DISCRIMINATORY PUBLIC PROCUREMENT POLICIES

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DEDICATION

This work had been dedicated to my daughter, Margaret Nakimuli Sseennoga who was born while I was away in Netherlands pursuing this course.
ABSTRACT

This research, Discriminatory Public Procurement Policies, develops a model that guides developing countries in need of striking a balance between promoting free trade through competitive public procurement (primary goal) and the protection of a country’s legitimate social economic objectives (secondary goal).

To achieve the social economic objectives, governments usually institute discriminatory practices in their procurement framework. Discriminatory procurement is the practice by government to favour its own domestic suppliers over foreign firms for advertised contracts. Opening up procurement markets to foreign firms in especially developing countries would expose the domestic firms to large foreign firms with high quality products, produced at lower prices due to their high technological base and efficient production mechanism. This would render many of them out of business leading to job losses and reduced standard of living. On the other hand, favouring domestic firms for advertised contracts would perpetuate complacency in production leading to inefficiency. In the absence of foreign competition, there is little incentive for domestic firms supplying the public sector to invest in innovation and research to keep costs down and meet international standards. Developing countries are then faced with a problem of making a decision of opening the procurement markets given the rather contradicting policy outcomes.

First, this research quantitatively established the fact that there are sizeable savings that government would achieve if it opened up its procurement market to foreign competition rather than closing it. This was established through use of a modified Cecchini analysis. Using data collected from five government ministries sampled according to their annual spend; we determined the monetary savings that Uganda government could achieve if it opened up its procurement markets. The saving computed are sector dependent but average at 10% for the entire economy. At what savings level, then, would a country justifiably open up its procurement market?

To answer this question, we develop a model that can be used to determine whether or not to award the advertised contracts exclusively to a domestic firm or to a foreign firm. This is our second phase. Using the accounting multiplier computed through the Social Accounting Matrix (SAM), we calculated the impact of government expenditure on
the economy. We argue that savings made through buying competitively can be reinvested into a priority sector (chosen in regard to government policy objectives). The impact on the economy created by these savings is compared with the impact of buying domestically. This leads to the development of a Procurement Policy Option Model (PPOM) used as a decision tool to determine whether a contract should be awarded to a foreign or a domestic firm.

In our third phase, we use the PPOM to analyse the various discriminatory practices available to achieve socio economic objectives. Specifically we consider set asides, preference schemes, offsets and local content requirements. The choice of these four schemes is based on their broader use in the current literature. For each of the four schemes we analyse their behaviour as discriminatory practices and undertake a sectoral analysis on their applicability in Uganda. Our PPOM model allows the computation of thresholds of various parameters implicit into the various schemes. The guiding principles computed in this section are replicable by other developing countries desirous of using discriminatory procurement practices to attain social economic objectives.

As an alternative to savings re-invested into the economy we analyse the impact of transforming savings into tax relief. We note that transforming savings into tax relief rather than re-investing it into the economy helps to reduce discriminatory procurement threshold set for foreign firms.

We conclude after computations and through the various models developed that advocates of interventions in public procurement have a justifiable course. The potential savings arising out of awarding a contract to a foreign firm might not be sufficient to create the same impact on the economy equivalent to awarding a contract to a domestic firm. Below a certain threshold level of contract savings (domestic contract value less foreign contract value) it is better to contract domestic firms. However, the thresholds are different for every sector. To efficiently implement the discriminatory procurement schemes countries need to undertake a sectoral analysis in order to determine which scheme to use for each of the different sectors. The models and rules developed in this research provide the necessary guidance on how countries can differentiate between the different sectors so as to set effective thresholds necessary to achieve social economic objectives without compromising on the primary objective of value for money.
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CHAPTER ONE

1.1 INTRODUCTION

World over, public procurement plays a prominent role in terms of the delivery of goods and services to end-user organisations, groups and individuals. Public procurement involves the process of acquisition by means of contractual arrangements; goods, services, works and other supplies by government, regional and local public authorities usually governed by a public law. It is always government responsibility to ensure that resource utilisation through public procurement is efficient because the monetary values involved are usually high.

It is because of its importance plus the monetary value involved that governments have tended to use public procurement to not only achieve economic objectives but also socio-economic objectives. To achieve these socio-economic objectives, governments usually institute discriminatory practices in their procurement frameworks. This is in total disregard to various international agreements designed to promote free trade. Proponents of free trade argue that this will lead to efficient resource utilisation while interventionists argue that government should be able to use public procurement to achieve social objectives like increased employment and a better standard of living for its citizens.

Using macro economic analysis this study designs discriminatory procurement models that strike a balance between government’s desire to achieve both primary and secondary objectives. Our concern is that while opening up public procurement markets could eliminate waste in resource utilisation, if allowed to operate in a state where large highly efficient foreign firms compete for the same contracts with small, struggling firms, especially those in developing countries, the end result might be catastrophic. This study offers decision support to developing countries considering instituting discriminatory procurement practice within their public procurement framework but fearing the repercussions this might entail.

This research combines public procurement and macro economics to create an integrative approach.

1.2 BACKGROUND TO THE STUDY

In all countries, governments are significant buyers of goods and services. The value of the contestable government procurement the world over was estimated at $2000 billion in 1998 (OECD Report 2001).
This is equivalent to 7% of the world GDP and 30% of the world merchandise (Odhiambo and Kamau 2003). In East Africa, as the table below indicates, even though the public procurement market of Kenya and Tanzania reflect a situation in line with the international average, Uganda’s central government purchasing figure was 34.76% of GDP in 1999/200 financial year! The stakes are therefore very high for the optimal utilisation of public funds in Uganda and indeed the rest of the world.

**TABLE 1: ESTIMATED SIZE OF CENTRAL GOVERNMENT PROCUREMENT IN EAST AFRICA.**

<table>
<thead>
<tr>
<th>Estimated Size of Central Government Procurement in Kenya Uganda and Tanzania (' Millions) Local Currencies</th>
<th>Kenya</th>
<th>Uganda</th>
<th>Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenyan Government Expenditure 1999/00</td>
<td>223,225</td>
<td>326,633</td>
<td>1,168,779</td>
</tr>
<tr>
<td>Labour Costs 1999/00</td>
<td>35,389</td>
<td>47,951</td>
<td>1,305,035</td>
</tr>
<tr>
<td>Subsidies 1999/00</td>
<td>200.</td>
<td>200.</td>
<td>308,052</td>
</tr>
<tr>
<td>Interest Payable 1999/00</td>
<td>28,917</td>
<td>31,129</td>
<td>75,520</td>
</tr>
<tr>
<td>Transfer Payment 1999/00</td>
<td>61,745</td>
<td>80,837</td>
<td>197,324</td>
</tr>
<tr>
<td>Net Lending 1999/00</td>
<td>1,599</td>
<td>1,953</td>
<td>48,702</td>
</tr>
<tr>
<td>Debt Redemption 1999/00</td>
<td>0.00</td>
<td>78,845</td>
<td>92,085</td>
</tr>
<tr>
<td>Military expenditure 1999/00</td>
<td>80.00</td>
<td>7,628</td>
<td>7,487</td>
</tr>
<tr>
<td>Government Procurement(CGP) 1999/00</td>
<td>45,363</td>
<td>85,718</td>
<td>616,855</td>
</tr>
<tr>
<td>GDP at market 1999/00</td>
<td>740,330</td>
<td>788,917</td>
<td>7,225,666</td>
</tr>
<tr>
<td>CGP as % of GDP</td>
<td>6.13</td>
<td>10.87</td>
<td>8.54</td>
</tr>
</tbody>
</table>

With such heavy expenditure, there is no doubt that all possible measures should be put in place to ensure that best value for money is obtained. Indeed many countries all over the world, have prescribed procedures that the procuring entities have to follow to ensure that value for money is obtained.

While recognising the importance of a clear procurement process, guided by public tendering, publication of winning bidder and mechanism for appeal for aggrieved parties, various countries insert in their laws provisions that are intended to protect their national ‘sovereignty.’ Such provisions usually take into account the country’s industrial policy (e.g. protection of the country’s local industries), social policy (e.g. protecting the role of women or the physically disabled) or
A protective strategy of a country’s strategic economic objectives such as regional integration. These provisions although deemed desirable, especially for developing countries, have serious connotations in as far as promoting free trade is concerned. They constitute a subtle protectionism to trade (Arrowsmith et al 2000).

In order to fight this form of protectionism, there has been a development of international agreements that are aimed at opening up procurement markets to competition. These agreements have generally prohibited discrimination based on local interests in public procurement.

Discrimination refers to a government’s tendency to favour its own domestic industry’s supplies and disregard foreign firm supplies. If a government cares for local firms’ profits but not foreign firms, it will discriminate them when competing for government procurement contracts (Vagstad 1995). Regional blocs aimed at promoting free trade have been set up across the globe. These include; North American Free Trade Agreement (NAFTA), Asian-Pacific Economic Co-operation Forum (APEC), European Union plus a number of bilateral agreements. The underlying issue in all these regional and bilateral agreements, as mentioned above, is establishing rules and discipline aimed at ensuring free trade across countries.

There has been effort world over, by different countries and regional blocs to set up a framework in public procurement. International negotiations aimed at liberalisation of public procurement began in the late 1960s without much success. The current plurilateral Agreement in Government Procurement (GPA) was signed in Marrakech on 15th April 1994 and entered into force in January 1996. By 2005, only 28 members were signatories to the GPA. Even though the GPA made provisions for special and differential treatment, exceptions and exclusions, many developing countries were reluctant to accede to it. Various reasons have been sighted for the reluctance by developing countries to join the GPA.

One issue raised is that discriminatory procurement practices are desirable by developing countries for purposes of economic and social objectives such as stimulating infant industries within their economy, fostering underdeveloped regions and creating employment. Secondly developing countries are not sure whether accenting to an agreement on openness in public procurement, is not a ploy by developing countries to
make them open up their markets but they (developing countries) get nothing in return.

On the other hand increased openness of global procurement markets has been justified as a practice that enhances competitiveness, reduces cost of procurement by government leading to efficient public resources utilisation. With governments spending up to 7% of their GDP on non-contestable government procurement((Trionfetti 2000), it is hoped that, by agreeing to a multilateral agreement on public procurement governments, will be able to reduce on their spending leading to proper utilisation of resources which in turn increases the social welfare among these countries.

This research discussed the apparent deadlock plus other reasons for and against developing countries reluctance to joining a multilateral agreement on public procurement. It developed a model for successfully opening up their national markets to foreign firms their fear not withstanding.

1.3 PUBLIC PROCUREMENT PROTECTIONISM

Arguing for a single market within the European Commission, Cecchini (1988) points out that government protectionism in procurement markets is a shoot in the foot. He indicates that in 1986, the total purchases controlled by the public sector (Central and local governments, their agencies and enterprise within monopoly-type concessions) was Ecu 530 billion, amounting to 15% of the community GDP. By rejecting intra-EC competition, the public sector paid more than it should, for goods it needs and in so doing, supported sub-optimal enterprises within the community. A working paper by the Directorate of Trade in the OECD (2003) agrees with Cecchini. Estimating each country’s government expenditure of being between 14%-20%, the report indicates that open access to procurement markets is an issue of increasing importance in international economic relations due to the commercial significance as well as the implications of procurement policies on government’s attitude towards the economy.

Criticising the rejection of intra EC trade, despite the spirit and conduct of government leaders within the EC, Cecchini highlights three major areas of cost saving;

- The Static effect- meaning that public authorities are able to buy from the cheapest (foreign) suppliers.
- The competition effect- leading to downward pressure on prices charged by domestic firms in previously closed sectors as they strive to compete with foreign companies entering the market.

- The restructuring effect or the long run effect of economies of scale as the industry re-organises under pressure of new competitive conditions.

Efficient resource utilisation has been a key argument against any form of protectionism in public procurement. Failure in resource utilisation by government is a blow to the welfare of the economy and tax payers, who ultimately pick the tab, would have to bring government to account for such wastage. Cox and Furlong (1995) contend that protectionism in public procurement causes government to spend more than it would and this leads to higher taxation and borrowing as government struggles to look out for resources to meet its varied and always competing national demands.

Maza and Camblor (1999) indicate that due to governments’ informal and legislative policies of ‘buy national’ governments have generally tended to give large contracts to national firms, awarding those contracts not only on the basis of price and quality but on the grounds of nationality as well. This has resulted into inefficient and ineffectiveness in the procurement process, patterns of abuse and failure by government to obtain adequate value in return for the expenditure for public funds.

In addition to this wastage, Cox and Furlong (1995) argue that protectionism perpetuates inefficiency on the supply side of procurement process. National protectionism reinforces featherbedded companies that are unable to supply at lower prices compared to their counterparts from other parts of the world. This is not only a problem to the local economy as far as it leads to higher public expenditure but a big disincentive at a global level because these featherbedded companies are unable to compete in world markets.

In order to assist domestic firms, government have always toiled with an idea of creating a symbiotic relation between government and key sector suppliers. The argument here has always been that of helping domestic firms with an aim that this would have a long term positive effect on the economy. However Cecchini calls this “economic incest.” He criticises this symbiotic relationship that builds between government purchasers on one hand and suppliers on the other. This incest breeds ground for
commercial deformities and deviant competitive behaviour. It tolerates widely differing national and exclusive use of standards, government subsidies, research and development duplication, dispersed and sub-optimal enterprises and maintenance of companies with little incentive to invest in new technologies.

Maza and Camblor are unrelenting in their quest for opening up procurement markets. They argue that continual favouritism of domestic suppliers constitute non-tariff barriers to international trade. Elimination of these barriers will lead to a more efficient allocation of resources through increased competition, higher quality procurement and budgetary savings to government. In addition efforts in this direction translate into reduced opportunities for trade conflicts and better commercial relations among countries.

Less obvious but critical issue of open procurement markets is that fair, non-discriminatory and transparent procurement procedures, render perpetrators of fraud and corruption more difficult.

1.4 GLOBAL EFFORT TOWARDS OPENING UP PUBLIC PROCUREMENT MARKETS

Global effort towards opening up public procurement markets is not a new phenomenon. The GATT negotiations of 1947 rejected subjecting government procurement to GATT guidelines. The arguments were mainly based on ‘nationalistic’ tendencies. The Tokyo Round of 1979 was not successful either. Only a Code on Government Procurement was achieved with only few countries agreeing to be bound.

After several years of discussion the Uruguay Round, which gave birth to the Agreement on Government Procurement (GPA), is so far the most successful as far as efforts towards opening up government procurement markets are concerned. Assented to by various parties in 1996, the GPA is a plurilateral agreement, requiring its member states to abide by the obligations set out in its framework. The obligations set out in GPA have two dimensions; substantial and procedural. Under the substantial obligations, member countries are required to impress upon the covered purchasing agencies not to give price and other preferences to domestic producers and also not to discriminate against foreign suppliers. That is, transactions that are based on other criteria rather than best value for money should be avoided. Under the procedural obligations member countries are required to put in place a procurement system that is
transparent and encourages open competition. The current membership of GPA is 28 (Zanamwe 2003) most of them developed countries and none from Africa.

Alongside free trade initiatives taken in the context of multilateral trade negotiations, different global blocs developed regional integration agreements. The European Economic Community (EEC) introduced specific directives on procurement, enacting a series of procedures to ensure transparency and non-discriminatory access to government contracts without replacing national procedures and practices. The North American Free Trade Agreement (NAFTA) introduced rules similar to those adopted inside the European Community on government procurement.

Procurement practices also evolved in the context of international financial institutions. The World Bank, the Inter-American Development Bank and other regional development banks have played an important role in shaping generally accepted principles for public procurement. These Banks have established detailed policies and procedures for procurement in connection with the projects funded by them, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations (Arrowsmith et al 2000)

With the encouragement of leading international financing institutions, and with the interests of developing countries in mind, the United Nations Commission on International Trade Law (UNCITRAL) decided in 1986 to undertake work in the area of procurement. The work resulted in the adoption by the Commission of Model Law on Procurement of Goods, Construction and Services. The decision taken by UNCITRAL to formulate model legislation on procurement was taken in response to the fact that in a number of countries, the existing legislation was inadequate or outdated. The Model Law has the dual purpose of assisting countries in the need for improved public procurement legislation and for the overall purpose of helping remove unnecessary obstacles to international trade.

Even though most of the regional agreements and GPA are market access agreements because they are aimed at improving opportunities for foreign supplies to enter the global markets in case of GPA or markets of their co-signatories in case of regional and bilateral
agreements, a major theme in all of them is the issue of transparency at all stages of the procurement process (Evennett and Hoekman 2000).

GPA provides a framework of common procedures, transparency at all stages of the procurement process and opportunities for aggrieved private bidders to challenge procurement decisions and obtain redress in a timely fashion in the event of inconsistencies with the rules of the agreement (Directorate of OECD 2003). To give meaning to the provisions on market access it is necessary to ensure that procurement systems are transparent, fair, objective and accountable.

The WTO Singapore Ministerial Conference held in December 19996, agreed to set up a Working Group on Transparency in Government Procurement (WGTGP). The mandate of this Group is to conduct a study on transparency in government procurement practices, taking into account national policies and based on this study to develop elements for inclusion in an appropriate agreement.

Evernett (2003) while discussing the road from Singapore to Cancun on transparency, points out that Working Group discussions were focused on improved transparency and not expanding market access, indicating reluctance of certain WTO members—including many developing countries to take further steps to open up procurement markets to foreign competition. The question that arises from this observation is; why are some countries so much opposed to opening up procurement markets to foreign suppliers?

1.5 OPPOSITION TO OPENING UP PROCUREMENT MARKETS TO FOREIGN SUPPLIERS

Through various legislations such as Competition Act (1984), National Space policy Directive (1990), The Airport and Airway Safety, Capacity, Noise Improvement inter-Modal Transport Act (1993), the Federal Water Pollution Control Act etc, The United States government attempts to give preferential treatment to its local products in a campaign sometimes code named “Buy America”. Many other countries also have the same policies like America although they may not set them out clearly in legislation, the way, United States does! This form of preferential treatment is referred to as tacit discrimination. With tacit discrimination, formal respect of the tendering procedure is not guarantee of fair treatment of foreign firms (Trionfetti 2001). Discrimination provisions in the law are always fraught. This might be caused by deliberate effort by
government like the case of United States and Japan or failure to monitor the practice by governments like in the case of European Union as the extract below indicates

BOX 1: ILLUSTRATIVE EXAMPLE BETWEEN EXPLICIT AND TACIT FORMS OF DISCRIMINATION.

One example of explicit discriminatory procurement practices is the U.S. ‘Buy American Act’ which in different cases requires U.S. suppliers to be chosen despite the cost disadvantage of up 6%(normal), 12%(small business and firms in regions of unemployment) or 50%(military equipment). Explicit national preferences are also applied in Canada, Australia and New Zealand (McAfee and McMillan 1989)

On the other hand tacit (implicit) discriminatory schemes are not imbedded in the law as it is in the case in US. For example, the members of the European community are not allowed to favour domestic firms over firms from other counties. Never the less trade figures indicate that such favouritism takes place on a large scale: fewer than 2% of government procurement contracts in the European Community are awarded to non-national bidders (Tigner 1991). Since domestic firms are over-represented in the market for small contracts, the figures are somewhat less extreme when considering contract volumes. Nevertheless, over 95% of government contracts are awarded to domestic firms in most countries within European Community (Laffont and Tirole 1991)

Equally pronounced is the Japanese policy of discrimination, with the Japanese market for computers as an example: while US suppliers have 40% of private part of the market, their share of the government part of the market is only 0.4%(Robertson 1992)

There are three kinds of business practices that government may wish to pursue through procurement policies according to Davies (1998):

- Collusion which occurs where suppliers take turns to bid the lowest price for repeat contracts to seek to artificially raise the cost of goods and services or to tacitly agree to respect each others market hence blunting the edge of competition between suppliers
- Subsidisation of firms where firms in receipt of subsidies of some kind may be able to sell goods at levels which do not reflect any competitive advantage they have over firms producing similar goods
- Dumping where firms export at prices below those charged on the domestic market or even below cost price
Arrowsmith et al (2000) argue that public procurement is often a tool for promoting the government’s economic, social or environmental objectives. The industrial, social and environmental objectives are sometimes referred to; as secondary or collateral objectives as opposed to the primary concerns of procuring goods and services on the best possible terms. Arrowsmith therefore points out the need to relate these secondary concerns with other objectives of the procurement process like value for money and the procedure for attaining them.

Some preferential procurement policies are sometimes directed at promoting the development of certain groups of people like the women and physically handicapped within the economy. The basis for this discrimination is to empower these groups of peoples so as to improve their income. Subjecting them to foreign competition is damaging to their effort. United States sometimes sets aside some contracts to be given to those firms that operate in “labour surplus areas”.

Although the UNICTRAL model law is to promote competition and encourages states to remove any form of discrimination, it also has provisions for countries that might want to use it as an instrument for industrial development. This would probably be instrumental in underscoring the need for discrimination if it is aimed at protecting the industries that are less competitive.

In East Africa, a treaty was signed in 2000, establishing the East Africa Community. Although this treaty does not specifically address the issue of public procurement, the three East African states have committed themselves to the harmonisation of their macroeconomic framework. It is hoped this would create stronger cooperation in the area of public procurement. Additionally the three East African countries are members of a bigger body, the Common market for Eastern and Southern Africa (COMESA) which is committed to the harmonisation of regulation regarding public procurement for increased competition within the region. Stressing COMESA’s, efforts towards building a regional competition policy, Karingizi (2003) says,

As the region gets more integrated and trade more liberalised, the need to ensure fair and open trade will be greater. In order to enhance competition and transparency in both private and public procurement arrangements, it is essential that regulations and procurement procedures be harmonised across the Free Trade Area and this is the aim of the regional approach to public procurement under COMESA. One of the most important principles to regional
integration is to maintain an outward oriented approach recognising that most of the Member States of COMESA also belong to the World Trade Organisation

Two issues arise out of this statement. One, that the region is committed to improved competition and transparency in public procurement within the region and hence member countries should harmonise regulations towards achieving this goal. Two, that as regulations are being developed, they should not be retrogressive but tailored within the framework of World Trade Organisation (WTO). However much as the statement emphasises outwards looking, COMESA is still convinced that public procurement reforms can be addressed through regional approaches rather than the international fora hence giving a blow to multilateral agreements at least for the moment.

1.6 STATEMENT OF THE PROBLEM
Market openness refers to the ability of foreign suppliers to compete in national markets without encountering discrimination, excessive burdensome or restrictive conditions (OECD Report 2002). Since the creation of GATT in 1947, government procurement has been left out of multilateral rules and discipline towards market access commitment. An absence of a general trade discipline on public purchasing practices is a major “hole” in the WTO edifice (Evenett and Hoekman 2002). Opening up national markets rather than protectionism can be a powerful force for economic growth and poverty reduction. During the 1990s, developing countries that successfully opened up their markets into the global economy enjoyed a per capita income increase averaging 5% annually (USAID Strategy 2003). There is therefore a strong justification for opening up national markets. There is equally good justification to specifically open public procurement markets.

Protectionism in public contracting causes the public sector to spend more than would be necessary and this contributes to higher taxation and increased borrowing. This in turn forces interest rates to go higher that they might otherwise have done (Cox and Furlong 1995). Arrowsmith (2000) argues that in many countries, major projects are funded by loans and other forms of Aid. Inefficient resource utilisation that arises out of discriminatory procurement ultimately creates a lot of concern among the various donors in addition to affecting government expenditure due to increasing interest rates. With global challenges such as poverty, diseases, environment degradation and lack of basic education; any resource wastage would create a grave impact.
However, advocates of market liberalisation or openness give insufficient attention to the immense diversity among countries in political, economic and social conditions (Brown and Stern 2004). There is empirical evidence that excessive liberalisation has caused dislocation of local industries in several developing countries at the same time there has not been an increase in export opportunities or performance to offset these adverse developments (Khor 2003). In international trade relations, the countries of the world have always had to search for some balance between their propensity to exchange commercial preferences with their political or economic allies and the simultaneous desire to safeguard the commercial transaction from arbitrary political interruptions by other governments.

Opening up procurement markets to foreign firms in especially developing countries would expose domestic firms to large foreign firms with high quality products, produced at lower prices due to their technological base and production mechanism. This would render many of them out of business leading to job losses and reduced standard of living.

Due to their inability to compete with gigantic global firms in bidding for and winning procurement contracts, domestic firms may need some form of protection. Indeed, in order to guard against the negative outcomes of opening up national markets, countries have been involved in various forms of discrimination both open and tacit. However, in trying to embed social objectives in their policy framework on procurement, such countries would be encouraging protectionism and giving a blow to free trade.

There lies the challenge. Should countries open up their procurement market with its associated reservations or insert in the procurement framework, schemes intended to achieve social objectives? There is therefore a compelling need for especially developing countries to take a pragmatic approach so as to develop a procurement strategy that is selective in choosing how, when and in which sectors and to what extent to open up their domestic economies to the global economy.

Due to the still difficult task of interfacing the domestic policies of developing countries with the world economy, this research discussed strategies that could guide developing countries in need of striking a balance between promoting free trade and the protection of a country’s
legitimate domestic non-procurement related objectives paying particular attention to sectoral development. How far can a government go in trying to increase foreign access to its public procurement markets and at the same time cater for its industrial and social obligations? In view of these pertinent issues this research was developed through the following phases:

1.7 OUTLINE OF THE RESEARCH

1.7.1 PHASE A: PUBLIC PROCUREMENT ENVIRONMENT

Many authors have sighted various reasons as to why there is need to open up procurement markets. According to Piana (2004) there are basically four reasons for which a country may decide to import a certain good or service. These are:

- That the product does not exist domestically
- The product does not exist at a specified level of quality
- It is cheap abroad
- It is in insufficient supply domestically.

In view of these reasons, this research measures the size of the Ugandan public procurement market and assesses the adequacy of domestic suppliers to meet the public procurement demand in terms of quantity (availability of goods and in sufficient supply) and quality of goods supplied.

Various laws for different countries, although stressing the need for non-discrimination, have instances where local suppliers may be preferred for a certain contract. This research assessed the degree of discriminations against foreign suppliers that exists in Uganda and more importantly what are the potential gains if government opened up its procurement market and allowed open competition between foreign and local firms. Phase A considers the following issues:

What is the potential monetary gain of an open competitive public procurement market in Uganda?  
- Why are developing countries largely opposed to opening up of their public procurement markets to foreign firms? (Chapter 3)
- What are the possible/available discriminatory procurement practices in Uganda? (Chapter 4)
• What is the overall central government public procurement environment in regard to local and foreign firm participation? *(Chapter 5)*
• What are the Ugandan firms’ capabilities in regard to bidding and winning local procurement contracts? *(Chapter 6)*
• What is the potential monetary gain of an open competitive public procurement market in Uganda? *(Chapter 7)*

1.7.2 PHASE B: DEVELOPING AN ECONOMIC DECISIONAL MODEL FOR DISCRIMINATORY PUBLIC PROCUREMENT

Several reasons have been advanced as the cause of developing countries’ refusal to agree on a multilateral agreement on public procurement markets (Arrowsmith et al 2000, Evenett 2000) These reasons include:

- Economic arguments
- Social arguments
- Environment arguments
- Reciprocity arguments

Arguments against opening up public procurement markets give the infant industry argument as the basis for their refusal. They argue that because such industries are not yet competitive, they should be allowed to have government contracts so as to boost their income without subjecting them to undue competition from foreign suppliers. Secondly, another argument that has been forwarded is the issue of social welfare i.e. support of marginalized groups like the women and the physically handicapped and the impact on employment as industries cut down on costs to meet the challenges of foreign competition.

Inspite these arguments, no known macro economic analysis has been undertaken to contribute to both sides of the argument. In order to make both sides clearer we measure the impact of discriminatory procurement on the economy and develop a decisonal model to aid development countries contemplating introducing them. *(Chapter 8 and 9)*

1.7.3 PHASE C: IMPLEMENTING MODELS USABLE IN ACHIEVING BOTH PRIMARY AND SECONDARY PUBLIC PROCUREMENT OBJECTIVES

Opening up national markets to the global economy can be a powerful force for economic growth. Trade is one of the principal mechanisms
through which global market forces, competition, human resource development, technological innovation generate growth in developed and developing countries (USAID Strategy 2003). Perhaps the most important although difficult set of policies that a developing country has to decide on lies in the interface between domestic policies and the world economy. In the international discussion, there is no consensus rather a debate and controversies exist on the definition, nature and consequences of opening up markets (Khor 2003). Using Uganda as a case study this research designs discriminatory procurement models which developing countries can use as a reference point in their effort towards to open up procurement markets while at the same time achieve their social objectives (chapter 10, 11, 12 and 13)
CHAPTER TWO

METHODOLOGY

2.1 INTRODUCTION
In this chapter, we describe the research design and methodology used to tackle the problem statement identified in the previous chapter. We present in brief the ideological argument underpinning this research. We indicate that despite the argument that opening up public procurement markets leads to efficient resource utilisation, discriminatory procurement tends to leave the money in economy in what would constitute an injection. This leads to increased employment and household income in the economy. The question of opening up procurement markets or introducing discriminatory procurement practices then boils down to undertaking a macroeconomic analysis using the Social Accounting Matrix (SAM) to evaluate the policy implication of both arguments.

2.2 RESEARCH DESIGN
The overall research design for this study consisted of two strategies. A cross-sectional survey of various procurement entities from the demand side (public sector) together with a qualitative case study research. This research design, combining survey methodology and qualitative case study was used due to the argument that multi-method approach enables triangulation to take place. Further, since each method has different effects and it may be impossible to ascertain the nature of that effect, use of different methods cancels out the ‘methods effect’ and will lead to greater confidence being placed on the conclusion (Saunders et al. 2003).

This study is arranged in three parts (phases). The first part is the public procurement environment. This part begins with a building of literature on the need for and reasons against opening up of procurement market in developing countries. This part also assesses the overall central government public sector environment with a view of determining the domestic firm’s capabilities, discriminatory environment if it exists and measure the potential monetary gains arising out of open competitive procurement (Cecchini analysis). The methodology used here is mainly a qualitative analysis of existing literature plus a survey of the various
public procurement entities in Uganda together with an exploratory review of PPDA documentation.

The second part of this study designs a macro economic model of the impact of discriminatory procurement practice. It introduces the concept of the Social Accounting Matrix (SAM) and based on the multiplier computation, designs the Procurement Option Model (PPOM) which is crucial to government in determining whether or not to award a contract to a foreign firm.

In our third phase, we use the PPOM to analyse the various discriminatory practices available to achieve socio economic objectives without compromising the primary objective of value for money. The models developed in this section are intended to give policy advice on how different countries can benefit from opening discriminatory procurement regime without squandering national resources.

Below we take you through each of the three parts, bringing out clearly the objectives of each part and explaining how data relating to the particular section was collected and reviewed. A complete explanation on data analysis for the identified questions is also given within each section. This eliminates loss of flow of information as we flip flop through various sections of this research.

2.3 RESEARCH FRAMEWORK

2.31 PART ONE - THE PUBLIC PROCUREMENT ENVIRONMENT

This section sets the background for the rest of this research. Through a qualitative analysis of current literature, it looked at the advantages of a liberalized foreign public procurement market. It scrutinizes the arguments for and against discriminatory procurement practices in especially developing countries and assesses the overall public procurement environment in regard to Ugandan firms’ capabilities in winning domestic contracts.

We then undertake a survey of public procurement entities to measure the potential monetary benefits of opening up public procurement markets. To measure the monetary benefits we use the Cecchini analysis.
2.3.2 DATA COLLECTION

Data collection was undertaken by a survey conducted within 5 government ministries in Uganda. These were Ministry of Education and Sports, Ministry of Health, Ministry of Agriculture, Animal Husbandry and Fisheries, Ministry of Works, Transport and Communication, and Ministry of Lands, Water and Environment. The choice of these ministries was according to their size of their annual spend. The size of their spend was based on an initial visit to the Ministry of Finance, Planning and Economic development, the ministry in charge of the Budget.

The purpose of this survey was three fold. One was to make an assessment of the public procurement environment in Uganda in regard to the nature and conduct of public procurement. This enabled us determine whether on not some form of discrimination in public procurement exists. Our intention was that if some discriminatory procurement schemes were detected we would conduct further studies to determine which nature exists and its intended objectives.

The second objective for this survey was to assess the local firms’ capabilities in winning the government advertised contracts. As will be shown, Uganda has a large number of products not manufactured locally. So, even before one looks at a competitive public procurement environment, he needs to consider that a large part of public procurement contracts are won by foreign firms because no local firm bids. This as we explain in chapter six is due to absence of that product domestically or lack of expertise by local firms to deliver on that particular contract. It is this general procurement environment we were interested in. It would later help us in forming an opinion about whether or not discriminatory procurement practices are necessary in Uganda.

The third objective of this survey was to determine the potential monetary benefit of government opening up its procurement market to competition without favouring domestic firms over foreign firms.

To measure the potential monetary gains for an open competitive public procurement market the survey was conducted as follows:

For the five ministries surveyed, we visited their procurement entities (PDEs). Specifically, in each of the PDEs visited a request was made to review their contract committee minutes for the calendar year 2005.
This was to establish the contracts awarded in the year 2005, who won the contract, i.e. domestic or foreign firms, the monetary value involved, award criteria and any particular reason for rejection of especially a foreign tender. We also examined any appeal procedures that existed in the case of an unsatisfied firm especially if the affected firm is a foreign firm.

We accessed information on 217 contracts from five ministries with a contract value of UShs. 304,188,457,460. Actually much more contracts were documented but during analysis, they were dropped because, several related to foreign goods that quite naturally would not attract domestic suppliers and even when they did (a few did), the net impact to the economy would be marginal. The other bunch of contracts was those with a monetary value that was small and could not attract foreign bidders. Practically these attracted domestic bidders and actually for this class of contracts, the method of procurement was through prequalification. Most firms pre-qualified are domestic because in many cases, the nature of product category is routine.

A big problem faced during this survey was the reluctance by ministries to give us access to the contract committee meetings even when we got a supporting letter from PPDA. Where we failed or got incomplete information, we made it up with the PPDA. Procurement entities are, by law, required to file monthly returns of their procurement activities to PPDA. Most of these ministries do comply with this requirement and actually those that do not attract a strong rebuke from the PPDA. A combined tour between ministries and PPDA ensured that we got all the required information. PPDA was particularly helpful in this regard.

From this set of 217 contracts, we extracted contracts that had been bided for by both foreign firm and domestic firms. Those that attracted both foreign and domestic bidders were 30 in total. These, as we explain below, formed the basis for our Cecchini Analysis.

2.3.3 DATA ANALYSIS

There was need to explicitly define a local and a foreign firm. According to the preference schemes currently under discussion in Uganda, a Ugandan provider (local firm) is defined as a company that is incorporated or registered in the Republic of Uganda with at least 50% of its’ authorized capital owned either by the Government or by Ugandan nationals. A Ugandan national would normally mean a person of any race who holds a Ugandan passport. This research adopted this definition.
Our data analysis in this part of our research was a three-step procedure.

2.3.4 PUBLIC PROCUREMENT ENVIRONMENT-DEMAND SIDE ASSESSMENT
The first step was the public procurement environment-Demand side assessment covered in chapter five. Using a short background on the sectoral nature of the Ugandan economy as quoted from the background to the national budget 2003/4, we give an assessment of the nature of the Ugandan procurement sector from the demand side i.e. the procurement entities. We show the critical sectors that government can use in its policy formulation to improve the economy and critically explain the nature of the Ugandan procurement sector. Using tables and graphs we illustrate the implications of this nature of the procurement environment.

2.3.5 PUBLIC PROCUREMENT ENVIRONMENT-THE SUPPLY SIDE ASSESSMENT
Step two in the analysis looks at the procurement environment from the supply side. Since we do not make a survey on the supply side, most of the analysis from this section relies more on documented information on the Uganda firms plus our own findings from the demand side analysis. To give an overview of the Ugandan firm capabilities, we use the construction subsector. The construction subsector is chosen due to its importance in terms of providing employment to the population plus the fact that construction consumes a significant chunk of government expenditure compared to other sectors.

2.3.6 THE CECCHINI ANALYSIS
Step three is very critical for this research, the Cecchini analysis. This step measures the monetary gain of non-discriminatory public procurement practices, i.e. the impact of non-discriminatory procurement on government spending. While measuring the economic implications of liberalising public procurement markets in the European Community, Cecchini (1988) analysed savings made by public sector through its procurement practices\(^1\). Using about 40 products most

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\(^1\) Cecchini (1988) uses data collected and analysed by Eurostat, Atkins (1984). It is the methodology used by Atkins as quoted in the Cecchini report that is adopted in measurement of various parameters in this research although with various modifications to fit into the circumstances pertaining to developing countries and resources available for this research.
purchased by government and public enterprises, he made a survey across EC member countries of the actual prices charged by each country for the selected products. On the basis of the average prices of these products, in each member country the potential saving gains were estimated after subtracting extra costs associated with intra community trade such as transport, marketing, insurance and exchange risk cover. The estimated savings were thus the potential savings achievable if the public purchasing body selected the most competitive supplier.

We adopted the Cecchini analysis with some modification. For each of the ministries, we visited their PDEs to ascertain the contracts advertised in the year 2005. For this particular part of our methodology, we sorted out those contracts advertised and were able to attract both foreign and local suppliers. For each contract advertised and responded to by both of them (foreign and local suppliers), we established bid prices offered for that contract. The purpose was to determine which of the two (foreign and local supplier offered a better price and by how much and eventually irrespective of the price, who won the contract. By preferring one bidder to the other, government would either lose on the primary objective of value for money or make a saving if it opted for the lowest bidder.

2.3.7 PART TWO -MACRO ECONOMIC MODEL BUILDING

Using the Social Accounting Matrix to assess the macro economic impact of discriminatory procurement practices, we developed models infusable into the public procurement framework to attain both primary and secondary objectives.

The Social accounting matrix (SAM) is a technique related to national income accounting, providing a conceptual basis for examining both growth and distributional issues within a single analytical framework in an economy. From the SAM we can then compute the accounting multiplier. In its simplest form the accounting multiplier shows how a unit change in an element of the exogenous variable will affect the endogenous accounts. Specifically in this research the exogenous account is government expenditure and endogenous accounts are the various economic sectors aggregated form the 2002 Ugandan Social accounting Matrix.

Using the accounting multiplier we compute the impact of government injection (Exogenous account) in generating or increasing wage employment. Although, most of what we are talking about is explained in detail in chapter eight, we need to make some quick clarification at this stage.
In this research we argue that government is faced with two options for every contract it intends to award. It could award the contract to a foreign firm or to a domestic firm. If it awards the contract to a foreign firm, it's a leakage out of the economy as most of the money is expropriated out of the economy.

If the contract is instead awarded to a local firm, this acts as an injection to the economy. This will result in increased output, increased employment and improved welfare. There is therefore need to measure specifically, how much increase to the economy such an injection can create. This is when the concept of the accounting multiplier comes in and guides us in computing the impact of this injection.

Alongside this measurement, we also argue that normally when a product is sold to a foreign firm, its bid price is lower. Meaning that it is usually cheaper to buy from a foreign firm that a domestic firm. This is especially true in developing countries where production processes are not efficient, helping in raising the cost of production for domestic products leading to these firms to post higher bid prices while reacting to advertised public procurement contract.

The difference between the bid price of a local firm and a foreign firm is what constituted our potential savings as computed through the Cecchini analysis. In this section we also, just like the case of injections in the previous paragraph, quantify the impact they could create on the economy if re-invested into a more competitive sector.

We compare the impact of the injections arising out awarding a contract to a domestic firm and the impact of the saving arising out of awarding a contract to a cheaper foreign firm, to design what we call the Public Procurement Option Model (PPOM).

The PPOM model developed, discusses the sectoral options available to government in awarding a contract to a foreign firm. What is the macro economic impact of the decision? As we show in chapter nine from a simple analysis, government would be advised to buy domestically but to do so would be to ignore the global trends and complexity of international trade. How then does government bring in foreign firms but continue at the same pedestal of economic impact. This become the basis of our section three and become the centre pin for this research.
2.3.8 PART THREE - IMPLEMENTING DISCRIMINATORY PUBLIC PROCUREMENT MODELS

As indicated in the previous section, this was the crux of this research. Governments especially among the developing world are under a lot of pressure to open up their procurement markets. The General Agreement on Procurement (GPA) has added to this pressure. Many countries are stuck to their guns and still want to use public procurement to achieve social objectives. The problem is how well to do it without resource wastage which a key argument for proponents of free trade.

The Public Procurement Model is developed further into the use of the various discriminatory schemes. Specifically in this research we develop models in regard to set asides, local content requirements, preference schemes and offsets. We then provide policy guidelines on the use of each of the models developed. The underlying reasoning is that whatever scheme is used, the primary objectives of public procurement should not be sacrificed but rather a delicate balance should be developed that enables countries achieve both social and economic objectives.
CHAPTER THREE

DISCRIMINATORY PROCUREMENT PRACTICES

3.1 INTRODUCTION
Developing countries face a problem of making a decision of opening up public procurement markets to all suppliers irrespective of their country of origin. The perceived benefit of opening up procurement markets (non-discriminatory practices) is that it enhances competitiveness, leading to efficient public resources utilisation. Governments discriminating against foreign firms in favour of local suppliers are motivated by the desire to achieve benefits such as, stimulating infant industries, fostering underdeveloped regions and creating employment.

Discrimination can take various forms, both explicit and implicit. Explicit forms of discrimination are embedded in the law such as the “Buy American Act” while the implicit forms of discrimination are not formal although they are in many cases widely used. The argument for or against discriminatory procurement can take various dimensions especially in regard to developed and developing countries. Within developed countries, the assumption is that there are a number of suppliers domestically who can compete between each other for an advertised contract and this competition could deliver value for money to government even without foreign firms’ involvement. Involvement of foreign firms then becomes an issue of benchmarking best prices to avoid complacency that could emanate from protectionism.

The situation in developing countries is complex. They do not have sufficient numbers of suppliers domestically to create sufficient competitive environment which ensures that government achieves value for money for an advertised contract. To create sufficient competitive environment foreign firms need to be allowed to bid for the advertised domestic contracts. The danger with doing so is that, this opens up the market to large foreign firms with high quality products, produced at lower prices due to their high technological base and efficient production mechanism. They compete with domestic firms with archaic technology and inefficient production techniques. This means that domestic firms cannot compete for advertised contracts in their own countries.
To continue with the argument above a step further, if firms from developed countries can fail to win contracts domestically, it is an uphill task for them to win them in other countries, especially the developed nations. While developed nations have the capacity to compete for and be awarded contracts in developing countries, the reverse may not be true. Potential suppliers in developing countries lack the capacity to compete favourably in international procurement markets due mainly to high costs of production arising out of poor production techniques and lack of expertise. This leads to products from developing countries to become uncompetitive in terms of quality and price compared to those from developed nations.

Then the argument becomes that of reciprocity. While firms from developed countries can win government contracts within developing countries, the reverse is not possible. This chapter expounds on the procurement environment within developing and developed countries, it addresses developing countries’ apprehension to non discriminatory public procurement regime and offers, from existing literature, possible remedies where developing countries can achieve both their economic and social interests through public procurement.

3.2 THE PUBLIC PROCUREMENT ENVIRONMENT

The goals of the public sector and consequently that of public procurement range more widely than a single company’s profits to a concern for a wider economy and economic, efficient and effective delivery of a wider range public services including law and order, health, social services, education, defence, transport and environment (Erridge 2005). However there is no clearly agreed international best-practice models for the management of public procurement to address these issues and government responses have varied widely (Thai 2008). A government that has an underprivileged ethnic group may focus its procurement policies on procurement equity while a government that deals with an ailing economy may use its procurement as a policy tool for economic development and stabilisation.

Using procurement as a policy tool can also be referred to as “wealth redistribution” – using procurement to channel funds to discrete categories of economic actors. The freedom of governments to use procurement as a policy tool has, however, to a large extent been restrained in recent years due to the implementation of measures aimed at achieving free trade in public markets (Bolton 2006). The use of procurement as an instrument of policy to achieve socio economic
outcomes is therefore not without controversy and questions have been raised regarding its legitimacy and effectiveness (Watermeyer 2003). A more liberal purchasing regime would bring significant economic benefits with increased competition for contracts expected to reduce public sector procurement costs and facilitate the creation of industrial base better able to win business in world markets (Cecchini 1992). However for especially developing countries, liberalisation of the procurement market would bring both opportunities and challenges.

While some developing countries have done well in building a competitive advantage and integrated well in the global economy, others have failed to do so (UNCTAD 2006). Many developing countries find themselves uncompetitive in even industries they may have a competitive advantage due to high production costs, poor product quality, slow and unpredictable delivery to market and archaic technology.

Free trade between countries with very different endowments and capabilities, presumably with large asymmetrical commercial power, is deceptive. The removal of barriers to trade, whatever they are, would be easier, if the adjustments demanded by the problem of asymmetrical power between countries were more seriously taken into consideration for practical purposes (Silva, 1999). Developing countries are characterised by relatively low level of competition and limited or no formal competition policy (Falvey, Chimia, Morrissey and Zgovu 2007). This, in part, is attributed to size and capacity of firms that dominate the developing countries. Developing economies are dominated by Small and Medium size firms with inadequate capacity to compete.

Trade among non-equals/producers in developing vis-à-vis developed countries can lead to such adverse outcomes such as the collapse of entire industries in some developing countries. Similarly simply expanding the realms of free trade has, in many cases, resulted in an actual increase in poverty and environmental degradation and has had an adverse impact on women and food security across the developing world (Mendoza & Bahadur, 2002). A cautious approach therefore needs to be undertaken that takes into account divergences in the level of development between countries. In many cases, the core problem in regard to competitiveness of firms from developing countries is not at enterprise level but the entire economy.
The approach would be to raise total factor productivity which means an approach that goes beyond raising productivity of individual enterprises or industries but rather address the broader and more comprehensive task of raising productivity at country level. There is need for capacity building policies that make the economy as a whole a competitive location for products and enable all enterprises in the economy to contest in world markets at par with firms from more developed countries. To achieve this, discriminatory policies at least in the short run, are necessary.

Certainly, commercial transactions in the real world, even in the absence of formal barriers, are not exchanged between countries in the same circumstances, incidentally not with the same degree of power. Close scrutiny and consideration, bearing in mind the existing situation, could lead to an effective level playing field between the most diverse trading partners, and contribute to the emergence of internationally fair competition, as well as to the establishment of a likely equality of opportunities for a wide and varied range of countries (Silva, 1999). However, freeing public procurement markets without creating structural changes within the economies of developing countries in order to improve competitiveness will create very little economic gain.

As indicated in chapter one, in the global effort to open up public procurement markets, the Agreement on Government Procurement (GPA), is so far the most successful and even then only 28 countries have appended their signatures, none of them from developing countries. And here lies the problem. Many scholars uphold GPA as a major step forward in the process of liberalisation and are particularly dissatisfied that the adhesion of developing countries to it is extremely limited (Trionfetti, 2000). They argue that opening up procurement markets will lead to international specialisation with the positive result of efficient resource allocation and mobility. However, according to Trionfetti, one element crucial in determining whether or not the policy will affect international specialisation is the market structure of the economic sector in question. Battling with this view, Trionfetti uses the Heckscher-Ohlin and New trade Theory models to justify his argument. In a Constant Returns to Scale, Perfect Competitive (CRS-PC) market structure, a discriminatory procurement policy will only affect international specialisation, if the size of government demand is sufficiently large. Under the Increasing Return to Scale Monopolistic Competitive (IRS-MC) market structure, regardless of the size of
government demand, discriminatory procurement will increase domestic output and reduce imports.

However in a more vibrant private sector, discriminatory procurement may not necessarily constitute a barrier to trade nor does it necessarily affect international specialisation. Indeed it is possible that discriminatory practices applied to different sectors of the economy produce different results. For instance the same discriminatory procurement may result in an increase of domestic output and in a reduction of imports from some sectors of the economy and at the same time be completely inconsequential on trade and specialisation (Trionfetti, 2000). The potential for reducing imports through discriminatory government practices is inconsequential because the private sector tends to buy additional imports when their prices decline and as government demand for imports reduces. Once allowance is made for the entry of new firms, a procurement ban may not have any long-term effect.

The inconsequential nature of discriminatory procurement practices as argued by Trionfetti above is a lone voice. Continual favouritism of domestic suppliers constitutes non-tariff barriers to international trade. Elimination of these barriers will lead to a more efficient allocation of resources through increased competition, higher quality procurement and budgetary savings to government. If domestic firms were encouraged to become competitive, they would not only supply to government at competitive prices but also export to foreign markets. This would lead to their expansion which would translate into increased employment and improved quality of life to the people.

3.3 SUPPORT FOR DISCRIMINATORY PUBLIC PROCUREMENT PRACTICES

Governments are conspicuous actors in the modern economy. It follows that by their choice between purchasing overseas and favouring domestic suppliers, governments can have a marked impact on international trade patterns (McAfee & McMillan, 1989). Public procurement has been used as a tool to promote the government’s economic, social or environmental objectives.

Governments have thus adopted protectionist procurement policies in pursuit of policy objectives such as maintaining independence in defence production, supporting employment in declining industries, supporting high technology sectors and more general political considerations e.g.
domestic lobbying for protection (Uttley & Hartley, 1994). These policy objectives are sometimes referred to as secondary or collateral objectives as opposed to the primary concerns of procuring goods and services on the best possible terms (Arrowsmith, Linarelli & Wallace, 2000). Arrowsmith points out the need to relate these secondary concerns with other objectives of the procurement process like value for money and the procedure for attaining them.

Discrimination against foreign suppliers is based on the Keynesian macroeconomic orthodoxy emphasizing less government expenditure on imports. It is also based on the “nationalism” argument claiming that “our money” should be spent on “our goods” to “keep jobs at home” (Evenett & Hoekman, 2004). Discriminatory procurement practices can further be justified by the power of certain interest groups or by the infant industry argument (Naegelen and Mougeot 1998).

When making procurement decisions, many cities and states give preference to local business as a means to nurture small businesses and local economies. Some of these jurisdictions give a local preference only in the case of tie bids, but others give preference if a bid from a local business is within a certain percentage of the lowest non-local bid. The underlying rationale is that in many countries SMEs are an engine for economic development. Small firms are a significant component of economic strategies for employment and a vehicle through which jobs are created.

In Europe, often the only reason why individual member countries experienced employment growth in the mid to late 1980s was because growth in SMEs employment more than offset losses in the large enterprise sector (Fee, Erridge & Hennigan, 2002). There is need to protect these firms so that they can grow but more so because they continue providing employment. There is therefore a symbiotic relationship between government and SMEs. Government offers attractive, stable contracts and accreditation to small firms while the small firms offer the best potential job growth and innovation. Protection of government procurement against bigger and most cost effective foreign firms would go a long way in ensuring SMEs growth leading to economic development.

Preferential procurement policies are sometimes directed at promoting the development of certain groups of people like the women and physically handicapped within the economy. The basis for this
discrimination is to empower these groups of people to improve their economic welfare. Subjecting them to foreign competition is damaging to their effort. The United States sometimes sets aside some contracts to be given to those firms that operate in “labour surplus areas.”

Perpetuating inefficiency in the procurement process leading to loss of government resources, as has been touted by many countries; discriminatory procurement can lead to a significant reduction on cost of purchase by government. It is argued that a policy that gives preferences to domestic firms reduces the effective competition they face from foreign firms and so induce domestic firms to raise their bids. However foreign firms respond by lowering their pre-preference-inflated bids. If the probability of a low cost foreign firm winning a contract is large enough, this can result in a reduction in government’s expected procurement costs. In this case price preference shifts profits towards domestic firms while potentially reducing government outlays (Evenett & Hoekman, 2002). So while procurement preferences are commonly interpreted as protectionist devices, they can serve by increasing bidding competition and lower the expected price paid by government for the item. Thus procurement preferences have unexpected and sometimes beneficial side effects (McAfee & McMillan, 1989).

Discrimination may also have a significant positive impact on potential exports. It has been argued that discriminatory procurement practices have a major impact on exports through shaping the minds of potential foreign consumers’ view on the quality levels of a product. Sighting a case of battle field ambulances, (Colie and Hviid 1995) argue that if the UK government decided to buy them from Steyr Daimler of Austria instead of Land Rover of UK, when both firms bid to supply them, the potential consumers especially in the rest of the world who does not have direct information about quality levels of the submitted bids might construe it as a vote of no confidence in Land Rover ambulances. They will use the outcome of the awarded bid to update their beliefs about the quality levels of advertised products. If a government does not award a contract to its own domestic companies but instead awards it to foreign suppliers, potential foreign buyers would be restrained from accepting bids from the unsuccessful domestic companies thinking that their quality is low compared to products elsewhere. Awarding it preferentially to a domestic firm will be construed to mean government confidence for products from that firm hence helping to increase exports.
3.4 SHORTCOMINGS OF DISCRIMINATORY PROCUREMENT PRACTICES

Governments have tended to discriminate in their purchasing policies in favour of their own industry because of the desire to achieve one or more benefits that go beyond the immediate aim of purchasing goods and services at the best possible terms (Discherdorfer, 2000).

Discriminatory public procurement is considered a stumbling block to free trade and efficient utilisation of resources. Favouring local suppliers in government procurement, limits import competition creating an effect similar to other protectionist measures which introduce distortions that limit choice, increase prices and discourages economic efficiency (Audet 2002). These are the same feelings echoed by the Agreement on Government Procurement (GPA). The GPA is based on the general presumption that discriminatory procurement adversely affects trade and that the prohibition to preferences in procurement creates welfare benefits analogous to those arising from trade liberalisation (Mattoo, 1996).

In America, as a result of “buy national” legislation and other informal policies, government tended to give large contracts not only on the basis of price and quality but on grounds of nationality as well. This resulted in inefficiency and ineffectiveness in the procurement process, patterns of abuse and failure of the public purchase to obtain adequate value in return for the expenditure for public funds (Maza & Camblor, 1999). If government and government agencies are compelled to pay an extra $50,000 for its fleet of police cars because some buy-American law requires it to purchase autos manufactured in America, the taxpayers ultimately have to pick the tab (Block & McGee, 1997). They would have to part collectively with $50,0000 more. This uncalled for excess expenditure, will no doubt affect the welfare of the country. Advocates of increased access to public procurement markets consequently argue that non-discriminatory practices enhance competitiveness and reduce the cost of procurement by government leading to efficient public resources utilisation. In addition efforts in this direction translate into reduced opportunities for trade conflicts and better commercial relations among countries.

Cox and Furlong (1995) argue to the effect that protectionism creates featherbedded companies. Their argument is that if national purchasing structures were opened to greater competition, protected national
champions might be eradicated or replaced by more efficient national or European firms or failing that, more efficient international firms. Which ever way, the consequence ought to be lower prices, lower public expenditure and lower taxation.

In Sub-Saharan Africa (SSA), the problem of faltering socio-economic progress is especially acute. Poverty is widespread and severe, with more than half of the population living on less than $1 a day. The region also confronts serious public health challenges, such as HIV/AIDS pandemic, malaria and tuberculosis. The capacity to generate knowledge and to participate in the knowledge society is declining. Environmental degradation is rapid and severe (Musila, 2004). With such endemic problems, would it be fair for any country to buy products at sub-optimal level? Why would a country engrossed in such a quagmire of problems decide to discriminate against foreign suppliers yet it would provide the much needed budgetary savings for use in solving these inherent social problems?

The arguments for protection based on social consideration among developing countries needs further review. Not much information is available as to whether protection of public procurement markets will enhance the social welfare other than incapacitating it. The argument here is that if the government had not given preference to domestic industries to promote social causes like unemployment, would it not have made substantial saving through buying cost effectively? If so, wouldn’t these savings be translated into the badly needed resources to fight disease, hunger and other healthy related problems that threaten developing countries like the case of SSA? Discherdorfer (2000) quotes a study estimating 8-19ECU (European Currency Unit) billions being saved from five European countries, which would flow from introducing competition on the supply side of the demand market. One would only guess the impact this could have on the welfare of a population especially in developing countries if it were saved and spent on the social welfare.

Emphasizing the need for competition, Madu (1997) argues that developing economies have a purpose to satisfy the social utility function of their people. This cannot be achieved if their social welfare and quality of life cannot be maximised. Unemployment is high, productivity is low and technologies are antiquated. The lack of competitiveness has
created so much misery. These economies need to develop. There is need to improve the quality of their products and services, improve productivity and generate more revenue to be able to provide social services. By placing tight controls as a way of developing local industries and protecting them from overseas competition, developing countries tend to reduce local competition and customer expectations. As a result, firms are either unable to achieve high levels of quality or else view quality improvements as unnecessary. In doing so, local industries have tended to develop devoid of a focus on quality (Gosen, Babbar & Prasad, 2004). This inevitably impacts negatively on the well-being of people as they pay more for less quality goods.

In the absence of foreign competition, there has been little incentive for domestic firms supplying the public sector to invest in new technology and thus keep costs down. Moreover, firms in protected markets have been characterised by low product specialization resulting in uneconomical product ranges and short product runs. The outcome has been artificially high prices as the public sector pays more than it should for goods it needs (Uttley & Hartley, 1994). Both the global and national economic welfare of nations will improve if nations are free to trade their specialised skills in the market place. If a government restricts trade, resources are wasted in the production of goods that could be imported more cheaply than they can be produced domestically (Frankel, 2000). Competition in procurement is liable to generate benefits akin to the opening up other areas of trade. Benefits would emanate from savings for private sector buyers as spin-off effects for reduced prices in the public sector and the wider effects of greater competition on innovation, investment and growth of the economy (Discherdorfer, 2000)

The policy of discrimination by government causes distortions the way tariffs do. They can be considered as part of the whole gamut of economic policies such as tariffs, subsidies, exchange restrictions and quota that tend to create a wedge between the domestic price and the world prices of internationally traded goods. Domestic content laws require products to contain percentages of home-grown parts in order to avoid tariff or quota restriction. In some cases manufacturers must alter the composition of the products they make in order to meet domestic content requirements. The fact that they must do so logically implies that domestic content restrictions raise prices and/or reduce quality since manufacturers would have to make different choices in the
absence of restrictions (Block & McGee, 1997). This implies that government would now pay more for poor quality goods affecting both the budgetary allocation and the welfare of the people who would have benefited from increased provision of social services if efficient allocation of resources had been adhered to.

3.5 MONETARY IMPLICATIONS OF DISCRIMINATORY PROCUREMENT PRACTICES

Cecchini indicates that in 1986, the total purchases controlled by the public sector (Central and local governments, their agencies and enterprise within monopoly-type concessions) was Ecu 530 billion, amounting to 15% of the community GDP. A working paper by the Directorate of Trade in the OECD (2003) estimates each country’s government expenditure of being between 14%-20%. The report indicates that open access to procurement markets is an issue of increasing importance in international economic relations due to the commercial significance as well as the implications of procurement policies on government’s attitude towards the economy.

It is because of the volume and value that public sector procurement represents a vital segment of the economy (Maza & Camblor, 1999). By rejecting intra-EC competition, the public sector paid more than it should, for goods it needs and in so doing, supported sub-optimal enterprises within the community. Hence by creating differences between domestic and foreign prices for goods and services, procurement practices affect market access and are a stumbling block to free trade. Openness allows firms to keep in touch with global markets. A high rate of economic interaction with the rest of the world speeds the absorption of frontier technologies and global management best practices, spurs innovation and cost cutting and competes away monopoly (Frankel, 2000).

Quoting the Cecchini report, (Uttley and Hartley (1994) argue that procurement policies favouring national suppliers were resulting in excessive costs and inefficiencies that could be eliminated through competitive procurement. They highlighted three areas that could become major savings. These are the static effect, competition effect and restructuring effect.
The static effect are savings created by public authorities buying from the cheapest (foreign) suppliers, the competition effect arises due to the downward pressure on prices charged by domestic firms in previously closed sectors as they strive to compete with foreign companies entering the market while the restructuring effect is the long run effect of economies of scale as the industry re-organises under pressure of new competitive conditions. Using Average cost curves, Uttley and Hartley illustrate the three cost saving effects using the diagram below:

**GRAPH 1: SAVINGS ARISING OUT OF COMPETITIVE PROCUREMENT**

Using price and average cost curve, Uttley and Hartley (1994) explain that the static trade effect will occur as public authorities buy from the lowest cost, possibly foreign source. (Graph 1) This would represent a reduction in unit costs from $AC_1$ to $AC_0$ for output $Q_1$. The competition effect is obtained as domestic firms in previously protected markets are forced to compete with foreign companies entering the market. The competition results in reduced profit margins and thus lower prices. As a result of the combined trade and competition effects, prices fall from $P_2$ to $P_1$ and profit margins from $\Pi_1$ to $\Pi_0$. The long-run restructuring effect will be achieved as industries reorganize to achieve economies of scale. This is indicated by further reductions in unit costs and prices as output increases from $Q_1$ to $Q_2$ on the long-run cost curve $AC_0$. 
3.6 DEVELOPING COUNTRIES OPPOSITION TO OPENING UP PUBLIC PROCUREMENT MARKETS

Due to the unequal commercial powers of the world, developed nations have the capacity to compete for and be awarded contracts in developing countries. Conversely the reverse may not be true. Developing countries are frequently characterised by large procurement markets such that in agreeing to an open procurement market, they would generally be liberalising larger than an industrialised country would (Davies, 1998). Potential suppliers in developing countries lack the capacity to compete favourably in international procurement markets mainly due to high costs of production arising out of poor production and lack of expertise. This leads to products coming from developing countries to become uncompetitive in terms of quality and price compared to those from developed nations. This lack of reciprocity has led developing countries to grow cold feet as to whether there are economic gains that would arise if a multilateral framework on procurement was to be developed.

The unfettered advocacy of opening up global market that has become so passionately pursued by major industrialised countries may thus be injudicious. Through its policy aims, market liberalisation undermines the multilateral principle of reciprocity and gives insufficient attention to the immense diversity among countries in political, economic and social conditions. Each country has deep roots in its individual social norms and wants to decide how it wants to adjust its domestic laws and practices in order to accommodate its trading partners and to gain a comparative adjustment from them (Brown & Stern, 2004). Cross-border economic integration, for example, and national political sovereignty have increasingly come into conflict leading to a growing mismatch between economic and political structures of the world.

Developing countries may indeed benefit from freer procurement markets, but the negotiations on global non-discriminatory procurement framework so far suggests that sovereign nations are only willing to accept foreign competition in procurement markets if they are convinced that the benefits of gaining access to foreign markets outweigh the loss of power to employ public procurement as a mean to promote domestic policies (Discherdorfer, 2000). All countries have a purpose to satisfy the social utility function of their people. There is
therefore need to consider an integrated and holistic approach towards linking up public procurement and social obligations of a country.

There is little doubt that free trade objectives could be better achieved. However, the most important although difficult set of policies developing countries have to decide lies in the interface between domestic policies and the world economy. Whether, how, when, to what extent, in which sectors and in which sequence to integrate the domestic economy and society with the international economy and society remain difficult questions that face developing countries. There is no consensus but rather controversy on the definition nature and consequence of integration (Khor, 2003). Achieving improved non-discriminatory procurement practices is necessary but it is by no means sufficient to bolster growth prospects in developing countries. Domestic markets in Sub-Saharan Africa for example are too small to permit economies of scale that allow a country to be competitive and to integrate into the global economy (Musila, 2004). Emphasis should therefore be on developing strategies that could enhance social and economic objectives of countries.

Developing countries need to reassess their development prospects as they become more and more integrated into a multilateral trade regime. The social policy and free procurement markets should be incorporated as prime objectives of the system. Appropriate balance between the two should be seen as a normal activity that takes place within the system itself. There seems to be inadequate attention given to whether and to what extent the trade regimes have overall coherence and consistence with the development goals of the countries it is intended to benefit, despite repeated policy statements by all countries of WTO to construct a regime that promotes development (Mendoza & Bahadur, 2002). Simply opening up economies without a thought through programme may become catastrophic.

There is a need for developing countries to take a pragmatic approach to liberalisation and to be selective in choosing how, when and in which sectors and to what extent to integrate their domestic economies with the global economy in all crucial areas. The interaction with global economy can benefit a developing country significantly. However, the terms of interaction are crucial if the potential benefits are to be realised and if the cost and damage is to be avoided. The approach of selective
opening up done carefully and appropriately suited to the conditions of a country is therefore of utmost importance. It should replace the still dominant approach of “big bang” carried out inappropriately in a one-size fits all manner (Khor, 2003). Liberalisation should pay much attention to the peculiarities of different countries if they are to become sustainable. Question becomes, how can this be achieved? We suggest three approaches:

3.6.1 SECTOR-SPECIFIC SITUATION
As our discussions in subsequent chapters indicate, different sectors react differently to macro economic policies. A comprehensive sector analysis paying attention to their impact on the economy may be crucial. This could provide an opportunity for developing countries to adjust their level of openness of government procurement markets to the development needs and national policy objectives. Countries should carry out a sector by sector analysis, focusing first on those sectors where government procurement is significant.

As chapter five indicates, the service sector outpaced others in its contribution to GDP. This is the case with many other countries. This has created an increasing shift from manufacturing to services as an engine of economic development. The relative importance of manufacturing and services to economies and the inter-relationship between the two have been the subject of much discussion through the years. Some have argued that the decline in manufacturing and the corresponding shift to services is unsupportable in the long run, since services depend critically on manufacturing for their existence. In the absence of manufacturing, service sectors are seen as collapsing (OECD, 1999). On the other hand, services have been seen as a major driving force in economic growth. Most developing countries are labour intensive; hence the need to focus on the sectors of the economy that enhance increased employment.

The argument is therefore increasingly turning to the services market as an engine for social development within various economies. Sectors that could be looked at include, for instance, computer and related services, construction services, engineering and architectural services, environmental services, catering services, building-cleaning services and travel agencies (WTO, 2002). The construction services market in developing countries for example is a fundamental economic activity. The construction services sector has variously been used in developing
countries to address rural poverty and provide opportunities for women because it is labour-intensive.

Although the distinction between goods and services is blurred, by 1990 a number of OECD countries had caught up with USA in having a service-based economy and it is no longer uncommon that some 70% of a country’s GDP originates from the service sector employing a nearly equal share of the working force (Aarnio, 1999). As the table below indicates, employment in the service sector increased tremendously within a period of 10 years from 1987 to 1997. Apart from Poland and Turkey all countries have service sector employment of over 50% with remarkable increase between 1987 and 1997.

<table>
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<th>TABLE 2: CIVIL EMPLOYMENT IN SERVICES 1987 AND 1997 (%)</th>
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<td>OECD Total*</td>
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Source: OECD (1999) *Former Federal Republic of Germany only
... Not Available 'Only data shown in the table are included in these totals
The services sector is thus increasingly becoming the largest contributor to GDP and employment. During the last decade up to 1995 the services balance showed a declining deficits trend, shifting since then to an increasing surplus position of over US$ 17 billion during 2000 as a result of the growing dynamism of the services export (Butkeviciene, Benavides & Tortora, 2002). Elaborating on the figure, Butkeviciene et al indicate that developing countries’ services exports doubled during the 1990-1999 period shifting from US$ 147 billion to 347 billion, growing at a faster pace than developed economies: 16 percent during 1990-95 and 8 percent during 1995-1999. During the last decade, services exports were among the top five sources of foreign currency in 90 developing countries meanwhile in 38 countries including 19 developing countries were top export revenue (Butkeviciene, Benavides & Tortora, 2002).

So if developing countries are to use discriminatory procurement policies to fulfil their social obligation of reducing unemployment levels within their countries, then government should critically look at the service sector. In as much as the service sector is crucial, there is need to assess each type of service’s contribution to the employment levels of the country. Those services that are critical should be protected from foreign competition so that they continue to provide employment and improve the welfare of the population. A blanket overall service sector protection will not enhance its productivity hence the need to undertake a service sectoral analysis to spell out exactly which service sector to protect and the mechanism for protection.

The mechanism for protection is important. Free markets create competitiveness leading to increased innovation. Completely shutting out foreign competition from various sectors of the services industry will stifle innovation. The margin of preference for example should not be set at a level that completely shuts out foreign competition. It should become possible for a foreign firm that bids at favourably low prices to win a government contract. This will create an acceptable level of competition between domestic and foreign firms and will eliminate any possible complacency that would arise if no competition were allowed at all.

An acute shortage of skilled workers however exists in especially developing countries and is a major problem. In recognition of this situation, governments are exploring a number of ways to support the
up-skilling of the workforce. These include educational reforms and incentives for firms as well as individuals to invest in continuous learning.

3.6.2 CREATING COMPETITIVENESS ON THE SUPPLY SIDE OF THE MARKET

Although positive economic growth returned to many developing countries in the 1990s - a phenomenon that was frequently associated with export dynamism - in most cases it did not result in generalised improvements of welfare or relevant changes in poverty and employment. Developing countries economies are made up of very small to medium firms without sufficient capacity to compete in world markets. Liberalisation of the economy can remove the constraints to growth caused by poor management, inefficient public enterprises and high entry costs for private enterprises. Nonetheless, they can not by themselves allow the economy to build more advanced capabilities to escape the so-called “low-level equilibrium trap.” After an initial spur of growth, economies with static capabilities slow down as their inherited advantages are exhausted.

Developing countries are characterised by limited diversity in economic activity, export-concentration of a few products, significant dependency on trade taxes and small size firms. These small firms cannot attain either internal or external economies of scale. Due to lack of resources, skills and technologies, these firms are unable to create new products for export. To derive greater benefit from increased market access, countries need competitive enterprises that are able to produce products at a reasonable cost. They also need an efficient mechanism in place to ensure that these products can reach international markets within the time and cost required to stay competitive.

There need to tailor the rate of import liberalisation to the increase in the supply capacity of local firms in order to realise the country’s export potential. Increasing the supply capacity of local firms entails significant government interventions. Trade liberalisation has not been able to solve the supply-side constraints of developing economies nor promoted the changes needed in their productive structures which are essential if developing countries are to compete successfully in markets of value-added goods and services.
Exposure to global competition requires small firms to invest heavily in their national market and more so in order to export (Bernal, 2001). Developing nations have to up-skill and raise their productivity very quickly to “play the game” (Shurchuluu, 2002). There is need to ask how other developed nations become world players. There is need to benchmark and become competitive. Shurchuluu further argues that competitiveness is desired only because it holds the key to sustain economic prosperity, jobs and a higher standard of living. Quoting the OECD, he gives the definition of national competitiveness as the degree to which a country can under free and fair market conditions, produce goods and services which meet the rest of the international markets while simultaneously maintaining and expanding the real incomes of its people over a long time. This should be the desired goal for all countries including developing economies. The question then becomes how can this competitiveness be attained?

For countries seeking to enhance their international competitiveness, there is little debate about the importance of the role of government in this process (Wint, 1998). Making sustainable and effective integration of the developing countries into the processes of liberalization of the world economy rests upon creating a supportive domestic and international policy and regulatory environments. Fair trade will not be achieved in the imperfect markets, where information will not be equally available to all, where dominant players will impose their own terms of doing business and where the rest will have no tools to address the anti-competitive practices.

Market failures that bedevil developing countries need to be corrected in order to obtain both static and dynamic efficiencies. Developing countries have an inadequate output of internationally competitive firms capable of exporting their products in international markets (Wint, 1998). Without enabling support from the government, domestic firms from developing countries find it difficult to bridge the gap between their skills, technologies and capabilities and those needed for international competitiveness. Wint argues for the development of an international entrepreneur who is capable of meeting the challenges of international competitiveness. Given the deficiency of such calibre of people in especially developing nations, he advocated for selective government interventions.
Policy makers in developing economies should realize that their economies operate in a global economy and that the survival and the growth of their economy are influenced by market forces. They should provide a conducive environment to give their economies a chance of competing effectively in the global market. Governments from developing economies need to continuously dialogue with their international counterparts in order to share experiences and get the necessary technical advice to spur local economies towards development.

The other measures can be found in building capacity for investment. There is need to enable developing countries to enhance their producers’ ability to compete in the world market through increasing their productive capacity. Increased access to finance, business development services, managerial and technical skills and access to global supply chains are critical. New capital is needed to continue to invest in technology, train employees and provide ongoing on-the-job training and invest in quality management programmes. Furthermore, research and development efforts will be required to ensure that current technologies and quality programmes are updated.

Firms within developing nations need to recognise quality as a focal competitive strategy. This calls for cultural transformation. There is a difference in perception of quality and of what it takes for a product to be able to effectively compete in global markets between people in developing countries and those in the industrialized world (Madu, 1997). The economies of many developing countries have historically been protected through government regulations and significant import duties. As such, people constituting the workforce remain unexposed to the kinds of choices available to consumers in industrialised countries and thus fail to comprehend the level of quality it takes to satisfy demanding consumers in open and intensely competitive world markets.

Additionally in many developing countries the local supply base is poorly developed or non-existent. The use of sub-standard parts from local suppliers invariably results in the firm’s inability to produce high-quality products (Gosen, Babbar & Prasad, 2004). If quality management practices become established in the developing world, a number of positive outcomes should become apparent. With the capability to produce world-class products, firms based in these countries will
effectively be able to compete in global markets and bring wealth and prosperity to developing countries. One goal of quality management is the reduction of waste in the system. Poor countries with minimal resources stand to gain the most from such quality management practices.

Recognizing the limitations of skills and resources to exploit growing technology and sustain competitive advantage, firms are engaging in intra and inter-industry alliances both at the national and international level. The goals of strategic alliances are to leverage critical capabilities, increase the flow of innovation, and improve the flexibility in responding to market and technological changes (Malhotra, Agarwal & Baalbaki, 1998).

Strategic alliances are more than simple instrumental means for achieving collective goals directly benefiting the collaborators. They constitute each partner firms’ corporate social capital, providing potential access to various assets controlled by other strategic alliance network members. Alliances provide opportunities for participants to tap into the resources, knowledge, and skills of their immediate partners in a portfolio of inter-firm agreements (Toveda & Knoke, 2005). The development of relationships which support internationalisation may therefore permit small firms to expand outside the boundaries of their domestic markets and lessen the risks associated with new markets development (Marcela, Bernal, Burr & Johnsen, 2002). Quoting Coviello and Munro (1997), Marcela, Bernal, Burr and Johnsen conclude that having an in-depth knowledge of foreign markets and right connections in these markets is an important impetus to the internalisation of small firms.

The cross-fertilisation of global and local features can be exemplified in what has come to be called “brand affiliation.” Affiliation with the standards and icons belonging to global culture are increasingly becoming irresistible for locally bound small enterprises, which are hampered by their “smallness” and by their limited ability to tap into global markets single handedly, and to compete with their larger, globally omnipresent competitors. Attributes of the global culture may function as an “endorser” for small and medium enterprises (SMEs) and ingress to a global clientele without compromising their local identity and without relinquishing operational control (Yakhlef & Maubourguet, 2004). Quoting Eroglu and Machleit (1988), Ahmed et al (2001) argue
that a brand name can affect quality ratings such that a highly regarded brand can overcome a negative Country of Origin (CO) effect of country of manufacture and/or final assembly. Thus a Japanese Toyota car assembled in Brazil might be viewed as a reliable brand. This implies therefore, that if developing countries could hold on the affiliations to international brands, their product ratings would go up and penetration into international markets will be achieved.

3.6.3 PHASED APPROACH THROUGH REGIONALISATION

Power asymmetry across the globe has led to increased support for regional integration instead of a multilateral framework on public procurement. The argument is that if countries at the same level of development formed regional blocks, they would not be disadvantaged when they open up their markets. The issue of lack of reciprocity would not arise given that if they opened up, each country’s suppliers would be able to supply in the other country’s market leading to increased competition between countries.

Preference trading arrangements are nothing new in international relations and have complimented each other ever since. The WTO has reported about 250 regional trade agreements and the number could have risen by the end of 2005 to 300 (Brown & Stern, 2004). However, Brown and Stern are optimistic that the degree of commercial and economic interdependency today militates strongly against any possibility that trading blocks might raise barriers against each other in order to form more exclusive trade barriers within their free trade areas. Further they infer that the lowering of trade barriers within the Free Trade Areas (FTAs) is contributing positively to global trade liberalization. That some of the very large developing countries have joined in forming an FTA, only adds to positive momentum especially given that it is in trade among developing countries themselves that high trade barriers are encountered.

Indeed when developing countries join FTAs they will develop internal competitiveness. Once competitiveness has been achieved within the FTAs they would want to expand and merge with other FTAs. The eventual result would be a global market. The advocates for a regional bloc first before a global market argue for a phased approach to integration and might have a key to internationalisation of the public
procurement market. Firms at almost the same level of development would first have to share and compete with each other and then develop the capacity to compete before moving global. This would be a welcome alternative rather than blanket opening up of procurement markets where small firms from developing countries would be put up with mega multinationals while competing for government tenders with catastrophic consequences.

3.7 CONCLUSION

This chapter, through a review of related literature, has brought out critical issues on opening up public procurement markets. First it has argued that opening up public procurement markets plays a crucial role in enabling public authorities to purchase goods and services at the lowest cost hence giving taxpayers value for money, improving the quality of government service delivery and permitting better allocation of resources. Opening up competition to foreign providers can also stimulate domestic industry, promote innovation and contribute to good governance. Conversely, policies that favour national or local providers over those which are foreign have effects similar to other protectionist measures; introduce distortions that limit choice, increase prices and discourage economic efficiency. On balance, discriminatory policies shift profits to domestic firms, but these benefits are ultimately offset by increasing procurement costs.

Secondly this chapter has grappled with how developing countries could be open up their public procurement markets. Three issues came up:

- Sector-specific approach: This one argues that the sectors that offer employment to a larger number of a country’s citizens should be protected from foreign competition. The social utility function of government should be achieved through protecting some sectors of the economy so as to promote employment. The service sector being crucial in employing a large number of people in a particular country, it was argued, should be protected over the manufacturing sector. It was argued that critical assessment of the service sector be made and those that are critical to social functions of government be protected.

- Creating competitiveness on the supply side of the market: This approach argues that, for especially the manufacturing sector, instead of advocating for discrimination, the argument should
be how to improve their competitiveness. The competitiveness can not be improved through locking out foreign competition but through structural adjustments within the firms themselves. Various issues were suggested on how to achieve improved competitiveness so as to achieve a global thrust.

- **Phased approach:** This approach has argued that well-as a global procurement framework is necessary the move to achieve it should be gradual. It argues for regional trading blocks first before eventually expanding into a multilateral framework. The phased approach would enable countries to compete with those at the same level of development, build the competitiveness and then become global.

This chapter has not been able to recommend which of these approaches is better since much more research is needed in this area. However developing countries have to realise that discriminating foreign supplier in favour of domestic suppliers is not a long term approach in achieving their social and economic objectives. They should find a critical balance between opening public procurement markets and achieving their social-economic objectives because both of them are crucial.
CHAPTER 4

DISCRIMINATORY PROCUREMENT SCHEMES

4.1 INTRODUCTION

Discriminatory public procurement is a policy practiced by all governments with varying degrees of intensity and candour. Because of its magnitude, discrimination was recognised by GATT and EC as constituting an impediment to international trade and economic integration (McLanchlan 1985). By ending national preference and assisting in the removal of artificial barriers, it was argued, public expenditure within the European Union would be reduced through the use of lower-priced suppliers and the European industry would become more competitive as more efficient EU suppliers were allowed to oust inefficient but protected local competitors (Cox and Furlong 1997).

The desirability of free trade therefore, rests on the view that this will maximise the use of global resources and hence total global wealth (Arrowsmith 2002). However, the argument that national economies would benefit from well crafted policy on national preferences should not be ignored. The preposition that a state will become worse off; by protection of its own industry against foreign competition is therefore counter-intuitive.

As argued before in this research the primary objectives should not be the sole basis for public procurement given that government all over the world try to achieve other secondary objectives like promoting of nation industries, increasing employment in the country etc. We argue in this research, based on various scholars, that a government pursues two policy objectives through public procurement; primary and secondary objectives i.e. acquisition of goods and services at the best value for money and secondary objectives which encompass socio-economic or political objectives (McCrudden, 1999, Arrowsmith 2000, Watermeyer 2002, Ssennoga 2006, Telgen et al 2007 etc). A government is therefore faced with the decision to pursue one objective at the expense of the other or pursuing both at the same time.

Government could use the protection, for especially infant industries as a tool against rapacious foreign firms who would want to charge predatory prices. Market imperfections may enable local firms to reap
“super profits” as assistance to national industry and well tailored government policies will enable domestic firms to enjoy such benefit.

Several models for public sector procurement interventions, based largely on country specific procurement regimes and requirements, have evolved (Watermeyer, 2004). McCrudden (2004) discusses several schemes developed by various countries to support disadvantaged groups. He discusses a Special Contract Arrangement (SBA) introduced by Britain to support disabled people in the European economic area. The SBA requires contracting authorities to give special consideration to suppliers registered with the scheme. The scheme involves ‘offer back’ under which a registered supplier whose tender is unacceptable on price alone should be given an opportunity to submit a revised tender for part or the entire contract. If on such ‘offer back’ the registered supplier is able to match the best offer, then his tender should be accepted.

In Belgium, a government decree was introduced that provided that subsidies concerning Works, worth more than 30 million Belgian Francs and lasting for more than 60 days could only be granted if the public contract incorporated a social clause under which the contractor has to recruit an unemployed person registered with ORBEM (the Brussels unemployment service)

The major work in regard to various discriminatory procurement regimes in public procurement was designed by Arrowsmith (2000). She develops 4 broad schemes that could be used to discriminate foreign firms from bidding and winning domestic public procurement contracts (see table 3 below). These four generic schemes are further subdivided into nine implementation methods.
**TABLE 3: DISCRIMINATORY PROCUREMENT SCHEMES**

<table>
<thead>
<tr>
<th>Scheme Type</th>
<th>Methods</th>
<th>Action associated with the method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation</td>
<td>#1 Set Aside</td>
<td>Allow only enterprises that have prescribed characteristics to compete for contracts or portion thereof, which have been reserved for their exclusive execution.</td>
</tr>
<tr>
<td></td>
<td>#2 Qualification criteria</td>
<td>Exclude firms that cannot meet a specified requirement or norm relating to the policy objective from participation in contracts other than those provided for in law.</td>
</tr>
<tr>
<td></td>
<td>#3 Contractual conditions(Local Content)</td>
<td>Make policy objective a contractual condition e.g. fixed percentage of work must be subcontracted out to enterprises that have prescribed characteristics or a joint venture must be entered into</td>
</tr>
<tr>
<td></td>
<td>#4 Offering back</td>
<td>Offer tenderers that satisfy criteria relating to policy objectives an opportunity to undertake the whole or part of the contract if that tenderer is prepared to match the price and quality of the best tender received</td>
</tr>
<tr>
<td>Preferencing</td>
<td>#5 Preferences at short listing stage</td>
<td>Limit the number of suppliers/service providers who are invited to tender on the basis of qualification and give a weighting to policy objectives along with the usual commercial criteria as quality at the short listing stage</td>
</tr>
<tr>
<td></td>
<td>#6 Award criteria (tender evaluation criteria)</td>
<td>Give a weighting to policy objectives along with the usual commercial criteria, such as price, quality at the award stage</td>
</tr>
<tr>
<td>Indirect</td>
<td>#7 Product/service specification</td>
<td>State requirements in product or service specifications e.g. by specifying labour-based construction methods</td>
</tr>
<tr>
<td></td>
<td>#8 Design of specifications, contract conditions and procurement processes to benefit particular contractors</td>
<td>Design specifications and/or set contract terms to facilitate participation by targeted groups of suppliers</td>
</tr>
<tr>
<td>Supply side</td>
<td>#9 Generic Assistance</td>
<td>Provide support for targeted groups to compete for business, without giving these parties any favourable treatment in actual procurement</td>
</tr>
</tbody>
</table>

Generic Schemes for Public Procurement Interventions
Source: Arrowsmith (200e).

In the various sections below we take you through each of the nine schemes given by Arrowsmith for use in attaining social economic benefits.
4.2 SET ASIDES

Set asides are part of the reservation schemes as identified in table 3 above. Set asides shut out all firms from other countries from bidding for part/whole of a particular contract by clearly and unambiguously setting criteria that favours only local firms. The request for proposal will therefore include: contractors which are owned, managed or controlled by local firms, classified as small business enterprises or a joint venture with local firms.

Fenster (2003) argues that set asides are easy for officials to understand and introduce, simple to explain to tenderers and transparent but they may be the least cost effective, the least competitive and the least equitable. For a country determined to discriminate in favour of local firms directly regardless of additional cost, set asides may present the best option, he concludes.

According to McCrudden (2007), in the United States of America, the Public Works Act 1977 provided that at least 10% of each grant for local works project be expended for minority business enterprise. This came to be known in the United States as Set Asides. In Malaysia, in order to uplift the entrepreneurial capacity of the local Malays(called the Bumiputera), all supplies contracts with value between RM10,000-RM100,000 and work contracts up to RM100,000 were reserved to them(McCrudden 2004).

Uganda, just like many other developing countries is dominated by small and medium sized businesses. These SMEs lack the capacity to compete favourably in highly competitive public procurement markets due mainly to high costs of production arising out of poor production techniques and lack of expertise. There are structural and behavioural factors affecting firm’s competitiveness. These structural and behavioural aspects include firm size, operating efficiency, product development capability, knowledge of government requirements, personnel knowledge and training, quality control processes plus production methods and technology. There need to protect them from excessive competition from large foreign firms through set asides.

Hefner (1997) argues that the economic rationale for procurement set asides is that the policy results in either creating more jobs or at least not losing them. Further, the policy potentially produces more taxes for the local economy than otherwise would have occurred had a non-resident vendor been awarded the contract. Using the Input-output
model, Hefner calculates the impact of South Carolina’s decision to spend $1,000,000 a year on an out of state vendor in the purchase of concrete pipes. Using the appropriate Regional Input-Output Multiplier (RIMS II), she calculates that the total loss of economic activity would be $2,150,600 of which $656,300 would be in lost earnings. A total of 27 jobs would also be lost within the concrete product industry.

4.3 QUALIFICATION CRITERIA
Qualification criteria is a form of reservation scheme that excludes firms that cannot meet a specified requirement or norm relating to the policy objectives from participation in contracts other than those provided for in the law. In case of global trade, the contracting authority might prefer to exclude all firms without internal linkages from participation. A contract would therefore be competed for by only those firms who have subsidiaries with local firms or have a working relationship with domestic firms in which case they bid as a consortium.

The history of qualification criteria often referred to as selective purchasing goes a long way in history. It was used in the 1980s as a weapon by various States and local government in the United States and other governments across the globe to force firms to support the Sullivan principles, relating to South Africa during the apartheid era. Later in 1996, the Commonwealth of Massachusetts enacted a Law limiting state agencies from signing new contracts or renewal of contracts with companies doing business with or in Myanmar (Formerly Burma). The underlying principle in which it was built was the protection of human rights among developing countries.

Achieving social objectives, as argued in this research, qualification criteria could be used to achieve a multiplicity of goals such as environment, poverty reduction, social inclusion and community development (Erridge 2007).

Although Watermeyer argues that qualification criteria reduces competition and excludes suppliers who are capable of satisfactorily executing the contract, Fenster (2003) argues that if well arranged and transparent, it would save, an excluded buyer, the hassle of going through the often time-consuming and expensive process of bid preparation. For those keen to win the contract, it would enable them make necessary linkages and associations before deciding to bid.
4.4 CONTRACTUAL CONDITIONS (LOCAL CONTENT REQUIREMENT)

The intention here is to make policy objectives a contractual condition e.g. a fixed percentage of work must be subcontracted out to enterprises that agree to meet prescribed obligations such as performing a contract as a joint venture or employing specific local personnel while undertaking the contact. The Belgium government decree discussed in the introduction part of this chapter is a form of contractual condition. As indicated, for a firm to qualify for subsidies, it had to recruit an unemployed person registered with ORBEM, the Brussels unemployment bureau.

According to Watermeyer, contractual conditions have the potential under certain circumstances to satisfy both primary and secondary objectives. However he argues that they impose inefficient and uneconomical restraints to the supplier in the execution of the contract.

Erridge (2006) does not agree. In order to develop a procurement policy that incorporated the pursuit of socio-economic objectives, Northern Ireland developed an Unemployment Pilot Project (UPP). Developed in 2005, it attracted 15 contracts ranging from £700,000-£8,500,000. All bidders were required to include in their bid, an employment plan for utilizing those registered as unemployed in the country for at least 3 months or else their bids would be rejected.

The project results indicated that even at the time of full employment (As was the case in Northern Ireland at the time), commitment by government and contractors to invest in such labour market programmes on grounds of equity, social cohesion and efficiency can be successful in attaining sustainable employment. Besides, there was no evidence to show increased cost of production or loss in efficiency.

Just as in the case of Erridge (2006), we do assume that even when local content involvement is made as a pre-condition to awarding contracts to any foreign firm, there is no increase in cost of production or efficiency.

4.5 OFFER BACK

Offer the tenderers that satisfy criteria relating to policy objectives an opportunity to undertake whole or part of the contract if that tenderer is prepared to match the price and quality of the best tenderer received. The Special Contract Arrangement (SBA) introduced by Britain to support disabled people in the European economic area is an example of the
offer back discriminatory policy. The SBA requires contracting authorities to give special consideration to suppliers registered with the scheme. The scheme involves ‘offer back’ under which a registered supplier whose tender is unacceptable on price alone should be given an opportunity to submit a revised tender for part or the entire contract. The shortcoming with this method is it awards contacts to those who are not necessarily capable of performing the contract within the nominated contract price. This unfairness makes the procurement process unattractive to some tenderers leading to reduced competition. The method used does not inspire public confidence. Because of the inherent problems in this method, this research does not pursue it further.

4.6 PREFERENCES AT SHORTLISTING STAGE

Among the nine different methods for using public procurement to promote non commercial objectives, preferencing schemes are the most practiced. Arrowsmith (2000), gives 2 categorisations in which preference schemes can be applied. Under preferences at short listing stage a number of suppliers / service providers who are invited to tender are limited on the basis of qualification. Weighting is given to policy objectives along with the usual commercial criteria, such as quality, at the short listing stage.

In Uganda, A procuring and disposing entity is empowered under Section 50 of the Public Procurement and Disposal of Public Assets Act (No. 1 of 2003) (PPDA Act), with the prior written approval of the Public Procurement and Disposal of Public Assets Authority (PPDA), to limit the participation in the procuring process on the basis of nationality. Regulations 28-33 of the Public Procurement and Disposal of Public Assets Regulations (No. 70 of 2003) (PPDA Regulations) prescribe the use of preference and reservation schemes by central government Procuring and Disposing Entities (PDE) and Regulations 52-53 of the Local Governments (Public Procurement and Disposal of Public Assets) Regulations (No. 39 of 2006) (Local Government Regulations) make similar prescriptions for local authorities. It is stated in Regulation 28(2) of the PPDA Regulations and Regulation 52(2) of the Local Government Regulations that a preference scheme shall have as its objective the development of local businesses, by giving local businesses a competitive advantage when competing for public procurement contracts.
4.7 AWARD CRITERIA (TENDER EVALUATION CRITERIA)

Under award criteria (tender evaluation criteria), all prospective tenderers are given an opportunity but weighting in regard to policy secondary objectives is made along with the usual commercial criteria, such as price and quality, at the award.

Giving preferential treatment to domestic firms tends to raise the bids of domestic firms (because they now face weaker competition) and lower the bids of foreign firms (because they now face stronger competition). Whether a price preference policy lowers or raises the governments expected payment depends on whether the effect by increasing domestic bids is higher than the lowering of bids by foreign firms (Delta and Evenett 1996). What this would imply is that once foreign firms lower their bids to meet increased competition, the savings made on a contract by government increase, further increasing the impact on the local economy.

4.8 PRODUCT/SERVICE SPECIFICATION (OFFSETS)

Arrowsmith describes them as indirect schemes to achieve social economic benefits but most scholars prefer to call the offsets. Offsets require the seller to transfer extra, economic benefit to the buyer as a condition for country to buy goods and services from that firm. Instead of bargaining for price discounts, governments prefer to realise in-kind transfer that spill over to the whole economy (Taylor 2002). Offsets often appear under the guises of:

- Industrial benefits
- Compensation packages
- Cooperative agreements
- Counter-trade policies

Under product/service specification for offsets, a purchasing government obliges a foreign seller to include extra benefits with the sale of the basic goods. These foreign firms may then sign individual offset contracts with local firms in the purchasing government economy.

In a technologically deficient economy that many developing countries are, there is usually enormous public expenditure on foreign goods without any visible impact on the economy since much of the expenditure leaks out of the economy. This is especially true for defence
expenditure and other high technology goods. Countries would need to introduce compensatory mechanisms in order to ensure part of the money return to the economy. They will therefore establish compensatory schemes (offsets) to ensure:

- Transfer of technology, know how, licenses and other intellectual property resulting in enhancing domestic firm competitiveness or help in modernising the existing technologies and products.
- Creation of new export markets for the buying country’s existing goods or creation of new export oriented, innovative, internationally competitive products and services and providing distributional networks as a mechanism for integration in the framework of globalisation
- Investment in special sectors of the economy for social development leading to the creation of new jobs, innovative and high-technology packs etc
- Application of new technologies and export-oriented investments that are crucial in bringing social prosperity.

It follows therefore that if offsets are well managed, they create favourable conditions for economic growth and development, skill enhancement and increase in wage income.

Offsets can take the form of direct or indirect offsets. Direct offsets relate to the subject matter of the contract in question. This might involve contracting domestic firms in the servicing and maintenance of the product in the contract throughout its useful life. When this is done, then the offsets are akin to set asides.

**4.9 SPECIFICATIONS, CONTRACT CONDITIONS AND PROCUREMENT PROCESSES THAT BENEFIT PARTICULAR CONTRACTORS**

Most pronounced offsets are the indirect ones. Under this category of offsets, specifications and/or set contract terms are designed to facilitate participation by targeted groups of suppliers who might not be necessarily the suppliers of the tender product. The indirect offsets are all activities, services, acquisitions of tangible and intangible assets, technologies, know-how, industrial property rights etc which create new or innovative products, create new jobs, create added value and enhance competitiveness of domestic products of the buying country in the international markets.
It follows that all contracts will not attract the same type of offsets. What is important however is that a prescribed offset can cut across a number of sectors. The government will need to set its priorities very clear and determine which sector would be crucial in attaining these priorities. If for example, it wants to increase its products competitiveness on the world market, its focus might be on particular industries within the manufacturing sector. In the case of Uganda, this would be agro-processing industries. A clear competence evaluation would also be crucial. Is it poor production processes, is it poor skills among the workers or is it obsolete technology. Once this is done the type and nature of the offsets can be prescribed and the impact on economy measured. A country like Uganda that is still substantially agricultural, might dictate, for example that for a foreign firm to win a defence contract, Ugandan firms should be able to sell up 100% of the contract’s price of agricultural products to the sellers country. What this means is that although the firm that is supplying defence equipment will not buy the agricultural products, because this is not its area of operation, it will network with other firms, in its own country so as to buy agricultural products from the country, this would promote agricultural development and creation of employment in the economy.

So after a competence analysis the government would be able to advice procuring entities to pursue particular goals in setting up offsets. These goals as mentioned earlier could be technological transfer, opportunities for increasing the buying country’s products competitiveness, offset investment in project of major significance to the economy. This significance again could me measured in creation of employment, economic impact etc.

4.10 SUPPLY SIDE ENHANCEMENT
A country would undertake to empower its national firms to become competitive in bidding for tenders. Effort would be undertaken by government to eliminate all supply side constraints. The government would therefore provide access to finance, undertake mentorship, capability workshops or even direct subsidies. Once this is done, firms are allowed to fairly compete with international firms at equal footing.

4.11 SUMMARY
The discriminatory procurement practices discussed above form the centre subject matter for the remainder of this dissertation. We
approach our discussion as per the broad categories identified by Arrowsmith i.e. Reservation schemes, Preferencing schemes and Indirect methods/offsets. Approaching them per small category would not only be a daunting task but some of them have very thin lines of differentiation which would make our recommendations hazy. We, however, make one exception to the broad categorisation. Two schemes under reservations are covered i.e. the set aside and local content requirement. This is because the two come out distinctly in the current literature and they present interesting scenarios for our study.

Our discussion does not address the supply side enhancement discussed in 4.10 above. Supply side enhancement involves completely a different picture of analysis. First, we would have required to make an intensive assessment of supply side constraints and second we would require to measure the impact of the interventions. This would have completely introduced different scenarios that were not the intended objective of this research.

Our choice was therefore to approach this discussion from the demand side of the procurement process i.e. government departments and only give a broader picture of the supply side in chapter six. After measuring the monetary gains of competitive procurement regime, we discuss for the rest of the dissertation out discriminatory schemes can be introduced without losing the basic concept of value for money.
CHAPTER FIVE

PUBLIC PROCUREMENT IN UGANDA-THE DEMAND SIDE

5.1 INTRODUCTION

Public procurement is usually guided by a law that is formulated by government to ensure that procuring entities carry out their activities as efficiently and as transparently as possible. In Uganda, a law to guide public procurement was enacted in 2003 and came to be known as the Public Procurement and Disposal of Public Assets Act 2003.

In its corporate plan 2006, the PPDA, which is the regulatory body for public procurement in Uganda, highlights some of its objectives to be the establishment of a fair, transparent and accountable public procurement system plus making better use of the Government’s budget by obtaining better value for money in public procurement (better contract prices for more suitable products and services). In self-evaluation, the PPDA notes that while the progress in achieving these outcomes cannot be precisely measured, there is sufficient evidence of improvement for the judgement to be made that the public procurement system in Uganda is fairer, more transparent and accountable than it has been in the past. It contends that so far there is insufficient information available to assess whether better value for money in public procurement is being obtained. However, enforcement of the procurement rules and, in particular, of the preference that ought to be given to open competitive bidding, should enable better value for money to be obtained than under procurement methods that allowed contracts to be awarded to favoured bidders without going through a competitive process. They further contend that where an agreement contains a preference or preferences in favour of national and resident providers, a procuring and disposing entity shall ensure that the applicable preference or preferences are clearly stated in the bidding documents. As discussed in chapter seven, PPDA is in the process of designing preference schemes to operationalise this section.

In this chapter, we look at the nature of public procurement environment in Uganda as far discriminatory procurement is concerned, discuss the nature of contracts awarded to local and foreign firms and set a background for further analysis. The objective of this chapter is to assess the overall central government public procurement environment in
regard to local and foreign firm participation. To achieve this we undertake a survey of five ministries where we visit the procurement entities and document contract information for the year 2005. But before we discuss the survey results, let us give a simple highlight on Uganda’s sectoral performance.

5.2 SECTORAL ANALYSIS

The post war recovery period (1986-present) saw a rapid growth of the country with GDP rate of 6.4%. Agriculture pre-dominated the economy before the 1990s’. However, the structure of the economy has gradually changed since the mid-1980s with industrial and services accounting for a growing share of GDP at the expense of agricultural sector. Increased capacity to produce and trade manufactured goods is a cornerstone for a country’s economic development. The share of industry and services increased from about 18.6% and 40.6% in 2000/01 to nearly 20.4% and 43.3% respectively. The services sector contributed more than other sectors to the economic recovery. Although the service sector growth rate slowed from 8.1% in 2003/2004 to 7.2% in 2004/2005, it continued to outpace all other sectors of the economy contributing 43.3% to the GDP. The predominant service sectors include: wholesale and retail trade, hotel and restaurants, transport and communication and community services.

As earlier identified, the second biggest contributor to GDP is the agricultural sector having contributed 36.3% to GDP in 2004/2005. However due to structural transformation and policy guidelines by government, its growth has been declining. Nevertheless, agriculture is still the largest contributor to rural employment and income. The agricultural sector basically includes food and cash crops plus livestock production.

<table>
<thead>
<tr>
<th>TABLE 4: THE CONTRIBUTION TO GDP BY SECTOR AT BASIC PRICES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Industry</td>
</tr>
<tr>
<td>Services</td>
</tr>
</tbody>
</table>

2 Statistics from this section are extracted from the background to the Budget, Government of Uganda 2004/2005
5.3 NATURE OF GOVERNMENT PROCUREMENT

Governments are major buyers and in some case the only buyers of particular goods and services. They can hence influence size, structure, conduct and performance of national industries. Governments can allow foreign firms to bid for domestic contracts or shut them out all together. In terms of conduct, government can determine whether competition is restricted to price or includes non-price variables like offsets.

Government procurement thus involves a complex set of choices embracing what to buy, who to buy from, how to buy and the selection of the choice of criteria (Arrowsmith & Hartley 2002). They further argue that in determining what to buy, the product range from routine products such as paper clips to space satellites and telecommunication systems which affect technical progress and the possibility that some technology will spill over to the rest of the economy.

The choice of whom to buy from will embrace the argument of whether to buy from the national market or source internationally. The choice then becomes the selection options available. Broadly, these range between the extreme of fixed cost and cost plus contracts with incentive contracts forming an intermediate type. Such contracts have different implications of sharing risk between government on one side and contractors on the other. This eventually impacts on the efficiency of the procurement system and the contractors’ profitability. Governments must also determine whether procurement choices are based on narrow attributes of price, delivery and performance or are based on national economic benefits in terms of jobs created, technology acquired and level of exports involved.

5.3.1 UGANDA’S PUBLIC SECTOR EXPENDITURE

This research undertook study of government expenditure of 5 key government ministries3 for the calendar year 2005. The five ministries were selected on the basis of their annual spend. Uganda currently has

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3 The ministries sampled are:
- Ministry of Education and Sports
- Ministry of Health
- Ministry of Agriculture, Animal Husbandry and Fisheries
- Ministry of Works, Transport and Communication
- Ministry of Lands, Water and Environment
twenty-one ministries and the 5 ministries selected are the biggest spenders of government resources. A Sectoral analysis is indicated by a graph as shown.

**GRAPH 2: SECTOR PUBLIC PROCUREMENT EXPENDITURE**

![Bar graph showing sectoral public procurement expenditure]

From the graph, government spends up to 67% on works. This is not surprising given that Uganda went through turbulent times and most infrastructures were destroyed. Supplies (Goods) consume 25% of the total procurement budget while government expenditure on services was 8%. The total expenditure was UShs 304,188,457,460. This constitutes a percentage of 10% of the GPD.

A further look at the above expenditure is necessary. Out of the expenditure highlighted above, a percentage relates to foreign manufactured goods. These are mainly supplies that are absent from the local economy. These include cars, computers, road equipment etc. Out of the total expenditure on supplies of UShs 76,729,947,365, a percentage of 42.4% relate to foreign manufactured goods. These goods are usually supplied by foreign firms. Many of these foreign firms have a local presence in Uganda for purposes of getting access to information relating to advertised goods but by and large, expropriate most of the money back to home countries.

As we indicate in chapter seven foreign firms won a total contract price of UShs 66,926,531,166 in the year 2005 in 5 ministries surveyed. This constitutes a percentage of 22% of the total expenditure. When you add this figure to expenditure highlighted above that goes to foreign firms by
the very nature that the goods are not are not produced within Uganda, the percentage that goes to foreign firms is quite high. This translates into UShs 99,447,464,323= or 32.7%

**GRAPH 3: SHARE OF GOVERNMENT PURCHASE BETWEEN DOMESTIC AND FOREIGN FIRMS**

As can be seen foreign firms have a share in the Uganda public procurement of up to 33% but as indicated 11% of this is due to lack of choice in part of government because of the absence of these products from the local economy while 22% is won through open competition with local firms through open bidding.

In the EU, in spite a law that prohibits discrimination against foreign firms in bidding for and winning public procurement contracts across-border procurement is only at 10%. So at 33% of Uganda, we could not defend any existence of discriminatory procurement practices in Uganda, whether tacit or explicit.

**5.4 SECTORAL EMPLOYMENT AND PRODUCTIVITY**

According to the World Factsbook, Uganda has a labour force of 14.02 million out of an estimated total of 31.4 Million people. This is a percentage of 45.2%. Out of this labour force, 82% is employed in agriculture, industry (both manufacturing and construction) employs 5% and 13% is employed by the services sector.
Despite these employment figures, it is important to note from section 4.2 of this chapter that the contributions to GDP are 36.3% for agriculture, 20.4% for industry and 43.3% for services. Meaning that well as agriculture employs 82% of the labour force, its productivity in terms of generating GDP is less that services that employ only 13% of the labour force.
Such contradictions arise mainly because of total factor productivity differences. For example, agriculture employs mainly unskilled and semiskilled labour that attracts low wages while services usually attract high skilled labour.

In this research we therefore argue that although agriculture is crucial in as far as it employs a very large percentage of the labour force (82%), its productivity is low in as far as contribution to the overall economy is concerned. An injection in this sector would not substantially increase wage income as would be the case of the services sector. This is attested to in chapter eight when we calculate the accounting multipliers. The social services sector comes out strongly as having a higher propensity in creating wage income.

So if government makes a financial saving out of buying competitively (Cecchini analysis), then those saving would are more effectively utilised if reinvested in the social services sector rather than agriculture as a quick observable deduction would suggest. This analysis is crucial in aiding government in not re-investing savings in a less productive sector for the only reason that it employs the largest percentage of the labour force but rather they should be reinvested into a more productive sector.

In this research we argue that government could use public procurement to achieve social goals. Specifically, it should use public procurement to increase wage income. In the previous section, we have noted that 33% of government expenditure goes to foreign firms meaning that local firms win only 67% of the total contract value.
CHAPTER SIX

PUBLIC PROCUREMENT IN UGANDA-SUPPLY SIDE ANALYSIS

6.1 INTRODUCTION

Uganda has experienced rapid economic growth but its manufacturing sector remains small due to a long period of political instability and de-industrialisation (Siggel, Ikiara and Ngaria 2000). Industries are facing increased international competition due to past structural adjustments and the increasingly globalised world economy. This calls for increased international competitiveness on all global players if they are to survive in the market. Siggel et al however contend that not all firms can be expected to compete successfully in a perfectly free trade. A certain level of protection against low cost international competitors should be maintained. This chapter assesses Ugandan firms’ capacities and their ability to bid and win local contracts.

The impressive economic performance has however not matched with positive social indicators (ILO 1999). The high level of productivity indices and massive underemployment indicate that a large part of the population is yet to benefit from the country’s economic recovery. According to the ILO report the number of under/unemployed people is about 3.8 million. With a labour force of 14.02 million, this is a percentage of 27% unemployment rate! Quoting the country’s PEAP, the ILO report says that the prevalence of poverty could be eliminated by among others, increasing wage employment. However a recent survey in manufacturing firms, finds evidence of a low labour productivity in Uganda. On average, value-added per worker in Uganda is less than half in other countries. Average technical efficiency is estimated at only 0.5 indicating that firms are only half as efficient in their use of its inputs as the most efficient firms. Increasing wage employment when the average technical efficiency is 0.5% may be only illusory.

In this chapter, taking the construction sector as an example we put to light, the nature of Ugandan firms. This is important in view of the argument that public procurement markets should be opened to foreign competition. We argue that for competition to be effective, firms should be fairly equal. In a situation as we indicate below, where firms are grossly underdeveloped, faced with a lot of institutional constrains, opening them to competition my act as a quick road to their ‘death’
6.2 FIRM CAPABILITIES – THE CONSTRUCTION SECTOR

In Uganda, a contract of US$3,200,000 was awarded to Zzimwe Construction Ltd (a local firm) in 2006 for the construction of two roads in Kampala. These two roads were given to this construction firm not through competitive bidding but as a government policy of supporting local investors. According to the Permanent Secretary, Ministry of Works, Transport and Communication, Zzimwe is ranked as an A contract among local contractors (New Vision Newspaper 19 January 2007), yet by that date, the contract was 15 months behind schedule!

This is not an isolated case in Uganda, neither is it an isolated case in the developing countries. In 1993, the Ethiopian Road Authority awarded turnkey contracts for 15 rural road construction projects to different local construction companies. These contracts involved the tasks of survey and design of roads as well as their construction, all to be done in a package for delivery within three to five years. However, five years after the award of the contracts, only one had been completed. One of them had not even been started (Zawdie & Langford 2001). This low implementation rate in Ethiopia was attributed to a wide range of factors, including low engineering expertise; disregard for professional ethics; shortage of robust construction machinery and equipment; poor supervision and follow-up; and adverse weather conditions in some cases. The domestic contractors took the task in the first place without any prior knowledge of the alignment of the roads, the quantities of work involved, the terrain classifications, and the volume and hardness of the rock excavations involved!

What are the underlying reasons in Uganda? The reasons are not much different from those of Ethiopia. The Ugandan local construction industry (LCI) is very weak, undeveloped and faced with many problems. The problems range from lack of management and technical capacity, low levels of working capital to lack of access to credit facilities and work altogether. The enterprises in the sector are still heavily dependent on imported machinery, spare parts and imported raw materials and currently using obsolete plant and machinery.

According to the recent report of the Building Inspection Taskforce of the Ministry of Works, Housing and Communication, poor workmanship, failure to adhere to the building regulations, and use of unqualified personnel are very rampant on construction sites including high-rise buildings. In addition, unscrupulous business people are engaged in the sale of substandard building materials and tampering with and
adulterating other products such as cement. Unlike developed countries where the necessary regulations and enforcement mechanisms are in place to curb construction malpractices and to prevent entry of fake and substandard products into their markets, the reverse is true for developing countries like Uganda where archaic laws and poor enforcement mechanisms have turned their markets into a dumping ground.

Government is not spared in this blame game. Funding by government is in many cases inadequate and intermittent. Funding for the sector has not yet reached optimal levels and budget ceiling have continued to be below the required budget estimate. The inadequacy of funding is seriously affecting development and maintenance programmes leading to delay in implementation and in some cases complete abandonment of the contract and loss to the economy especially if the road construction is predominantly financed by government without foreign support.

The major impact of non payment or delayed payment is heavier on local industry given their low levels of capitalisation. One of the immediate consequences of inadequate government expenditure is the retardation of the construction firms in the provision of services at the required scale. Furthermore late payment by government for services provided by the private sector increases the indebtedness of the sector, increasing their expenditure on loan interest repayment and in some instances leads to closure of businesses. This undermines the government policy of developing a viable local construction industry and promotion of private sector development.

Intermittent funding by government aside the major issue as indicated above is lack of technical capacity in the local industry. Local engineering firms remain small, fragmented and disorganised- too scattered to take on large and lucrative contracts. The result is that local industry remains marginalised due to lack of confidence in its ability and it therefore benefits little out of infrastructure spending by government.

This research discovered for example that out of 18 newly constructed roads awarded by the Road Agency Formation Unit (RAFU)\(^4\), a government department under the ministry of Works, Transport and Communication.

\(^4\) RAFU is mandated to manage the road development function in the country apart from maintenance which falls directly under the Ministry of Works, Transport and Communication.
Communication, none is awarded to a domestic firm! The total contract value for these 18 roads is UShs 535,068,000,000. This figure is outside our computations in the last chapter regarding works, because RAFU was not sampled for this research. RAFU, although a department of ministry of Works, Transport and Communication operates independent of the mother ministry. The main ministry is in charge of routine repair and maintenance of national road network and as indicated in the analysis of the previous chapter is competed for between both local and foreign firms. As indicated this was UShs 76,165,365,543=. This is only 12.5% of the road construction and maintenance value and the remaining 87.5% is taken by foreign firms due to lack of capacity at home!

The situation highlighted above could be better in supplies and services sectors but not completely different. Under current procurement arrangements, few local contractors are fully competitive. It is the capacity of the firms and the personnel employed in this firms that will determine the quality of professional work that will be delivered to the public. It is a clear demonstration that personnel and corporate capacities will determine which firm wins an assignment and this has a snowball effect in that the more assignments won and executed satisfactorily the more experience accrue to the personnel and firm and fundamentally, this is lacking among the Ugandan firms.

6.3 ADDRESSING THE STRUCTURAL CONSTRAINTS

In chapter three, we argued that trade liberalisation has not been able to solve the supply-side constraints of developing economies nor promote the changes they need in their productive structures, which are essential if developing countries are to compete successfully in procurement markets. Government intervention is crucial if these firms are to become competitive.

Government can use its macro economic strategic interventions to assist these firms. Through its fiscal policy government can dictate the direction of these firms. A balance between increased spending and tax subsidies may be a step in the right direction. In regard to public procurement these tools of fiscal policy are better used if government makes a careful sectoral assessment of structural constraints affecting firms. Once this is done, then government can progressively favour domestic firms in the award of government contracts while evaluating the impact these preferences are creating in terms of institutional
growth. Favouring domestic firms might help in providing local firms with the needed capital to expand and improve technical capacity. As we argue in chapter eleven, introducing offsets might also be crucial in enhancing skills within these firms. So advocates of discriminatory schemes might have a point in especially developing countries. The ‘young’ firms should be assisted to grow to enable them compete and win national procurement contracts. A blanket opening of procurement market might instead suffocate their growth rather than enhance it. In the next chapters we discuss this further.
CHAPTER SEVEN

THE CECCHINI ANALYSIS

7.1 INTRODUCTION
While advocating for the creation of a single European market, Cecchini (1988) argued that a true European market would suppress a series of constraints that prevented enterprises from being as efficient as they could be and employ their resources in full. It would also establish a competitive environment which would incite them to exploit new opportunities. The emergence of the new competitive incentives would lead to significant reduction in cost due to better exploitation of several kinds of economies of scales, force the setting of prices closer to cost of production (reduction of profit margins) and creation of innovation, new product processes and new products stimulated by the dynamics of the competitive environment. These processes, he further argues would liberate resources for alternative uses and this would lead to increased consumption and investment. Increased investment would translate into increased employment leading to improvement in the economic welfare of member states and other macro economic gains.

To compute the empirical estimates of the economic gains arising out of increased competitive environment is however not an easy task. Cecchini notes that this is especially true as far as the cumulative long term effects are concerned. However he argues that cost and price are the key elements in the attempt to quantify the economic gains mentioned above. The percentage reduction in costs or prices resulting from the removal of market barriers or change in competitive conditions is the essential starting point in the quantification process. A first approximation of the economic gains in monetary terms would be arrived at by multiplying these percentage costs against the initial value of goods and services in question.

This is indeed the focus of this chapter. We attempt to compute monetary estimates of a change in the competitive environment in public procurement. We specifically measure the cost that government would incur in a non competitive environment i.e. where government would award a contract to a domestic firm and discriminates foreign firms irrespective of whether they would post lower bid prices. On the
other hand we measure the cost to government if it awarded the same contract in a competitive environment allowing domestic firms to compete alongside foreign firms. The difference between the two cases constitutes the loss or gain that government incurs in operating in a non-competitive environment.

7.2 THE CECCHINI METHODOLOGY
For public procurement, within its report on a single European market, the Cecchini commission relied on a study by Atkins that surveyed five countries with the European community (Belgium, France, Italy, Denmark and United Kingdom). Based on the 1984 base prices, Atkins, evaluated the potential benefits that could be anticipated from liberalisation of public procurement, distinguishing from the generality of products those for which the public sector was a major purchaser. For standard products the direct effects of then, current purchasing practices were analysed by means of surveys of actual prices in the member states.

Using about 40 products most purchased by government and public enterprises, the survey was made across EC member countries of the actual prices charged by each country for the selected products. On the basis of the average prices of these products, in each member country the potential saving gains were estimated after subtracting extra costs associated with intra community trade such as transport, marketing, insurance and exchange risk cover. The estimated benefits were thus the potential savings achievable if the public purchasing body selected the most competitive supplier.

The savings achievable for these representative products were then extrapolated to the level of the industries producing them, assuming that the degree of import penetration from other member countries in the public sector would reach a similar level to that observed in the private sector. Multiplying total public purchasing less current expenditure in these industries by the existing potential gains due to price differences and by the increase in import penetration, gave an estimate of the direct economic effects for each sector. The total direct effects were estimated to be around 3 billion ECU.

Further the direct effects on purchase price were amplified by indirect effects. These indirect effects due to rationalisation of production
structures will occur in industries where the public sector is the dominant purchaser.

7.3 MODIFIED CECCHINI METHODOLOGY

Just like in the European Community case, this research set out to measure the impact discriminatory procurement practices would have on government spending. Put it another way, the cost to government as a result of operating in an uncompetitive environment. To do this, we adopted the Cecchini method with some modification.

In chapter 5 we indicated that this research undertook study of government expenditure of 5 key government ministries for the calendar year 2005. These Ministries were: Ministry of Education and Sport, Ministry of Health, Ministry of Agriculture, Animal Husbandry and Fisheries, Ministry of Works, Transport and Communication and Ministry of Lands, Water and Environment. These ministries, we said, had been chosen due to there big annual spend in comparison to other government departments.

For each of these ministries, we visited their PDUs (Procurement and Disposal Unit) to ascertain the contracts advertised in the year 2005. For this particular part of our methodology, we sorted out those contracts advertised and were able to attract both foreign and local suppliers. For each contract advertised and responded to by both of them (foreign and local suppliers), we established bid prices offered for that contract. The purpose was to determine which of the two (foreign and local supplier offered a better price and by how much and eventually irrespective of the price, who won the contract. By preferring one bidder to the other, government would either lose on the primary objective of value for money or make a saving if it opted for the lowest bidder.

So, for each PDE visited we requested to review the minutes of the contract committee that awarded the contract in question. We need to note here that contract evaluation is a two step process. The first step is the evaluation of the technical proposal. At this step in the evaluation process, all submitted bids are subjected to technical evaluation upon preset criteria. Usually at technical evaluation criteria level, government intending to prefer domestic firms over foreign firms would award higher marks to those aspects that give advantage to local firms. Such criteria would include issues like use of local labour, experience of local environment, serviceability of the contract etc. A look at the evaluation
criteria did not show any possible mark award that would particularly favour domestic firms. Actually the criteria seemed to favour foreign firms as far as capital requirements, experience requirement and performance bonds were concerned.

Stage two of the evaluation process involves the financial proposal. Once, the technical evaluation has been done and the best possible suppliers selected, then the contracts committee would open their financial proposals. This then became our centre of focus. Once the technical bids have been evaluated, it means that all short listed firms can perform on a particular contract fairly well. So the question of quality and efficiency in contract execution ceases to be a major determining factor. The major factor now becomes the financial bid unless there is a tie or insignificant difference in the bid price, then the score at technical level would help in finding a solution.

Awarding a contract to a domestic firm that bids higher that a foreign firm at this stage would imply a price preference and hence a loss to government. Conversely awarding a contract to a foreign firm that bids lower would signify government’s effort to put its primary objective of value for money ahead of any other objectives and hence for our research, we said government would be making a financial saving. This saving is calculated as the difference between the lowest foreign bid prices (which would normally be the winner of the contract) and the lowest domestic bid.

**BOX 2: ILLUSTRATION OF THE CECCHINI METHODOLOGY**

<table>
<thead>
<tr>
<th>Example of the methodology used</th>
</tr>
</thead>
<tbody>
<tr>
<td>If after the technical evaluation 3 firms are short listed for a particular contract, one foreign firm, A, and two domestic firms B and C with bid price UShs. 5,000,000 for A, 5,600,000 for B and 6,100,000 for C, the last firm with a bid price of UShs 6,100,000 would automatically be left out because its price is so high.</td>
</tr>
</tbody>
</table>

The foreign firm A at a bid price of UShs 5,000,000 would now be competing directly with domestic firm B at bid price Shs. U5,600,000. A country discriminating against foreign firms would award the contract to firm B at UShs 5,600,000. Given that foreign firm A is bidding at UShs 5,000,000 this means the country would lose UShs 600,000 in discriminating A against B.

Conversely by allowing foreign firm A to take the contract instead of B, government would have acted prudently, pursued the primary objective of value for money and would make a final saving of UShs.600,000 or 12% of the contract price.
We encountered a number of problems, one, many PDEs were reluctant to release information, even after getting permission from the Permanent Secretaries of the sampled ministries. The researcher had to travel to and from PPDA where he got some data. However in many cases, this was incomplete. He then had to travel back to the PDEs to ensure the missing gaps were filled. A promise was however made to try as much as possible to let their PDEs remain anonymous in data processing.

Secondly, there were not many contracts that attracted both categories of supplier i.e. foreign and local supplier for a particular contract. Either they were solely foreign or solely indigenous. We established that the main cause of this was the dollar (money) value involved. If the sums were huge, this attracted only foreign firms e.g. Road contractors, Medical Drugs etc. Where the contract value involved was relatively low, this attracted only indigenous firms and not international suppliers.

Another problem was to define an indigenous firm. A draft proposal for preference schemes\(^5\) in Uganda that this research has seen described a Ugandan provider as a company that is incorporated or registered in the Republic of Uganda and whose 50% authorised share capital is owned either by the government or by Ugandan nationals. A Ugandan national is one who possesses a Ugandan passport. This research adopted this guideline.

The use of the Cecchini report methodology is important due to it wide acceptability and hence giving credence to this research and also allow for comparison and generalisability. However the modification to his methodology is justifiable. Due to limited resources for this research it was not possible to make a survey across countries. The survey was made within Uganda.

### 7.4 DISCUSSION OF FINDINGS

30 contracts were identified for measurement under this section. Care was taken to include only products manufactured in Uganda. It would not make sense for example to include a contract bided for and won by a

\(^5\) Uganda government through the PPDA is consulting with various stakeholders to set up preference schemes within the public procurement framework. These consultations have resulted into a draft proposal that this researcher was able to access. However, this draft proposal is still in its very preliminary stages. It has to be discussed by cabinet and eventually passed by parliament.
local company where the product concern is not made in Uganda e.g. cars. For such a contract whether or not it was won by a Ugandan company the multiplier effect will be minimal given that most of the money received will be sent to the manufacturers abroad.

**TABLE 5: THE CECCHINI ANALYSIS**

<table>
<thead>
<tr>
<th>Winning firm</th>
<th>Bid Price of lowest foreign firm</th>
<th>Bid Price of lowest Local firm</th>
<th>Contact Price</th>
<th>Financial Savings</th>
<th>% Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Works Contract</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local firm</td>
<td>2,215,916,959</td>
<td>1,932,685,841</td>
<td>1,932,685,841</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>1,353,260,779</td>
<td>1,464,871,003</td>
<td>1,353,260,779</td>
<td>111,610,224</td>
<td>8.25</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>8,022,062,148</td>
<td>9,252,312,023</td>
<td>8,022,062,148</td>
<td>1,230,249,875</td>
<td>15.34</td>
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<td>Foreign Firm</td>
<td>1,386,752,400</td>
<td>1,625,434,200</td>
<td>1,386,752,400</td>
<td>238,681,800</td>
<td>17.21</td>
</tr>
<tr>
<td>Local firm</td>
<td>1,537,534,800</td>
<td>1,436,302,800</td>
<td>1,436,302,800</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>1,276,387,200</td>
<td>1,536,302,800</td>
<td>1,276,387,200</td>
<td>257,221,900</td>
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<td>Foreign Firm</td>
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<tr>
<td>Foreign Firm</td>
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<td>1,436,302,800</td>
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<td>-</td>
</tr>
<tr>
<td><strong>Service Contracts</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Local Firm</td>
<td>186,900,100</td>
<td>149,553,434</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>610,295,542</td>
<td>752,540,870</td>
<td>610,295,542</td>
<td>142,245,328</td>
<td>19</td>
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<td>Foreign Firm</td>
<td>891,367,200</td>
<td>1,120,678,000</td>
<td>891,367,200</td>
<td>229,310,800</td>
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<td>Local firm</td>
<td>350,246,850</td>
<td>270,140,000</td>
<td>270,140,000</td>
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<td>-</td>
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<td>Foreign Firm</td>
<td>2,294,377,788</td>
<td>2,476,239,000</td>
<td>2,294,377,788</td>
<td>181,861,212</td>
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<td>259,434,184</td>
<td>271,619,600</td>
<td>259,434,184</td>
<td>12,185,416</td>
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<tr>
<td>Local firm</td>
<td>567,890,324</td>
<td>454,584,563</td>
<td>454,584,563</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Local firm</td>
<td>890,600,555</td>
<td>780,678,654</td>
<td>780,678,654</td>
<td>-</td>
<td>-</td>
</tr>
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<td><strong>Supplies Contracts</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Foreign Firm</td>
<td>520,299,338</td>
<td>886,011,727</td>
<td>520,299,338</td>
<td>365,712,389</td>
<td>41</td>
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<tr>
<td>Foreign Firm</td>
<td>370,400,000</td>
<td>561,934,782</td>
<td>370,400,000</td>
<td>191,534,782</td>
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</tr>
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<td>3,391,986,600</td>
<td>3,962,789,012</td>
<td>3,391,986,600</td>
<td>570,802,412</td>
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<tr>
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<td>852,476,400</td>
<td>905,000,000</td>
<td>852,476,400</td>
<td>52,523,600</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>2,447,693,110</td>
<td>2,710,000,123</td>
<td>2,447,693,110</td>
<td>262,307,013</td>
<td>10</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>3,570,349,132</td>
<td>4,120,005,100</td>
<td>3,570,349,132</td>
<td>549,655,968</td>
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<tr>
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<td>4,000,129,456</td>
<td>3,570,249,132</td>
<td>429,880,324</td>
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<tr>
<td>Foreign Firm</td>
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<td>400,890,024</td>
<td>369,727,902</td>
<td>31,162,122</td>
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<td>Foreign Firm</td>
<td>1,020,815,710</td>
<td>1,102,000,745</td>
<td>1,020,815,710</td>
<td>81,185,035</td>
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<tr>
<td><strong>Modified Cecchini Analysis</strong></td>
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<tr>
<td>Local firm</td>
<td>6,051,112,543</td>
<td>6,276,034,121</td>
<td>6,276,034,121</td>
<td>565,602,756</td>
<td>9.90</td>
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<td>Foreign Firm</td>
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<td>Foreign Firm</td>
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<td>52,523,600</td>
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<td>Foreign Firm</td>
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<tr>
<td>Foreign Firm</td>
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<td>4,120,005,100</td>
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<td>549,655,968</td>
<td>13</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>3,570,249,132</td>
<td>4,000,129,456</td>
<td>3,570,249,132</td>
<td>429,880,324</td>
<td>11</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>369,727,902</td>
<td>400,890,024</td>
<td>369,727,902</td>
<td>31,162,122</td>
<td>8</td>
</tr>
<tr>
<td>Foreign Firm</td>
<td>1,020,815,710</td>
<td>1,102,000,745</td>
<td>1,020,815,710</td>
<td>81,185,035</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,113,997,324</td>
<td>18,648,760,969</td>
<td>16,113,997,324</td>
<td>2,534,763,645</td>
<td>13.59</td>
</tr>
<tr>
<td><strong>Values</strong></td>
<td>72,009,253,791</td>
<td>77,311,290,359</td>
<td>70,529,531,796</td>
<td>6,781,768,563</td>
<td>10</td>
</tr>
</tbody>
</table>

Modified Cecchini Analysis

The analysis indicates that if competitive bidding was allowed to take place i.e. without preferences for Ugandan companies, the government
would be saving up to UShs 6,781,768,563 for the selected contract. This is the static effect according to Cecchini. Works attracts a savings of 7.56% of the contract price services attract a percentage of 9.9% while suppliers come out with the highest percentage savings of 13.59. Overall, this translates into 10% savings on the contract price. These figures although seemingly hypothetical are very crucial in providing an idea of the magnitude of potential savings that may result in buying competitively.

**TABLE 6: SUMMARY OF RESULTS**

<table>
<thead>
<tr>
<th>Product category</th>
<th>Percentage Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works</td>
<td>7.56%</td>
</tr>
<tr>
<td>Services</td>
<td>9.9%</td>
</tr>
<tr>
<td>Supplies</td>
<td>13.59%</td>
</tr>
<tr>
<td><strong>Overall percentage savings</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

The question that arises and is going to form a bulk of our discussion hereafter is the impact of the 10% on the economy. Should the government ‘throw’ away this 10% at the expedience of achieving social objectives? The advocates of non discriminatory procurement argue that buying competitively leads to more efficient resource utilisation. The 10% savings calculated using the Cecchini analysis, attests to this argument.

However as indicated in the previous chapter, firms especially from developing countries are in a precarious situation. For government to open up procurement markets where these small and inefficient firms compete with gigantic well capitalised foreign firms may be suicidal. These small forms offer employment to a large part of the population and if government wants to improve welfare, these firms are crucial in attaining its objectives. So rather suffocate them further through opening procurement makes government should help them grow.

In this research we argue that government can achieve improvement of people’s welfare using public procurement. To achieve this, the firms need to be helped to grow and with further expansion more employment will be created, wage income increased and welfare improved.

So we argue that it should not be a question of ‘throwing’ away the 10% savings as calculated above, but a balance between efficient resource utilisation and attainment of social objectives. In the next chapter we
compute the impact of an extra injection into the economy, that is, what is the impact of the 10% savings on the economy. To do this we use the social accounting Matrix (SAM). We then compare this impact with a situation when a government decides to favour domestic firms. An equilibrium level between the impact of the savings and a discriminatory regime would help to achieve both social and economic objectives. This becomes the focus of our discussion in the next chapters.
CHAPTER EIGHT

MACRO ECONOMIC IMPACT ASSESSMENT OF DISCRIMINATORY PUBLIC PROCUREMENT

8.1 INTRODUCTION

It is always government responsibility to ensure that public money is well spent as alternative uses of funds constantly compete for policy spending priorities. Government procurement involves a complex set of choices embracing what to buy, how to buy it and who to buy from. The choice of whom to buy from, may embrace the argument of whether to buy from the national market (discriminatory procurement) or opening up to allow competition from foreign suppliers.

If the economy is to grow and be able to improve the standard of living of its people, some resources should be spent within the economy rather than spending it on foreign sourced goods especially if those goods exist within the economy. Government therefore argues that deciding to buy from national markets will create a stimulus to the economy through injections. Injections to the economy will stimulate the expansion of infant industries, foster growth of underdeveloped regions, create employment and improve the standard of living.

On the other hand while opening up the market to foreign firms will enhance competition leading to possible efficiency in resource utilisation, it allows for resources to flow out of the economy through leakages. Leakages represent resources withdrawn from the re-spending cycle in the economy. If a government through procurement spends money on a domestic supplier this would constitute an injection and will boost the local economy but if it instead spends the money on a foreign supplier, then that is a leakage from the economy. A leakage will only boost other economies rather than this particular economy (see the figure below).
Government deciding to either buy from domestic suppliers or from foreign suppliers comes down to either:

1) Paying more than the optimal price to domestic firms with the hope that this will create a stimulus to the economy through increased employment, income and output.

2) Buying at the most competitive price which might mean buying from a foreign firm which could post a lower bid price. This will deny the local economy the required stimulus as most of the money would be expropriated. However it would make a monetary saving which it could inject back into the economy.

The question then boils down to the possible savings arising out of buying at the most competitive price against the possible stimuli created by injections through buying from domestic firms. If the savings are large, there is no doubt government would be motivated to buy from a foreign firm and then invest the savings back into the economy while if the savings are small or insignificant, the justification to buy from a foreign firm would not exist. This creates a balance of scale between how much saving government can earn from buying from a foreign firm against the impact of the stimulus created by a domestic expenditure.
In chapter seven we discussed a case of two firms, one domestic and another foreign, bidding for an advertised government contract. The local firm bid price was UShs 5,600,000 vis-à-vis a foreign firm bid price of UShs 5,000,000. We indicated that a prudent government would award the contract to a foreign firm and make a monetary saving of UShs 600,000. Deciding otherwise would lead to a loss of that amount of money.

In this chapter we argue that the UShs 600,000 should be looked at in the light of the impact it can create on the economy vis-à-vis the impact of awarding the contract to a local firm. A question that arises along this reasoning is: if government awarded the above contract to a local firm, would its decision be different if the monetary saving were higher, say 1,200,000. In other words, at what point should government accept to pay slightly more to a local firm for the sake of attaining social objectives?

8.2 SOCIAL ACCOUNTING MATRIX

The Social accounting matrix (SAM) is a technique related to national income accounting, providing a conceptual basis for examining both growth and distributional issues within a single analytical framework in an economy. It can be seen as a means of presenting in a single matrix the interaction between production, income, consumption and capital accumulation. A social accounting matrix is simply defined as a single entry accounting system whereby each macroeconomic account is represented by a column for outgoings and a row for incomings” (Round, 1981). It is represented in the form of a square matrix with rows and columns, which brings together data on production and income as generated by different institutional groups and classes, on one hand, and data about expenditure of these incomes, by them on the other. In a SAM, incomings are indicated as receipts for the row accounts in which they are located and outgoings are indicated as expenditure for their column accounts. Since all incomings must be, in a SAM, accounted for by total outgoings, the total of rows and columns must be equal for a given account.
sum of a row is the total output or total sales of an industry.

Each column records the purchase of inputs of the industry identified at the top of the column from the industries named on the left.

Table 7: SAM Transaction Table

<table>
<thead>
<tr>
<th>Industry</th>
<th>Factors</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Const.</td>
<td>Manuf.</td>
</tr>
<tr>
<td>Construction</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Labour</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Capital</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Household</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Govt</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Accum a/c</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>ROW</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>123</td>
</tr>
</tbody>
</table>

The numerical/transaction table above contains an eight sector SAM. 2 Producing industries in the economy (Construction, and manufacturing) 2 factor of production, 3 institutional accounts i.e. Household, government, and 1 accumulation a/c plus the Rest of the world which are listed twice in the transaction table. Rows for producing industry reflect the receipts by each producing industry from other industry or institutions within the local economy or to final consumers (households and government). Columns for producing industry in the table reflect purchases by producing industries from other industries as well as payments by workers, households and Government plus the Rest of the world. The table is balanced in that the total sales of each producing industry equals to total purchases by that industry.

The factors of production accounts are meant to show how value added generated in the various production activities are allocated over production factors, and subsequently how factor incomes are distributed to current institutions.

The institutions current accounts are split into household and government. For any of the institutions, by adding different sources of incomes in rows, we find the total incomings of that institution. In the columns we see how the institutions pay out some of their incomings as direct taxes and transfer payments, spend on consumer goods and transfer their savings to a combined accumulation account/investment-savings account.

The rest of the world account, imports and exports are marched with incomings and outgoing foreign transfers. The row gives the distribution of imports on consumption goods, investment goods, intermediate goods and transit imports and exports. The column gives the expenditure of the external world in the form of net factor incomes from abroad, net household and government transfers, net capital inflow and export and transit balances of goods and services.

Most importantly, the transactions table reflects the way in which the productive sectors are linked to each of the other industries and to the final demand component of the local economy. Changes in one sector affect other sectors of the economy through the linkage indicated.
SAM is a data system, including both social and economic data for an economy. The data sources for a SAM come from input-output tables, national income statistics, and household income and expenditure statistics. Therefore, a SAM is broader than an input-output table and typical national account, showing more detail about all kinds of transactions within an economy. An overriding feature of a SAM is that households and household groups are at the heart of the framework. Only if there exists some detail on the distributional features of household sector can the framework earn the label ‘social’ accounting matrix (Dakila and Dakira 2004).

The SAM is not, of itself a model. It is simply a representation of a set of macro-meso data for an economy (Round 2004) However once the SAM is built with all the accounts in a consistent framework; this forms the transaction table providing the basis for the multiplier analysis to be undertaken. The first step is to decide which accounts are considered endogenous and which ones are kept exogenous. The framework can then be used to measure the impact of change in the exogenous accounts on the whole system (Dakila and Dakira 2004). Usually SAM tables consist of production activities, factors of production and households. It has become customary to regard these as endogenous while transactions in government account, capital account and the rest of the world are considered exogenous. This is because government outlays are essentially policy-determined, the external sector is outside domestic control and as the model has no dynamic features so investment is exogenously determined (Round 2004).

Once the endogenous and exogenous accounts are determined, the transaction matrix can be transformed into corresponding matrix of coefficients. This can be obtained by dividing a particular column entry in the table by the column total. This yields a sub-matrix $A_n$ which represents the average expenditure propensities of the endogenous accounts (Parikh and Thorbecke 1996) These propensities obtained from endogenous accounts are the coefficients analogous to the input output model that are used to compute the matrix multipliers. The accounting multiplier can be derived from $A_n$. The proportions that are obtained from the exogenous account show the leakages i.e. the proportion of each endogenous account that leaks out as expenditure into external accounts without feedback.

The total transformed matrix is expressed in ratios where each column adds up to one. So, well as transaction matrix is expressed in monetary
value, the matrix expenditure propensities shows the values as the ratio of each particular element of endogenous accounts with respect to the column in which the element is situated. The endogenous rows accounts can then be written as a series of linear identities and the system can be solved to give the multiplier matrix relating endogenous income \( y_n \) to exogenous injections \( X \)

\[
Y_n = (1 - A_n)^{-1}x = M_n x
\]

The inverse, \((1 - A_n)^{-1}\) is termed as the accounting multiplier matrix. \( A_n \) represents the matrix of average endogenous expenditure properties.

**BOX 5: ILLUSTRATION: SAM AS A COEFFICIENT MATRIX**

*Social Accounting Matrix as a coefficient matrix for modelling the national economy*

The transaction table in Box 7 above provides a basis for the multiplier analysis to be undertaken. The next step towards the computation of the SAM-based multiplier models is to compute column shares (column coefficients) from a SAM transaction table in order to represent structure and, analogous to an input-output model, to compute matrix multipliers. In order to obtain the SAM coefficients, the first step is usually to decide which accounts are considered endogenous and which ones are kept exogenous. It has become customary to regard productive sectors, factors of production and Households (columns 1-5) as endogenous while transactions in government account, accumulation account and the rest of the world are considered exogenous (6-8). Once the endogenous and exogenous accounts are determined, the transaction matrix can be transformed into corresponding matrix of coefficients. This can be obtained by dividing a particular column entry in the table by the column total. The SAM coefficient matrix below is computed from the transaction table in Box 7 above.

**Table 8: SAM Coefficient Matrix**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Factors</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const.</td>
<td>Manuf.</td>
<td>Lbr</td>
</tr>
<tr>
<td>Construction</td>
<td>0.20</td>
<td>0.16</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.13</td>
<td>0.11</td>
</tr>
<tr>
<td>Labour</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td>Capital</td>
<td>0.13</td>
<td>0.15</td>
</tr>
<tr>
<td>Household</td>
<td>0.10</td>
<td>0.16</td>
</tr>
<tr>
<td>Govt</td>
<td>0.08</td>
<td>0.09</td>
</tr>
<tr>
<td>Accum a/c</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>ROW</td>
<td>0.17</td>
<td>0.11</td>
</tr>
</tbody>
</table>
The social accounting matrix can also be written as a series of linear identities. We determine the accounting multiplier. If we consider \( n \) as endogenous institutions and \( z \) exogenous institutions, a SAM can be written in the following way:

\[
\begin{pmatrix}
Y_n \\
Y_z
\end{pmatrix} =
\begin{pmatrix}
A_{nn} & A_{nz} \\
A_{zn} & A_{zz}
\end{pmatrix}
\begin{pmatrix}
Y_n \\
Y_z
\end{pmatrix}
\]

Where \( A_{ij} \) are sub matrices that contain the expenditure share coefficients calculated in table A\(_n\) above. Income from endogenous account \( Y_n \) can be obtained as follows:

\[
Y_n = A_{nn}Y_n + A_{nz}Y_z = (I - A_{nn})^{-1}A_{nz}Y_z = M_n x
\]

Hence: \( Y_n = M_n x \)

Where I is the identity Matrix, \( M_n = (I - A_{nn})^{-1} \) is a matrix of multipliers and \( x = A_{nz}Y_z \) is a vector of exogenous variables. The multiplier \( M_n \) shows the overall effect of a unitary increase in the exogenous components on the endogenous accounts i.e. overall effect on labour wage income due to a unitary increase in government expenditure on domestic suppliers.

8.3 THE UGANDAN SOCIAL ACCOUNTING MATRIX AND THE ACCOUNTING MULTIPLIER

In the previous section we gave a theoretical background on the generation and use of social accounting multipliers. The purpose of this section is to quantify the impact of an exogenous factor i.e. government expenditure on domestic firms using the social accounting multiplier. Cecchini justified the opening up of public procurement markets on its ability to increase GDP which he estimated at 0.5% and its increase of employment by around 400,000 jobs. We take a slightly different approach. Sectoral production activities are evaluated according to their ability to generate wage employment income. Specifically, we trace the flow of income within the various occupational sectors of the labour force arising out of government decision to spend within the economy in the procurement of government contracts rather that buying from foreign suppliers who might at times post cheaper prices.

The Ugandan SAM refers to the year 2002 and consists of 4 blocks of accounts. The first block of accounts combines 61 commodities and 74 activities that could be referred to as commodity mappings, the second block refers to factors of production which are subdivided into 16 categories of labour and two categories of capital (mixed income and operating surplus). The third block refers to 32 institutional accounts ranging from regional households to corporations. The fourth and final block is the combined government, accumulation a/c and foreign sector.
Our effort is to measure the impact of government deliberate policy of spending more that it should in the local economy to promote employment instead of buying from foreign suppliers possibly at a lower price.

In chapter seven, using a modified Cecchini approach, we established government makes on average a 10.4% saving if it chose to buy cost effectively i.e. without due consideration of discrimination against foreign suppliers. The question now becomes whether it is economically acceptable to ‘throw away’ these savings at the altar of stimulating the economy through direct exogenous expenditure by government. To answer this we use the Social Accounting Matrix (SAM). The following section highlights step by step the analytical procedures for our research using SAM.

**8.3.1 SECTOR AGGREGATION**

As indicated, the Ugandan SAM has 189 columns and rows. Apart from the work involving running such a large matrix, all the details pertaining to such a large matrix were not required for this research, so we aggregated them to 16 columns and rows of which 15 were endogenous and 1 exogenous.

Our major focus for this research was to evaluate the various sectoral abilities to generate wage employment as a result of an external stimulus, i.e. government expenditure through its public procurement policy. As noted earlier the SAM tables for Uganda provide 16 categories of labour dichotomised according to gender (male, female), geographical location (rural, urban) and level of skills (unskilled, semi-skilled, skilled and high-skilled) creating 2x2x4 matrix (16 labour classes). The definitions of "unskilled", "semi-skilled", "skilled", and "high-skilled" are linked to educational achievement:

- Unskilled: not completed primary
- Semi-skilled: completed primary (completed Primary Seven)
- Skilled: above primary to completed secondary (inclusive)
- High-skilled: Graduate from tertiary education

We aggregated the labour categories to only four according to the level of skill i.e. unskilled, semiskilled, skilled and high-skilled. These formed the factor of production utilisation within our aggregated matrix.
Creation of wage employment to the economy is the work of the productive sectors. As indicated the productive sector is made up of 61 commodities and 74 activities that we referred to as commodity mappings. We aggregated these into 7 productive sectors. The basis of our aggregation was the closeness or similarity of the activities involved (See appendix 1). The commodities and their production activities as indicated in the social accounting Matrix, show a clear categorisation based on agriculture (major sector in the economy), product processing (Manufacturing), water and electricity (Utilities), Building and construction (Building construction and civil engineering), transport and communication, commercial services and social services. Aggregation of the sectors in this manner was also instrumental, later on, when we wanted to make a comparison with the categorisation that is usually made the PPDA, which are: suppliers, works and services. It was very clear to us which sector should be put where.

The households or institutional accounts were 32 based on the region, whether east, west, north or south. The regions were further divided into urban or rural. This created a 4(2x2x2x2) matrix equalling to 32. We aggregated these accounts into only four accounts based on the region. So we got: East, West, North, central households.

We then created one exogenous account that comprised of government, capital account and the rest of the world (ROW). This concluded our aggregation (see table below). It indicates Productive sectors (1-7), labour (8-11), (12-15) households and 16 the exogenous account.
### TABLE 9: AN AGGREGATED SOCIAL ACCOUNTING MATRIX FOR UGANDA 2002

<table>
<thead>
<tr>
<th>Sectors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture, Animal husbandry, forestry &amp; fisheries</td>
<td>3778649</td>
<td>1103279</td>
<td>0</td>
<td>8</td>
<td>32</td>
<td>30072</td>
<td>137</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>680631</td>
<td>407302</td>
<td>233885</td>
<td>484411</td>
<td>339040</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing</td>
<td>191024</td>
<td>4735625</td>
<td>26570</td>
<td>589059</td>
<td>142792</td>
<td>323741</td>
<td>338522</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1231804</td>
<td>655589</td>
<td>340034</td>
<td>616810</td>
<td>1220864</td>
</tr>
<tr>
<td>3</td>
<td>Utilities</td>
<td>6535</td>
<td>36315</td>
<td>492597</td>
<td>4122</td>
<td>8608</td>
<td>46101</td>
<td>65611</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>136877</td>
<td>71518</td>
<td>35183</td>
<td>67710</td>
<td>27144</td>
</tr>
<tr>
<td>4</td>
<td>Building, Construction and Civil Engineering</td>
<td>1375</td>
<td>18735</td>
<td>5209488</td>
<td>8020</td>
<td>98084</td>
<td>45710</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>101134</td>
<td>10762</td>
<td>2106</td>
<td>29762</td>
<td>1693944</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Transport and communication</td>
<td>54137</td>
<td>110547</td>
<td>5495</td>
<td>73943</td>
<td>909578</td>
<td>287408</td>
<td>169554</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>35036</td>
<td>66</td>
<td>108952</td>
<td>42793</td>
<td>115891</td>
</tr>
<tr>
<td>6</td>
<td>Commercial Services</td>
<td>108458</td>
<td>572072</td>
<td>12776</td>
<td>109289</td>
<td>283479</td>
<td>558630</td>
<td>559566</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1104032</td>
<td>429366</td>
<td>219166</td>
<td>461726</td>
<td>535927</td>
</tr>
<tr>
<td>7</td>
<td>Social Services</td>
<td>39940</td>
<td>69048</td>
<td>805</td>
<td>15760</td>
<td>99359</td>
<td>3258132</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>136877</td>
<td>213683</td>
<td>65436</td>
<td>224301</td>
<td>565592</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Unskilled labour</td>
<td>456623</td>
<td>76589</td>
<td>472</td>
<td>15277</td>
<td>22400</td>
<td>63846</td>
<td>79022</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Semiskilled labour</td>
<td>73501</td>
<td>37525</td>
<td>1399</td>
<td>22577</td>
<td>6167</td>
<td>55167</td>
<td>32975</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Skilled labour</td>
<td>60926</td>
<td>66702</td>
<td>42522</td>
<td>33562</td>
<td>34243</td>
<td>266084</td>
<td>157343</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>High Skilled labour</td>
<td>26181</td>
<td>55861</td>
<td>23732</td>
<td>64251</td>
<td>49767</td>
<td>395859</td>
<td>116534</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Central Households</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Eastern Households</td>
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<td>0</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>Northern Households</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>15</td>
<td>Western Households</td>
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<td>0</td>
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<td>0</td>
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<td>0</td>
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</tr>
<tr>
<td>16</td>
<td>Government, banks and foreign sector</td>
<td>2260097</td>
<td>3530126</td>
<td>391946</td>
<td>1088997</td>
<td>859106</td>
<td>2730134</td>
<td>484120</td>
<td>12034</td>
<td>5323</td>
<td>13727</td>
<td>62293</td>
<td>875009</td>
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<td>TOTAL</td>
<td>7057446</td>
<td>1041244</td>
<td>998230</td>
<td>4069125</td>
<td>2344317</td>
<td>9982485</td>
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<td>714228</td>
<td>233675</td>
<td>661342</td>
<td>1781185</td>
<td>5817796</td>
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<td>2119987</td>
<td>1076123</td>
<td>2438407</td>
</tr>
</tbody>
</table>

Source: Uganda Bureau of Statistics (UBOS)

---

6 The sectors 1-16 along the columns bear the same order as they appear in the rows making the SAM a square matrix. So 1 is for Agriculture, Animal husbandry, Forestry and fisheries all through to 16 which is the government, banks and foreign sector (taken as an exogenous account in the multiplier analysis).
The next step towards the computation of the SAM-based multiplier models is to compute column shares (column coefficients) from a SAM in order to represent structure and, analogous to an input-output model, to compute matrix multipliers. This operation provides average expenditure propensities for the various Productive and social sectors obtained by dividing a particular column of endogenous accounts by the column total. These coefficients expressed as ratios constitute the $A_n$ used to obtain the income multipliers.

**TABLE 10: SAM COEFFICIENT MATRIX FOR UGANDA**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Agriculture, Animal husbandry</td>
<td>0.535</td>
<td>0.106</td>
<td>0.000</td>
<td>0.000</td>
<td>0.003</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.117</td>
<td>0.192</td>
<td>0.217</td>
<td>0.199</td>
<td></td>
</tr>
<tr>
<td>2 Manufacturing</td>
<td>0.027</td>
<td>0.455</td>
<td>0.027</td>
<td>0.145</td>
<td>0.061</td>
<td>0.032</td>
<td>0.053</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.211</td>
<td>0.309</td>
<td>0.316</td>
<td>0.253</td>
<td></td>
</tr>
<tr>
<td>3 Utilities</td>
<td>0.001</td>
<td>0.003</td>
<td>0.493</td>
<td>0.001</td>
<td>0.004</td>
<td>0.005</td>
<td>0.010</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.023</td>
<td>0.034</td>
<td>0.033</td>
<td>0.028</td>
</tr>
<tr>
<td>4 Building, Construction</td>
<td>0.000</td>
<td>0.002</td>
<td>0.000</td>
<td>0.506</td>
<td>0.003</td>
<td>0.010</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.017</td>
<td>0.005</td>
<td>0.002</td>
<td>0.012</td>
</tr>
<tr>
<td>5 Transport and communication</td>
<td>0.008</td>
<td>0.011</td>
<td>0.006</td>
<td>0.018</td>
<td>0.388</td>
<td>0.029</td>
<td>0.027</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.060</td>
<td>0.051</td>
<td>0.040</td>
<td>0.048</td>
</tr>
<tr>
<td>6 Social Services</td>
<td>0.015</td>
<td>0.055</td>
<td>0.013</td>
<td>0.027</td>
<td>0.121</td>
<td>0.560</td>
<td>0.088</td>
<td>0.000</td>
<td>0.000</td>
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<td>0.000</td>
<td>0.189</td>
<td>0.203</td>
<td>0.204</td>
<td>0.189</td>
</tr>
<tr>
<td>7 Commercial Services</td>
<td>0.006</td>
<td>0.007</td>
<td>0.001</td>
<td>0.002</td>
<td>0.007</td>
<td>0.010</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.094</td>
<td>0.101</td>
<td>0.061</td>
<td>0.092</td>
</tr>
<tr>
<td>8 Unskilled labour</td>
<td>0.065</td>
<td>0.007</td>
<td>0.000</td>
<td>0.004</td>
<td>0.010</td>
<td>0.006</td>
<td>0.012</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>9 Skilled labour</td>
<td>0.010</td>
<td>0.004</td>
<td>0.001</td>
<td>0.006</td>
<td>0.006</td>
<td>0.005</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>10 Central Households</td>
<td>0.009</td>
<td>0.006</td>
<td>0.043</td>
<td>0.008</td>
<td>0.015</td>
<td>0.027</td>
<td>0.025</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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</tr>
<tr>
<td>11 High Skilled labour</td>
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<td>0.005</td>
<td>0.024</td>
<td>0.016</td>
<td>0.021</td>
<td>0.040</td>
<td>0.183</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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</tr>
<tr>
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<td>0.000</td>
<td>0.364</td>
<td>0.536</td>
<td>0.562</td>
<td>0.509</td>
<td>0.096</td>
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<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>13 Northern Households</td>
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<td>0.000</td>
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<td>0.000</td>
<td>0.000</td>
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<td>0.129</td>
<td>0.128</td>
<td>0.029</td>
<td>0.037</td>
<td>0.000</td>
<td>0.046</td>
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</tr>
<tr>
<td>14 Western Households</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.285</td>
<td>0.239</td>
<td>0.177</td>
<td>0.206</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.043</td>
<td></td>
</tr>
</tbody>
</table>
8.3.2 THE IDENTIFIED MATRIX
The SAM coefficient Matrix calculated in the previous section is multiplied with the identity matrix to get $(1-A_y)$ which is inverted to calculate the accounting multiplier.

8.3.3 THE ACCOUNTING MULTIPLIER (LEONTIEF MATRIX)
Inverting the coefficient Matrix $(1-A_y)$ above would create the accounting multiplier derived by the formula $M_A=(I-A)^{-1}$ where $M_A$ is the SAM multiplier matrix for a Matrix A.
So suppose government increases its expenditure in the Manufacturing Sector (Column 2), this will work out in the whole economy through direct and indirect effects, increasing on production activities 1-7, increasing factor incomes 8-11 and improve welfare through increasing household income (12-15)

BOX 6: BASIC INTERPRETATION OF THE SAM MATRIX

In 1949, Wassily W. Leontief developed an input-output model of the United States economy by dividing it into 500 economic sectors. He developed a linear equation for each sector representing how that sector distributes its outputs to the other sectors of the economy. The various sectors of the economy, such as agriculture, manufacturing, transportation and communication, utilities etc each represented resources which rely on input from the output of other resources. For example, production of agriculture requires an input of manufacturing, transportation, and even some agriculture.

Our SAM Matrix incorporates more transactions than the input output sectoral deliveries. The SAM multipliers below indicate for example that if government wanted to increase production of agriculture by injecting in say UShs, 1000 the impact will not only be limited to the agricultural sector but since agriculture uses inputs from other sectors the initial 1000 will reverberate within the economy increasing agricultural production 2.39 times, manufacturing by 0.286 etc. It will utilise all types of labour helping to increase wage income by 15.6 for every Shs.100 spent for unskilled labour Shs. 4 for high skilled labour etc. The utilisation of labour will inevitably boost the household income. Our matrix table indicate how household income will be boosted by an injection in agriculture with Central Uganda households benefiting most while northern Uganda gets the least impact. Analysis of this kind is crucial in helping government to determine which sector it would want to use to stimulate the economy and also measure the overall impact of such a stimulus per sector, per all types of labour and per geographical location of households.
TABLE 11: THE ACCOUNTING MULTIPLIER FOR THE UGANDAN ECONOMY

<table>
<thead>
<tr>
<th>Sectors†</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>7</th>
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<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Animal husbandry Forestry &amp; fisheries</td>
<td>2.319</td>
<td>0.506</td>
<td>0.118</td>
<td>0.208</td>
<td>0.146</td>
<td>0.189</td>
<td>0.395</td>
<td>0.667</td>
<td>0.628</td>
<td>0.623</td>
<td>0.629</td>
<td>0.549</td>
<td>0.719</td>
<td>0.796</td>
<td>0.755</td>
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<tr>
<td>Manufacturing</td>
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<td>0.663</td>
<td>0.337</td>
<td>0.335</td>
<td>0.658</td>
<td>0.780</td>
<td>0.752</td>
<td>0.754</td>
<td>0.753</td>
<td>0.717</td>
<td>0.859</td>
<td>0.882</td>
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<td>0.028</td>
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<td>0.023</td>
<td>0.032</td>
<td>0.044</td>
<td>0.098</td>
<td>0.095</td>
<td>0.092</td>
<td>0.092</td>
<td>0.092</td>
<td>0.089</td>
<td>0.105</td>
<td>0.104</td>
<td>0.098</td>
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<td>0.011</td>
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<td>0.031</td>
<td>0.061</td>
<td>0.072</td>
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<td>0.060</td>
<td>0.059</td>
<td>0.058</td>
<td>0.070</td>
<td>0.043</td>
<td>0.035</td>
<td>0.058</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>0.076</td>
<td>0.075</td>
<td>0.053</td>
<td>0.107</td>
<td>1.692</td>
<td>0.158</td>
<td>0.220</td>
<td>0.189</td>
<td>0.192</td>
<td>0.193</td>
<td>0.190</td>
<td>0.208</td>
<td>0.188</td>
<td>0.168</td>
<td>0.187</td>
</tr>
<tr>
<td>Commercial Services</td>
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<td>0.613</td>
<td>2.515</td>
<td>0.914</td>
<td>0.824</td>
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<tr>
<td>Social Services</td>
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<td>0.058</td>
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<td>0.287</td>
<td>0.287</td>
<td>0.282</td>
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<td>0.302</td>
<td>0.221</td>
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<td>Unskilled labour</td>
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<td>0.030</td>
<td>0.033</td>
<td>0.034</td>
<td>0.066</td>
<td>1.060</td>
<td>0.057</td>
<td>0.057</td>
<td>0.057</td>
<td>0.052</td>
<td>0.064</td>
<td>0.068</td>
<td>0.066</td>
</tr>
<tr>
<td>Semiskilled labour</td>
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<td>0.015</td>
<td>0.006</td>
<td>0.018</td>
<td>0.014</td>
<td>0.019</td>
<td>0.025</td>
<td>0.017</td>
<td>1.017</td>
<td>0.017</td>
<td>0.017</td>
<td>0.016</td>
<td>0.018</td>
<td>0.018</td>
<td>0.018</td>
</tr>
<tr>
<td>Skilled labour</td>
<td>0.034</td>
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<td>0.036</td>
<td>0.048</td>
<td>0.078</td>
<td>0.095</td>
<td>0.047</td>
<td>0.046</td>
<td>1.046</td>
<td>0.046</td>
<td>0.046</td>
<td>0.049</td>
<td>0.048</td>
<td>0.049</td>
</tr>
<tr>
<td>High Skilled labour</td>
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<td>0.063</td>
<td>0.078</td>
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<td>0.456</td>
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<td>0.099</td>
<td>0.099</td>
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</tr>
<tr>
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<td>0.080</td>
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<td>0.146</td>
<td>0.357</td>
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<td>1.223</td>
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<td>0.125</td>
</tr>
<tr>
<td>Eastern Households</td>
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<td>0.030</td>
<td>0.025</td>
<td>0.029</td>
<td>0.043</td>
<td>0.106</td>
<td>0.259</td>
<td>0.175</td>
<td>0.199</td>
<td>0.197</td>
<td>0.070</td>
<td>1.079</td>
<td>0.039</td>
<td>0.091</td>
</tr>
<tr>
<td>Northern Households</td>
<td>0.040</td>
<td>0.021</td>
<td>0.026</td>
<td>0.022</td>
<td>0.026</td>
<td>0.038</td>
<td>0.096</td>
<td>0.204</td>
<td>0.153</td>
<td>0.165</td>
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<td>0.047</td>
<td>0.035</td>
<td>1.114</td>
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<tr>
<td>Western Households</td>
<td>0.068</td>
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<td>0.037</td>
<td>0.034</td>
<td>0.039</td>
<td>0.057</td>
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<td>0.050</td>
<td>0.055</td>
<td>0.052</td>
<td>1.100</td>
</tr>
</tbody>
</table>

Source: Computation from the Uganda SAM 2002

† The column sectors 1-16 have the same order of arrangement as they appear within the rows making it a square matrix.
THE ACCOUNTING MULTIPLIER AND WAGE INCOME GENERATION

The above matrix depicts the interplay of various sectors in the economy. Inspite our major focus being on wage income increase as a result of an external injection, we could not look at it in isolation. The economy is a single unit and in trying to address an increase in wage employment in the economy, we address it in its entirety.

We have shown in the previous section that we aggregated the SAM accounts into 7 commodity mappings (Products and production activities) 4 labour classifications and 4 household classification. Our objective was to evaluate the various sectoral abilities to generate employment income. Specifically, our aim was to trace the labour income that would accrue in the various sectors if there was an external injection i.e. government expenditure.

Therefore the matrix above captures sectoral-occupational linkages and estimates the overall impact of an exogenous spending on the Ugandan economy. The labour market has been aggregated according to level of skill requirements, hence getting unskilled, semi-skilled, skilled and high skilled. It should be recalled that, unskilled labour is used to refer to those people who have never completed primary education, semi skilled completed primary education(Primary Seven), skilled completed primary education plus secondary education while high skilled labour are graduates from tertiary institutions.

Categorisation of labour along these lines is crucial for government planning. Depending on its priorities government will inject resources in that sector whose type of labour it would want to promote. For example the table captures agriculture, animal husbandry, forestry and fisheries as the largest partaker of unskilled and semiskilled labour while utilities are least users of this category of labour (See graph below) Given that Uganda’s literacy level is low; the unskilled and semiskilled labour is in abundance. So if government wanted to increase income within this unskilled and semiskilled populace, the crucial sector to invest in would be agriculture, animal husbandry, forestry and fisheries.

Let us illustrate this with an example, if government injected UShs. 100 in the agricultural sector it would produce an additional UShs. 15.60 for unskilled labour and UShs. 2.80 for semiskilled labour. A similar injection of Ushs.100 in Utilities would produce only UShs 1.30 and 60 cents for unskilled and semiskilled labour respectively. An injection of Ushs.100 in
social services would create the largest income for the high skill labour at Ushs.45.60. It follows from the argument above that agriculture, animal husbandry, forestry and fisheries attract the least wage income for the skilled labour at only UShs.4.50 for every UShs.100 invested.

It should be noted that high skill labour benefits most from an exogenous injection. At an average of Ushs12.50 for every UShs100 invested, it partakes the highest share compared to the other types of labour. Semiskilled labour comes out least affected by an external injection. It averages at UShs 1.79 per UShs. 100 invested.

**GRAPH 6: IMPACT OF AN EXOGENOUS INJECTION (GOVERNMENT EXPENDITURE) ON LABOUR**

This research argues that when government makes monetary savings from buying competitively, it can re-invest the savings in the most competitive sector. The sectoral competitiveness is judged by its ability to increase wage income relative to other sectors. From the accounting multiplier computations, the social services came out strongly to indicate a heavier impact on the economy as a result of an external injection. The total multipliers for all types of labour for social services sector is 0.642. Simply put, a Ushs.100 injection within the social services would create an additional UShs. 64.20. At the extreme end, the manufacturing sector comes out lest strongly as a reaction to an external injection. UShs14 is created in wage income per UShs. 100 invested (see graph below). It is
because of the importance of the social services sector in terms of wage income generation that we decided to base on it for our further argument. We argue that it would be the most appropriate sector to reinvest the savings into.

GRAPH 7: IMPACT OF AN EXOGENOUS INJECTION (GOVERNMENT EXPENDITURE) ON WAGE INCOME

The above graph is also indicative of the household welfare in the economy. As indicated above, this research computes the change in wage income due to an exogenous injection. However we need to emphasize that increase in wage income moves in tandem with household income or household welfare. So if we compute the impact of a government policy on wage income, we are able to deduce the effect of the same policy on household welfare. In this research we use labour categorisation rather than household categorisation because labour categorisation gives more insight on various types of labour and this is crucial in designing appropriate improvement strategies. The graph below indicates very strongly that if government wants to improve household welfare, an improvement in the wage income is critical. So, as
we assess the impact on wage income due to an exogenous factor, we are in effect arguing for increased welfare of the state. We are arguing for improved household income.

**GRAPH 8: WAGE INCOME AND HOUSEHOLD INCOME PER SECTOR**

8.5 IMPLICATIONS TO PUBLIC PROCUREMENT

The sector-occupation linkage draws attention to several important issues that are pertinent to public procurement. First, these results reinforce our understanding of the different categories of the labour market. Policy designs can then be undertaken to boost each type of labour category.

Secondly, such labour categorisation enables us to use discriminatory procurement practices to enhance social benefits. For example, the results show, the economy benefits more in form of increase in wages for the high skilled labour category. What this one might imply is that offsets to enhance skill acquisition should be established within the procurement function. So, instead of negotiating for large price discount, skill enhancing offsets like global internships could be incorporated into the contract conditions.
9.1 INTRODUCTION

In the previous chapter we addressed ourselves to the accounting multiplier computed from the social Accounting Matrix to assist us to determine whether it is economically justifiable to discriminate foreign firms using all sorts of tools. In order to justify government continuous purchase from foreign firms, the first criteria is that the price they offer should be less than that offered by the domestic firms assuming equal quality levels and efficiency in service delivery. So with this argument, a case where a foreign firm offers UShs 5,000,000 vis-à-vis a domestic firm that offers UShs5,600,000, the contract should normally go to a foreign firm. When this happens, like we have argued before, government makes a monetary saving of UShs.600,000. However is the UShs600,000 savings a sufficient justification to award a contract to a foreign firm? As argued before would government decision be different if the savings were much less, say UShs250,000. What would the government decision bee if the savings were higher say UShs1,000,000? In this chapter we attempt to design a decision rule to assist government in determining whether or not a contract should be given to a domestic or foreign firm.

9.2 THE MODEL

Price alone is insufficient to determine whether or not to buy from a foreign firm. Another criterion that should be used is the impact that buying domestically or from a foreign firm has on the economy. The impact made on the economy by either should be greater than that of the other so as to determine whether to buy domestically or from a foreign firm. In the example above, the impact of USh600,000 that is saved from buying from a cheap foreign source should have a heavier impact on the economy than if the contract went to a domestic firm. This impact is measured in terms of generating wage employment. The diagram below demonstrates the two options available to government.

As the diagram indicates, government has two policy options in awarding a contract to an advertised bid at a contractual price X i.e. to either buy locally (from domestic firms) or to buy globally (from foreign firms). As indicated earlier foreign firms tend to post lower prices especially in developing countries due to higher production skills they possess. When government buys from a foreign firm, it makes a percentage saving
denoted by the symbol, $\alpha_i$. So instead of spending the entire amount of X as the contractual value, it will spend $(1 - \alpha_i)X$. The difference between X and the actual expenditure is what we call the savings ($\alpha_i$). The government will then invest the savings back into the economy in a sector of its choice depending on its spending priorities.

Our underlying argument is that for a government to make a decision of either buying from a foreign firm or domestic firm, it analyses the impact on the economy of either options. The impact of buying from a domestic firm is denoted by $M_i$. This should be counter balanced with a combined impact of a foreign firm expenditure on the economy if any plus the impact of the savings accruing from such a contract thereof. This combined effect is denoted by $M_p \alpha_i + M_f$. If the impact on the economy, of buying from a domestic firm is higher that the impact buying from a cheap foreign source then buy domestically, otherwise it makes economic sense to buy from a foreign firm. This boils down to:

$$M_i \geq M_p \alpha_i + M_f$$

Where

$M_i = \text{Impact of domestic firms expenditure on the economy}$

$M_p \alpha_i = \text{Impact of saving on the economy made on a foreign awarded contract}$

$M_f = \text{Impact of a foreign expenditure on the economy if any}$

**Diagram 2: Government Public Procurement Policy Options**
The analysis above can be developed into a model. We have indicated that in order to determine whether or not to award an advertised contract to a domestic or foreign firm, we need to assess the impact of either option on the economy. To measure this impact we use the accounting multiplier computed from the Ugandan Social Accounting Matrix (SAM 2002). In the box below, we develop a Procurement Policy Option Model (PPOM) that is used as a decision tool to determine whether or not a country should award a contract to a domestic or foreign firm.

**BOX 7: THE PROCUREMENT POLICY OPTION MODEL (PPOM)**

As indicated in the previous section, in order to consider buying from a domestic firm:

- **Impact of buying domestically** ≥ **Impact of buying from a foreign Firm**

- **Domestic impact** ($M_i$) ≥ **Foreign Impact** ($M_f$) + **Impact of savings** ($M_p \alpha_i$)

**Mathematically, we develop the following equation:**

$$XM_i \geq X(1-\alpha_i)M_f + XM_p\alpha_i$$ .......................................................... 9.1

*Where*

- $X = \text{Contract Value}$
- $M_i$, $M_f$, $M_p = \text{Impact as computed through the accounting multiplier}$
- $\alpha_i = \text{Savings percentage from foreign supplier}$

**Solving for the equation further to eliminate X**

$$M_i \geq (1-\alpha)M_f + M_p\alpha_i$$ .......................................................... 9.2

But $M_f$ constitutes a leakage out of the economy hence tends to Zero

**Hence buy local if**

$$M_i \geq M_p\alpha_i$$ .......................................................... 9.3

**OR**  

$$\alpha_i \leq M_i/M_p$$ .......................................................... 9.4

Equation 9.4 is the Procurement Policy Option Model (PPOM). The PPOM is crucial in determining whether or not to award the advertised contracts exclusively to a domestic firm or to a foreign firm.
According to the PPOM, government can buy from a domestic firm with a possible impact of $M_i$ to the economy. Alternatively government can buy from a cheap foreign firm and the savings made can be injected into sector with a multiplier $M_p$ depending on government priorities. To award a contract to a foreign firm is then determined by assessing whether the saving that would be made and invested in the priority sector would be able to generate more wage income than would be the case if the contract was to be awarded to a domestic firm. The savings we are talking about here is the difference between the would-have-been price of the product had it been bought from a local firm and the actual price obtaining from buying the product from a foreign firm.

The model $\alpha_i \leq M_i/M_p$ therefore explains the two possibilities open to government in its conduct of public procurement and determines the decision point to either buy domestic or foreign. Basically the government can compare the direct savings from an open competition in sector $i$, $(\alpha_i)$, with the ration $M_i/M_p$. If the savings percentage is larger than this ratio an open competition is to be preferred.

According to the PPOM, government should award an advertised contract to a domestic firm, if the impact on the economy as calculated through the accounting multiplier, of the savings accruing from awarding it to a cheap foreign source is less than or equal to the impact of awarding it to a domestic firm.

It follows therefore that:
If $M_i$ tends to zero it becomes increasingly justifiable for government to award the contract to a foreign firm. This is because the impact of the savings accruing from awarding the contract to a foreign firm would increase and become greater than the impact of awarding the contract to a domestic firm.

Conversely, if $M_p$ tends to zero, it becomes increasingly justifiable for government to award the contract to a domestic firm. This is because the impact of the savings accruing from awarding the contract to a foreign firm decreases and becomes less than the impact of awarding the contract to a domestic firm.

The varying nature of $M_i/M_p$ underscores the relative importance of the domestic spend versus the best possible alternative use of the saved funds from a cheaper foreign firm. We argue that when government buys domestically, the economy benefits through increased local material
utilisation and employment generation, although it might pay slightly more that it would, had it to subject the contract to open competition.

When government buys from foreign firms it benefits from lower prices, but in this case most of the money is lost through leakage out of the economy since the firm is foreign and most of the production process is done outside the economy. However all is not lost. Government benefits from the savings which it can re-invest into the most economic sector depending on its policy directions, i.e. the priority sector. In the next section we explain the concept of the priority sector.

9.3 THE PRIORITY SECTOR

In the model, we introduce the concept of a priority sector. We argue that government has a policy direction through which it wants to develop the economy. The priority sector is one which government wants to put at the vanguard of the countries economic development. In a period of unemployment government would want to focus on a sector which generates more jobs per government expenditure on the economy e.g. industry, agriculture or services. Other priority area could be regional development e.g. Northern Uganda (This region has been embordered in civil war for the last 23 years). In this case the government would want to increase household income for the people in Northern Uganda. Alternatively government consider increasing the wage income of a particular labour category such as the skilled labour.

To determine the priority sector largely depends on the policy direction of the country. In this research we consider the sector which creates wage income most as calculated by the accounting multiplier. This sector is the social services sector with an accounting multiplier of 0.642. Considering the social services sector as the priority sector can sometimes present some problems given that it has few intermediaries. However, the generalised model developed in this research in terms of $M_p$ allows government more freedom to select the priority sector or a combination of them.

The concept of the priority sector underscores the varying impact of various sectoral investments on the economy calculated through the accounting multiplier. As seen from chapter eight, an extra injection of UShs.100 to various sectors of the economy would produce different results depending on the sector.
In this regard $M_p$ will vary relative to $M_i$ depending of the sector that government decides to invest the savings into. It is on this basis that we argue that for government to use PPOM, it should undertake a sectoral analysis to determine the most important sector in terms of its priorities to invest the savings into.

9.4 MODEL APPLICATION

We analyse the model application by measuring the impact of a domestic firm winning an advertised contract denoted by $M_i$ vis-à-vis the alternative possible savings if the contract went to a foreign firm, denoted by $\alpha_i$.

As indicated in our previous section, as $M_i$ decreases i.e. the impact on the economy of awarding a contract to a domestic firm, the percentage savings required to award a contract to a foreign firm decreases. This means, it is increasingly becoming less attractive to award a contract to a domestic firm in view of the impact that contract has on the economy. As $M_i$ decreases further and tends to Zero the alternative percentage requirements of savings lower and the absolute impact on the economy of buying from a foreign firm increases making it necessary to open up the procurement market to global competition.

To illustrate this argument, we compute sectoral percentage savings requirement, below which government would award an advertised contract to a domestic firm. From the accounting multipliers computed in the previous section, the impact of spending an additional Ushs100 in the economy was determined. This is what in our MOPP we denote by $M_i$. This is achieved if government chose to award a contract to a domestic firm.

Alternatively, government could award the contract to a foreign firm and re-invest the savings into the most competitive sector i.e. the social services sector with an accounting multiplier of 0.642. This is $M_p$. The percentage savings requirement level to determine whether or not to award the advertised contract to a foreign firm then depends on the $M_i$. As it decreases per sector, the percentage level savings required for that sector decreases.

In the graph below, commercial services and agriculture would attract the highest percentage requirement of alternative savings. If government is to award a contract in these two sectors to a foreign firm, it requires a percentage savings of above 40%. Below, this, it makes
economic sense to award the contract to a domestic firm because it would have a higher impact on the economy in absolute terms.

However, as the graph indicates the impact on the manufacturing sector of an extra Shs. 100 injected into it is only Ushs14. The percentage savings level required in this sector to justify domestic award of an advertised contract is 22%. If the savings expected from an open competition are above this percentage it becomes clear that government should award the contract to a foreign firm.

The savings percentages mentioned above can be used to decide on opening up of markets. Only if typical savings percentages per sector exceed the percentages indicated above should the corresponding sectors should be opened up for global competition. The diagnosis above also reflects the actual nature of the Ugandan economy. Since agriculture is the backbone of its economy opening up its market would have serious implications on the economy. It would therefore make the right argument if opening up of this sector should attract a higher percentage savings requirement. Alternatively the manufacturing sector is still humble, hence the justification of the lower percentage requirement. This argument is further exemplified in the Box below.
BOX 8: ILLUSTRATION OF THE IMPACT OF BUYING LOCALLY

Practical Illustration for the Use of the PPOM

At the beginning of this chapter we gave a case of two firms bidding for a government contract. The foreign firm’s bid price was UShs 5,000,000 vis-à-vis a domestic firm’s bid price of UShs 5,600,000. We said then that government could decide to award the contract to a local firm to achieve social objects and in the process loses UShs 600,000. We however posed a question, whether the decision would be different if the savings were higher, say UShs 1,200,000 Assuming this contract was either in agriculture and Industry covered above, let us see how this would map out.

Table 7: Illustration of the PPOM

<table>
<thead>
<tr>
<th>Savings ($Shs)</th>
<th>Savings (%)</th>
<th>Priority Sector Multiplier(Social Services sector)</th>
<th>%Reinvested in the *Priority sector</th>
<th>Agriculture</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>600,000</td>
<td>0.12</td>
<td>0.642</td>
<td>0.07704</td>
<td>0.258</td>
<td>0.139</td>
</tr>
<tr>
<td>1,200,000</td>
<td>0.24</td>
<td>0.642</td>
<td>0.15408</td>
<td>0.258</td>
<td>0.139</td>
</tr>
</tbody>
</table>

Inference

<table>
<thead>
<tr>
<th>Inference</th>
<th>Agriculture</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>_buy local at both level of savings</td>
<td>Buy local at 12% savings but buy foreign at 24% of savings</td>
<td></td>
</tr>
</tbody>
</table>

Decision becomes different in the case where savings are 24% for the manufacturing sector. However in agriculture the decision is the same at both levels of savings.

9.5 IMPACT OF CURRENT SAVINGS ON THE ECONOMY

In chapter seven, we estimated typical savings levels the government of Uganda makes through non-discriminatory procurement practice as indicated in the table below.

<table>
<thead>
<tr>
<th>TABLE 12: PERCENTAGE SAVINGS IN A COMPETITIVE PROCUREMENT SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product category</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Works</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Supplies</td>
</tr>
<tr>
<td>Overall percentage savings</td>
</tr>
</tbody>
</table>

What then does the procurement policy option model indicate per sector in view of the results above? The savings above would constitute the $a_i$ of the PPOM. When you compare these savings computed through the Cecchini analysis, with those computed required in the PPOM beyond which the sectors should justifiably be opened up for global...
markets, the percentage savings calculated through the Cecchini are too low to create the required stimulus to increase wage employment per sector in the country. The implication is that the currently estimated savings are insufficient to justify opening up the public procurement market in Uganda.

### TABLE 13: SECTORAL ILLUSTRATION OF THE PUBLIC PROCUREMENT OPTIONAL MODEL

<table>
<thead>
<tr>
<th>SECTORS</th>
<th>Agriculture</th>
<th>Forestry &amp; fisheries</th>
<th>Manuf</th>
<th>Utilities</th>
<th>Building, Constr’n And Civil Engin’ng</th>
<th>Transport and com.</th>
<th>Comm. Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of domestic expenditure ($M_i$)</td>
<td>25.8</td>
<td>14.0</td>
<td>18.1</td>
<td>14.7</td>
<td>17.3</td>
<td>25.9</td>
<td></td>
</tr>
<tr>
<td>Priority sector ($M_p$)</td>
<td>64.2</td>
<td>64.2</td>
<td>64.2</td>
<td>64.2</td>
<td>64.2</td>
<td>64.2</td>
<td></td>
</tr>
<tr>
<td>% Savings ($\alpha_i$) (Cecchini)</td>
<td>13.6</td>
<td>13.6</td>
<td>9.9</td>
<td>7.6</td>
<td>9.9</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>$M_p \alpha_i$</td>
<td>8.7</td>
<td>8.7</td>
<td>6.4</td>
<td>4.9</td>
<td>6.4</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>

In the graph below, we present the above analysis graphically. $M_i$, impact of buying domestically is higher than the impact of the savings for all the sectors of the economy as per Cecchini analysis. This means that the wage income generated through buying domestically is higher than the employment that could be generated by the savings that could be made as a result of government selling to a foreign cheaper source.

This implies that government would better be advised to buy all its products domestically as the impact of doing so is far higher in terms of wage income generation than the impact of the possible savings that government would make from buying competitively! Note: In line with our findings under the Cecchini analysis, we assume that government makes a financial saving of UShs7.56, Ushs9.9 and UShs13.59 on construction, services and supplies respectively per UShs100 invested. We therefore denote $\alpha_i$ (possible savings) to equal to each of those percentages per sector discussed. Graphically this appears as below:

**GRAPH 2: SAVINGS PER SECTOR**
We can argue from the graph above that it would make economic sense for government to buy from domestic firms instead of foreign firms in all the productive sectors. For example if government chose to buy manufacturing goods it has two options: to either buy them domestically (i.e. make it a policy requirement to boost the local economy) or to buy from the most competitive option irrespective of whether the supplier is foreign or domestic. The impact of buying domestically; generation of employment income, both direct and indirect as deduced by the accounting multiplier is higher than the employment income that would be generated by the savings made from a similar transaction and later invested into the most productive sector. That is if government decided to buy a manufactured good locally at Shs.100, an additional UShs. 14.00 in wage income would be generated in the manufacturing sector.

On the other hand, government could choose instead to buy the manufactured good from the cheapest source; foreign source. From UShs 100, government intended to spend; it would make a saving, since it has bought from the lowest possible source. Government would reinvest the savings in the most competitive sector i.e. a sector that would increase wage employment, the most. In our case, this is the social services sector; with an accounting multiplier of 0.642. If government did this, the savings from the manufacturing sector would generate
employment income of only UShs. 8.70. If you compare this with the 
UShs14.00 generated in wage employment if government bought the 
product internally, the decision would be clear, buy domestic. This is the 
same case with all the other productive sectors of the economy. The 
employment income generated as a result of buying domestic is higher 
that what could be generated by the possible saving for all sectors. 

However the analysis in the paragraph above is a simple reasoning based 
on sector average estimates of savings. Specific purchases savings may 
well be above this average. Also a simple rule like separating sectors for 
which open competition is to be preferred and sectors for which a 
discriminatory policy allowing only domestic suppliers to bid may not be 
sufficient to capture the many considerations involved. 

In the next chapter, we develop alternative rules that may assist 
government to undertake public procurement in a more multifaceted 
situation taking into account both economic and social objectives.
10.1 INTRODUCTION

As indicated in chapter seven, the government of Uganda is currently drafting preferencing schemes to be introduced into its procurement framework. Although not yet enacted into law by parliament, the framework among other things provides for preferring a Ugandan provider in the award of a contract, if such a contract will create and maintain substantial employment in Uganda and increase manufacturing and technological capabilities. It awards a margin ranging from 7.5% of contract price for works, 10% for services up to 15% for supplies. It however does not expound on what it regards as substantial increase in employment, manufacturing and technological capabilities, a basis of which it awards all these preference margins.

In Chapter 4, we explored 4 generic schemes designed by Arrowsmith (2002) for using public procurement to attain social economic objectives. These are: Reservation (Set Asides), preferencing, indirect (offsets) and supply side schemes. In the next sections we discuss the first three of these schemes. In Chapter 11, we discuss the supply side constraints. To make various analyses, we extend the Public Procurement Option Model (PPOM) developed in chapter nine.

10.2 RESERVATION SCHEMES/SET ASIDES

In chapter 4, we defined set asides as the reservation of part or whole of the contract to firms with particular characteristics. Many set asides are established to assist small business concerns but in the context of global trade, set asides involve reserving part or whole of the contract to local/domestic firms to boost the local economy.

How then can we assess the value of set asides/reservation schemes as a strategy by government to achieve both primary and secondary objectives? While it is appreciated that set asides programmes have positive impact on especially SMEs, the magnitude of this impact has not been explored. The choice of which sector to provide with set asides
depends on factors such as socio-economic goals to be addressed, the ability of officials to properly adjudicate tenders, the extent to which cost effectiveness can be sacrificed, how far beneficiaries of the scheme are able to exploit the advantages (Fenster G. 2003). A critical balance of all these would maximise government benefit in its procurement objectives.

In the context of the Ugandan economy as expounded in the previous chapter, it calls for a clear policy on what government wants to achieve through public procurement. In this research we argue that government might want to improve domestic welfare through increase of employment income. To do this, it might want to increase government expenditure and invest the savings made in buying competitively in the most competitive sector of the economy, which we referred to as the priority sector, in the previous chapter. It would therefore compute the possible savings as opposed to set asides with the argument of what-if these savings were re-invested into the priority sector. As, was discussed in the previous chapter, social services which generates the highest wage income, 0.642, compared to all other productive sectors is our priority sector. A policy that cuts across all sectors should be developed, hence the need to determine per sector, which percentage would be appropriate to set aside for domestic firms in order to boost employment income and welfare.

In this section, we design a model that could be a useful guideline in setting up set asides in public procurement as a crucial policy in improving employment income and in effect increase household income and welfare.

**10.2.1 SET ASIDE PUBLIC PROCUREMENT MODEL**

As the diagram below suggests, government has two options to either award advertised contracts exclusively to domestic firms or open up the procurement market with a policy that part of the contracts should be set aside and awarded to domestic firms. This, as we have argued before is to enable local firms benefit from government contracts which would enhance their growth. Completely opening up the procurement market without such a provision would disadvantage domestic firms which may not be able to compete with large foreign firms.
Allowing part of government contracts to be set aside for domestic firms would promote growth of the local industry and this would have a multiplier impact on the economy. In this research, we argue that this impact is in form of increase in wage employment leading to socio-economic development. This impact could diagrammatically be represented below:

As the diagram indicates, government can award all its contracts to domestic firms with $M_i$ impact on the economy. Alternatively it can open up the procurement market with a percentage option denoted by $\lambda$
being set aside for local firms. This means that 1 - \( \lambda \) would be available to foreign firms. As is the case in the PPOM, awarding a contract to a foreign firm provides a savings of \( \alpha \), which if reinvested into the economy provides an impact of \( M_p \) and the impact of a foreign firm, if any will be \( M_f \).

The above assessment of the impact on the economy, of setting up a set aside policy by government helps us to develop a model that could act as a guide to governments that would want to include set asides in their procurement framework to determine which sector require the set asides and their implication to the economy.

**BOX 9: SET ASIDE PROCUREMENT MODEL**

<table>
<thead>
<tr>
<th>Set Aside Public Procurement Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>In previous chapter we argued that in order for a government to buy domestically and exclude foreign firms, the following reasoning is helpful:</td>
</tr>
<tr>
<td>i) Government has obligation to set aside part (percentage) of a contract to local firm for the obvious social consideration. Let this percentage be ( \lambda )</td>
</tr>
<tr>
<td>ii) The remaining part of the contract goes to the market. Let this be ( (1 - \lambda) )</td>
</tr>
<tr>
<td>iii) The foreign firm charges ( \alpha ) less than the domestic firm and this provide what we refer to as savings</td>
</tr>
<tr>
<td>iv) The Savings are reinvested into the economy</td>
</tr>
</tbody>
</table>

So our equation becomes

\[
X M_i \geq X(1 - \lambda)(1 - \alpha) M_f + X \lambda M_i + XM \alpha (1 - \lambda) \]

However the impact \( M_f \) tends to zero because of the leakage out of the economy and plus dropping \( X \) this leaves us with the equation:

\[
M_i \geq \lambda M_i + M_p \alpha (1 - \lambda) \]

Leading to:

\[
M_i(1 - \lambda) \geq M_p \alpha (1 - \lambda) \]

Solving it further, this becomes:

\[
M_i \leq M_p \alpha \]

Calculating the required percentage set aside per sector, this equation can be

\[
\alpha \leq M_i \]

The Set aside model results in a similar model as the PPOM developed earlier. The set asides being discussed here are a case where the whole
contract or part of the contract within a particular sector is reserved for a local firm. The decision to set aside a particular contract for a local firm would naturally take the same reasoning as is the case of PPOM. Government will look at the impact of the contract on the economy of awarding it to a local firm vis-à-vis the impact of saving that would be re-invested in the priority sector if awarded to a foreign firm. This leads us to drop λ from the final equation. The implication is that, irrespective of the size of the set aside, the driving force for government’s decision to award a contract or part of it, to a local firm would be determined by the ability of the contract to create a higher impact on the economy than the impact of the savings that accrue from awarding the contract to a foreign firm. The impact of the percentage of the contract value set aside for a local firm should be higher than the impact of the savings that would emanate from awarding the entire contract to a foreign firm.

**BOX 10: ILLUSTRATION FOR SET ASIDES**

Let us use a simple example: Government wants to advertise contracts within the agriculture sector and it is faced with the problem of whether to set parts of these contracts aside for local firms given that it wants to use these contracts to not only achieve economic objectives but also increase wage employment in the economy. It will look at the impact of the contracts in terms of generating wage employment to the economy. In the Ugandan case, this would create an increase of UShs 25.8 in wage employment for every UShs 100 spent by government, if the contracts are awarded to domestic firms. We denote this by $M_i$.

Alternatively, if awarding these contracts to foreign firm generates savings that once reinvested have a higher impact on the economy that supersedes the Ush25.8, then there is all the justification to award it to a foreign firm. We denote this by $M_p$.

The defining parameter now becomes how much savings can government make on these contracts and later it invests the savings in the social services sector and receives an impact that is well above the impact created by letting out the contact to a local firm.

Government thus computes the quotient of buying local accounting multiplier 0.258 over the social services sector multiplier, 0.642. This translates into 40%.

So if government is sure of making at least a saving of 40% on letting out a contact in agriculture to a foreign firm, then it would be advisable to do so, otherwise the contract would be set aside for domestic firms.
10.2.2 SECTORAL SET ASIDES ANALYSIS

Equation 10.7 in the previous section becomes the set asides public procurement model. In this section we use this model to determine within which savings range, government would justify continued setting aside of particular contracts to local firms. The savings being discussed here is the difference between would-be-product price if the contract were executed by a domestic supplier and the actual price if let out to the most competitive foreign firm. If a local firm bid price for a particular contract is say Ushs100 and foreign firm bid price is UShs 80, the savings would be UShs 20. The question then becomes, should we let this contract and indeed all contracts of this kind within this sector to the foreign firm and save UShs 20 which we can re-invest into the most competitive firm or set it aside for a domestic form. What is the impact of both scenarios in terms of generating wage income?

As the graph below indicates, within a range of up to 40% savings for agriculture and commercial services, government has justification to continue setting aside contracts in these sectors to local firms. For the manufacturing, utilities and construction sectors, the range is below 30%. Beyond these ranges, there is absolutely no justification for government to set aside the contract to a local firm. If for example, government can make a financial saving of 35% on the contract price on a construction contract, then that contract should be let out to a foreign firm. The graph below helps us to emphasize our explanation above in all sectors.

It should be emphasized that this graph is a result of the set aside model above which is \( a \leq \frac{M_i}{M_p} \) where \( M_i \) is the impact of government option to procure domestically while \( M_p \) is the most competitive sector that government can invest its savings into and as explained in the box above this is the social services sector with a multiplier of 0.642. And since social services is the baseline sector (the sector used as a reference with which to compare other observations or results) we do not calculate its percentage savings range as this would create linear results. We thus calculate saving range for six productive sectors.

So if government wanted to increase employment income in the economy through set aside policy in public procurement the percentages savings range shown would constitute the various recommended levels.
We should note that our computation figure for savings according to Cecchini analysis were 13.59%, 9.9% and 7.6% for supplies, services and works respectively. The savings of up to 24% for construction through to 40% for agriculture and commercial services are well above the Cecchini analysis figures computed earlier. A further look at our Cecchini analysis however indicates that there are some contracts that attracted this high level of savings. This is an illustration of the fact that on certain individual procurements the required savings levels to open up the government procurement market for foreign suppliers might still be attractive.

The implication here is that if set aside policy is adopted within the public procurement framework, most of the contracts might end up in the hands of local firms and very few let out to foreign firm, this might complicate the public procurement trade in a global setting. There will be no doubt that foreign firms would raise a lot of criticism of such high percentages.
10.3 CONTRACTUAL CONDITIONS (LOCAL CONTENT REQUIREMENT)

A form of set aside that does not require a contracting procurement entity to reserve the entire or part of the contract to a local firm is the contractual condition. The intention here is to make policy objectives a contractual condition e.g. a fixed percentage of work must be subcontracted out to enterprises that agree to meet prescribed obligations such as a performing a contract as a joint venture or employing specific local personnel while undertaking the contact. The common phrase for this form of set aside is local content requirement.

Whereas, the reservation scheme highlighted in the last section considers the whole or part of the contract to be set aside for local firms, contractual requirements emphasize input involvement. That is, part of raw materials, labour or capital should be sourced domestically as input to the supplied products. Local content requirement could be for example, recommend a percentage of labour to be provided locally. The underlying issue here is to ensure that government increases employment or wage income in the economy. Diagrammatically, local content requirements can be represented as below:

### DIAGRAM 5: DIAGRAMMATIC REPRESENTATION OF LOCAL CONTENT REQUIREMENTS

![Diagram 5: Diagrammatic representation of Local Content requirements](image)

As the diagram indicates, government has two options, awarding the contract exclusively to local firms or opening up the procurement market to foreign competition. As argued earlier, the savings could be reinvested back into the economy. The contract value obtained if awarded to a foreign firm is with a caveat i.e. a percentage of it should have local content input. We assess the impact of this requirement diagrammatically as below:
Government has two options i.e. awarding a contract to a domestic firm with an impact of $M_i$ or awarding it to a foreign firm. From our earlier argument, when a contract is awarded to a foreign firm, the government makes a saving of $\alpha_i$ that are reinvested into the economy to create an impact $M_p$. The contract is awarded to a foreign firm with the condition that part of its input shall be local content. This local content also creates an impact on the economy depending on the sector it is invested into. This impact is denoted by $M_4$.

The above assessment of the impact on the economy, of local content requirement by government helps us to develop a model that could act as a guide to governments that would want to include it a policy within its procurement framework.
**BOX 11: LOCAL CONTENT REQUIREMENT MODEL**

In the section we explained that local content requirement is form of set aside. But in this case the pre-condition is that there is need to use local resources. In order to be consistent with our earlier argument, the condition is that the winning contract uses a percentage of local labour in the execution of its contract. The following reasoning is helpful:

i) A winning foreign firm has obligation to use percentage of local content in the execution of an awarded contract. Let this percentage be $\lambda$.

ii) The remaining part of the content used in the execution of the contract is from foreign sources. Let this be $1-\lambda$.

iii) The local content used has an impact on economy denoted by $M_i$.

iv) By buying from a foreign firm, government makes a saving denoted by $\alpha$.

v) The savings are reinvested into the economy.

So our equation becomes

\[
XM_i \geq X(1-\lambda)(1-\alpha)M_i + X\alpha M_p + XM_i(1-\alpha) \lambda
\]

However the impact $M_i$ tends to zero because of the leakage out of the economy and plus dropping $X$ this leaves us with the equation:

\[
M_i \geq \alpha M_p + M_4 \lambda (1-\alpha)
\]

Leading to:

\[
M_i \geq \alpha M_p + M_4 \lambda - M_4 \lambda \alpha
\]

Solving it further, this becomes:

\[
M_i \leq \alpha (M_p - M_4 \lambda) + M_4 \lambda
\]

Calculating for the required percentage savings, this becomes:

\[
\alpha \leq \frac{M_i - M_4 \lambda}{M_4 \lambda}
\]

Determining the required local content per sector, this becomes

\[
\lambda \leq \frac{M_i - M_4 \alpha}{M_4 (1-\alpha)}
\]

Equation 10.12 is helpful in determining the percentage local content requirement per sector necessary for government to obtain its social objectives while at the same time paying attention to the primary objective of value for money.
As indicated above, government will reinvest the savings obtained from awarding a contract to a cheap foreign source to a priority sector creating an impact $M_p$. As a requirement the foreign firm has to use local content and this creates an impact to the economy $M_4$. $M_4$ depends on the characteristics of the local content. To a certain degree $M_4$ may be determined by the government as is $M_p$, by specifying a certain kind of local content. If for example, it wants to increase wage employment of a particular category of labour, $M_4$ will be the accounting multiplier of that labour category.

As will be clearly shown in the illustration below, the percentage of how much local content is required per contract largely depends on how much savings can be made on the contract if the contracted is awarded to a foreign firm. If these savings are high, the percentage local content requirement is low and vice versa. The underlying reason for this is that there is no justification of continuing to demand for foreign firm’s local material utilisation since savings being earned continue to increase and can be invested into the most competitive sector and usually create stronger impact than local content utilised.

If the savings are low, the government would require higher local content involvement. If we took an example of agriculture, animal husbandry, fisheries and forestry for illustration, if we inserted different figures for savings on an increasing scale, the local content percentage turns out to be decreasing as the possible percentage savings keep increasing.

If the savings decrease to zero, i.e. the government is unable to get any savings from awarding a contract to a foreign firm, the requirement for local content rises significantly and as the diagram below indicates the percentage requirement of the local content moves to 40%. This implies that, if government is unable to get savings from awarding a contract to a foreign firm, then, the local content requirement should equal to the level of savings it would have made if it awarded a contract to a foreign firm.
As can be seen, if government can make a saving of 40% for a contract in agriculture, there is no justification for it to make local content a pre-condition in the contract award. Investing the 40% saving in the most competitive sector would generate substantial employment income that if the local content requirement condition existed. On the extreme end, if government is to make only a 10% saving by awarding the contract to a foreign firm, then this requires a pre-condition of local labour utilisation of up to 33%.

10.3.1 SECTORAL LOCAL CONTENT ANALYSIS
Local content requirement entail part of the material input in a product to be locally obtained by a winning firm for a particular contract. So, for a contract, a percentage of its content will be externally sourced. But the remaining part of material will be locally sourced. This could be in the form of raw materials or labour each with a different $M_4$. As an illustration we assume for the moment local content is in the form of labour. Using equation 10.11, we calculate the local content input required per sector as a pre-condition to awarding a procurement contract to a foreign bidder.
As the graph below indicate, in order to generate wage employment in the economy without jeopardising the primary objective of value for money, public procurement contracts should set contractual conditions as part of their bid requirements. How much content requirement should be allocated per sector is what we are trying to address now. So we can open up our procurement markets but impose a local content requirement to a winning firm. And as the graph indicates, agriculture, animal husbandry, forestry and fisheries would require a 30.8% local content requirement, Manufacturing 9.5%, utilities 20.3%, Building, construction and civil engineering 16.6% transport and communication 19% and all through to commercial services that require 33.9% local content involvement. Our presumption in this case is that savings will have an impact on economy $M_p$ which we calculated for each sector of the economy using the Cecchini analysis.

**GRAPH 5: REQUIRED LOCAL LABOUR CONTENT PER SECTOR**
10.3.2 LABOUR CATEGORISATION

Within the framework of the previous discussion, we might need to consider each labour category. Meaning, what proportions need to be considered in view of local labour requirement.

It is not enough to simply say we should involve at least 30.8% of our labour force in agriculture as a requirement for awarding the contract to a foreign firm. We try to measure for each labour category, how much should be involved as input for each contract awarded in a particular sector. See table below.

These percentages have been computed in regard to each type of labour required per sector. For example, how much unskilled labour as a fraction of the whole labour is required in the production of manufactured goods? After fraction is established, then we compute how much is required as a condition to boost that labour category. The local content requirement percentages used here are those computed in the previous section.

The findings are consistent with our earlier assessment with Agriculture, animal husbandry, forestry and fisheries requiring the highest reservation for the unskilled labour at 18.7% while commercial services require a large part of high skilled labour as a contractual condition.

TABLE 14: LABOUR CATEGORY REQUIREMENT PER SECTOR AS CONTRACTUAL INPUT REQUIREMENT FOR FOREIGN FIRMS.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled labour</td>
<td>18.6</td>
<td>3.5</td>
<td>1.42</td>
<td>3.4</td>
<td>3.63</td>
<td>4.44</td>
</tr>
<tr>
<td>Semiskilled labour</td>
<td>3.30</td>
<td>1.0</td>
<td>0.73</td>
<td>2.1</td>
<td>1.57</td>
<td>2.45</td>
</tr>
<tr>
<td>Skilled labour</td>
<td>4.05</td>
<td>2.1</td>
<td>10.6</td>
<td>4.0</td>
<td>5.27</td>
<td>10.2</td>
</tr>
<tr>
<td>High Skilled labour</td>
<td>4.81</td>
<td>2.9</td>
<td>7.54</td>
<td>7.1</td>
<td>8.56</td>
<td>16.8</td>
</tr>
</tbody>
</table>

Below we take you through a series of graphs to reflect each labour category’s requirement.

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8 The sectors in this table are arranged in order in which they appear in accounting multiplier table in the previous chapter.
The graph above shows the unskilled labour requirement as a contractual condition for foreign firms wishing to bid for tenders in Uganda. So depending on the type of contracts advertised, the Uganda government may be required to set up conditions relating to the boosting of unskilled labour. As the graph and table above indicate, agriculture, animal husbandry, forestry and fisheries related contracts would require the highest local unskilled labour input at 18.6%, followed by social services at 10.3%, all through to utilities that require an input reservation of 1.42%.

These labour requirements are consistent with the nature of the Ugandan economy. Uganda has a high illiteracy level due to economic and social mismanagement by governments in power before 1986, when the current government of NRM took power. These people are mainly in rural areas involved in agriculture, animal husbandry, forestry and fishing. In order to improve their well-being, then government must tackle, the agricultural sector. It is for this reason that agriculture should carry a larger percentage of unskilled labour set aside contractual conditions than other sectors. We next look at semiskilled set aside contractual conditions.
Semiskilled labour category ranks the lowest in terms of reacting to exogenous stimuli. Our supposition for this reaction is the very close categorisation between unskilled and semiskilled labour types by the Uganda SAM. Uganda SAM defines unskilled those people who have never completed primary education while semi skilled completed primary education (Primary Seven). Well as Primary Seven is a terminal level, it is not a defining one, in an individual’s career. It is unlikely to find jobs specifically set for individuals who have at least completed primary seven. You will not find a job advertised and requires a primary seven certificate as evidence of completion in order to get the job. What therefore happens is that those who completed primary seven compete for and do the same types of jobs with those ones referred to as unskilled. So designing a strategy within the procurement framework to target this particular group may be an uphill task on part of government. However as SAM indicates, possibly it might be done. The low percentages needed to be absolved as contractual conditions, further augment the argument in the previous lines.
As discussed in this section, it is unlikely that government would come up with a strong policy on this type of labour category because even identifying the people who fall in this group might not be an easy task. Besides, they do not have any outstanding skills that are different from their counterparts in the unskilled category. The Ugandan education system has not been tailored to acquire industrial or productive skills at that level.

Next let us focus on skilled labour.

**GRAPH 8: SKILLED LABOUR CONTRACTUAL CONDITIONS PER SECTOR**

As discussed earlier, skilled labour in the Ugandan SAM was defined as people who did secondary education. According to our contractual reserve requirements, utilities plus commercial services come out to generate more wage income for this type of labour category than other sectors and conversely do require more labour content involvement compared to other sectors of the economy. Utilities require local content involvement of skilled labour of 10.6% while commercial services require 10.2%. Again for these sectors to come out strongly on this type of labour category is not surprising, given that they require some educated labour force. Commercial services involve retailing, insurance, financing, advertising etc. these do require some level of educated labour force.
So for a foreign firm to win a contract from say commercial services, government would require that at least a 10.2% of the skilled labour force be involved in the production or service delivery. The manufacturing sector requires the least involvement of this type of labour force with only 2.1% requirement.

Next we look at the last category, the highest skilled labour force:

**GRAPH 9: HIGHLY SKILLED LABOUR CONTRACTUAL CONDITIONS**

Manufacturing surprisingly requires a smaller involvement of this labour category than all the other sectors. This can be explained within the general framework of the manufacturing sector that is still in its infancy and needs a lot of external support. The manufacturing sector has not yet grown to a level significant enough to stand alone. This might also help to dispute the fact government should set up a comprehensive policy of discriminatory procurement practices to protect the local industries. They are still to ‘young’ to stand alone but might benefit from some low levels of labour content requirements and offsets, as shall be seen in the section on offsets.

Agriculture, animal husbandry, forestry, and fisheries comes out as second in this category of less users of high skilled labour at only 4.81%. So if government wanted to boost the economy by increasing wage
employment among the high skilled labour, it would be appropriate to invest more in commercial services. So contacts advertised by government in the commercial services sector need to emphasize the high skilled labour required to be involved and this case a 16.77%.

**GRAPH 10: DIFFERENT LABOUR CONTRACTUAL CONDITIONS PER SECTOR**

The above graph does not introduce new facts but contributes in trying to get an overall picture about the Ugandan economy vis a vis labour requirements. The fact that Uganda is agro-based and having a high level of unskilled labour comes out strongly where the agriculture, animal husbandry, forestry and fisheries require the highest involvement of unskilled labour while commercial services partake the largest high skilled labour.

This graph and the findings of this section may be very instrumental in assisting government in setting up priority areas as far as increasing wage employment is concerned. On the whole, unskilled labour generates higher wage income and mainly from agriculture.
10.4 PREFERENCING SCHEMES
This Section will establish using the SAM the economic benefit derived through the application of preference schemes in public procurement. Usually the most popular discriminatory procedure, preference schemes allow all eligible contractors to bid for advertised tenders. However tender evaluation points are granted to those contractors who satisfy prescribed criteria or who undertake to attain specific goals in the performance of the contract.

How then can government continue making the bidding process competitive while at the same time promoting domestic social concerns? To achieve this, foreign firms should be made clear that despite the preference schemes, they can still win, if their bids can out-compete the preference margins. This therefore means excessive margins of preferences need to be discouraged.

BOX 12: PRICE PREFERENCE PUBLIC PROCUREMENT MODEL

<table>
<thead>
<tr>
<th>Price preference Public Procurement Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let us try to find which margins could be acceptable i.e. those that will continue stimulating competition.</td>
</tr>
</tbody>
</table>

When government wants to introduce a preference scheme, it would want to benefit from a social impact. In order for preference schemes to be effective it should not create an impact that is less than the equilibrium.

In the previous chapter we designed a PPOM model that created a scale of balance in determining whether or not to procure from a foreign firm. The PPOM model is: $\alpha \leq M_i / M_p$

Using the same model under the preference schemes, we argue that the preference margin should be able to create an impact which is more than or equal to the impact of the savings $M_i / M_p$

We have already argued in this research that $M_p$ is the impact of the sector with the highest propensity to create wage employment. To enable government to achieve its social objectives the same conditions as per PPOM model pertains hence the impact of the price preference margin should be equal to the savings $M_i / M_p$

So:

$\varphi \leq M_i / M_p$ .......................................................... 10.13

Where $\varphi$ is the price preference margin and $M_i$ and $M_p$ are sectoral multipliers and multiplier of the priority sector as earlier computed.

Equation 9.9 would then act as the guide to policy makers in determining what level of preference would be appropriate.
So, if the savings that the foreign firms provide increases our equation $\phi \leq M_i / M_p$ is put in disequilibrium. The impact of buying foreign would now be higher than buying local. Hence the government would then offer the contract to a foreign firm because doing so would increase wage employment more than awarding it domestically.

The preference scheme should set at a percentage that equals the required level of savings that government calculates per sector and unless conditions significantly change, they should be maintained at this level per sector. This would eliminate the instability that could be created on the supply side when foreign suppliers are not sure what next to expect.

**GRAPH 19: PRICE PREFERENCE MARGINS**

Our analysis therefore indicates the percentages as set per PPDA is an underestimation in all sectors and would not create the required socio-

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10.4.1 PREFERENCING SCHEMES IN UGANDA

As indicated in chapter eight, PPDA has drafted a framework for the establishment of preference margins within the Ugandan procurement framework. Although not yet enacted into law by parliament, the framework among other things provides for preferring a Ugandan provider in the award of a contract, if such a contract will create and maintain substantial employment in Uganda and increase manufacturing and technological capabilities. It awards a margin 15% for supplies, 7.5% of contract price for works, 10% for services.

Our analysis therefore indicates the percentages as set per PPDA is an underestimation in all sectors and would not create the required socio-
economic impact. As our calculations indicate, price margins are sector specific with each of the sectors having its completely different price margin requirements. So making blanket margins as per for supplies and works would not achieve the intended purpose. Even when these blanket provisions are accepted, they are still very low. In aggregate our margins and calculate averages to fit with PPDA categorisation. The table below indicate our computations.

TABLE 15: COMPARISON OF PPDA PREFERENCE MARGINS AND OUR OWN COMPUTED MARGINS

<table>
<thead>
<tr>
<th>Comparison of PPDA Preference Margins and our own computed Margins</th>
<th>Supplies</th>
<th>Works</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPDA recommended Preference margin</td>
<td>15</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>Our recommended Price margins</td>
<td>31</td>
<td>23</td>
<td>32</td>
</tr>
</tbody>
</table>

The wide difference in margins set by PPDA and our own findings portray the dilemma countries find themselves engrossed into in trying to fixe price preference margins. Our argument therefore is that governments must first undertake a sectoral analysis to assess the impact of the preference margins on each of the sectors before margins are established.

10.5 OFFSETS

Arrowsmith describes offsets as indirect schemes to achieve social economic benefits. Offsets require the seller to transfer extra, economic benefit to the buyer as a condition for a country to buy goods and services from that firm. Instead of bargaining for price discounts, governments prefer to realise in-kind transfer that spill over to the whole economy (Taylor 2002). Offsets often appear under the guises of:

- Industrial benefits
- Compensation packages
- Cooperative agreements
- Counter-trade policies

A purchasing government obliges a foreign seller to include extra benefits with the sale of the basic goods. These foreign firms may then sign individual offset contracts with local firms in the purchasing government’s economy. Offsets should therefore be assessed against the benefits that the economy receives as a result of the implementation of the offset project. An offset benefit would normally be the product of the net monetary value of a given offset and the respective multiplier of
the sector in which the offset has been carried out and since offsets might not involve discussing price discounts but instead prefers in-kind transfers, it is important to consider these arguments while computing the worthwhile of a particular offset.

As the figure below indicates government has two options to either award a contract exclusively to a domestic firm or open up the procurement market. When it is opens up the procurement market, foreign firms who bid are given offset conditions. These offsets do provide an impact on the economy and should be computed.

**DIAGRAM 6: DIAGRAMMATIC REPRESENTATION OF OFFSETS**

When government awards a contract with offset conditions, the offsets \( \theta \) given, will have an impact on the economy denoted by \( M_l \). This is shown in the diagram below:

**DIAGRAM 7: IMPACT ASSESSMENT OF OFFSETS**
The impact assessment above enables us to develop the offset procurement model below.

**BOX 13: OFFSETS PROCUREMENT MODEL**

**OFFSET PROCUREMENT MODEL**

In the previous section we explained that a purchasing government obliges a foreign seller to include extra benefits with the sale of the basic goods. The following reasoning is helpful:

i) A winning foreign firm has obligation to sign up offsets with local firms. These offsets form a percentage of the contractual value. Let this percentage be $\beta$

ii) The local offsets used have an impact on economy denoted by $M_t$

iii) By buying from a foreign firm, government makes a saving denoted by $\alpha$

iv) The savings are reinvested into the economy

So our equation becomes

$$XM_i \geq X(1-\beta)(1-\alpha)M_t + X\alpha(1-\beta)M_p + XM_t(1-\alpha)\beta$$ ................................................. 10.13

However the impact $M_t$ tends to zero because of the leakage out of the economy and plus dropping $X$ this leaves us with the equation:

$$M_i \geq \alpha(1-\beta)M_P, M_i \beta(1-\alpha)$$ .................................................. 10.14

Leading to:

$$M_i \geq \alpha M_P + M_t, \beta - M_t, \beta \alpha_i$$ .................................................. 10.15

Solving it further, this becomes:

$$M_i \leq \alpha [M_P, M_t, \beta] + M_t, \beta$$ .................................................. 10.16

Calculating for the required percentage savings, this becomes:

$$\alpha \leq \frac{M_i - M_t \beta}{M_P - M_t \beta}$$ .................................................. 10.17

Determining the required percentage offsets, this becomes

$$\beta \leq \frac{M_i - M_P \alpha_i}{M_t (1-\alpha_j)}$$ .................................................. 10.18

Equation 10.18 then assists us to compute the desired offset value. Government’s challenge then becomes what sector to target for offsets. This would determine the $M_t$, what $M_i$ should be in order to determine $\beta$. 


As indicated in the box above, determining the sector at which the offsets are to be targeted determines $M_t$ and would in essence determine the offset contractual percentage value to demand form a foreign firm.

Let us now try to apply the offset public procurement model practically. As indicated earlier, there are so many possible offsets that government would want to apply, such that illustrating all of them in this research would be an indomitable task. We however try to give two kinds of offsets that government can use together with their measured impact.

**BOX 14: OFFSET APPLICATION**

<table>
<thead>
<tr>
<th>A Simple Explanation for offsets application</th>
</tr>
</thead>
<tbody>
<tr>
<td>We argue in this section that a government can impel a foreign firm to make a within sector investment. In our analysis above, if government did this, the impact on the economy would be similar to that of $M_t$, so $M_t = M_i$ in our offset model.</td>
</tr>
</tbody>
</table>

Alternatively it can chose to impel the selling firm to reinvest in the most competitive sector (a sector with a higher propensity to create jobs, as argued before this would be the social services sector hence in this case $M_t = M_p$).

Finally it could choose any sector, it wants to promote. For example it might want to enhance IT skills, hence it makes offsets to target the IT sector.

So as argued before it really depends on government’s priority option and that option will determine the $M_t$.

One such kind of offset is the offset investment in project of major significance to the economy. In such a type of investment, the buying company will be required to invest in an industry within the country that can spur development and increase employment and welfare in the country. Such an investment my crisscross sectors within the economy. Meaning that a selling company might not be required to invest within the particular sector in which the contract falls. A firm selling defence equipment might be required to invest in communication sector, transport etc. This therefore means that even when that is not the buying company’s core capability, it has to network with other firms within the required sector so as to make the investment that the buying company requires.

However, government my also require that the investment be made within the sector where the contract falls. This requirement has two main advantages. One, the offset would fall within the very sector in which the buying firm has core competences. So, apart from the fact that
the selling firm is saved the hustle of looking globally for a partnering firm to come and invest in an industry were it has no competence, investing in a line investment would imply that firm coming into the country having a wealth of experience that would be instrumental to the economy. Secondly, within-line investment, sounds more attractive to a potential bidder rather than when the firm is required to grope in the wildness. This is important to the country in that an advertised tender will attract several good bids rather than when potential bidders are scared off by the conditions. In line with this argument we try to compute the offset percentage requirements that a country might incorporate within its policy if it requires within-sector counter investments. If this is a pre-condition then this means that the impact the investment would have on the economy would be equal to the impact of awarding the contract to the local firm i.e. \( M_i \). In this case

\[ M_t = M_i \]

We use the sector multiplier as our \( M_i \). These sectoral multipliers indicate the impact an exogenous investment would have per sector. If government for example invested in the agriculture sector, it would have a direct and indirect impact on the economy of UShs26 for every Ushs100 invested. Our argument then follows that what would happen to a sector if an external firm (selling firm) made a direct investment in that particular sector. What would be the direct effect? From our SAM we extract the direct impact per sector that would arise out of an external injection. This constitutes our \( M_t \). We also used 0.642 (the social services multiplier which is the highest) as our \( M_p \) signifying that if government made any savings \( \alpha_i \), this is the sector it would invest them into as had been argued in our earlier cases.

With that set up as discussed we discover that if government wanted buying foreign firms to make within-sector counter investments, the offsets are as indicated. In trying to explain different offsets across countries Brauer and Dunne (2004) indicate that frequently, governments ask for up to 100% of offsets and others even exceed the 100% mark. They for example quote Poland that signed an aircraft deal with an American company valued at US$ 3.5 billion but offsets amounted to US$5.5 billion indicating a 157% in offsets. But they also do contend that other countries ask for less than 100% offsets. Ordinarily this happens in small countries whose industrial sector may have difficulty absorbing huge offset deals. This may be applicable to Uganda.
Another form of offsets that we selected as an application case in our research in regard to offsets is in relation to labour especially skilled labour. Government in many cases use public procurement contracts to enhance skilled and highly skilled labour within the country. Selling firms will reciprocate by training the indigenous labour force in modern production methods, technological advancements etc. these might be in workshops conducted within the countries or even global internships where skilled workers are flown to the firm’s originating country to spend a period of time within the contracting firm’s parent industry.

In our case illustration we look at the total sector labour multipliers and they constitute our $M_i$. These multipliers are the measure of the impact in the increase of wage employment in the economy as a result of an exogenous injection. If government or any foreign investment were made in each of the sectors below, the multipliers indicated would constitute the impact in wage employment or wage income generation per sector. We then focus on the skilled labour. The social accounting matrix disaggregated skilled and highly skilled labour. In this particular case we aggregate them with the hindsight that in an offset government may not be too particular especially if it’s an across-the-sector policy. Particular labour category say high skilled labour would be a focus to
government to enact an offset for it, if it sector specific for example energy sector where government wants to gain particular highly trained labour. So for this illustration, we combined skilled and high skilled labour.

Our computations indicate that apart from agriculture, animal husbandry, forestry and fisheries, most offset recommendations rotate around 100%. For agriculture, animal husbandry, forestry and fisheries, its offset requirement is a wobbling 266%. However this is not surprising for the agriculture sector with regard to skilled labour is concerned. The agriculture sector as indicated previously attracts largely unskilled and semiskilled labour with skilled labour following to far other sectors in skill requirements. It falls therefore that if the skill requirements in the agriculture sector are to be upgraded the offset requirements should be high.

**GRAPH 12: SKILLED LABOUR OFFSETS**

So the two examples above, one on within- sector counter investment and skilled labour generation help to operationalise the set aside public procurement model indicated in this section above. As earlier argued it
really depends on what the intentions of government are, after having made a critical analysis of its sector requirements, it will give guidance to the procurement entities, as to what offsets they should focus on.

10.6 SUMMARY
In this chapter we develop discriminatory procurement models that can be infused in the public procurement frame work without appearing to compromise the primary objective of value for money.

We argue that contrary to the wide believe that discrimination in public procurement leads to resource wastage, if well managed it is crucial in attaining the primary object and also achieve social objectives at the same time.

Governments all over the world do have so many secondary objects they would want to achieve through public procurement. We could not design models for each of these objectives; we instead concentrated on the improvement of wage income in the economy as a social objective because this is cutting-across issue for all countries irrespective of their level of development.

But by and large we introduce the guiding principle that could be transferable in trying to achieve other social objectives. Fundamentally important for the transferability of these models is a country’s ability to measure the impact on the economy, buying local could have vis-à-vis the impact of potential savings arising as a result of buying competitively. Crucial also, is what the government uses the saving for.

We designed 4 discriminatory procurement models, Set asides, local content involvement, price preference and offsets. We were unable to give situational applications of each of them over the other but we note that if well used, each can deliver government’s intended objectives. However a starting point for there applicability, as noted in the previous paragraph, is for government to estimate sector savings that arise in a competitive situation. If this is achieved, then applicability of each of them becomes situational. However in chapter 11, we attempt to give guidance. This is tacked in the subsequent chapters.
CHAPTER ELEVEN

EXTENSION OF THE ANALYSIS

11.1 INTRODUCTION

In the previous chapter we undertook an analytical study of public procurement discriminatory schemes. We analyzed when governments should prefer to award a contract exclusively to domestic firms and cases where it would make economic sense to award a contract to foreign firms. A balance between the two, we argued would enhance efficient resource utilization and enable government to achieve both its primary and secondary objectives through public procurement. In this chapter we extend our analysis by considering two other scenarios that could be useful in producing a complete picture of public procurement policies.

11.2 INADVERTENT LOCAL INVOLVEMENT IN A FOREIGN-AWARDED CONTRACT

While presenting the procurement policy model, we argued that savings as a result of buying competitively was the only direct injection into the economy for a contract awarded to a foreign firm. This argument was based on the fact foreign firms usually expropriate all the money earned back to their home countries and this acts as a leakage to the economy. Hence in our equation, \( M_i \geq (1-\alpha_i) M_f + M_p \alpha_i \), the \( M_f \) tended to zero, coming up with our PPOM to buy local if \( M_i \geq M_p \alpha \). Let us extend this model with a modified argument.

When a foreign firm wins a domestic contract, it is unlikely that all the money apart from the profits arising out of buying competitively will be lost out of the economy. We want to argue that even when a foreign firm wins a domestic contract, some money will find its way back into the economy in terms of local services that the firm will hire in order to successfully execute the contract. Such services might include transportation of goods, communication, hotel accommodation and many other commercial services. The impact to the economy arising out of this argument will depend on how much local services he uses.
This scenario should be distinguished from the local content involvement we looked at in the previous chapter because in this particular case, it’s not a contractual requirement and in many cases the foreign firm will do it unconsciously. The foreign firm’s focus is to successfully execute a contract not so much a conscious effort to develop the local economy. The impact of this inadvertent local involvement in a foreign awarded contract can be diagrammatically represented as below:

As the diagram indicates, government can award a contract exclusively to a local firm with the associated impact of $M_l$ on the economy. Alternatively, it can award the contract to a foreign firm. When a
contract is awarded to a foreign firm, government makes a savings of $\alpha_i$. In addition, since a contract is being executed within the country, they are unintended benefits. These benefits can be denoted by $\rho$ with the impact denoted by $M_d$.

We hence extend our PPOM model extended as follows:

**BOX 15: PPOM with local involvement in a foreign-awarded Contract**

<table>
<thead>
<tr>
<th>PPOM with local involvement in a foreign-awarded Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We begin with the equation:</strong></td>
</tr>
<tr>
<td>$XM_i \geq X(1-\alpha_i)M_f + XM_f\alpha_i$</td>
</tr>
<tr>
<td>Some local services will be hired by a foreign firm to successfully execute its contract: Let this be $\rho$ of the contract value with an accounting multiplier $M_p$. So our equation becomes $XM_i \geq X\rho(1-\alpha)M_d + X(1-\rho)(1-\alpha)M_f + XM_f\alpha_i$.</td>
</tr>
<tr>
<td>$M_d$ = impact of inadvertent local involvement</td>
</tr>
<tr>
<td>Dropping $X$ and $M_f$ because it is a leakage out of the economy,</td>
</tr>
<tr>
<td>$M_i \geq \rho(1-\alpha_i)M_d + M_p\alpha_i$</td>
</tr>
<tr>
<td><strong>Solving for the required savings, this equation becomes:</strong></td>
</tr>
<tr>
<td>$M_i \geq M_d\rho - M_d\rho\alpha_i + M_p\alpha_i$</td>
</tr>
<tr>
<td>$\alpha_i \leq \frac{M_i M_d \rho}{M_p - M_d \rho}$</td>
</tr>
</tbody>
</table>

In this case, it becomes clear that in order to determine whether or not to award the contract to a domestic firm, the impact of the inadvertent local involvement $M_d\rho$ in a foreign contract will be evaluated alongside the impact of investing the savings in the priority sector as earlier calculated in the PPOM. The magnitude of the local involvement alongside the savings will determine the government option.

As the equation indicates, the savings required to justify award of a contract to a local firm would go down in relation to the inadvertent local involvement denoted by $M_d\rho$. This means that the savings as calculated through the PPOM will go down by $M_d\rho$ which is the inadvertent local involvement.
11.2.1 INADVERTENT LOCAL INVOLVEMENT-THE UGANDAN CASE

Given the extended model above, how would this translate in the Ugandan economy? We compute the impact of two variables $\alpha$ and $\rho$ using the Accounting multipliers but we have to determine the $M_d$ first.

From our argument in this section, the local involvement is expected to be primarily in terms of transport and communication and commercial services such as banking, insurance etc. If we therefore computed the average of the transport and communication plus commercial services sector multipliers, we get a picture of the impact of these two sectors on the economy. Our computation indicates that the average multiplier of these two sectors is 0.216. This becomes our $M_d$ multiplier.

Secondly we need to determine what percentage of the contract is inadvertently spent in the economy. This is what constitutes our $\rho$ in the inadvertent local involvement equation above. There is no doubt this percentage will vary from one contract to another depending on the nature of the contract. A labour intensive Works contract will have a higher expenditure in the economy than a high technologically intensive one. A service contract that hires more local experts will have to spend more in the economy that one that is based on foreign experts. In the graph below we assume that a foreign awarded contract can have an inadvertent expenditure within the economy of 30% of the contract Value.

In the previous chapter we established the $M_i$ per sector (impact of government decision to award a contract to a local firm) and established $M_p$ (The most competitive sector where the government can reinvest the savings). We also determined the savings per sector using the Cecchini analysis. Given this information we can compute the impact of awarding a contract to a foreign firm but with some level of local involvement.

In the previous chapter, when we compared $M_p\alpha_i$ with $M_i$, we recommended that government’s simple option is that beyond a particular percentage it would make economic sense to award the contract to a foreign firm. This is because the savings made as a result of buying from a cheap foreign firm have a bigger impact once reinvested into the economy than awarding a contract to a local firm. This analysis can be extended in the case of inadvertent local involvement as the graph below indicates:
With inadvertent local involvement in a foreign awarded contract, the percentages required to award a contract exclusively to a local firm go down significantly. At 30% inadvertent local involvement in a foreign awarded contract, the require percentage savings to award a contract to a domestic firm is for example only 13% and 14% for the manufacturing and Building, Construction and Civil engineering sectors respectively.

It should be noted that under Cecchini Analysis, this research found out the following percentage savings for a foreign awarded contract.

**TABLE 16: THE CECCHINI PERCENTAGES**

<table>
<thead>
<tr>
<th>Product category</th>
<th>Percentage Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works</td>
<td>7.56%</td>
</tr>
<tr>
<td>Services</td>
<td>9.9%</td>
</tr>
<tr>
<td>Supplies</td>
<td>13.59%</td>
</tr>
<tr>
<td>Overall percentage savings</td>
<td>10%</td>
</tr>
</tbody>
</table>

The percentages calculated with inadvertent local involvement in a foreign awarded contract at the level of 30% are closer to the Cecchini
percentage savings for especially works and manufactured goods. In fact for manufactured goods, they are the same.

This implies that in a situation of inadvertent local involvement in a foreign contract there is a greater degree of freedom for foreign firms as the percentage savings required to award a contract exclusively to a local firm are lower and in some cases closer to the actual savings computed through the Cecchini analysis.

11.2.3 INADVERTENT LOCAL INVOLVEMENT AND OTHER DISCRIMINATORY MODELS

In a similar vein inadvertent local content will affect the other discriminatory procurement practices as developed from our PPOM model in the previous chapter. We not go through each of them under this section.

It is however important to note that the set asides, local content requirement, preference scheme percentages, as we saw them in the previous chapter will go down significantly since the economy is not solely relying on the savings from buying competitively for its injections but in this case it also benefits from hiring of local services by foreign firms who desire to have successful execution of their contracts won within the country.

11.3 DISCRIMINATORY PROCUREMENT AND TAXATION

Cecchini argues that budgetary savings arising out of government opening up its procurement market can be used as an instrument of fiscal policy. Fiscal policy involves the use of government spending, taxation and borrowing to influence both the pattern of economic activity and also the level and growth of aggregate demand, output and employment. To raise the level of employment government increases its expenditure or lowers its taxes.

In the previous section we argued that government will re-invest its savings in the most competitive sector which, in Uganda, we adduced to be the social services sector. This is the sector that we calculated as having capacity to create wage income the most as calculated by the accounting multiplier. It has an accounting multiplier of 0.642. As a fiscal option government can instead ease taxes or pay the external debt.
11.4 TAX RELIEF AND PUBLIC PROCUREMENT

In this section, we take a look at taxation and how it can be integrated into the procurement framework. In the previous chapter we assessed the impact of increased government expenditure on wage employment using the accounting multipliers generated through the SAM. We now turn to tax reduction. Instead of government investing the resources in the most competitive sector; it instead offers an income tax relief.

Offering tax reduction is akin to injecting more money into the economy. The impact of an extra UShs 100 awarded as a tax regime would have the same effect as when government directly injects it through discriminatory procurement practices. This means that our PPOM model would aptly apply if in the case of tax reliefs. So, restating the PPOM,

\[ \alpha_i \leq \frac{M_i}{M_p} \]

How would this model relate in the case of tax relief. First \( M_i \) is still the accounting multiplier per sector as identified in the last chapters. This is because a tax relief will have the same impact on the economy as an injection discussed previously. Our analysis is based on government ability to increase wage employment and subsequently wage income. In order to increase wage income, government might award tax reliefs on wage income. Once this is given the impact would translate to \( M_p \) becoming 1.

Obviously, the impact of a tax relief would be higher than government spending the money in the most competitive sector for all the sectors of the economy since \( M_p < 1 \).

As a consequence the set asides, local content requirement, preference scheme percentages, as we saw them in the previous chapter will go down significantly since the economic impact of the ‘savings’ has gone up. We do not take you through the preference schemes again because the underlying logic for increased government expenditure or reduced taxation is the same. In this section we only give an illustrative example in respect to set asides to emphasize our argument that the models do not change but what changes ate the percentage totals.

So we do not reformulate new models in this section as our argument is that government either spends or gives a tax relief is maintained. In our PPOM model:

Buy local if \( M_i \geq M_p \alpha_i \) we replace \( M_p \) with the tax 1.
Hence our PPOM where savings are translated into tax relief becomes
\[ M_i \geq \alpha_i \]
This is also true for the other procurement schemes discussed in the previous chapter. \( M_p \) is replaced with 1 so the set aside procurement model becomes

\[
\lambda \leq \frac{M_i - \alpha_i}{M_i(1-\alpha_i)}
\]

In the graph below, we demonstrate the tax relief percentage levels that would be necessary to infuse into a procurement framework to achieve both social objectives while paying attention to the primary objective of value for money and make a comparison with savings calculated in previous chapters.

11.4.1 COMPARISON OF GOVERNMENT EXPENDITURE AND TAXATION AS FISCAL OPTIONS

GRAPH 14: COMPARISON OF GOVERNMENT EXPENDITURE AND TAXATION

11.5 SUMMARY

In this chapter we have introduced an extension of the procurement policy option model. As noted, we really do not introduce a fundamentally new thinking but rather a what-if scenario that completes the whole picture for our research. We note that both inadvertent local content and tax relief help to reduce discriminatory procurement margins set for foreign firms.
CHAPTER TWELVE
IMPLEMENTATION OF DISCRIMINATORY SCHEMES

12.1 INTRODUCTION
In the previous chapters we undertook an analytical study of public procurement discriminatory schemes. We presented a case where governments would prefer to award a contract exclusively to domestic firms and cases where it would make economic sense to award a contract to foreign firms. A balance between the two, we argued would enhance efficient resource utilization and enable government to achieve both its primary and secondary objectives through public procurement. In this chapter, we discuss the actual implementation i.e. what a government desirous of instituting discriminatory procurement schemes can do to ensure successful implementation. We also highlight associated problems with some of the schemes.

12.2 IMPLEMENTATION OF THE PUBLIC PROCUREMENT OPTION MODEL (PPOM)
In our discussion we have indicated that price alone is insufficient to determine whether to buy from a local or foreign firm. One other criterion should be the impact buying domestically has on the economy in comparison to a foreign awarded contract. Our basic analysis using the PPOM model is that government compares the impact of percentage savings arising out of open competition (domestic firm vis a vis foreign firm) with the impact of awarding the contract exclusively to a domestic firm. We hence concluded that government should buy local if the percentage savings is less or equal to the quotient $M_i/M_p$ defined as the sectoral accounting multiplier divided by the accounting multiplier of the priority sector.

Our computations in this research indicate that the savings calculated through the accounting multiplier will generally be too high as compared to the expected savings we calculated through the Cecchini analysis. We therefore inferred that the current savings as per the Cecchini analysis are insufficient to justifiably open up procurement markets to foreign firms in the sectors we studied.
However the PPOM is based on the idea that a foreign awarded contract would have all the money expropriated out of the economy under what we call leakages. This argument is idealistic since some money is inadvertently spent into the economy for any contract awarded to a foreign firm. The percentage amount of money inadvertently spent inside the economy will vary depending on the nature of the contract. It could be negligible in a technologically intensive contract especially in developing countries where technology is humble but can rise significantly in a labour intensive contract such as Works.

Our assessment indicated that in the case of inadvertent local involvement, the percentage savings required to determine whether to award a contract to a foreign firm or not would go down significantly. At 30% inadvertent local content involvement, the saving percentage for supplies was equal to 13.95% a figure similar to the expected savings from the Cecchini analysis. What direction should the implementation of the PPOM take? Below we provide some guidelines to government:

- Undertake a sectoral analysis to determine how much savings government would gain from awarding the contract to a cheap foreign firm. This is the Cecchini analysis.
- Calculate the impact of these savings on the economy as calculated through the accounting multiplier.
- Compare the impact of these savings with the impact of awarding the contract exclusively to a local firm. As indicated the impact of the savings would be low necessitating the award of most contracts to a local firms.
- To avoid a backlash that could arise out of awarding most contracts to local firms, compute inadvertent local involvement in a foreign awarded contract.
- Re-compute the percentage savings required for government to justifiably award the contract to a local firm inadvertent local involvement in a foreign awarded contract not withstanding.
- Inadvertent local involvement would significantly bring down the percentage savings requirements in some cases closer to the Cecchini percentages depending on the percentage of inadvertent local involvement.
- The percentage savings computed would constitute the discriminatory margins below which government would justifiably award the contract to a local firm.
• Publish these margins in a trade journal for guidance for procurement entities

It should also be noted that once sectoral margins are computed and published, each procurement should be checked against the percentage rule and decision to award a contract to a foreign or local firm taken.

12.3 IMPLEMENTATION ALTERNATIVE DISCRIMINATORY PROCUREMENT PRACTICES

12.3.1 SET ASIDE AND PREFERENCE SCHEMES

As noted in our discussions, governments may opt for various discriminatory procurement practices as opposed to the basic PPOM. These include, set asides, local content, preference schemes and offsets.

Our previous chapters indicate that set aside schemes and price preference schemes are simple to implement. These models are similar to the PPOM. Within these two models, the decision is to buy local if the equation $\alpha_i M_i / M_p$ is not satisfied. For a country to apply them, it is required to have available or calculate sectoral multipliers to be able to assess the impact of an additional UShs.100 on the economy. Additionally government needs to determine the priority sector in line with its policy objectives. Once the sectoral multipliers and the priority sector have been identified and published, the implementation of these models becomes fairly simple. In summary government wanting to use set asides and/or preference schemes discriminatory policies requires to do the following:

• Identify government priorities in regard to social and economic development. These priorities could be increased employment, regional development, enhancement of marginalised groups, SME development etc.

• Identify the driving sector of the economy which is at the centre of achieving the highlighted priorities. This involves undertaking sector analysis. Using the country’s Social Accounting Matrix, each sector’s accounting multiplier is calculated. The sectoral multipliers are used to assess each sector’s ability to achieve the country’s economic and social
priorities. As discussed in this research the sector with the highest ability to achieve the countries economic and social objectives is identified and this becomes the priority sector. An impact of an external injection (government expenditure) in this sector is denoted as $M_p$. The impact of an external injection (government expenditure) on each of the other sectors is denoted as $M_i$ for every $i$.

- Given $M_p$ and knowing $M_i$ for every sector $i$ we can calculate the thresholds per sector. The thresholds are calculated from $M_i/M_p$. These thresholds are used to determine at which level per sector can a country award an advertised contract to a local or foreign firm.

- The thresholds are then published. Both domestic and foreign firms can bid in every purchase knowing the thresholds. In evaluating the bids the thresholds are taken into account.

- As in the case of the PPOM, inadvertent local involvement would significantly bring down the thresholds. As was done under the PPOM the inadvertent local involvement per contract could be calculated and the re-computed thresholds published.

### 12.3.2 LOCAL CONTENT REQUIREMENT & OFFSETS

The local content requirement and offsets requirements however present complex situations. Their implementation especially at entity level could prove a nightmare. The local content requirement for example, might require a comprehensive policy on which local content, entities should ask for. Is it raw materials or labour and if labour which type should it be? Should it be unskilled, semiskilled, skilled or highly skilled labour?

Identifying the type of local content is only part of the question. Ensuring that the contract performance is within the agreed contractual obligations might prove to be very burdensome. If for example, an entity wants to buy transformers and it awards a contract to a foreign firm with a contractual condition that 10% of the raw materials should come from the country. How does the entity guarantee that this condition has been met in the performance of the contract? If, in the rare case, it is discovered that the entity did not use up to 10% of local raw material but only 8%, what remedies are there to enforce performance. Such arguments make the implementation of local content requirement quite
complex Entities might find it a daunting task and might skip its implementation.

Offsets are not any better either. Identifying which particular offsets to demand from foreign firms and assessing their impact on the economy is work that many countries might want to avoid. Even when these offsets have been identified and communicated to buying entities, implementation might become quite complex. Let us for example look at a ministry of defence that may require buying fighting helicopters from a foreign firm and its contractual condition is that some amount of agricultural output must be bought from the country in return. How is such an offset going to be implemented and monitored for compliance? As discussed earlier, apart from such offsets discouraging potential suppliers, setting up a framework within which to operate is difficult.

However despite the above identified problems the philosophical reasoning behind the discriminatory schemes discussed is all the same. Once the priority sector is identified threshold levels required for local content or offsets can be computed using the models developed from chapter 10.

However, unlike the first two alternative procurement schemes, a lot of training is required for procuring entities in their implementation if they are to be successful. A monitoring system may be introduced possibly within the Procurement Authority to monitor compliance.

12.3.3 INADVERTENT FOREIGN CONTENT INVOLVEMENT IN A LOCALLY AWARDED CONTRACT

In this research our discussion centred on comparing the impact of a locally awarded contract vis a vis a foreign awarded contract. Our supposition is that a locally awarded contract would have its total contract sum impact on the economy setting aside the argument that a percentage of it could indeed be inadvertently funded by a foreign input.

However, like what happens in real situations, it is unlikely that a locally awarded contract would entirely be funded locally. Some of the input would inadvertently come from outside the country. This means that the impact on the economy of awarding a contract to a domestic firm would be low since some of the money would be spent outside the economy on inadvertent foreign involvement. This implies that the impact of the savings reinvested into priority sector will go up relative to the impact of a domestically awarded contract.
We do not intend at this stage to calculate thresholds were some money for a locally awarded contract is inadvertently spent outside the economy but like in the case of inadvertent local content in a foreign awarded contract, the savings margin required for government to award a contract exclusively to a local market or open up the procurement market to competition will go down significantly and this gives foreign firms more freedom to supply to government and hence to compete with local firms.

In summary to effectively implement discriminatory procurement practices, governments needs to explore the various scenarios pertaining to the economy paying particular attention to:

- Sectoral differences and how each sector reacts to the different external stimuli
- Nature of individual contracts and how these contracts can be awarded in view of the discriminatory procurement thresholds designed per sector. In this case, computations in regard to inadvertent local involvement in a foreign awarded contract and inadvertent foreign involvement in a locally awarded contract need to be computed their implication to the economy established
- Once thresholds are established and published constant monitoring is necessary to ensure that the implementation conforms to set out guidelines

Fundamental to the above analysis, in order to effectively implement discriminatory schemes, we need to understand the secondary objectives they are intend to achieve.

### 12.4 SOCIAL OBJECTIVES ANALYSIS

Secondary objectives are as many and as wide as all government goals could be. Mentioning each of them and trying to prescribe a particular discriminatory procedure to achieve each of them would be an enormous task. We, however try to broadly categorise them and discuss them within these categories. We can classify government secondary objectives into two categories: firm specific objectives, welfare focused objects. Although each of these objectives could be achieved through most of the discriminatory schemes highlighted in the previous chapters, the approaches through which they can be achieved differ and this impacts heavily on their success. Let us try to look at each of the two categories.
12.4.1 FIRM SPECIFIC OBJECTIVES

Firm specific secondary objectives relate to a firm as the driving force in tying to institute discriminatory procurement practices. The government’s goal here is to achieve institutional growth and development of firms. This growth and development relate to increase in technology, growth of innovation within these firms, growth of small-scale firms, the infant industry arguments etc. With these goals in mind, we can further position them according to three criteria: geographical, historical and economic criteria. Geographical criteria relates to firms disadvantaged due to their geographical location. Possibly, as is usually the case in developing countries, part of the country could have been under a state of war and in the process, firms from that part of the country lagged behind. A simple example here in the Ugandan case, whereas the largest part of the country has been relatively stable; the northern part of the country has been under political instability for the last 22 years.

The historical criteria are usually due to past prejudices and marginalization. Here we might come across issues of women and physically handicapped-owned firms. Because of past prejudices, such firms may not be doing as well as other firms hence the need for interventions.

The economic criteria relates to firms being disadvantaged based on the economic situation they operate in. this raises the issue of infant industries in especially developing countries. The most fundamental issue in all the three categories is the need for institutional development. They need new skills, new technology, process improvement etc

In chapter four we discussed supply side enhancement but it does not appear in our analysis in chapter ten and eleven. This is because; supply side enhancement schemes are not contact-specific. They are not measured in how much loss or gain per contract can be generated once they are applied. However they constitute a strong tool for institutional growth and development that this section addresses. The supply side enhancements are aimed at boosting the competitiveness of the industry in general so as to build the capacity to compete equally later on with foreign based firms when contract advertisement occurs. No specific preferences are given at tender or award stage.
Developing countries are characterised by limited diversity in economic activity. The small firms that constitute most of the enterprises in developing countries cannot attain either internal or external economies of scale. Due to lack of resources, skills and technologies, these firms are unable to compete for and win bids that involve foreign-firm based competition. To derive greater benefit from advertised bids, countries need competitive enterprises that are able to produce products at a reasonable cost.

Governments in developing countries can enhance local capability by providing financial and technological support, and making industrial development an important priority. The direction, to which these interventions can take, is outside our scope but this could form a serious alternative to contract-specific discriminatory procedures covered in the previous chapter.

Within the contract-specific discriminatory schemes discussed in chapter nine, three out of the four discussed come out strongly to enhance institutional growth. These are set asides, offsets and preference schemes. Once any of the three is used, it will provide business to domestic firms, helps to build capital in these firms badly needed for expansion and enhancing their experience in contract execution.

12.4.2 WELFARE FOCUSED OBJECTIVES

With welfare focused objectives, government focuses more on individuals than institutions. We used this viewpoint of this research. The immediate beneficiaries of welfare based discriminatory schemes are the institutions but they are usually not the intended target. A government in need of increasing wage income in the economy will do so through enhancing the private sector to do so. Once the firms grow, they will increase total wages and eventually demand in the economy will be boosted. In relation to welfare focused objectives, the more effective discriminatory schemes should be contractual conditions (local involvement) and offsets.

As explained earlier, contractual conditions would normally entail government requiring that a percentage of local content should be used in the execution of the contract. This is usually in terms of raw material usage and local labour. If local raw materials are used, people’s welfare will improve. Likewise a requirement that particular type of labour, like
we argued in this research, be used, it would directly improve people’s income helping to improve their welfare.

Offsets can also be used to target a particular group of people or improve on their expertise. As argued earlier, government can require that a foreign firm helps in building local capacities. This could involve employing local labour or providing international internship programmes to the local people as an overall package within a particular contract. When this is done, the individuals targeted, do not only improve their expertise, but they will step up their careers, helping to improve their welfare.

12.5 CONCLUSION
The problem with discriminatory schemes is that once they are introduced, politically, they are hard to remove. Governments are exposed to various lobby groups that want to ensure they exist in perpetuity. A government fearing to lose an election succumbs to these demands leading to continued perpetuation of inefficiency. A time frame needs to be attached to the programme and progress constantly monitored.

One way WTO could ensure discriminatory schemes are not held in perpetuity is to discuss with individual countries the specific objectives they want to achieve. Most objectives could be achieved through most of the discriminatory schemes highlighted in the previous chapters, however the approaches through which they can be achieved differ and this impacts heavily on their success which in turn impairs the possibility of attaching a time line on their applicability. Constant evaluation of institutional growth arising form discriminatory schemes should be introduced and time frames for their applicability drawn. If this is not done, complacency sets in and the intended objective of improving their competitiveness is never attained.

12.5.1 RECOMMENDATION FOR GROWTH PATH
Once some form of discrimination is introduced along side competition, some local firms will start winning public contracts and this will motivate them to work harder to brace up with competition. They will innovate and restructure their production processes to be able to compete and win more domestic contracts. This discrimination is positive for it assists local firms to play hard and win. So, in the short run, discrimination
schemes are justifiable for they assist local firms to grow and once they grow and enlarge issues like wage income would increase hence enabling government to achieve its social objectives of improvement in welfare.

However as argued earlier, discriminatory schemes should be applied as stop gaps and not used in perpetuity. Constant evaluation of institutional growth arising form discriminatory schemes should be introduced and time frames for their applicability drawn. If this is not done, complacency sets in and the intended objective of improving their competitiveness is never attained. To avoid this negative aspect we suggest two ways forward:

i) Multipliers should be recalculated every few years in order to work with the most recent data. This way, the discriminatory rules will change over time.

ii) Instead of wait and see policy (as in 1) government can also implement policies in which they force the local firms to become more competitive by for example calculating $M_f/M_p$ once and reducing this discriminatory threshold in say 10 years time to zero (the ten years period may be different per sector). Or reducing it by 1% a year. Then both the domestic and the foreign suppliers will know what they are facing in the coming years.
CHAPTER THIRTEEN

FINAL DISCUSSION

13.1 INTRODUCTION
In this chapter we discuss discriminatory public procurement in the face of global opposition from the multilateral agreement, GPA and provide a summary of this research’s findings.

13.2 PROCUREMENT AND PROTECTIONISM
In chapter one, we indicated the global concerns from bilateral and multilateral bodies in regard to discrimination in public procurement. Specifically, we pointed out, that countries, especially from developing world are reluctant to append signatures to it. The General Agreement on Procurement (GPA) was established with a view of achieving greater liberalisation and expansion of world trade (Arrowsmith 2000). It is based on the argument that increased liberalisation will create higher level of trust, thus lower level of risk; higher level of competition, thus lower level of prices; more efficient utilisation of funds via savings on individual procurements; restriction of unfair and corrupt practices; convergence of international practices, thus lower costs of access to information and cheaper introduction of new procurement techniques; speeding up the process that domestic suppliers should undertake for becoming more competitive; and attraction of foreign capital (Giraldo 2005).

To achieve the said benefits, Article III of the GPA prohibits any form of discrimination in public procurement. Specifically, it provides that government cannot exclude non domestic firms (or products and services) any form of preferences such as price preferences. Government cannot insist that foreign providers form joint ventures with local undertaking. Government cannot prescribe offsets within their procurement framework that require successful foreign bidders to use local materials, local labour or local subcontractors.

Inspite the well stipulated intentions of GPA, different countries still want to operate in a discriminatory manner as a way of achieving social objectives through public procurement. Giraldo (2005) puts this argument clearer when he says that measures taken to liberalise public
procurement substantially restrict the possibilities for using procurement as a policy tool. In spheres of industry, government has traditionally been concerned with national welfare and inevitably many policies designed to promote this have involved discrimination in favour of home industry, whether concerned simply to protect uncompetitive industries or directed at other goals such as restructuring, fostering new competitive industries, or regional development.

The key question then becomes, which side should be adopted. Should developing countries throw away the whole concept of GPA to achieve their social concerns or should they jump on the GPA bandwagon in order to achieve its prescribed well intended objectives.

This research’s core analysis is that it is not a question of either/or. Simply opening up the procurement market the way GPA advocates may adversely affect local firms who may be faced with fierce competition from gigantic international firms and given their sizes and production capabilities will be edged out of the market! On the other hand closing out international firms perpetuates complacency and breeds inefficiency.

There is therefore need for a flexible agreement that indicates an open window through which developing countries can be allowed to negotiate their specific cases in view of the circumstances pertaining to their countries. All the countries may not need the same type of discriminatory schemes so a blanket ‘one for all’ prescription might not be the best options hence the need for assessing the prevailing circumstances per country.

We entirely agree with Arrowsmith (2000) that non-discrimination leads to efficient utilisation of resources via savings on individual procurements. Using the Cecchini analysis, these savings are sector dependent but average at 10% of the total government procurement expenditure. ‘Throwing’ it away at the altar of discriminatory procurement might not make economic sense especially in developing countries hit by all sorts of social and economic upheavals.

The question that this research raises however is what the impact of these savings are in the attainment of a country’s social objectives, a crucial argument for proponents of discriminatory procurement policies. Practically, if government wants to increase wage income, as argued in this research, can the savings if re-invested back into the economy
create the same level of increase in wage income that buying local could create?

Our analysis in chapter nine showed that the impact a 10% savings creates in terms of generating wage income when re-invested back into the economy is not high enough to motivate countries to open up their procurement markets to outside competition. On the face of it, governments would better be advised to buy domestically because doing so would increase wage income in economy higher than the savings would. But we argued that social objectives should be interlaced with economic objectives. If this is not done, we could get a situation where a domestic firm charges say 50% more that the foreign firm and if the 50% savings from buying internationally is insufficient to create the required stimulus on the economy in terms of creating more wage income, we would award the contract to a local firm. Such a situation of awarding a contract to a domestic firm would not only lead to resource wastage but perpetuate inefficiency within domestic firms.

So in principle there is justification for the discriminatory schemes. We showed that in general potential savings arising out of awarding a contract to a foreign firm might not be sufficient to create the same impact on the economy as awarding the contract to a local firm. We however also showed that if the computations take into account inadvertent local content involvement in a foreign awarded contract, the impact on the economy for a foreign awarded contract increases and the justification to open up the procurement market increases.

For the above reason, we argue that indeed discriminatory procurement practices could be operated alongside competitiveness. This is however dependent on a clear and well designed sectoral analysis aimed at assessing sectoral reaction to different external injections. This would be crucial in determining sectoral thresholds which could effectively be used in the discriminatory framework.

An analysis of individual contracts within the sectoral thresholds is also important to complete the picture. Whereas broad sectoral guidelines are established, particular characteristics for individual contracts should be explored in order to make decisions that are relevant in particular situations. For example, well as our analysis recommended a 23% price margin for Works contracts, a labour intensive and highly technological works contracts would no doubt attract different thresholds especially in developing countries. This is because, even when the works contract is
awarded to a foreign firm, the impact of inadvertent local involvement would raise the impact on the economy of such a contract high which would justifiably address the social concerns of government.

Discriminatory procurement schemes should therefore address individual contracts characteristics and be able to put both sides of the equation at par in determining whether to award a contract to a local or foreign firm. The critical level becomes that point at which the impact of buying domestically is equal to the impact of potential savings from buying from foreign firm. This is what we developed through the Public procurement Option Model.

**BOX 16: JUSTIFICATION FOR DISCRIMINATORY PROCUREMENT SCHEMES-ILLUSTRATION**

<table>
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<th>Justification for discriminatory procurement schemes-Illustration</th>
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| Let us take 2 extreme situations. One, suppliers in especially developing countries, as we indicated in chapter 6, are not very efficient. This is as a result of structural weakness such as obsolete technology, poor production methods etc. This causes their cost of production to be high relative compared to their counterparts from the developed world. This higher cost of production is usually reflected in the bid prices they quote that are normally higher than their competitors from the developed world. If, government awards contracts on the basis of price competitiveness, most of the domestic firms will be left out. This research discovered that 33% of Ugandan public procurement within the selected ministries is undertaken by foreign firms. This percentage is a lot higher when you combine it with road construction which is almost entirely won by foreign firms. We might get a situation where almost all public procurement is undertaken by foreign firms. What is the implication of such an extreme situation on the economy in terms of social objectives i.e. industries, jobs and above all national sovereignty!

Let us consider the other extreme, which we discussed in chapter nine. Government wants to achieve social objectives and according to the computations, these objectives are better won, when foreign firms are left out from public procurement. In chapter ten we discovered unless interventions are introduced in public procurement almost all public procurement contracts would go to domestic firms. What is the implication of such a decision to long term macro economic planning? This like we indicated, will automatically perpetuate inefficiency within these firms and resource wastage on part of the tax payer.

The second extreme situation is not therefore tenable. Foreign firms should be allowed to come into the economy, introduce competition so as to avoid complacency on part of domestic firms. Hence the systematic opening up through discriminatory schemes.
This is where our research takes a center position. We need to avoid both extremes because in both cases inefficiency at the supply side is manifested. By introducing competition, both situations draw closer and inefficiency is reduced. In the first case, once some form of discrimination is introduced along side competition, some local firms will innovate and restructure their production processes to be able to compete and win more domestic contracts. So, in the short run, a mechanism should be developed that truly balances their insufficiency and helps them to surmount it while at the same time government avoids ‘throwing’ away money. Once the suppliers grow and enlarge, issues like wage income would increase hence achieving the governments social objectives of improvement in welfare.

But as discussed in the previous chapter, in the long run discriminatory procurement practices are not tenable and need to be eliminated. This however calls for a clear programme for especially local firms to know the roll out of the whole discriminatory framework and how it would eventually be phased out. This will, as argued before, enable the firms to innovate and prepare for the competition.

13.3 DISCRIMINATORY PROCUREMENT LIMITATIONS

It would not be fair on our part if we did not point our limitations of procurement schemes. Many of the limitation are already discussed in chapter three. In this section, we mainly consider those that we interfaced with in this particular research, mainly by deduction.

An important question that is normally raised in regard to discriminatory procurement is the determination of the local price (bid price). If a local firm indicates a price for a product, a government unaware of the firms costs of production and profit margins might tend to be exploited to award a contract at a price higher than it would especially if a firm is aware it is operating under a discriminatory procurement regime. Closely related to this is the argument of corruption where a government department colludes to award a local firm a particular contract.

Two ways could be used to guard against excessive payment arising out of price ignorance on the part of the government or out right corruption. One is the internal domestic competition. Unless there is collusion among domestic firms, domestic firm competition i.e. price quotations by local firms can help inform government about the going market price for a particular product. The point here is that unless two or more firms collude to bid excessively high, price quotation helps government to fairly get an over view of the market price of the product. Firms aware of competition from fellow domestic firms will try to out compete them by
bidding at the lowest price hence assisting government not to be ripped off.

Two, in Uganda, government usually compiles a list of common use items that offers guidance to government departments of the market prices of various products. This list of common user items acts as a base mark comparison of quoted prices by the bidders to a particular contract. The only problem with the list of common use items is how current these price lists are in view of inflation and changing designs and other complexities in trade. For example the list of common user items in Uganda was compiled in 2005!

It is important to appreciate that although all the discriminatory procurement practices discussed in this research are aimed at achieving secondary objectives using public procurement, some are stronger in specific areas; others may be open to abuse if not critically monitored while the rest might be out rightly complicated to implement. In the next section, we discuss some of the fears and make recommendations

13.4 CONCLUSION OF RESEARCH FINDINGS
In this research, through a combination of scholarly work and empirical study, we have built models through which government can attain both economic and social objectives using public procurement through the application of discriminatory schemes. We undertook a three-phase Analysis. Below, we give you a summary of these phases

13.4.1 THE PUBLIC PROCUREMENT ENVIRONMENT
In the first phase, we undertook an analysis of the public procurement environment in Uganda. We analyse public sector expenditure market and assess the adequacy of domestic suppliers to meet the public procurement demand in terms of quantity (availability of goods and in sufficient supply) and quality of goods supplied. Through a survey of five government ministries, we assess whether or not discriminatory procurement practices exist in Uganda.

Using the Cecchini analysis, we also measure the potential monetary gain of an open competitive public procurement market in Uganda and assess the overall central government public procurement environment in regard to local and foreign firm participation.
Our findings indicate that government spends up to 67% of public procurement on works while supplies and services constitute 25% and 8% respectively. We further note that 33% of all contracts in the 5 ministries’ sampled are awarded to foreign firms, 11% of which is because of their absence in the local market. Our findings indicated that Ugandan suppliers are still in a very uncompetitive position. For example the Ugandan local construction industry (LCI) is very weak, undeveloped and faced with many problems. The problems range from lack of management and technical capacity, low levels of working capital to lack of access to credit facilities and work altogether. The enterprises in the sector are still heavily depended on imported machinery, spare parts and imported raw materials and currently using obsolete plant and machinery.

The Cecchini analysis gives us the potential gain of competitive procurement practices from sampled ministries. Our findings indicate that if competitive bidding was allowed to take place i.e. without preferences for Ugandan companies, the government would be saving up to UShs 6,781,768,563 for the selected contract. Works attracts a savings of 7.56% of the contract price; services attract a percentage of 9.9% while suppliers come out with the highest percentage savings of 13.59%. Overall, this translates into 10% savings on the contract price. The question that arises from this section is forms a bulk of our discussion hereafter is the impact of the 10% on the economy. Should the government ‘throw’ away this 10% at the expedience of achieving social objectives? This question is answered through economic models that are developed.

13.4.2 MACRO ECONOMIC MODEL BUILDING

This section forms the core of this research. Governments are torn between opening up procurements markets to allow competition between foreign firms and domestic firms for advertised contracts and the need to achieve social economic objectives through discriminatory procurement practices. Inspite these arguments, no known macro economic analysis had been undertaken to contribute to both sides of the argument.

Using the accounting multipliers computed through the Social Accounting Matrix we develop a procurement policy option model (PPOM) used as a decision tool to determine whether a contract should be awarded to a foreign or a domestic firm. It helps to put countries at a
comfortable pedestal to balance between awarding an advertised contract exclusively to a domestic firm and allowing foreign firms to bid for and win the advertised contracts without compromising on the fundamental principle of value for money.

Our underlying argument using the PPOM is that for a government to make a decision of either buying from a foreign firm or domestic firm, it analyses the impact on the economy of either options. According to the PPOM, government should award an advertised contract to a domestic firm, if the impact on the economy as calculated through the accounting multiplier, of the savings accruing from awarding it to a cheap foreign source is less than or equal to the impact of awarding it to a domestic firm.

13.4.3 IMPLEMENTING DISCRIMINATORY PUBLIC PROCUREMENT MODELS
The Public Procurement Model is developed further into the use of the various discriminatory schemes. Specifically in this research we develop models in regard to set asides, local content requirements, preference schemes and offsets. We then provide policy guidelines on the use of each of the models developed. The underlying reasoning is that whatever scheme is used, the primary objectives of public procurement should not be sacrificed but rather a delicate balance should developed that enables countries achieve both social and economic objectives.

We indicate in Chapter 12 that in order to effectively implement discriminatory procurement, there is need to undertake a sectoral analysis to determine thresholds applicable to each of the discriminatory procurement schemes to be used and in addition establish the priority sector to which the savings achieved from awarding the contract to a cheaper foreign firm can be invested. Once the sectoral multipliers and the priority sector have been identified and published, the implementation of the various discriminatory models becomes fairly simple.

13.5 FINAL REMARKS
We have argued in this research that advocates of interventions in public procurement have a justifiable course. Economic and social objectives should be interlaced for a country to achieve economic development and transformation. Given the amount of resources expended by various
governments through public procurement, it should be put at the centre of this economic development and transformation.

Given the inadequate capacity in many firms in various sectors in especially developing countries, economic development and transformation cannot be attained without interventions. This is where the argument for discriminatory schemes in public procurement comes in.

However, to efficiently implement the discriminatory procurement schemes, countries need to undertake a sectoral analysis in order to determine which scheme to use for each of the different sectors. The models and rules developed in this research provide the necessary guidance on how countries can differentiate between the different sectors so as to set effective thresholds necessary to achieve social economic objectives without compromising on the primary objective of value for money.
### APPENDIX 1 - SOCIAL ACCOUNTING MATRIX SECTORS

<table>
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<th>Uganda Social Accounting Matrix Sectors (2002)</th>
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<td>Maize</td>
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<td>Cassava</td>
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<td>Potatoes</td>
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<td>Cotton</td>
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<td>Sunflower</td>
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<td>Groundnuts</td>
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<td>Beans</td>
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<td>Millet And Sorghum</td>
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<td>Rice, wheat, Other Cereals</td>
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<tr>
<td>Growing Of Other Horticulture Crops</td>
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<td>Flowers And Seeds</td>
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<td>Coffee</td>
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<td>Cocoa And Vanilla</td>
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<td>Matoke</td>
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<td>Passion Fruits</td>
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<tr>
<td>Farming Of Animals</td>
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<td>Other Animal Products</td>
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<td>Agriculture And Animal Husbandry Service Activities, Except</td>
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<td>Forestry, Logging And Related Service Activities</td>
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<tr>
<td>Fishing, Operation Of Fish Hatcheries And Fish Farms; Services</td>
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<td>Mining And Quarrying</td>
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<td>Processed Food Products</td>
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<td>Manufacture Of Alcoholic Products</td>
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<tr>
<td>Manufacture Of Soft Drinks; Production Of Mineral Waters</td>
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<td>Manufacture Of Tobacco Products</td>
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<tr>
<td>Manufacture Of Textile Products</td>
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<tr>
<td>Manufacture Of Leather, Products And Footwear</td>
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<tr>
<td>Sawmilling And Manufacture Of Wood Products</td>
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<tr>
<td>Manufacture Paper, Printing And Publishing</td>
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<tr>
<td>Petroleum Refining, Manufacture Of Products Of Coal</td>
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<tr>
<td>Chemical And Pharmaceutical Products</td>
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<tr>
<td>Manufacture Of Rubber And Plastic Products</td>
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<tr>
<td>Manufacture Of Non Metallic Products</td>
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<tr>
<td>Manufacture Of Metal Products And Equipment</td>
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<tr>
<td>Manufacture And Repair Of Motor Vehicles And Ships</td>
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<tr>
<td>Other Manufacturing N..E.C.</td>
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<tr>
<td>Electricity Supply</td>
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<tr>
<td>Collection, Purification And Distribution Of Water</td>
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<tr>
<td>Building, Construction And Civil Engineering</td>
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<tr>
<td>Trade Services</td>
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<tr>
<td>Hotels, Bars And Restaurants</td>
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<td>Category</td>
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<tr>
<td>Railway Transport</td>
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<td>Passenger Road Transport</td>
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<td>Goods Road Transport</td>
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<td>Water Transport</td>
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<td>Air Transport</td>
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<td>Other Transport Services</td>
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<tr>
<td>Telecommunications</td>
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<td>Banking And Insurance</td>
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<tr>
<td>Housing And Real Estate Services</td>
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<td>Lease Services</td>
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<td>Business Services</td>
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<tr>
<td>Public Administration And Defence</td>
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<tr>
<td>Education services</td>
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<tr>
<td>Medical Services And Social Work</td>
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<tr>
<td>Social, Cultural And Recreational Services</td>
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<tr>
<td>Private Households With Employed Persons</td>
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<tr>
<td>Other Services</td>
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<tr>
<td>Maize Growing</td>
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<td>Rice, Upland Growing</td>
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<td>Wheat Growing</td>
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<td>Root Tubers</td>
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<td>Cotton Growing</td>
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<td>Tobacco Growing - Flue-Cured</td>
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<td>Tobacco Growing - Fire-Cured</td>
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<td>Tobacco Growing - Air-Cured</td>
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<td>Simsim &amp; sunflower growing</td>
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<tr>
<td>Groundnuts Growing</td>
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<td>Cereals</td>
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<tr>
<td>Sugar Growing</td>
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<td>Beans Growing</td>
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<td>Growing Flowers &amp; Horticultural crops</td>
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<td>Coffee Growing</td>
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<td>Tea Growing</td>
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<td>Cocoa Growing</td>
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<td>Vanilla Growing</td>
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<td>Matoke Growing</td>
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<tr>
<td>Passion Fruits &amp; other tree crops</td>
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<tr>
<td>Farming Of Cattle; Dairy Farming</td>
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<td>Farming of Goats and Other Livestock</td>
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<tr>
<td>Poultry Farming</td>
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<tr>
<td>Forestry, Logging And Related Service Activities</td>
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<td>Fishing, Operation Of Fish Hatcheries And Fish Farms</td>
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<td>Mining and Quarrying</td>
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<td>Processing And Preserving Of Of Fish And Fish Products</td>
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<td>Activity</td>
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<tr>
<td>Vegetable and animal oils &amp; fats</td>
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<tr>
<td>Manufacture Of Dairy Products</td>
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<td>Manufacture Of Sugar and Jaggery</td>
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<tr>
<td>Coffee and Tea Processing</td>
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<tr>
<td>Distilling and manufacture of malt</td>
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<tr>
<td>Manufacture Of Soft Drinks; Production Of Mineral Waters</td>
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<td>Manufacture Of Tobacco Products</td>
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<td>Manufacture of starches</td>
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<td>Cotton and associated activities</td>
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<td>Manufacture of textiles</td>
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<td>Manufacture of apparel, leather and footwear</td>
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<td>Wood &amp; wood products</td>
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<td>Manufacture of paper and paper products</td>
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<td>Printing activities</td>
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<td>Manufacture of petroleum and chemical products</td>
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<td>Manufacture of rubber and plastic products</td>
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<td>Manufacture of clay and ceramics</td>
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<td>Warehousing and supporting transport activities</td>
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<td>Subsidies on products</td>
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<td>Taxes on production and imports other than VAT</td>
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<td>Value added taxes - domestic (VAT)</td>
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**Corporations**

**Government and Non-Profit**

**Capital Account**

**ROW**
Appendix II

Reference


The Public Procurement and Disposal of Public Assets Act No. 1 of 2003 and the Public Procurement and Disposal of Public Assets Regulations No. 70 of 2003.


Zawdie G. and Langford D. A. The state of construction and infrastructure in sub – Saharan Africa and Strategies for a sustainable war forward, working paper, Department of Civil Engineering, University of Strathclyde Glasgow, UK