, as the Jamaica case study indicates, sustainability is included as one of the components of value for money in national procurement policy. The rapid development of green procurement is reflected in many initiatives to promote the general goal of sustainable development. For example, in 2009, former U.S. President Obama signed an Executive Order directing all federal agencies to 'increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities'. 128 The Executive Order also stipulates that federal agencies must immediately start conducting 95 per cent of their purchases through green certified programmes, and achieve a 28 per cent greenhouse gas reduction by 2020. 129 In the U.S., federal, state and local governments constitute more than 38 per cent of GDP, with the federal government alone spending USD 3.6 trillion in 2010. Clearly, a redirection of government purchasing could create large markets for clean power, electric vehicles and efficient buildings, as well as for more sustainably produced furniture, paper, cleaning supplies, uniforms, food and services. If the U.S.

¹²⁷ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions, *Public procurement for a better environment*, European Commission, Brussels, p. 5 (2008).

¹²⁸ United States Executive Order 13514.

¹²⁹ C. Parenti, *The Big Green Buy: How Government's Purchasing Power Can Drive the Clean-Energy Revolution*, The Nation, Aug. 2, 2010.

government buys green goods and services, it would likely serve to drive down marketplace prices, adding momentum to the private sector.

A conceptual difference exists between using public procurement for green innovation and green procurement. Public procurement for green innovation involves the purchase of green products or technologies that do not yet have a significant market – those products with unrealized economic potential. More than simply taking environmental impacts into consideration in the procurement process, public procurement for green innovation is about giving preference to those products that offer innovative solutions to environmental problems, or innovative methods of lessening the environmental impact of the activity for which the government is making its purchase. It is both about changing today's technology to make it more environmentally friendly as well as about propelling broader innovation leading to benefits, which will materialize in the future. ¹³⁰

Procurement instruments to promote green public procurement

As the case studies indicate, government interventions to protect the environment and accordingly, to realize sustainable development through procurement contracts include:

i. Tender preferences

- As part of the criteria for purchasing goods and services, environmental sustainability can be included in the awarding of contracts. In this context, preference can be given to goods manufactured with less carbon emission and better use of energy and other resources. Use of international environmental standards such as ISO performance standards as a basis for procurement contract specifications can be an actual example of offering preferential treatment for green products.
- Government can also introduce a system to allow only those suppliers who meet the
 pre-set green requirements including energy efficiency, carbon emission, recycling and
 other environmental factors to participate in the public procurement market for certain
 categories of products.
- Price preferences for green procurements can be also provided.

ii. Set-asides for green products

A requirement for the specified percentage of total procurement tenders to be green can be introduced.

¹³⁰ See, for example, OECD, *The environmental performance of public procurement: Issues of policy coherence*, (2003)

iii. Building infrastructures of green-purchasing

- Accounting methods that better account for the environmental impact of a purchase over its lifetime
- More comprehensive and accessible information networks on the environmental impacts of purchases for procurement officers or the public
- Capacity building programmes and guidelines for procurement officers about where and how to incorporate environmental considerations into procurement decisions.

3.4 Promotion of exports to foreign public procurement markets

One of the primary objectives of an effective procurement policy is the promotion of efficiency, which means choosing the supplier who offers the best value for money. Competitive bidding is one of the common methods procurement agencies rely upon to achieve better value for money. The lower the prices and better the quality of goods or services being procured, the more governments will be able to purchase and the more firms will have to work to improve to maintain a place in the market. Competition concerns arising from public procurement are also largely the same concerns that can arise in an "ordinary" market context: the reaching of collusive agreements between bidders during the tender process or across tenders.

The literature on public procurement policies and export promotion focuses mainly on assisting SMEs in becoming competitive and export-oriented. Generally, it is thought that a more competitive domestic industry is more likely to expand its potential market place to include exporting to other countries. Export-oriented industrialization for developing and transitional economies, therefore, relies on an open economy that exports goods to industrialized nations and other markets. As domestic firms become more competitive, the more efficient and responsive ones are better able to withstand foreign competition and ultimately, to contest meaningfully in foreign markets. However, the flip side is that less competitive firms may be driven out of particular markets.

It is generally thought that governments can only secure many of the benefits of open borders—greater choice, better value for money, access to international standards of managerial practices and cutting edge technology—by reforming their procurement practices domestically based on best practice to obtain value for money and effective competition. In the private sector, this can lead to greater competitiveness and export readiness. In public procurement, improved techniques can also affect exports.

Reciprocal export opportunities can also be negotiated within bilateral or regional trade agreements. The Asian Development Bank emphasizes¹³¹ that when presented with lucrative commercial opportunities within an encouraging policy framework, properly incentivized managers rise to the challenge. Many developing country exporters of commodities, raw materials and parts and components benefit indirectly when their corporate buyers win contracts to supply foreign governments. Direct exports to foreign governments are only part of the picture in a world of integrated supply chains. Moreover, In a world where there are substantial flows of foreign direct investment—including investments by local subsidiaries of foreign firms—and where regional and more far-reaching production networks and supply chains have extended their reach across many sectors and countries, state purchasers do not always realize how much they already benefit from relatively open borders.¹³²

However, indirect supply to foreign governments through corporate buyers winning contracts is beyond the scope of this paper, because it is purely export itself rather than direct participation in foreign public procurement markets. The focus here is instead about how governments can support their SMEs to expand direct supply to foreign governments as part of governments' endeavours in export promotion.

Procurement instruments to promote exports to foreign public procurement markets

Although the case studies do not include many examples, government interventions to promote exports to foreign public procurement markets may include:

- Entry into the WTO GPA and bilateral or multilateral FTAs governing government procurement
- Providing support to competitive SMEs to enter international procurement markets such
 as offering information on foreign procurement markets, supporting SMEs' market
 exploitation activities, for example, by way of dispatching a business delegation or
 funding participation in overseas public procurement exhibitions.

Trade and Procurement: Effective Public Purchasing and Market Access. www.adb.org/sites/default/files/publication/30229/trade-procurement.pdf

4. International procurement agreement, policy space and industrial development strategies

Several legal frameworks determine how governments can use public procurement to stimulate green innovation. While the plurilateral WTO GPA provisions apply to the 47 governments that are signatory parties, the WTO ASCM agreement contains more generally applicable provisions relating to the procurement of goods. In addition to WTO agreements, governments are also increasingly choosing to incorporate public procurement provisions or chapters in their regional and bilateral trading arrangements. These procurement regimes provide for some discretion for governments to determine their own social and environmental standards and specifications. Nevertheless, this overview shows that there are limits to this discretion, and that these limits vary between the different agreements.

4.1. WTO government procurement agreement

Public procurement was explicitly excluded from the national treatment obligation in the General Agreement on Tariffs and Trade (GATT). ¹³³ Consequently, certain GATT parties negotiated a Public Procurement Code applicable only to the signatory parties. The Public Procurement Agreement (GPA)¹³⁴ became the successor to the Procurement Code during the Uruguay Round negotiations establishing the WTO. While remaining plurilateral and voluntary¹³⁵ in membership, the GPA extended its coverage to services and construction works, entities at sub-central and local government level and certain public and regulated private companies. ¹³⁶ The GPA also established new financial thresholds for contracts covered by the agreement, along with stronger provisions regulating procedural and technical requirements imposed by entities on services and goods providers. ¹³⁷

The extent to which the commitments of the GPA govern procurement promoting green innovation must be determined on a case-by-case basis due to the different schedules each contracting party has negotiated. It can nonetheless be argued that there is sufficient flexibility under the GPA to promote green innovation through public procurement without violating the terms of the agreement. This can be undertaken either *ex ante* by excluding strategic entities or markets from coverage of the agreement in negotiations, or *ex post* by justifying the measure under Art. XXIII exceptions related to security, the environment or human health. Smaller green

¹³³ Article III:8(a) states that 'the provisions regarding national treatment for imported products shall not apply to laws, regulations or requirements governing the procurement by government agencies of products purchased for government purposes.'

¹³⁴ The GPA came into force on 1 January 1996.

The GPA remains voluntary to the original GATT signatory parties, however, new WTO members may be required to join the GPA in their Accession Protocol.

¹³⁶ Subject to negotiated limitations.

Available at http://www.wto.org/english/tratop_e/gproc_e/thresh_e.htm.

innovation contracts will fall below the threshold levels that determine coverage with regard to value. This is of importance for smaller contractors as the U.S. also negotiated a carve-out to promote domestic SMEs by exempting them from the obligations of the GPA.

Where applicable, the GPA lays down rules guaranteeing fair and non-discriminatory conditions for internationally competitive tendering, and emphasizes the need for transparency at each step of the procurement process. Art. IV provides the cornerstone to the agreement by setting out non-discrimination and national treatment as the two basic principles governing the GPA. It requires each party to immediately and unconditionally provide treatment to the products, services and supplies of other parties that is no less favourable than that accorded to domestic products and services and those of any other party. Further, each party shall ensure that its entities will not treat a locally-established supplier less favourably than another locally-established supplier on the basis of degree of foreign affiliation or ownership and that its entities shall not discriminate against locally-established suppliers on the basis of the country of production of the good or service being supplied, provided that the country of production is a party to the GPA.

The GPA does not cover public procurement markets comprehensively. The reach of the agreement is qualified by Art. II, which states that the Agreement applies to any law, regulation, procedure or practice regarding any procurement by entities as specified in Appendix I annexes. Governments seeking to use procurement to stimulate green innovation through tendering processes that discriminate against foreign or small businesses can *exclude* relevant agencies, goods or services from the commitments of the provisions during the negotiation process. The GPA typically follows the positive list approach to determine the reach of the provisions with regard to entities, and only applies to entities listed in an Annex. This gives GPA members such as the Republic of Korea and the UK ex ante flexibility in negotiating to what extent they wish their domestic procurement practices to be subject to the stipulations of the commitments.

The WTO GPA prohibits the use of offsets, also known as domestic content requirements, under Article IV.6, although there are limited exemptions for developing countries pursuant to Article V. That is, a signatory party may not generally seek to use procurement contracts to support domestic industries that are developing green innovations. Local content requirements may not be built into any procurement contract subject to the provisions of the GPA. This is because offsets—defined by the WTO as 'any condition or undertaking that encourages local development or improves a Party's [a Signatory] balance-of-payment accounts, such as the use

¹³⁸ Annex I 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.'

of domestic content, the licensing of technology, investment, counter-trade, and any similar actions or requirements' are generally considered to violate the cornerstone principles of national treatment and non-discrimination. Offsets are thus also implicitly prohibited under the national treatment and non-discrimination provisions set out in Art. IV.1 and IV.2.

This notwithstanding, procurement tender requirements can, in principle, also include environmental standards that relate to how a good or service is produced as well as its physical properties. Article X.6, for example, includes explicit permission for governments to use technical specifications to protect the environment:

Article X.6: for greater certainty, a party, including its procuring entities, may, in accordance with this Article, prepare, adopt, or apply technical specifications to promote the conservation of natural resources or protect the environment.

4.2. Relevant disputes under GATT and WTO

As yet, there is still little case law interpreting the necessity of preferential procurement that breaches WTO GPA commitments to draw upon. This is partly because most procurement disputes are between contractors and the procuring agency and take place in domestic bid challenge systems.¹⁴⁰

i. Belgian family allowances¹⁴¹

This landmark dispute was the first GATT case to find that a governmental social policy violated non-discrimination trade rules. The complaint was brought by Norway and Denmark against a Belgian law that levied a 7.5 per cent charge on foreign goods that were purchased by public bodies, when these goods originated in a country whose system of family allowances did not meet specific requirements. Belgium granted exemption from the levy on products purchased by public bodies when they originated in Luxemburg and the Netherlands, as well as in France, Italy, Sweden and the UK, but not for other GATT contracting parties, including Denmark and Norway.¹⁴²

The panel found that the Belgian legislation was discriminatory in granting an exemption based

¹³⁹ WTO Report, Revision of the Agreement on Public Procurement, Geneva, 8 December 2006.

¹⁴⁰ The bid challenge procedures of the GPA provide that procurement decisions shall be subject to challenge by private bidders before national courts or impartial administrative bodies. Any disputes regarding the implementation of the Agreement by the signatory parties are also subject to the provisions of the WTO Dispute Settlement Mechanism.

¹⁴¹ GATT Panel Report Adopted 7 November 1952 (G/32 - 1S/59)

¹⁴² The panel found that the levy was only collected on products purchased by public bodies for their own use and not on imports as such. Further, that the levy was charged when the purchase price was paid by the public body and therefore should be treated as an 'internal charge as determined by paragraph 2 of Article III of the General Agreement. *Ibid.* Para 2.

on certain conditions. This finding implies that, even if based on domestic social policy, a WTO member cannot justify discriminatory procurement legislation under GATT Articles I or III. Nevertheless, as indicated in the U.S.-Shrimp Case, an Art. XX exception may allow a trade restriction based on domestic environmental and possibly social policy in an exporting country, as long as it is not applied on a discriminatory basis.

ii. Canada – Feed-In-Tariff dispute¹⁴³

The *Canada–Feed-in Tariff* (*FIT*) dispute highlights the complications that emerge when determining whether a challenged government purchase is or is not a government procurement – as defined in the GATT Article III.8(a) derogation. The *FIT* dispute emerged when Japan and the EU challenged the legality of the domestic content requirements set out in the FIT scheme established by the Canadian Province of Ontario. ¹⁴⁴ The FIT programme pays generators of electricity produced from certain types of renewable energy a guaranteed price for electricity delivered into the Ontario electricity system under 20-year or 40-year contracts. ¹⁴⁵ However, only facilities geographically located in Ontario that, inter alia, generate electricity exclusively from specified sources of renewable energy were deemed eligible to participate in the Ontario Power Authority's scheme.

On appeal, the appellate body clarified that the term 'governmental agencies' also refers to those 'arms-length' entities acting for or on behalf of the government in the public realm, within the competences that have been conferred on them to discharge governmental functions. There need not be a charge to the public account. The appellate body found that the scope of the derogation under Article III.8(a) should be limited to products purchased for the use of the government, consumed by the government or provided by the government to recipients in the discharge of its public functions. ¹⁴⁶

The appellate body concluded that the domestic content requirements scheme was in violation of the GATT national treatment obligations.

¹⁴⁴ A FIT is an increasingly employed instrument for promoting investment in renewable energy typically through fixed pricing for the purchases of renewable energy power above the market price for electricity.

¹⁴⁵ The Ontario FIT Programme is divided into two streams – (i) the FIT stream, and (ii) the microFIT stream – for

¹⁴³ Appellate Body Report, Canada – Measures Relating to the Feed-In Tariff Program, 6 May 2013, WT/DS412/AB/R and WT/DS426/AB/R, ¶1.31.

¹⁴⁵ The Ontario FIT Programme is divided into two streams – (i) the FIT stream, and (ii) the microFIT stream – for projects with a capacity to produce up to 10 kW of electricity. Participants under the microFIT stream are typically small household, farm, or business generation projects. Panel Report, *Canada – Measures Relating to the Feed-In Tariff Program*, WT/DS412/R, WT/DS426/R,19 December 2012, ¶7.66 (referring to FIT Rules Exhibit (version 1.5.1), Section 2.1(a)(iii); and microFIT Rules (version 1.6.1), Section 2.1(a)(iv)).

¹⁴⁶ The appellate body further noted that the characterization of the provision as a derogation does not pre-determine the question as to which party bears the burden of proof with regard to the requirements stipulated in the provision. Canada–FIT, ¶5.57.

iii. **India – Solar Cells Dispute**

In the India - Solar Cells case, the U.S. challenged India's measures relating to the domestic content requirements under the Jawaharlal Nehru National Solar Mission ('NSM') for solar cells and solar modules as being inconsistent under the GATT national treatment obligation pursuant to Article III.4. In settling the claim under GATT Article III.4, the panel report explicitly followed the legal reasoning set out in the Canada - FIT appellate body report's interpretation of Article III 8(a) of the GATT 1994. 147 It consequently agreed with the U.S. submission that Article III. 8(a) did not apply. Relying on the 2013 decision of the appellate body in Canada – Renewable Energy/Feed-In Tariff Program, the panel concurred that the product procured (electricity) was not in a competitive relationship with the product being discriminated against (solar cells and modules), and therefore, such discrimination was not covered by the derogation of Article III:8(a). This finding was upheld on appeal. 148

4.3. **Regional procurement frameworks**

In addition to the WTO legal frameworks regulating members' public procurement systems, regional trade agreements may also include provisions that can constrain the extent to which public procurement can promote green innovation. Two-thirds of the RTAs notified to the WTO since 2000 include provisions related to public procurement, and about 28 per cent of extant RTAs treat public procurement in a comprehensive way. 149 The European Union currently has the most comprehensive regional procurement framework.

i. The European Union

The WTO GPA is incorporated into EU law by Council Decisions 150 requiring EU member states to transpose its content into their national laws and regulations. The EC procurement directives are prima facie compatible with the GPA. Non-discriminatory product-related specifications on the environmental performance of products are permitted in the EU, provided that these requirements a) have not already been harmonized at Community level; b) that they relate to environmental justification, and c) that they are not more restrictive of intra-Community trade than necessary. 151

¹⁴⁷ Panel Report, India - Certain Measures Relating to Solar Cells and Solar Modules, WT/DS456/R and Add.1,

circulated to WTO Members 24 February 2016. ¶7.115.

148 Report of the Appellate Body. India – Certain Measures Relating to Solar Cells and Solar Modules AB-2016-3 Report of the Appellate Body. WT/DS456/AB/R. 16 September 2016 ¶5.32.

Robert D. Anderson, Anna C. Müller, Kodjo Osei-Lah, Josefita Pardo de Leon and Phillipe Pelletier. Public procurement Provisions in Recent Regional Trade Agreements in: The WTO Regime on Public procurement: Challenge and Reform, Cambridge University Press.

¹⁵⁰ Council Decisions N 94/800/EC December 22, 1994.

¹⁵¹ Peter Kunzlik, International Procurement Regimes and the Scope for the Inclusion of Environmental Factors in Public Procurement, 3 OECD Journal on Budgeting (2003).

The Treaty Founding the European Union (TFEU) also includes provisions that regulate the ability of member states to provide aid to stimulate green innovation if it 'distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods [...] in so far as it affects trade between Member States'. 152 The European Commission has stated that 'a tender procedure guaranteeing full competition can be taken as an important indicator that the [procurement contract is at] market price and that there is no State Aid. Complying with procurement rules will in these cases therefore also help in ensuring respect of the State Aid provisions'. 153

ii. **NAFTA**

The North American Free Trade Agreement between Canada, Mexico and the U.S. contains a comprehensive procurement chapter. This sets out both procedural and substantive provisions to ensure transparent and non-discriminatory procurement practices between the parties, including the establishment of a bid challenge mechanism. 154 The agreement prohibits offsets 155 but introduces a joint programme to promote procurement opportunities for SMEs. 156 In the U.S., the federal government explicitly aims to award at least 23 per cent of its roughly USD 400 billion in annual procurement contracts to small businesses, with lower targets for businesses owned by women, disabled veterans and the economically disadvantaged. 157 Federal procurement contracts between USD 25,000 and USD 100,000 are typically reserved for small businesses. 158

The U.S. and Canada are parties to the WTO GPA, unlike Mexico. The WTO GPA provisions are stricter than those of NAFTA, both in terms of non-discrimination but also in its dispute settlement mechanism. Consequently, when the U.S. House of Representatives passed a stimulus bill that provided a 25 per cent competitive margin for U.S. iron and steel companies in state purchasing, Mexico and Canada faced different treatment from the U.S. The bill was challenged by the EU and Canada in the WTO, with the result that the final version of the legislation explicitly stipulated that the rule must be compatible with the U.S.' international obligations, including the WTO GPA obligations, which assure other members of the WTO GPA access to U.S. procurement markets covered under the agreement. As a non-GPA party,

¹⁵² TFEU Articles 107-109.

¹⁵³ The European Commission, Frequently Asked Questions about State Aid, 2007.

¹⁵⁴ NAFTA Article 1017.

¹⁵⁵ NAFTA Article 1006.

¹⁵⁶ NAFTA Article 1021.

¹⁵⁷ Section 15(g)(1) of the Small Business Act reads: The Government wide goal for participation by small business concerns shall be established at not less than 23 per cent of the total value of all prime contract awards for each fiscal

Mexico did not benefit from the protection offered under the GPA, and remained subject to the discriminatory measure.

Clearly, an RTA such as NAFTA offers more flexibility than the WTO to promote indigenous green innovation through procurement. Not only was the U.S. permitted to implement its 'Buy America Act' but NAFTA initially allowed Mexico's national oil and electric companies to set aside one half of their procurement each year for domestic suppliers. NAFTA also allowed Mexico to impose local-content requirements for turnkey construction projects. For capital intensive projects, Mexico negotiated set-asides for as much as 25 per cent for local inputs, and up to 40 per cent Mexican content for labour intensive projects.

5. Conclusions

This conclusion sets out the main policy considerations identified in this report, which should be considered when using different measures to promote industrial strategies through public procurement contracting. This chapter finishes with final recommendations.

5.1. Public procurement and industrial strategy: policy considerations

5.1.1 Offsets for promoting SMEs and local preference

This overview indicates that offsets are an attractive option for both developing and developed country governments and a permanent fixture of international trade. The benefit of an offset is visible, while the costs are masked. Yet, despite their growing importance, an overview of the literature indicates that for all the attention surrounding them, little is known about the effectiveness of these policies in meeting their stated aims.

Opinion on offsets is polarized. On the one hand, proponents argue that preferential public procurement can achieve local social policy goals to assist the local economy. The New Economics Foundation (NEF) report on local procurement preferences in 2005 established an economic case for promoting revitalization through public spending. NEF findings indicate that local preference laws kept money circulating in the local economy by fostering local economic linkages and raising the capacity and expertise of local residents and suppliers ¹⁶⁰ Other research suggests that although procurement expenditures may rise in response to a local preference programme, governments believe that the additional costs are outweighed by the support for the development, enrichment, growth, expansion and retention of the local business community, thereby keeping any tax dollars spent on contracts in the area.

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¹⁵⁹ This was phased out by 2003.

¹⁶⁰ New Economics Foundation Report, 2005 cited in Seim, E. K. (April 2009). Bid Preference Programs and Participation in Highway Procurement Auctions. Philadelphia.

There are also studies that have shown that certain types of offsets can be economically advantageous for less advanced countries, in some cases contributing to knowledge transfer and other efficiency gains. As noted above, the Reis and Cabral study on procurement preference programmes in Brazil found that SMEs benefited as a result of this type of intervention, measured by their involvement and success rates in contract competitions. ¹⁶¹ A 2008 study, 'Local Preference in Municipal Audit Markets', conducted by the Owen Graduate School of Management at Vanderbilt University, concluded that a local preference law could serve its purpose in that it always increases the likelihood that the local firm wins. ¹⁶² The model used by the author demonstrates that insiders benefit from a local preference at a cost to the outsider through a lower chance of winning, while there is an additional cost to the municipality through higher average prices. A further study examining the impact of local procurement preferences on the local economy as well as the market impact identified an increase in employment in the local economy. ¹⁶³

Studies also indicate that the positive effects stemming from local preferences can be undermined by their associated costs. ¹⁶⁴ Depending on cost differentials between local and non-local firms, the policy creates the potential for higher consumer prices, decreased demand, reduced spending and job loss. Thus, on the other hand, procurement offsets are often viewed as inefficient and counter-productive, diverting trade away from highest value uses. ¹⁶⁵ Offset arrangements are also associated with corruption, particularly when contract negotiations are initiated by suppliers rather than governments. SMEs seem more vulnerable than large firms to corrupt practices in their effort to win government contracts. Corruption can be particularly harmful for SMEs in developing countries, where procurement opportunities are often held hostage by obscure bidding procedures shielded by vested interests. ¹⁶⁶

Local Preference in Public Procurement A position paper from NIGP: The Institute for Public Procurement On the Importance of Applying a Best Value Analysis When Government Has Adopted Local Procurement Preferences, www.nigp.org/docs/default-source/New-Site/position-

papers/localpreferencepositionpaper2015cap.pdf?sfvrsn=2

162 Shor, K. H. (July 2008). Local Preference in Municipal Audit Markets.

 ¹⁶³ Lorelli, R. S. (June 2003). The Economic Effects of Local Purchasing Preferences: A Case Study of Computer Systems West in Lane County. University of Oregon.
 ¹⁶⁴ Travis K. Taylor, "Countertrade Offsets in International Procurement: Theory and Evidence" in Murat A. Yulek

¹⁶⁴ Travis K. Taylor, "Countertrade Offsets in International Procurement: Theory and Evidence" in Murat A. Yulek and Travis K. Taylor, eds., Designing Public Procurement Policy in Developing Countries (New York: Springer, 2012); Mark J. Nackman, "Critical Examination of Offsets in Defense Procurement: Policy Options for the United States" (2010–11) 40 Public Contract Law Journal 511 at 516. Ryan J. LAMBRECHT, "The Big Payback: How Corruption Taints Offset Agreements in International Defense Trade" (2013) 70 Air Force Law Review 73 at 76; Carola Hoyos, Daniella Tsar, and Antoine Amann, "Q&A: What are Offsets?" Financial Times (9 October 2013), online: https://www.ft.com/content/87728d1e-197a-11e3-afc2-00144feab7de>

¹⁶⁵ Travis K. Taylor, "Countertrade Offsets in International Procurement: Theory and Evidence" in Murat A. Yulek and Travis K. Taylor, eds., Designing Public Procurement Policy in Developing Countries (New York: Springer, 2012).

¹⁶⁶ Lea Kaspar & Andrew Puddephatt. Benefits of transparency in public procurement for SMEs: General lessons for Egypt. Global Partners and Associates, March 2012.

There is also opposition to local preference policies from procurement agents themselves. NIGP NASPO, likewise "believes that public procurements should be made under conditions that do not restrain markets and that foster adequate competition in the market for the item or service purchased" (NASPO, 2010). Upon review of the issue, NIGP maintains the position that local preference policies are in conflict with the fundamental public procurement principles of impartiality and full and open competition and, therefore, does not support the use of local preference policies as an appropriate tool for improving local economies. However, acknowledging that governments may, in fact, adopt local preferences as a tool for improving local economies unless otherwise prohibited by federal court preferences, NIGP recommends that local procurement preferences be reflected as one of many criteria in a 'best value' evaluation and award process. Best value means the most advantageous balance of price, quality and performance identified through competitive procurement methods in accordance with stated selection criteria. There is no uniform statutory or regulatory definition, but it generally refers to a source selection based upon a cost-benefit analysis. The application of best value procurement to local purchasing preferences extends the concept of considering non-cost items in the evaluation process, and thereby provides the rational basis for including geography-based criteria.

In economic terms, rather than compete on the basis of the price and quality of their goods and services, suppliers win procurement contracts because of their degree of local content, even where this involves governments purchasing equipment or services it does not need or, more likely, pays more than what is necessary to obtain the goods and services because of the offset terms, a clear welfare loss. Any benefits incurred by the domestic economy are difficult to quantify, in part because offset agreements are often spread across many years, and may be characterized as more political in terms of satisfying particular lobby groups, rather than economic in benefiting the general public. Not only is there an increased cost to local taxpayers and government, just to implement such a programme, but it is also a complicated and potentially burdensome administrative process that may lack equal opportunity or reciprocity with other jurisdictions. ¹⁶⁷ In sum, the actual impact of offsets in terms of job creation or diversion, technology transfer, and increased international competitiveness of the domestic industry tends to be much lower than expected. ¹⁶⁸

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¹⁶⁷ Local Preference in Public Procurement A position paper from NIGP: The Institute for Public Procurement On the Importance of Applying a Best Value Analysis When Government Has Adopted Local Procurement Preferences, 2015.

¹⁶⁸ D. Collins. Government Procurement with Strings Attached: The Uneven Control of Offsets by the World Trade Organization and Regional Trade Agreements. Asian Journal of International Law www.cambridge.org/core/services/aop-cambridge-

However, data on offsets are scarce. Few firms report these expenses to their shareholders, and countries are reluctant to publicize such arrangements. Accordingly, the magnitude of offsets may be considerably higher than realized. Comprehensive empirical research is rare. Indeed, although most OECD countries make policy interventions to assist SMEs in public procurement, only a minority actively monitors and evaluates their policies. Part of the reason may be that policy objectives for SMEs in public procurement themselves lack specificity, which in itself does not lend itself to conducting policy assessments. Not only is there difficulty in securing survey access to populations of public buyers and SME suppliers, but public procurement is a relatively new field of academic inquiry, which has also tended to prioritize large firms over SMEs.¹⁶⁹

5.1.2 Public procurement for innovation

Despite general interest in the public procurement of innovation, cost-benefit analyses are also scarce or it is too premature to carry out impact assessments. One overview of the research concluded that all evaluations reviewed are seen as falling short of providing a rigorous and transparent assessment of policy impacts.¹⁷⁰

One methodological issue common to all discussions on the impact of preferential procurement policies is that the challenge of isolating or delineating the specific intervention to differentiate it from other demand side and even supply side measures is complex. Innovation outcomes may only be evident after some time following the intervention, after certain impacts materialize. Some initiatives oriented towards stimulating innovation through procurement often do not go beyond statements of intent and guidelines containing aspirations to support innovation procurement, without concrete implementation, let alone monitoring and evaluation mechanisms. Data availability constitutes another hurdle in assessing impact. Procurement data is fragmented and unreliable, allowing limited comparability across countries, and consequently, the share of innovative procurement is difficult to estimate.¹⁷¹

core/content/view/9FB28D1F244BCE97A0E15C7D46813019/S2044251316000278a.pdf/div-class-title-government-procurement-with-strings-attached-the-uneven-control-of-offsets-by-the-world-trade-organization-and-regional-trade-agreements-div.pdf

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169 D. Collins. Government Procurement with Strings Attached: The Uneven Control of Offsets by the World Trade Organization and Regional Trade Agreements. Asian Journal of International Law.

¹⁷⁰ Aschhoff, B., Sofka, W., 2009. Innovation on demand—Can public procurement drive market success of innovations. Research Policy, 38 (8): 1235–1247;

Elvira Uyarra Review of Measures in Support of Public Procurement of Innovation. Nesta Working Paper No. 13/17. www.nesta.org.uk/sites/default/files/working_paper_-

5.1.3 Green Public Procurement (GPP)

The main purpose of GPP is to mitigate climate change by enhancing the social environment effect and increasing the effectiveness of government spending and social welfare through the diffusion of green products. ¹⁷² Some experts argue that direct environment regulations such as a cap and trade system and carbon tax are more effective tools for CO₂ emission reductions and climate change mitigation than GPP. 173 Several empirical studies show that GPP influences the reduction of greenhouse gases and energy consumption, and limits the amount of toxic substances. Kunzlik studied various certification systems of green products and GPP policies in the EU, NAFTA, Australia and New Zealand. He concludes that the governments promoted lead consumers in new markets for green technology and green products, and found that GPP and certification systems of green products induced private demand for greener products. Government can stimulate demand and expand the market of own standard green products and technology through GPP by stimulating R&D. This is followed by market creation and escalation, which affects the size and structure of the market. After the market escalation stage, the number of potential suppliers willing to participate in GPP contracts increases. By increasing the number of entrants, competition in the market is stimulated, and the price of green products and services decreases while their quality is enhanced.¹⁷⁴

However, the majority of ex-post empirical studies and policy assessment reports only partially investigate the benefit and cost of GPP, without consideration of the reaction of other economic players and interaction between industries. Therefore, in order to comprehensively analyse the macro-economic impacts of GPP, the effects of GPP by changing the behaviour of several economic entities and markets must also be considered.

5.2. **Final recommendations**

The most salient issue this study uncovers is that there is a dearth of information and data on the costs and benefits of using government procurement to promote specific industrial strategies, even in developed countries with comprehensive preference systems. This is a non-trivial issue, for it is impossible to identify firm recommendations or conclusions about the impact of any particular intervention through procurement contracts, if no data on such procurements exist. It is also a challenge to isolate the effect of any single policy instrument on a given target.

As an integral part of any preferential procurement policy, pilot studies need to be implemented to assess cost-benefit estimates and determine whether the offset or price preference is superior

¹⁷² European Commission, 2012; 2011; Yoon et al., 2009

¹⁷³ Aschhoff and Sofka, 2008. 174 Uyarra and Flanagan, 2009; OFT, 2004).

to other instruments. For example, the government could make a subsidy available to a targeted industry or segment of the population, which could in turn foster growth more effectively and more transparently in the domestic economy compared to the offset.

Governments need to build databases to allow for formal accounting of preferential procurement programmes. Preferential procurement polices such as offsets involve significant public funds. As such, the performance of these funds ought to be accounted for by an offset audit team. It would then be possible for the "public-at-large to decide whether the losses or profits are worth the original objective." ¹⁷⁵

Lastly, procurement measures are mediated by their implementation. In particular, most interventions are conditioned by the way they are conducted, especially by the competences and skills of procurers. That is, the outcome of any particular procurement will be influenced as much by the capacity and capability of those who are party to the process, as by the nature of the contract to be delivered.¹⁷⁶

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¹⁷⁵ D. Collins. Government Procurement with Strings Attached: The Uneven Control of Offsets by the World Trade Organization and Regional Trade Agreements. Asian Journal of International Law.
¹⁷⁶ The UK Government HM Treasury Review on Competitive Dialogue (2010).

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