Towards a framework for the development of effective subcontracting relations and networks among small, medium and large firms in the motor vehicle manufacturing industry in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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JKUAT, Kenya

DEDICATION

This research work is dedicated firstly to my Lord and Savior, Jesus Christ. In the potter's hand, He makes something out of nothing. Thank you, Lord, for your faithfulness, grace and mercy. To God be the glory. Secondly, it is dedicated to my parents, the late Nelson Obiero and my mother, Bernadette. I will forever be grateful for all the struggle and sacrifice they made for me. I thank God that they realized, early in life, the value of educating the girl child. Last but not least, it is dedicated to my husband Felix Okatch and my children: Peter, Sidney and Susan. I thank them for their unwavering support.

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ABBREVIATIONS

AVA Associated Vehicle Assemblers

CBUs Completely Built Units

CKDs Completely Knocked Down Kits

EO Entrepreneurial Orientation

FDI Foreign Direct Investment

FBU Fully Built Units

GMEA General Motors East Africa

JIT Just In Time

KAM Kenya Association of Manufacturers

KSPX Kenya Subcontracting and Partnership Exchange

KVM Kenya Vehicle Manufacturers

Les Large Enterprises

MSMEs Micro, Small and Medium Enterprises

PSDS Private Sector Development Strategy Paper

SKDs Semi Knocked Down Kits

SMEs Small and medium enterprises

SSEs Small Scale Enterprises

TNCs Trans National Companies

UK United Kingdom

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Program

USA United States of America

DEFINITION OF TERMS

Subcontracting linkage - a commercial transition between a supplier (SME) who provides intermediate products or processing services to a purchasing business (large enterprise) which assembles or produces the final product (Kimura 2001; Kumar & Subrahmanya, 2007).

Small and medium enterprises - (SMEs)– the lower limit for "Small Scale" enterprises in Kenya is usually set 5 – 10 workers the upper limits at 50 and for medium enterprises at 100 (Hallberg, 1999).

Motor vehicleindustry-consists of: motor vehicle assemblers, franchise holders/importers/distributors and SME suppliers of the component parts for the assembly of the motor vehicles.

Assemblers – firms that build motor vehicles from parts imported in the form of CKDs.

Franchise holders – are those firms who hold licenses to import, assemble, distribute and market motor vehicles on behalf of the principle vehicle manufacturers in Japan Italy UK, America, Germany and others. They contract the assemblers to assemble vehicles imported in the form of CKDs.

Completely knocked down (CKD) kits – are motor vehicle parts that are imported as separate, broken down parts for local assembly of a motor vehicle.

Semi knocked down parts (SKDs) – when most parts of the motor vehicle are imported as already assembled, so that very little local assembly takes place.

Jigs - apparatus for assembling a motor vehicle body from the component parts of a floor panel, a roof panel and side panels.

ABSTRACT

The main purpose of this study was to explore subcontracting arrangements and networks among small, medium and large firms in the motor vehicle manufacturing industry in Kenya so as to establish the reasons why large firms are reluctant to form linkages with small and medium firms, yet this can enhance the performance of SMEs. Subcontracting is the purchase of part of a product or process from a different company. There are several types of subcontracting. This study is about backward subcontracting or linkages, which occur when large firm acquire goods or services from smaller firms. The study, by adopting the Schumpeter's Theory of Economic Development, sought to establish a link between subcontracting and entrepreneurship. The Transaction Cost Theory, the Strategic Behavior Approach and the Flexible Specialization Paradigm were also adopted to explore the research problem.

The sector was chosen for the study mainly because of its importance, which, can be attested to by the government's selection of the sector to promote subcontracting arrangements between SMEs and large firms. Secondly, the sector was chosen because of the complexity of the motor vehicle industry with one motor vehicle comprising about 10,000 component parts, all of which would be difficult for one company to manufacture in-house.

The research was mainly qualitative, but a quantitative approach was also adopted. Thematic content analysis approach was used to analyze the qualitative data and descriptive statistics to analyze the quantitative data. The study interviewed managers of two of the three motor vehicle assemblers and nine franchise holders. Sixty six managers of component parts suppliers filled and returned questionnaires. Observation and perusal of records was also done.

The results indicate that the level of subcontracting that takes place between small, medium and large firms in the motor vehicle manufacturing industry in Kenya is minimal. The little subcontracting that exists is motivated mainly by a desire to remain in the good books of the government. The main benefit derived from subcontracting by the large enterprises is lead time, which is shorter. For the SMEs it is that the big firms provide them with a steady market for their goods. The big enterprises are not willing to buy component parts from local suppliers and especially not local SME suppliers mainly due to the inability of the SMEs to supply quality products to schedule, lack of local suppliers for certain parts and competition from imported second hand vehicles from Japan, Singapore and lately from Europe. The proliferation of makes and models also requires frequent technological changes which both assemblers and SMEs owners find difficult to keep up with

The study recommends that the government should reduce the age of imported second hand vehicles to not more than five years and find a way of compelling the franchise holders and assemblers to buy parts locally. SMEs should also find a way to acquire up to date technology and become more competitive. The government must come up with a sound well articulated industrial policy for the development of the motor vehicle industry.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Small and medium enterprises (SMEs) play a predominant role in most developed and developing countries not only because of their number and variety and their involvement in all segments of the economy but more importantly, their role in employment creation (Baseline Survey, 1999; Thitapha, 2002; Kumar & Subrahmanya, 2007). The growth and proliferation of small and medium enterprises is what unarguably will eventually result in the establishment of an enterprise culture in Kenya. The Poverty Reduction Strategy Paper (Republic of Kenya, 2001 – 2004), states that the potential of small and medium enterprises (SMEs) in both employment creation and raising incomes for many Kenyan families makes them an important element in the poverty reduction strategy.

However despite the important role of SMEs, the sector is plagued by a number of concerns. According to Thitapha (2000), SMEs, especially in developing countries, have been exposed to intense competition due to the accelerated process of globalization which brings out the need for SMEs to develop competitiveness for their survival as well as growth. SMEs, in general are constrained in terms of infrastructural sources such as technology, finances, marketing and human resources, gender inequality, limited access to information and limited linkages to large enterprises, among others, according to Sessional Papers No2 (Republic of Kenya, 1992; 2005). The ability of SMEs to compete in the global market depends on their access to these resources and those SMEs which have better access to these infrastructural resources are able to exhibit better economic performance (Jenkins et al, 2007).

Subcontracting relationships with large enterprises, provides SMEs with a better scope for accessing these resources, and offers them a short cut to enhancing productivity

and other non-price determinants of domestic and international competitiveness (Meyn, 2004). This can only happen if SMEs in Kenya are ready to engage in entrepreneurial orientation of creativity, innovation and risk taking. This is what eventually results in the development an enterprise culture in a country. Motor vehicles come in many makes and models, making the industry dynamic and risky as the requirement for parts keep on changing. To survive the players have to able to take risks.

Subcontracting may be defined as the purchase of a part of a product or process from a different company (Kimura, 2001). Leung, as quoted in Ajayi (2003), describes production subcontracting as the arrangement of production processes wherein firms externalize their manufacturing activities to other independent firms. The contractor provides the orders and the subcontractor furnishes the work or services for the processing of material or production of parts, components, sub-assembly, or assembly of products according to the production specifications and marketing arrangements of the contractor. Subcontracting involves purchase-supply relationship where SMEs are the subcontractors who deliver product or service to the contractors, for the production requirements of the latter as per their specifications (Kumar & Subrahmanya, 2007). In this case the motor vehicle assemblers and franchise holders are the contractors while the subcontractors are the SME component parts manufacturers.

Subcontracting is the most frequently used form of outsourcing. Historically, its origins can be traced to the industrial revolution in Europe where the 'putting out' system was used periodically to smooth production (Tumbull, 2000). Despite initially being treated as ephemeral, marginal and dated, its role in the regeneration of the Japanese economy has made it one of the most prominent production strategies in the 1990s in Europe (Tumbull, 2000). Subcontracting permits firms to outsource in order to smooth production, obtain resources which they cannot access locally for various reasons

and expand their markets through internal distribution networks and product differentiation (Van Kooij, 1990; Watanabe, 2009). Inter-firm linkages involve all possible forms of economic relationships between firms to gain competitive and cooperative advantages (Meyanathan & Munter, 1995). It is internationally recognized that subcontracting is an increasingly important factor in the competitiveness of businesses. More and more large companies are contracting out some activities in order to reduce the size of their operations and concentrate on their core business. This process offers considerable opportunities for specialized subcontractors and could help to stimulate growth and employment in small and medium sized enterprises (European Commission Report, 1998).

Bwisa (2011) posits that businesses must build networks if they are to become more competitive. Networking is a process of creating alliances with people and alliances beyond the immediate boundaries of the venture. It is a process of linking up with the right people to get things done and the difference between a successful and unsuccessful venture often rests in knowing people in the right places. A network includes all the exchange relationships among a group of organizations or ventures operating within an environment. The network approach is useful for understanding the way ventures in a particular industry exchange resources. Networks may be organizational, social or personal. Inter organizational relationships involve the manner and form in which in which an organization links itself to other organizations in the environment. This study falls under organizational networks and it was an attempt to understand inter- firm linkages between SMEs and large firms in the motor vehicle manufacturing industry in Kenya.

Literature highlights three main types of subcontracting: (i) economic subcontracting motivated by cost minimization where subcontracting offers cost saving;

(ii) specialized subcontracting, motivated by the lack of internal capacity and technical capability to produce in-house; (iii) capacity subcontracting motivated by the need to balance demand and supply given limited internal capacity. Many inter-firm relationships fall in the category of specialized and economic subcontracting (Meyanathan & Munter, 1995). This study falls under economic subcontracting. Berry (1997), adds that inter-firm cooperation or linkages can take several forms: backward (also known as vertical) or forward linkages as well as horizontal linkages. Backward linkages occur when large firms acquire goods or services from smaller firms and forward linkages exist when one firm sells goods or services to another firm, mainly for distribution. Horizontal linkages involve interactions with firms of the same industry for joint ventures. Among these, backward linkages, where SMEs as suppliers are partnered with large enterprises as purchasers, have the deepest impact and are hard to promote (UNCTAD, 2001). Subcontracting has been criticized for being based on unequal power relations stemming from the hitherto western adversarial model of inter-firm relationships. However, based on the Japanese model which supports long term collaborative relationships, the western model of subcontracting has recently altered towards more reciprocal relationships (Tumbull, 2000).

1.2 Small and Medium Enterprises

Small and medium enterprises (SMEs) are, and will remain the economic backbone of most developing countries in the foreseeable future. These enterprises (SMEs) are crucial in most developing economies mainly because; they are an important source of social and regional stability in terms of overall job creation and income and output growth generation (Baseline Survey, 1999; Thitapha, 2002). They are also often the vehicles by which the lowest income people in society gain access to economic opportunities. The

Baseline Survey (Republic of Kenya, 1999) found that there were about 1.3 million micro and small enterprises countrywide, employing some 2.3 million people. The importance of the sector to create jobs is underscored in the Economic Survey (Republic of Kenya, 2007) which states that the improved performance in the various sectors of the economy was affected in the creation of new jobs in both the modern and informal sectors.

According to the Economic Survey (Republic of Kenya, 2008), overall, the economy generated 469 thousand new jobs in 2006 – 2007 financial years, an increase of 5.7 from the previous year. A large population of this labor force was absorbed in the informal sector which generated 418 thousand jobs. In the following year, the informal sector created 426.9 thousand new jobs in 2007 compared to 420.4 thousand jobs in 2006. According to Economic Survey, (Republic of Kenya, 2009), n estimated 8, 33.5 thousand persons were engaged in informal sector economic activities in 2009, an increase of 4.9 per cent from the 2008 level. The sector has always provided the necessary employment interface between the modern sector and small scale farming and pastoral activities. The ease of entry into the sector has made it a fall back opening for those leaving training institutions as they await to join the modern sector, for those leaving the modern sector and for those who cannot secure formal employment due to lack of appropriate skills. Nairobi province, as stated in the Economic Survey (Republic of Kenya, 2010), commands the largest share in informal sector employment at 24.3 per cent followed by Rift Valley and central provinces with 18.9 and 15.8 per cent in that order.

One of the main determinants for the success of SME growth and development is the establishment of useful linkages between large enterprises and SMEs through subcontracting arrangements (UNCTAD, 2000; Kumar & Subrahmanya, 2007). The contribution of SMEs to the economies of developing countries is mainly emphasized in manufacturing. International Labour Organization (2005), for example, shows that small

scale enterprises made up 95% of all registered enterprises in the manufacturing sector of developing countries.

The importance of SMEs to large firms in manufacturing is well documented, though more prominently in south East Asia than in African countries. Andersen (1999), reported that employment expansion of large firms attributed to the growth of small firms ranged between 40% and 53% for Korea, the Philippines, Turkey and Taiwan, and 67% and 70% for India and Colombia respectively, achieved mainly through subcontracting relationships. There is a possibility that these figures could be higher, considering that it is difficult to measure the subcontracting activity in many developing countries, due to the informality and lack of records in the SSE sector. It is also made difficult by the lack of a clear definition of the full extent of the varieties and impact of subcontracting. In other developing countries, assessment of the contribution of SMEs in real economic terms has been difficult due to the informality of the sector and due to the neglect of the sector by the government (ILO, 2005).

1.2.1 Are SMEs in Kenya's motor vehicle industry entrepreneurial ventures?

Psychological theories such as those developed by McLelland pay attention to personal traits, motives and incentives of an individual and conclude that entrepreneurs have a strong need for achievement (McLelland and Winter, 1971). A similar focus is found in locus of control theories that conclude that an entrepreneur will probably have strong internal locus of control (Amit et. al. 1993). This means that an entrepreneur believes in his or her capabilities to commence and complete things and events through his or her own actions. Brockhaus (1982) suggests that an internal locus of control, even if it fails to distinguish entrepreneurs, may serve to distinguish the successful entrepreneur from the unsuccessful one. However, success is a relative concept that can also be

measured differently in different contexts. If success is measured in relation to the fulfillment of the goals and objectives of a particular entrepreneur, self employed could also be classified as successful if their businesses generate continuously satisfactory (in relation to their goals) level of living.

Davidsson (1989), states that achievement motivation is the most important factor contributing in explaining variation of growth rates and entrepreneurship. Shaver and Scott (1991) believe that achievement motivation is perhaps the only convincing personological variable associated with new venture creation. Johnson (1990) found a relationship between achievement motivation and entrepreneurship. According to Shaver and Scott (1991), the specific need for achievement was defined as: to accomplish something difficult; to master, manipulate, or organize physical objects, human beings, or ideas; to do this as rapidly, and as independently as possible; to overcome obstacles and attain a high standard; to excel one's self; to rival and surpass others; to increase self-regard by the successful exercise of talent.

Internal locus of control is included in: to master and manipulate physical objects, human beings or ideas in; to overcome obstacles and attain a high standard and to excel one's self; high risk-taking propensity is connected with: to overcome obstacles and attain a high standard; tolerance of ambiguity is associated with: to accomplish something difficult; high needs for autonomy, dominance, and independence coincide with: to master, manipulate, or organize physical objects, human beings, or ideas as independently as possible; the capacity for endurance or capability for intense effort is parallel to: to overcome obstacles and attain a high standard, to accomplish something difficult, to rival and surpass others; to do this as rapidly, and to excel one's self.

In addition to the above traits, the definition of need for achievement includes traits as competitive mind (to rival and surpass others), self-consciousness, and an itch to self

development and learning (to increase self-regard by the successful exercise of talent) (Amit et. al., 1993; Pickle and Abrahamson, 1990) define an entrepreneur an as someone who organizes and manages a business undertaking, assuming the risk, for the sake of profit. The entrepreneur evaluates perceived opportunities and strives to make the decisions that will enable the firm to realize sustained growth. The latter sentence emphasizes the decision making ability and growth objective of an entrepreneur. In this regard the SME owner managers in the motor vehicle manufacturing industry in Kenya could be assumed to be entrepreneurs.

Timmons (1994) brings in the issue of the entrepreneurial mind. He describes the entrepreneurial mind as attitudes and behavior of successful entrepreneurs: He states that: they work hard and are driven by an intense commitment and determined perseverance; they see the cup as half full, rather than half empty; they strive for integrity; they burn with competitive desire to excel and win; they are dissatisfied with the status quo and seek opportunities to improve almost any situation they encounter; they use failure as a tool for learning and eschew perfection in favor of effectiveness; and they believe they can personally make an enormous difference in the final outcome of their ventures and their life.

From the viewpoint of growth-oriented innovative companies, Ronstadt (1984) defines entrepreneurship as the dynamic process of creating incremental wealth. The wealth is created by individuals who assume the major risks in terms of equity, time and/or career commitment or provide value for some product or service. The product or service may or may not be new or unique but value must somehow be infused by the entrepreneur by receiving and allocating the necessary skills and resources.

The following is a multidimensional definition of entrepreneurship with specific emphasis on the entrepreneur as the main actor in the process when he defines

entrepreneurship as: a dynamic process created and managed by an individual (the entrepreneur), which strives to exploit economic innovation to create new value in the market. An entrepreneur is a person, who has entrepreneurial mind with a strong need for achievement (Virtanen, 2010). When looked at from this perspective, then one can be tempted to argue that SME owners in the motor vehicle industry in Kenya are not entrepreneurs as they do not appear to exploit economic innovation to create new value in the market.

1.2.3 SMEs in the motor vehicle industry and Entrepreneurial Orientation (EO)

The SMEs that are likely to survive in this environment of uncertainty are those that are willing to engage in entrepreneurial orientation (EO). Research has shown that there is a lot of uncertainty in the motor vehicle manufacturing industry in Kenya (Masinde, 1996; Masai, 1991) due to globalization and competition from large enterprises, but more importantly, reluctance by large firms to engage in inter firm linkages with local SMEs.

Contemporary entrepreneurship stresses the importance of a new entry for business innovation referring to the process of creative destruction (Schumpeter, 1934). Miller (1983) clarifies the construct of entrepreneurial orientation and defines an entrepreneurial firm as "one that engages in product marketing innovation, undertakes somewhat risky ventures and is first to come up with proactive innovations, beating competitors to punch." Miller (1983) posits that firms are entrepreneurial if they are innovative, risk taking and proactive. In general, entrepreneurial orientation refers to top management's strategy in relation to innovativeness, proactiveness and risk taking (Lumpkin & Dess, 2001). Entrepreneurial orientation has been suggested as an essential attribute of high performing firms (Lee & Pennings, 2001). Today's dynamic, global and challenging business environment requires a firm to be entrepreneurial if it is to survive

and grow. Rapidly changing technology and short product life cycles support the need for a firm to be innovative and to develop new ideas, products and processes and be willing to take risks to cope with rapid change. Increased domestic and global competition amplifies the need for a firm to stay ahead of the competition (Fairoz, Hirobumi &Tanaka, 2010).

The innovativeness reflects the propensity of a firm to engage in new ideas and creative processes that may result in new products, services or technological processes (Wiklund & Shepherd 2005). Proactiveness refers to the extent to which a firm is a leader or a follower and is associated with aggressive posturing relative to competitors (Fairoz, Hirobumi & Tanaka, 2010)). Risk taking is the extent to which a firm is willing to make large and risky resource commitments (Covin & Slevin, 1991). Lumpkin and Dess (1996) argued that EO dimensions include innovativeness, proactiveness, risk taking, autonomy and competitive aggressiveness; where autonomy is described as independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion. Competitive aggressiveness reflects the intensity of a firm's efforts to outperform industry rivals, characterized by a combative posture and a forceful response to competitors' actions (Fairoz, Hirobumi & Tanaka, 2010). As has been pointed out elsewhere in this study, SMEs component parts manufacturers in the motor vehicle industry operate in an atmosphere of risk and uncertainty due to, among other reasons, the reluctance of motor vehicle assemblers and franchise holders to procure items locally (Masinde, 1996; Masai, 1991).

1.2.4 Innovation in the motor vehicle manufacturing industry in Kenya

The type of innovation that is likely to be found in the motor vehicle manufacturing in Kenya is what is called incremental innovation. According to Smith, 2006), innovation can be radical or incremental. Incremental innovation refines and improves an existing design through improvements in the components. However, it is important to stress that these are improvements, not changes: the components are not radically altered. Christensen (1997) describes incremental innovation as "a change that builds on a firm's expertise in component technology within an established architecture". Incremental innovations are more common than radical innovations. Gradual improvements in knowledge and materials lead to most products and services being enhanced over time. However, these enhancements typically take the form of refinements in components rather than changes in the systems. This is also known as ordinary innovation (Smith, 2006; Hisrich et al, 2008).

Radical innovation, however, is about much more than improvement to existing designs. A radical innovation calls for a whole new design, ideally using new components configured (that is, integrated into the design), in a new way. Radical innovations are rarer than incremental innovations and are often associated with the introduction of new technology; in some cases, this will be transforming technology (Smith, 2006).

It would therefore appear that most existing 999businesses that are considered to be innovative, today, (except in the world of (information technology) would fall under the description of incremental innovations. It is also right to assume that the SMEs in this study fall under incremental innovation as previous research has shown that the suppliers in the industry have not come up with any radical innovations, but simply make improvements on component parts.

1.2.5 Bringing Innovations to Market in the motor vehicle manufacturing industry in Kenya

Innovation is a crucial part of the entrepreneurship process. Drucker (1986) proposed that innovation is the central task of the entrepreneur. He contended that entrepreneurs must do something new or there would be no point in their entering a market. However, as Wickham (2006) points out, innovation in a business sense can mean a lot more than merely developing a new product or technology. The idea of innovation encompasses any new way of doing something so that value is created. Innovation can mean a new product or service, but it can also include a new product or service (so that it becomes more convenient for the user, for example, new methods of informing the consumer about a product and promoting it to them, ways of organizing new the company, or even new ways of managing relationships with other organizations. These are all sources of innovation which have been exploited by entrepreneurs. In short, innovation is simply doing something in a way which is new, different and better.

However, the entrepreneurial task goes beyond merely inventing something new. It also includes bringing that innovation to the market place and using to deliver value to consumers. The innovated product or service must be produced profitably, in addition to being distributed, marketed and defended from the attentions from the attentions of competitors, by a well run and well led organization. No matter how important innovation is to the entrepreneurial process, it is not unique to it. Most managers are encouraged to be innovative in some way or other. Being successful at developing and launching new products and services is not something that is witnessed only in entrepreneurial organizations. The difference between entrepreneurial innovation and ordinary innovation is, at best, one of degree, not substance (Wickham, 2006). In this regard entrepreneurs in this study could be assumed to fall into the latter category as the SME owner managers

not only make improvements on the component parts they supply to the assemblers, but also market it to them as there is stiff competition among the SME suppliers themselves.

1.3 Large Enterprises

Whereas various issues are material to understanding the conditions within which both suppliers and buyers operate, this study recognizes that it is crucial to explore the intrinsic behavior of the buying firms, in this case, the large firms since as indicated by Jenkins et al, (2007): (i) large firms still dominate the industrial production of most economies; and (ii) given existing production organization, collaborative linkages between large and small firms are more likely to be initiated by large firms rather than small firms. iii) given the current production organization paradigm supporting mass production, what goes on in an industry is an aggregate of what goes on in key firms, usually large firms, relative to other firms. In short, the focus on large firms is based on the premise that aggregate industrial behavior is the result of intrinsic corporate decisions at individual firm level, particularly those decisions taken by large firms.

Hence, such decisions are likely to affect, to a large extent, the division of labour among firms, resource distribution, and inter -organizational relationships in that industry. In addition, the benefits derived by SMEs through subcontracting will depend on the decisions taken by large firms. Kelley and Harrison (1990) argue, in their study of subcontracting behavior among single plant and multi- plant firms in the USA, that there is a related strategy among firms and that larger firm are more likely to instigate inter-firm relationships for the simple reason that they are likely to be leaders in their own industries. Relationships with small firms are therefore likely to be instigated and 'managed' by large firms.

Globalization has generated both new markets and competitive forces for large firms. Constant pressure to reduce costs, shorten lead time and focus on core competences

has driven firms to change their supply chain management strategies. Most large manufacturing companies now buy significant percentages of their inputs of both goods and services from other firms, with some spending as much as half of their revenues this way. Managing the supply chain for an optimal mix of cost, quality, flexibility and strategic advantages such as access to innovation is becoming an increasingly important source of competitive advantage (Hermann, 2005).

Cost pressure and presence in developing countries combine to create an interesting set of opportunities and challenges for Trans National Companies (TNCs). How to gain the local knowledge and contracts required for operating effectively? How to optimize cost, quality, flexibility and other considerations in the value chain? How to manage any social or political controversy surrounding company activities? How to preserve "social license to operate"? The message is clear. Companies need to be seen to be contributing and not simply exploiting (UNCTAD, 2006). There has, therefore, been an urgent need to forge stronger ties with the local communities in which these TNCs operate. While these challenges are particularly pronounced for foreign firms with alliances in developing countries, they are relevant to domestic developing country firms as well (ILO, 2005; Jenkins et al, 2007; Kumar & Subrahmanya, 2007).

In developing countries, business linkages with local SMEs, including procurement, distribution and sales, offer large firms an avenue through which to address some of these concerns. These relationships can allow large firms to reduce input costs while increasing specializations and flexibility. They can also increase local integration and "rooting:" providing access to local knowledge, and, by spurring growth and development in the local SME sector, bringing about positive social and economic impacts in the wider community. There are thus both competitiveness and corporate social responsibility arguments in favor of business linkages (Kumar & Subrahmanya,

2007). Large enterprises operating in developing countries can forge linkages with local SMEs in many different areas of their value chains. These opportunities may include procurement, agricultural out growers' schemes, manufacturing, sales of financial services, information and communication technologies, distribution and retail outgrowing, non core functions and services franchising, leasing and subcontracting (UNCTAD, 2006).

1.4 Structure of the Motor Vehicle Assembly Industry in Kenya

The motor vehicle assembly industry in Kenya consists of four distinct categories of participants, as illustrated in Figure1.The first category consists of the three assemblers: Kenya Vehicle Manufacturers (KVM), Associated Vehicle Assemblers (AVA), and General Motors East Africa (GMEA). The first two firms are contract assemblers while General Motors East Africa, is a franchise holder as well as an assembler. GMEA is the only assembler that does not contract assembly services to anyone else. All of the assemblers have a government shareholding together with some of the major franchise holders in Kenya. The second category consists of 13 franchise holders, better known in Kenya as importers of the completely knocked- down- kits (CKDs). They hold licenses to import and assemble on behalf of principle car manufacturers in Japan France, Italy, United Kingdom, Germany and others. About half of these have some shareholding interests in at least one of the assembly plants. GMEA is in a category of its own as it is both a franchise holder and an assembler. The distributors are usually also franchise holders. However, there are distributors who merely provide outlets for major franchise holders.

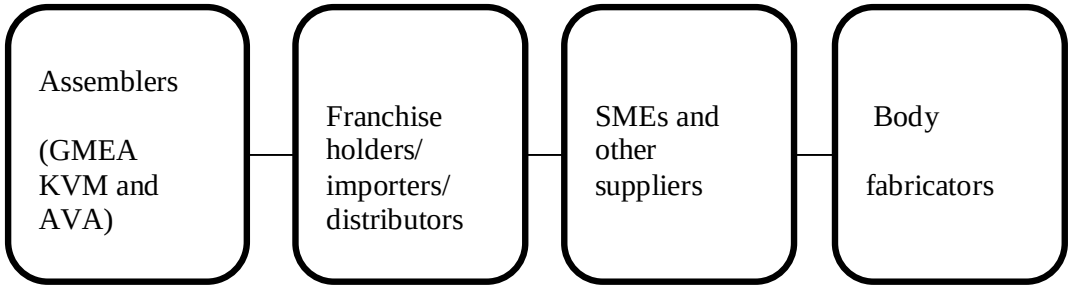

Figure 1.1 Components of the Motor Vehicle Industry in Kenya

The third category is the auto ancillary subsector comprising a variety of independent SMEs who supply the industry with assembly and replacement parts. However, because the assemblers import as complete a CKD kit as possible and import most of the other inputs, this category has tended mostly to serve the replacement market. Yet it is in this category that prospects for a wide range of small enterprises are found. The fourth category consists of body fabricators who play quite a vital role in subcontracting in the motor vehicle industry in Kenya. The service and repair sub-sector constitutes a fifth category that, while vital for the industry, is not directly linked into the assembly or auto ancillary sub sectors. In Kenya, this latter category employs perhaps, the largest number of the small enterprise workers in the motor vehicle industry (Kenya Association of Manufacturers, 2006). The activity flows in the motor vehicle assembly industry in Kenya and all the players, including those not directly linked to the assembly or auto ancillary sub sector such as the service and repair sub sector are illustrated in Figure 1. 2.

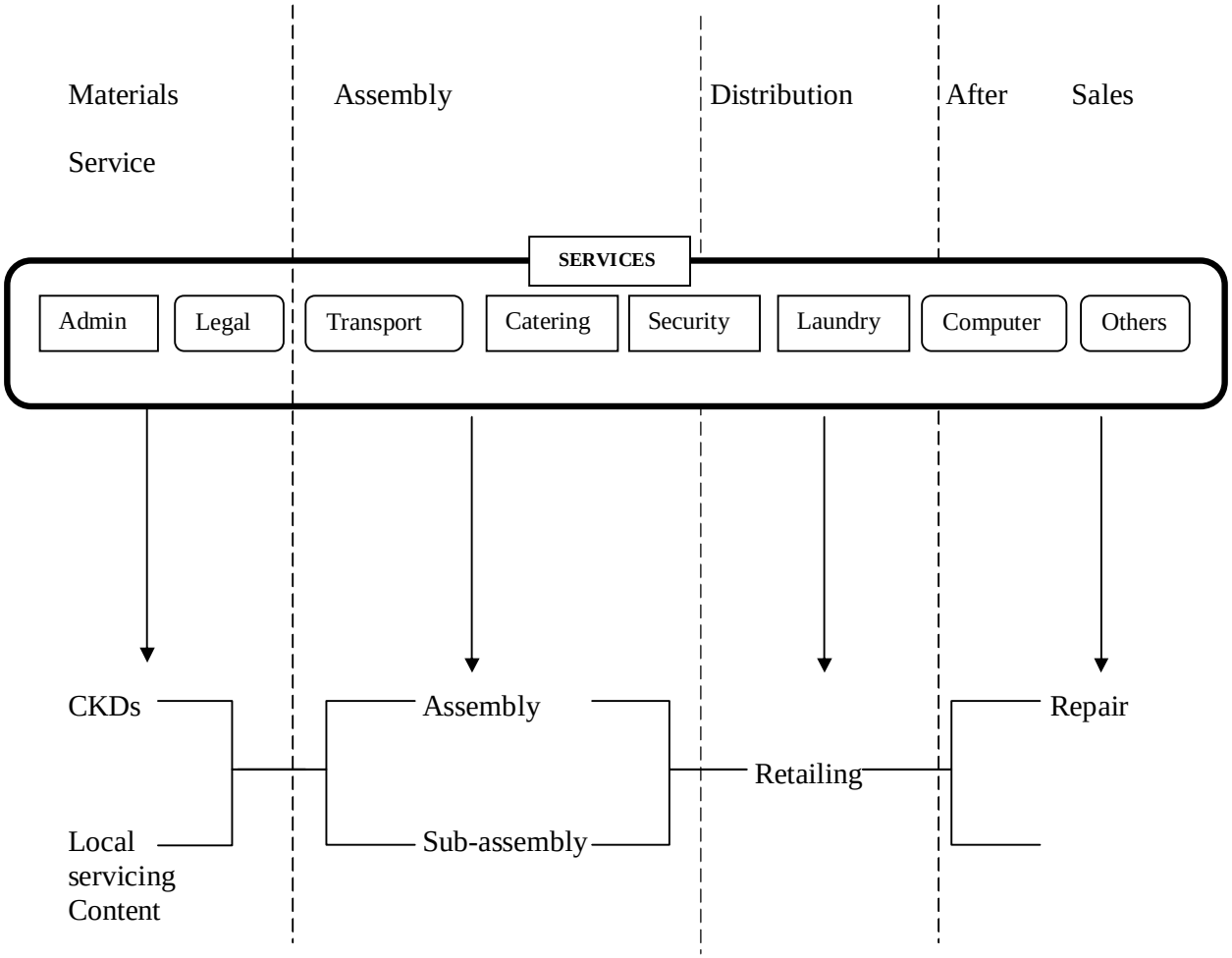

Figure 1.2 Activity Flows in Kenya's Motor Industry: (Masinde, 1996)

Notes: 'Others' includes insurance, information (computer) and miscellaneous services

The total installed production capacity of the three motor vehicle assemblers is 23,200 vehicles on batch basis (see Table 1). The table indicates that in the year 2004, the total utilization of the assembly plants by the three assemblers was only 28.5%. The capacity of the three motor vehicle assembly plants is, as can be seen clearly, grossly underutilized. This could be expected to impact negatively on subcontracting within the industry as local subcontracting depends on the amount of local assembly taking place.

Table 1.1 Capacity utilization in motor vehicle assembly plants (2004)

Name of assembly plant	Installed capacity	(2004) volume of assembled vehicles	Capacity utilization
AVA	9,600	3,578	37.2%
GM E.A.	7,100	2,124	30%
KVM	6,600	732	11.3%
Total	23,200	6,434	28.5%

Source: Kenya Association of Manufacturers (2006)

The installed capacity of the three motor vehicle assembly plants clearly shows that the production capacity of the three assemblers was grossly underutilized (see Tables 1and 2). This is supported by the Minister for Finance in the Budget Speech (Republic of Kenya, 2010) that production of locally assembled vehicles has been on the decline, and that the government of Kenya will need to work hard at improving this.

Table 1.2 Production of assembled motor vehicles in Kenya (2003 – 2009)

Month	2003	2004	2005	2006	2007	2008	2009
January	231	377	322	360	450	468	379
February	376	506	641	411	516	592	556
March	405	544	579	461	565	388	517
April	398	622	553	436	532	601	480
May	159	625	489	486	574	575	494
June	274	592	448	399	481	487	518
July	392	402	507	439	456	468	540
August	342	574	439	480	589	440	*
September	407	490	423	477	566	488	*
October	376	570	341	447	718	503	*
November	377	629	322	592	658	435	*
December	348	503	335	392	437	302	*
Totals	4,085	6,434	5,399	5,380	6,542	5,747	*

*data not available

Source: Statistical Abstract Kenya National Bureau of Statistics Ministry of Planning and Development (Republic of Kenya, 2009)

According to the Kenya Association of Manufacturers (2006), locally assembled, fully built and CKD vehicles and motor vehicle components respectively are: road tractors for semi trailers, motor- vehicles for transport of ten or more persons, including driver, motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars, motor vehicles for the transport of

goods, special purpose motor vehicles (for example break down lorries, crane lorries, fire fighting vehicles, concrete mixture lorries, road sweeper lorries, spraying lorries, mobile work-shops, mobile radiological units).

There is also assembly of: chassis fitted with engines for the motor- vehicles of heading 87.01 to 87.05, bodies, (including cabs) for the motor vehicles of heading 87.01 to 87.05, parts and accessories of the motor-vehicles of heading 87.1 to 87.05, work trucks, self propelled, not fitted with lifting or handling equipment of the type used in factories, warehouses, dock areas or airports for short distance transport of goods, tractors of the type used on railway station platforms, parts of the fore going vehicles. Also included are tanks and other armored fighting vehicles, motorized, whether or not fitted with weapons, and parts of such vehicles. There are also carriages for disabled persons, motorized or otherwise mechanically propelled. Also included are parts and accessories of vehicles of heading 87.11 to 87.13 and lastly trailers of the caravan type, for housing or camping (KAM, 2006).

Locally manufactured motor vehicle parts include: abrasives, sealants, masking tapes; vehicle bodies, batteries, automotive gaskets, leaf springs, u-bolts and hinge bolts, oil fuel and air filters, exhaust pipes and silencers, radiators, automotive paints and thinners, speedometer cables, aluminum sections for motor vehicle windows and seat frames, welding gases, PVC for vehicle seat covers, floor mats, tyres and tubes, brake pads and linings, screws and fasteners, fiber glass bodies, vehicle wind–shield, door and backlight glasses; engine oils, transmission oils, brake fluid, greases, lubricants; rubber mountings, fabric for vehicle seat covers and seats used for motor vehicles. The major local content in the assembly plants include: batteries, leaf springs for suspension systems, exhaust systems, wiring harnesses, seats and trimming materials, lubricants,

paints and other process materials, bolts and nuts, metal brackets, manuals and vehicle bodies (KAM, 2006).

1.5 Statement of the Problem

In no other industry has subcontracting been as extensively used as in the motor vehicle industry. One possible explanation for this could be that, apart from the service inputs, a typical vehicle model, for example, uses at least 10,000 different parts of components (Womack et al, 1990). Subcontracting, therefore, seems to be a logical production organization since no single manufacturer could possibly provide all these parts internally. It would appear, therefore, that the very nature of the technical process of motor vehicle manufacturing necessitates linkages involving several firms.

Since the establishment of the Kenyan Motor Vehicle Industry (MVI) in 1950s with servicing as the main activity, the sub-sector has grown to include auto ancillary services, vehicle body building, and coach works. The Government of Kenya has deliberately attempted to develop the assembly of motor vehicles by requiring assemblers to shift from semi knocked down kits (SKD) to completely knocked down (CKD) levels of assembly (Republic of Kenya, 1986). Nevertheless, low demand for vehicles on the domestic front, and the absence of a long term strategy to foster transition from assembly to manufacture, have limited the growth of the sector and its ancillary sub-sectors. Currently, the sector is plagued by importation of cheap second hand reconditioned vehicles and a proliferation of makes and models. Of the approximately 3000 models built in the world, Kenya assembles at least 30 models and has some 300 makes and models on the road, mainly from Japan, Germany and Britain. Despite such proliferation, Kenya has no official policies defining the designs and models to be used in the country (Kenya Association of Manufacturers, 2006).

Moreover, despite the need for both large and small firms in industry to become more competitive, and the proposal that one of the ways through which this can be achieved is through subcontracting between SMEs and large enterprises, little has been deliberately done to exploit this strategy (Republic of Kenya, 2005; 2006-2010; KAM, 2006). Until the establishment in 1991 of the Kenya Subcontracting and Partnership Exchange (KSPX) to promote industrial subcontracting in the country, Kenya had not taken deliberate steps to utilize the linkages between large and small businesses. The KSPX was set up in 1991 by the Kenya government with the help of United Nations Development Programme (UNDP), to bring together large, medium and small enterprises in a formal interaction (UNDP/Republic of Kenya Project Document, 1990), and to build a data bank to facilitate these activities. It was expected that its linkages with the various membership organizations assisting business people will ameliorate this situation, although there were serious doubts in the business circles about its survival (Masinde, 1996).

Recognizing the potential of the motor-vehicle industry for external sourcing and subcontracting activities, and in view of the successful experiences of this sector in industrial development in Europe (Becattini, 1991) and in Japan (Sato, 2000), the government selected the automotive industry as the pilot sub sector for the initial promotion of the KSPX activities and inter-firm linkages in industry. Together with a specific rationalization strategy aimed at streamlining the motor vehicle industry and encouraging local procurement of components, this strategy was expected to develop a local capacity to supply the motor assembly and other industries (Masinde, 1996).

However, according to Sessional Paper No. 2 (Republic of Kenya, 2005) and the Private Sector Development Strategy Paper (Republic of Kenya, 2006 -2010), the current situation is that linkage between Kenya's SMEs and large firms is weak. As a

result, Kenyan SMEs remain passive and underdeveloped. Research has shown that linkages between large firms and SMEs can enhance the growth and competitiveness of the latter and provide the much needed employment (McCormick & Atieno, 2002; Thitapha, 2002; UNCTAD, 2006; Kumar & Subrahmanya, 2007). Yet, firm to firm linkages in the form of franchising, leasing, production complimentaries, subcontracting and other inter-firm linkage opportunities between large firms and SMEs, is still untapped in Kenya (Masai,1991; Republic of Kenya, 1992; 2005; 2006-2010; Masinde, 1996). Despite the importance of business linkages in promoting the growth of SMEs, empirical research on subcontracting is inadequate. This study is an attempt to narrow the information gap.

Previous research on subcontracting in Kenya has concentrated on other sectors namely: the Pharmaceutical Sector (Owino, 1991), the Metal Fabrication Sector (Oketch, Mitullah, & Atieno, 2002), the Garment Manufacturing Sector, (Ongile & McCormick, 1996), the Food Processing Sector (McCormick & Atieno, 2002). The only studies conducted on subcontracting in the motor vehicle sub sector in Kenya were done much earlier by Masai, (1991), and Masinde, (1996). No recent studies have been carried out. The study by Masinde (1996), points out that effort to rationalize the industry and encourage assemblers to procure some of their inputs locally through subcontracting had not been very successful. Yet there exists an inherent capacity for subcontracting arrangements in the industry and it is, therefore, important to explore the reasons for the reluctance of the assemblers and franchise holders to enter into subcontracting arrangements with local SMEs.

Although there is some subcontracting in the Kenyan motor vehicle industry (Masinde, 1996; KAM, 2006), little has been documented about the factors that determine its existence. The aim of this research, therefore, was to examine the determinants of

subcontracting in Kenya's motor vehicle industry so as to establish why subcontracting arrangements between SMEs and large enterprises in Kenya remains, to a large extent, untapped.

1.6 Purpose of the Study

The main aim of this study was to explore the determinants of subcontracting arrangements between small and medium enterprises (SMEs) and large firms in the motor vehicle manufacturing industry in Kenya so as to establish the reasons behind the gap in subcontracting in Kenya. The study had first to establish the nature of subcontracting arrangements in the industry as a basis for other determinants. The development of business networks between SMEs and large firms could lead to the development of an enterprise culture in Kenya. This is because networks and linkages enhance the performance of SMEs, which in turn will encourage others to go into self employment enhancing employment creation.

The study addressed the following specific objectives:

1) To establish the nature of any existing subcontracting arrangements in the motor vehicle manufacturing industry in Kenya.

2) To examine what motivates the motor vehicle assemblers and franchise holders to engage in subcontracting arrangements with small and medium enterprises.

3) To identify how the demographic and operational characteristics of the SMEs influence subcontracting relationships with large enterprises.

4) To determine how firm benefits influence the subcontracting arrangements.

5) To ascertain the internal and external constraints that affects the subcontracting arrangements.

1.7 Research Questions

The study was guided by the following research questions

1) What is the nature of subcontracting arrangements in the motor vehicle manufacturing industry in Kenya?
2) What motivates motor- vehicle assemblers and franchise holders to enter into subcontracting arrangements with SMEs?
3) How do the demographic and operational characteristics of the SMEs influence subcontracting arrangements with the motor vehicle assemblers and franchise holders?
4) How do the firms' benefits influence subcontracting arrangements?
5) What are the internal and external constraints to the subcontracting arrangements between the large firms and the suppliers?

1.8 Significance of the Study

In the past two decades, the process of globalization has had a major impact in the way firms operate. It has generated both new markets and new competitive forces. Constant pressure to reduce costs, shorten lead times and focus on core competencies has forced firms to change their supply chain management strategies. Most large manufacturing firms now buy significant percentages of their inputs of both goods and services from other firms, with some spending as much as half of their revenues this way. Managing the supply chain for an optimal mix of cost, quality, flexibility and strategic advantage is becoming an increasingly important source of competitive advantage (Jenkins et al, 2007). Large firms which concentrate in their core capabilities and subcontract the provisions of non core products, processes and services, can serve as important channels for the transfer of technologies to SMEs (UNCTAD, 2003). Subcontracting relationships

with large firms provides local SMEs with more opportunity for the transfer of knowledge and technology to learn new practices and become competitive. Large firms in developing countries can diffuse valuable knowledge throughout the economy not only to linked firms but also through spill-over's to other firms in the economy (UNCTAD, 2001).

Given the interest the Government of Kenya has shown with regard to subcontracting as a means of enhancing SME performance and competitiveness and alleviating poverty in Kenya (Republic of Kenya, 1986; 2001-2004; 2005; 2006-2010), it is expected that the findings of this research will help the policy makers formulate policies that will create a conducive environment for subcontracting arrangements in Kenya thereby enhancing the competitiveness of not only SMEs but large enterprises s as well. This could put the country on its first steps towards establishing an enterprise culture that is lacking so far but which is vital not only for employment generation but also towards the country' industrialization. This study will also help students of entrepreneurship to gain more knowledge regarding the importance of business networking on the performance of SMEs in Kenya.

1.9 Scope of the Study

The research was limited to a study of subcontracting arrangements between SMEs and large enterprises in the automotive industry in Kenya. It is possible that the factors that determine subcontracting arrangements in this industry may be different from those in other industries. Moreover, since the study is mainly qualitative, it is possible that the biases of the researcher could have entered the research frame (LeCompte & Preissle, 1993, Nielsen, 2004).

1.10 Limitations of the Study

This research was limited to a study of subcontracting arrangements between SME suppliers and large enterprises in the motor vehicle manufacturing industry in Kenya. It is possible that the factors that determine subcontracting in arrangements in this industry may be different from those in other industries. It is possible that factors that determine subcontracting arrangements in this industry may be different from those in other industries. Secondly, since the study was mainly qualitative, it is possible that the biases of the researcher entered the research frame. It was realized that doing research in Kenya is difficult without personal contact within organizations of interest. One of the entry methods used by the researcher, therefore, was to get contacts of relevant people in the industry from other interviewees. This was more effective with the assemblers and franchise holders. Gaining access to the suppliers, especially SME suppliers was more difficult. Even though the researcher obtained a letter of introduction from the manager at GMEA to their suppliers, negotiating access was still not guaranteed as a number of SME owner managers refused to take the questionnaires completely while others took the questionnaires but failed to respond.

1.11 Summary

This chapter dealt with the introduction, statement of the problem, purpose of the study and significance of the study. It also stated limitations of the study. The study sought to examine the determinants of subcontracting arrangements between large firms and their SME suppliers so as to establish reasons for the gap in subcontracting arrangements in the motor-vehicle manufacturing industry in Kenya. To achieve this objective the study had first to establish the extent of any existing subcontracting arrangements. Chapter two will

examine the different approaches related to subcontracting and literature on determinants of subcontracting arrangements.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews related literature on determinants subcontracting arrangements between large firms and their SME suppliers. It is divided into six sections: The first section addresses some approaches to inter-firm linkages; the second section studies literature on the nature of subcontracting in the motor vehicle manufacturing industry. The third section studies literature on the motivation behind the arrangements. The fourth section examines the influence of the demographic and operational characteristics of the SMEs involved in the subcontracting arrangements. The fifth section looks at the issue of the influence of firm benefits on subcontracting arrangements and the last section examines the internal and external constraints that affect the subcontracting arrangements between SMEs and large enterprises.

2.2 Explanations for Subcontracting: Some Approaches

Apart from the approaches discussed in this section, researchers have also developed theories that are useful in explaining determinants of subcontracting arrangements, the assumptions made about its nature and the requisite conditions for its existence. The study was therefore based on the transaction cost theory (driven by efficiency and cost minimization); organization theory; the strategic behavior approach and the flexible specialization paradigm.

2.2.1 Joseph Schumpeter's Theory of Economic Development (linking subcontracting and entrepreneurship)

One major role of SMEs in a country is the creation of employment. A country that is economically developed is able to provide adequate employment to the people. The

entrepreneur is the prime mover in economic development and his function is to innovate, or to carry out new combinations. According to Schumpeter, economic development consists of coming up with innovation. He argues that entrepreneurship is the process of creating innovative and evolutionary processes to create successful business undertakings. The essence of entrepreneurship, therefore, lies not simply in putting together business activities in their original formations but in establishing new innovative business combinations in terms of supplies, products, markets processes or organization. This, according to Schumpter, is important because it brings forth a force that disrupts market equilibrium thereby creating change, which results to new opportunities (Wadhwani & Jones, 2007). Such relationships are created by encouraging subcontracting arrangements and networks between small, medium and large firms, such as is found in the motor vehicle manufacturing industry the world over.

The theory accorded the entrepreneur the role of an innovator. The entrepreneur is not merely a manger, but comes with something new. Schumpeter identified five types of innovation, all of which are enacted within subcontracting arrangements and network relationships among small, medium and large firms in the motor vehicle industry. These include:

i) The introduction of a new product;

ii) The introduction of a new method of production;

iii) The opening up of new markets;

iv) The conquest of a source of raw materials or semi manufactured goods and

v) The creation of a new type of industrial organization such as the creation of a monopoly.

However it is the introduction of a new product and its continued improvement that leads to economic development. The entrepreneur is motivated by the following

factors: i) the desire to build his own business empire; ii) the desire to conquer and prove his superiority, and iii) the joy of creating something entirely new and proving his ingenuity. The nature and activities of the entrepreneur depend on his socio-cultural activities. In order to perform his economic function, the entrepreneur requires two things: i) technical knowledge to make new products; ii) finance from banking institutions. Once the new innovation becomes successful and profitable, other entrepreneurs want to copy it and benefit from it. The theory continues by stating that innovation in one field may result in a wave of innovations in other related fields; for example, the emergence of a motor vehicle industry may stimulate a wave of new investments in the construction of highways, tyres petroleum products and more.

Thus, Schumpeter, saw entrepreneurs not so much as the lubricant that oiled the wheels of an economy, but as self interested individuals who sought short term monopolies based on some innovation. Once an entrepreneurial monopoly was established, as earlier mentioned, a new generation of entrepreneurs came along with more innovations that aimed to supersede that monopoly in a process Schumpeter called "creative destruction".

The importance of creating business linkages and networks is supported by Knudsen & Swedberg (2009) who argues that what is critical for the entrepreneur is to be able to envision new combinations in business processes. The entrepreneur moves away from combinations that already exist and creates new combinations in some part of the economy. Where the ordinary person (static man) sees nothing but routine, the entrepreneur (action man), knows that there exists a nearly endless number of new relationships to move the business forward. Knudsen & Swedberg (2009) goes on to support Schumpeter's Theory of Economic Development where Schumpeter argues that an entrepreneurial economy is an amalgamation of innovative combinations that defy the

centrality of economic equilibrium. He concludes that productive economic combinations must optimally relate the business to all its forward and backward linkages (subcontracting), and also its lateral support factors.

2.2.2 Transaction Cost Theory Approach

Basing his work on that by Coase (1937), which argues that firms and markets are alternative methods of coordinating resource allocation transaction, Williamson (1975, 1985) suggests that cost and difficulties associated with transactions sometimes favor hierarchies (or in house production, also referred to as vertical integration) and sometimes markets (subcontracting/outsourcing) as an economic governance structure. Transaction cost refers to the cost of providing for some good or service through the market rather than having it provided from within the firm. Therefore, when a company tries to determine whether to outsource or produce goods or services on its own, market prices are not the sole factor. Firms evaluate the relative costs of alternative governance structures (spot market transactions, short term contracts, long term contracts, and vertical integration) for managing transactions (Williamson, 1985). Transaction costs could be defined as the costs of acquiring and handling the information about the quality of inputs, the relevant prices, and the supplier's reputation and so on. In essence, it refers to all forms of search, information and negotiation costs, as well as all the costs of monitoring and enforcing contractual performance (Yvrande, 2000).

It goes on to say that in order to carry out a market transaction, it is necessary to establish who it is that one wishes to deal with, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed and so on. Contractual agreements are costly: costs have to be borne in order to negotiate and write the terms of the arrangements, to

monitor the performance of the contracting party, to enforce the contracts and others. The assumptions of this theory are bounded rationality and opportunism (Williamson & Marsten, 1995). According to Williamson (1985), Williamson and Marsten, (1995) and Yvrande (2000), bounded rationality refers to the fact that people have limited memories and limited cognitive processing power. We cannot assimilate all the information at our disposal and we cannot accurately work out the consequences of the information we do have. No matter how knowledgeable a manager might be, he cannot predict all the possible alternative courses of action. This is compounded by the fact that in reaching a decision, they must take into account how the competitors will react (Williamson, 1985).

Opportunism refers to the fact that people will act in self interest, with "guile." That is, people might not be entirely truthful about intentions, or they might attempt to take advantage of unforeseen circumstances that gives them the chance to exploit another party. The theory does not assume that all people will act opportunistically all of the time. It merely assumes that some people will act opportunistically some of the time and that it is not possible to predict in advance who is an opportunist and who not (Williamson,1989). The variables that are used to characterize any transaction are frequency, uncertainty and asset specificity. Transactions can be frequent or rare, have high or low uncertainty or involve specific or non specific assets. These three variables will, according to the theory, determine whether transaction costs will be lowest in a market or a hierarchy, that is, whether to subcontract or produce in house (Williamson & Marsten, 1995).

Frequency: The theory states that there could never be a situation in which a firm would want to integrate vertically so as to bring "in-house" the provision of a good or service that is very rarely used (Williamson, 1985, 1989; Williamson & Marsten, 1995). Uncertainty: the issue here is how hard it is to see the eventualities that might occur

during the course of the transaction. One obvious factor here is the length of time over which the transaction will take place. Transactions that take a short time or "spot markets" will have relatively little uncertainty because one does not have to predict the future. On the other hand, long term transactions add to uncertainty because of bounded rationality. No one can foresee all the eventualities. How can the supplier be sure that the buyer will not go out of business during the life of the contract thereby putting the supplier at risk? It can come about because of information asymmetries when both parties do not know much about each other's financial health. Uncertainty could also come about because of opportunism. How sure can the supplier be that having invested in resources to meet the contract, the buyer will not try to renegotiate the contract at some future time? The question to ask here is whether uncertainty will be reduced by vertical integration. If so, will any savings in transaction costs be enough to outweigh any costs associated with vertical integration- administrative costs, for example? (Williamson, 1985; 1989; Williamson & Marsten, 1995; Yvrande, 2000).

Asset specificity is perhaps the most important element in this theory. It argues that where transactions involve assets that are only valuable (or are much more valuable) in the context of a specific transaction, transaction costs will tend to be reduced by vertical integration This variable is again only a problem in the context of bounded rationality and opportunism. It is this that makes it risky for the supplier to invest in resources such as machinery. Other things being equal, when transactions involve highly specific assets, transaction costs are likely to be lower in a hierarchy than in a market (Williamson, 1989). It must be noted, however, that asset specificity is not sufficient condition for high transaction costs- uncertainty and frequency of operations are also necessary (Coase, 1937; Williamson, 1975). Depending on its objectives, a firm may still choose to produce in- house, (hence vertically integrating) even though its transaction

costs are higher than those of outside suppliers. Some reasons for this could be that the firm lacks the bargaining power needed to persuade outside suppliers to assume the risks which they hoped to avoid by subcontracting, or because vertical integration fits the parent corporate needs. However, contradictory arguments posit that production costs are the strongest predictor of make or buy decisions and that both volume uncertainty and supplier market competition have small but significant effects (Yvrande, 2000).

2.2.3 Strategic Behavior Theory

A third approach to the explanation of inter-firm relationships stems from theories of how strategic behavior influences the competitive positioning of the firm (Harrigan and Newman, 1990). The main difference between the motivations attributed to transaction theory and those attributed to strategic behavior relate to the objectives of the firm when making "make" or "buy" decisions. This means that decisions are taken not just to save cost, but for positioning relative to competitors. Transaction cost theory argues that firms transact by the mode which minimizes the sum of the production and transaction costs. Strategic behavior explanations states that firms transact by the mode which maximizes profits through improving a firm's competitive positioning vis a vis that of rivals. (Kogut, 2001) makes this distinction even more vivid for the purposes of this study but the primary difference is that transaction costs address the costs specific to a particular economic exchange, independent of the product market strategy. Strategic behavior addresses how competitive positioning influences the asset value of the firm.

This study contextualized inter-firm relations as a managerial decision making process. It is expedient, therefore, to highlight the implications of competitive dynamics within a business environment, and what these imply for large –small firm linkages. Inter-firm relations occur within the framework of a firm's desire to achieve competitive

advantage. In recent years, the competitive environment has become more challenging for firms, with resource management becoming the key tool for competitive advantage (Porter, 2001). Hence, all organizational strategy and activity are aimed at this acquisition and superior positioning, involving managers in decisions of how best to allocate resources and organize the firm's activities to achieve this position. Because these questions are essentially managerial concerns about competitiveness, the competitive dynamics of the firm, and the role of inter- firm relationships are briefly considered. Proceeding from the argument that inter- firm linkages are a function of the strategic choices of a firm about its sources of inputs and disposal of outputs, it is pertinent to explore the concept and role of organizational behavior (Porter, 2001)

Three underlying assumptions about organizations guide this discussion. First, as a pre-requisite to competitiveness, firms are primarily concerned with resource acquisition and control. Hence, their activities, structures and strategies are geared towards this goal. Secondly, this calls for a definition of their domain in the environment through strategic choices, thus "creating" their particular environment. Consequently, as Marshall (1999) suggests, to ensure competitiveness, the firm's structure, strategy and environment, must be aligned (strategic adaptation). Finally, organizations aim to increase the value of their offering by increasing the value of their value system (all those activities which go into giving a firm its competitive advantage). Hence, the firm aims its organizational strategies at this additionality (Porter, 2001).

Porter (2001) goes on to argue that because corporate strategy defines products and markets- and determines the company's course into the most indefinite future, the way firms make decisions is a function of how well they define their products and markets, and how well they can envisage their distant future. The essence of formulating competitive strategy therefore, is relating a company to its environment. Consequently,

how organizations view this task determines the perceived choices available, and the process by which the firm pursues competitive advantage.

Arguably, firms act upon the environment just as much as the environment affects the firm's decisions. As argued by Pettigrew and Whipp (1991), a basic premise of thinking about strategy concerns the inseparability of organization and environment since the organization uses strategy to deal with the environment. In analyzing inter-firm relationships, this approach suggests that the dynamics of competitiveness and the relationship between structure and strategy provide a working framework. It proposes that firms act in self interest (survival) in the long term, and select options (as perceived by management) which perpetuate them in their business environment, the key issues being resourcing and disposal of outputs. Consequently, they make strategic and tactical organizational decisions in order to achieve these goals. To understand this behavior therefore, it is critical to understand the drives behind the decisions and actions of organizations. While the former focuses attention on cost reduction, the later focuses on the firm's energies on product uniqueness.

Porter (2001), however, argues that even the focus on product differentiation is ultimately aimed at cost reduction via demand simulation brought about by brand loyalty. Evidently, the significance of any strength or weakness a firm possesses is ultimately a function of its impact on relative cost or differentiation. Cost advantage and differentiation in turn stem from industry structure. They result from a firm's ability to cope with the firm's forces better than its rivals. In turn, this advantage is evaluated in terms of its value to the buyers. Competitive advantage grows fundamentally out of the value a firm is able to create for its buyers that exceed that firm's cost of creating it. This value is translated into more superior returns than those of competitors. Hence, decisions and choices about resources, markets, labour, and others, are geared towards this goal.

Managerial approaches, which have taken supplier chain value maximization, or production efficiency approaches to inter- firm relationships, have this basic assumption at the heart of their theorization (Porter, 2001).

The supplier chain value is, perhaps, the most critical among Porter's five forces (buyers, suppliers, substitutes, potential entrants, and industry competitors) which determine industry profitability since supplier bargaining power determines the costs and availability of raw materials and other inputs. Evidently, power over the supplier chain is critical for the organization's competitiveness. The firm is therefore, keen to reduce the supplier bargaining power which is high when: (a) there is a concentration rather than a fragmentation of suppliers; (b) the switching costs from one supplier to another is high; (c) the supplier's brand is linked to switching costs if these are dependent on the brand; (d) there is the possibility of the supplier integrating forwards if it does not obtain the prices, and hence the margins it seeks; (e) the supplier's customers are of little importance to the supplier, in which case, long term relationships are not important (Porter, 2001).

Emerson (1962) and Blau (1964) use social exchange theories to emphasize the firm's resource acquisition objective, contending that inter-organizational dependencies are created by the need of all organizations to acquire scarce resources. This contention predicts that organizations are powerful relative to others, to the extent that aids them to: (a) control the resources needed by others; (b) can reduce their dependencies on others for resources. Success in the acquisition and control of resources has also been used as a measure of organizational effectiveness (Porter, 2001). Thus, in a very real sense, organizations are driven and evaluated by their relative success in the acquisitions of such resources in their environment.

Other authors such as Brusco (2004) propose that such power can be achieved, through increased corporation among organizations, which enhances the capacity of these

organizations to dominate their environment. Hence, power in inter- organizational networks is based not only on internal network exchanges, but also on external linkages to the larger environment. He extends this argument to suggest that an actor can lessen the power of dependencies within a relationship by using power derived from relationships with larger organizational or social networks- for example, clusters of organizations such as those described in the Emilia Romagna model of networking among small firms are reported to provide a network for small firms, while giving them scale to relate to in the wider environment (Brusco, 2004). Based on this argument, therefore, organizations are not concerned with their cost efficiency per se but with their access to and control of resources and markets.

In summary, the fore going argument implies that firms can make decisions to position themselves within a market, and in the process make decisions about acquiring and retaining resources through subcontracting or by blocking the access of rivals to such resources through agreements with the small firms they are linked to. However, the question here is whether these received models are applicable in developing countries where the business environment is significantly different.

2.2.4 The Flexible Specialization Paradigm

If large enterprises are to subcontract some of their inputs, then they must organize their production methods to facilitate this, hence the flexible production paradigm. The flexible production paradigm, advocating flexible productive organization, not only provides the paradigmatic logic for SME development, but also provides a framework for production decentralization and re- organization. In recent years, the debate on the efficiency of SMEs has shifted from a consideration of individual small enterprises as efficient users of scarce factors of production to one that suggests a comprehensive analysis of enterprises together and taking into account the enterprises social and economic environments

(Yankson, 1996). The framework discussed or presented under the rubric flexible specialization has attracted various interpretations (Schmitz, 1992). Its various approaches, however, emphasize the advantages of clustered, cooperating SMEs. They also underscore the importance of inter-firm linkages and indirectly, local embeddedness of industrial production and the role of local technological capability. Flexible specialization also highlights the role of local technological capability. Flexible specialization also highlights groups of networking enterprises and their socio-economic environment, rather than the single enterprise, and thus better captures their dynamics (Yankson, 1996).

The flexible production paradigm is viewed as an alternative capital accumulation to the paradigm of mass production, aimed mainly at production restructuring. Its main focus is the "flexibility" introduced into the production processes of an organization. This paradigm has been controversial as its critics doubt its ability to restructure an economy significantly (Yankson, 1996). However, three aspects of the logic underpinning it are relevant to the development of SMEs: (i) while questioning the paradigm of mass production, this paradigm (ii) supports the small batch production organization, flexible ,production regimes, and (iii) a size distribution of labor in industry. Thus the movement away from mass production to customized, small- batch production organization provides a framework within which to analyze alternative approaches to small enterprise development, particularly in an environment where large firms dominate, and internal markets are too small and/or fragmented to support mass production.

The Japanese (Sato, 2000), Italian (Becattini, 1990) and German (Schmitz, 1992), experiences suggest that there is a complementarity between large and small firms regarding scales of production, generation and diffusion of innovations, and productive networking. In Japan, for example, the emphasis is not on downsizing large firms as it is

on linking small firms with large firm as subcontractors (Sato, 2000). In Italy on the other hand, complementarity is defined within the framework of SME networks which supply the large firms collectively, or have entered markets hitherto dominated by large firms (Becattini, 1990). In hypothesizing how this occurs, Mead, (1998) proposes that explanations are likely to be found with large firms, since the changes which are taking place in the size distribution of production in the United Kingdom and other economies is itself a function of strategic decisions and structural changes inside existing large firms as they adjust to a volatile and uncertain environment. At the operational level, large firms have responded by production decentralization and structural dis-aggregation (Mead, 1990) as tools for competitiveness, resulting in more flexible, leaner and flatter organizational structures. On the one hand, the internal efficiency of the downsizing large firms is expected to produce efficiency. On the other level, through integrated networks of suppliers and distributors, such firms can, arguably, access a wider range of inputs and markets (Sato, 2000).

The paradigm further argues that instead of seeking internal economies of scale, it is the external economies (of scale and scope), which are likely to lead a firm to competitiveness. Hence, in a combination of contract and quasi- integrated arrangements (flexible production organization), firms can cover wide markets, and also compete in market niches. At the same time, these flexible arrangements allow a firm to increase capacity, for example through capacity subcontracting, licensing and franchising, without necessarily altering their investment base or production activities in response to fluctuations in demand. It is also possible to obtain specialist capacity from external sources while concentrating on core activities (Harrigan and Newman, 1990). The resulting production decentralization becomes important for SME development.

Although the approaches discussed here provide a useful starting point in "explaining" inter-firm relationship formation, it must be pointed out that these theories have been developed by studying relationships between large, often public sector organizations in developed countries. Hence, this study seeks to explore the nature of inter-firm relationship between large and small private firms in developing countries. It is argued that inter- firm relationship formation in developing countries will take different patterns, for various reasons such as government involvement. With this in mind, it is hoped that this study will help address the gaps in subcontracting in Kenya.

2. 3 Approaches to Subcontracting in the Motor Vehicle Industry

Despite the varied nature of inter-firm relationships in general, in the motor vehicle industry, they have been documented largely as contractual relationships taking the form of subcontracting (Tumbull, 2000; Aoki, 2006). By definition, strategic alliances (or partnerships) are based on mutual need and cooperation (and mutual ownership of the activity in question), implying exchange relationships. Contractual relationships, on the other hand, imply that firms are more likely to pursue individual and separate efficiency advantages, emphasizing cost reduction and profit maximization. This kind of relationship is primarily founded on asymmetry (power dependency), where one firm is dependent on the other for survival, with an implied superior bargaining position of one partner (Aoki, 2006).

Sako (2005) argues that on the one end of a spectrum of patterns of transactions, firms use arms length relationships with a pure contractual basis, while others use obligational relationships with an exchange basis. Other patterns lie in between, exhibiting the characteristics of either pattern. Inter-firm linkages seem to have shifted from strictly contractual relationships to more collaborative ones as the nature of

production organization has changed. Earlier Japanese and contemporary European inter-firm relationships were generally based on a purely arms length contractual philosophy (Tumbull, 2000). However, this approach changed significantly in Japan from the 1950s with Toyota's transition to JIT procurement systems. The Japanese approach to inter-firm relationships has changed to what is referred to as the 'co-operative' approach to inter-firm relations. The next section examines the two approaches to inter-firm linkages and the implications on developing countries such as Kenya.

2.3.1 The Japanese Approach to Subcontracting Relationships in the Motor Vehicle Industry

It has been widely suggested that the high productivity levels achieved by Japanese manufacturers can be accounted for by the use of inter-firm relations. Hence the Japanese industry continues to offer, perhaps, the most prominent examples of inter-firm linkages both of a specific and cross industry nature. The Japanese themselves note that their industrial development has relied heavily on the linkages between large and small firms particularly subcontracting (Watanabe, 2009; Sako, 2005; Sato, 2000). Watanabe (2009) has argued that, in fact, the efficient use of small firms alongside large firms through subcontracting is what has given Japan its industrial prominence. In general, about sixty five percent of all manufacturing firms in Japan enter into subcontracting relationships (Aoki, 2006). Similarly, the importance of the supplier network in the Japanese auto industry cannot be over emphasized, where small and medium sized enterprises with less than 300 employees are particularly important in the lower echelons of the supplier pyramid (Sato, 2002)..The major corporations themselves account for a minimal proportion of the costs, but play a significant role of coordinating the production activities performed by a host of SME producers. In the Japanese motor vehicle industry, for example, Toyota and Nissan account for 25-30% of manufacturing costs of the vehicles

sold under their nameplate. The rest is paid to subsidiaries, affiliates and subcontractors, hence the need for a close relationship between large and small firms in the industry. Tumbull, (2000) proposes that it is because of this close relationship between large and small firms in the motor vehicle industry that Nissan enjoyed 30% cost advantage over Ford UK and British Leyland in the subcontracting of components in the 1980s.

Those attempting to draw lessons from the Japanese approach argue that Japanese competitiveness emanates largely, from supply chain management (Watanabe, 2009). The Japanese automobile industry, considered the core of Japanese industrialization, has exhibited some of the most innovative techniques and approaches to competitiveness, including just-in- time supply, long term collaborative contracts with a limited number of suppliers, flexible production organization, and quality management of the production process. In addition, simultaneous engineering procedures, involving the concurrent production of designs, dyes and various parts and components, implies that several firms can work on a 'project' at the same time, thus reducing production time by up to half (Womack et. al. 1990). One of the central themes in simultaneous engineering is the need to share information from ideation to actual production of all parts and components, leading to close collaboration between buyers and suppliers. In effect, therefore, the focus upon inter-firm relationships can be said to result from the ongoing search for competiveness in Japanese and European manufacturing. It would be expected, therefore, that motives of efficiency (and related cost reduction objectives) should dominate such relationships. Yet, evidence suggests that Japanese firms form and nurture relationships based on reciprocity and exchange (Sato, 2000; Sako, 2005), and a high element of trust between buyer and supplier. In effect, the Japanese model 'blurs' the dichotomous divide between contractual and strategic alliances, where efficiency is sought collectively rather than at the expense of the other party.

Sako (2005) and others argue that the main thrust of relations in the Japanese 'model' is the interchange of information and a considerable level of 'trust' between buyer and supplier, (the Obligational Contractual Relation - OCR). The basis of this relationship is of mutual need, action and dependency. The participants in the relationship feel mutual indebtedness or obligation to one another and this sustains the relationship (Sako, 2005). Womack et. al. (1990) argue that this has been possible in the Japanese environment because a rational framework exists for determining costs, price and profits. This framework makes the two parties want to work together for mutual benefit rather than look upon each other with suspicion.

Hence, according to Sako (2005) buyer supplier relationships do not only involve economic contracts covering the production and trading of goods and services, but are also embedded in more pluralistic social relations between trading partners who have a sense of mutual trust. Consequently, the exchange of information and benefits highlights an environment of reciprocity. The interdependence which ensues and the time span involved in this 'model' of buyer supplier relations, are recurrent themes in the literature that seeks to contrast the Japanese and British (or western) approaches to subcontracting.

2.3.2 The Western Approach to Subcontracting Arrangements in the Motor Vehicle Industry

The western approach to subcontracting, on the other hand, although exhibiting some form of interdependency between firms, has been asymmetrical, and has been regarded by many authors as 'adversarial' in nature (Tumbull, 2000). As already mentioned, according to Sako (2005), this pattern is characterized by limited inter-dependence; limited information exchange; limited benefit sharing; and typified by short term contracts. The main thrust of the literature is that in the western inter-firm relations, the element of 'trust' is limited to 'contractual trust' (expectations that promises made are

kept) or ‘competence trust’ (confidence in a trading partner’s competence to carry out a specific task), while ‘goodwill trust’ is limited in order to avoid ‘excessive interdependence’ (Sako, 2005). Arguably, this accounts for the ‘adversarial’ relations between buyers and suppliers with cost minimization at the centre of relationship negotiation. Clearly, this limits the frequency of subcontracting.

European and American vehicle manufacturers have realized that in order to compete with Japan, they must adopt matching or better strategies in their industrialization process. Comparing the Japanese and European automotive industry, Tumbull (2000) cites relative competitiveness of the Japanese manufacturers who produce vehicles of comparable specification and complexity using half the labour input of the average European plant. The same study, also found that Japanese motor manufacturers, consistently record superior (and improving) levels of quality while that of European motor vehicle manufacturers is static. Consequently, motor vehicle manufacturers in the UK and other European countries, in trying to meet these levels of competiveness, have to recognize the need to improve their performance levels and to adopt strategies which give them comparable advantages in supplier chain management.

Reacting to the Japanese challenge, European vehicle manufacturers are emulating their production and management practices. Transplants of Japanese firms dot the European map, and production techniques and resource management systems bear the Japanese label. In the UK automotive industry, for example, the use of JIT systems is increasing, and inter-firm relations between buyers and suppliers is increasingly seen as the primary vehicle for comparable levels of competitiveness already achieved by the Japanese. However, although firms such as Nissan (UK) are increasingly adopting Japanese buyer supplier relations, for example, by reducing the number of suppliers and

getting involved in supplier development (Tumbull, 2000), this is not yet a widespread phenomena among British firms.

Thus, although European manufacturers are also aware of the importance of cost management and efficiency, their approach is significantly different from that used by the Japanese. Western, particularly European manufacturers, have retained the old format which supports mass production, and are pre-occupied with cost control. According to Tumbull (2000), this is inadequate when trying to change production organization. It is clear from the Japanese experience that in manufacturing, cost minimization is not the whole story, but rather, it is the combination of cost management, human resource management, and continuous quality improvements which matter, in addition to firms' commitment to each other.

In addition, western manufacturers view productivity in terms of automation rather than in terms of changing their whole approach to input sourcing, production organization and distribution re- configuration. Tumbull (2000) suggests that one of the major ways for the western firms to compete with the Japanese is to re-organize the flow of work within their own assembly plants and between assembly plants and external suppliers. In many respects, an external relationship with suppliers is more important given that the unit cost performance of most manufacturing operations depend far more on the effectiveness of purchasing than on the close control of direct labour performance.

Yet not all firms fully appreciate the importance of inter-firm subcontracting. Auto manufacturers such as Austin Rover (UK) admit that scheduling buyer-supplier relations is among the last area of manufacturing control to be refined in their programme of re-organization and re-structuring. Although those firms associated with Japanese vehicle manufacturers such as Nissan (UK) have made an effort to programme supplier relations, even these, reports Tumbull (2000), are still preoccupied with short term

financial performance, as illustrated by their focus on work practice reforms and attempts to intensify the work process in order to force up labour productivity.

The next section examines related literature on the extent of subcontracting on the motor vehicle industry, the motivations that influence the arrangements, the demographic and operational characteristics of the suppliers, the benefits of subcontracting, and the internal and external constraints to subcontracting in Kenya.

2.4 Nature of Subcontracting in the Motor Vehicle Industry in Kenya

The motor vehicle sector in Kenya only assembles completely knocked down (CKD) kits imported from the major manufacturers all over the world. By definition, therefore, most parts and components are sourced externally as part of the CKD kit. In addition, the modest, relatively poor quality and expensive manufacturing activities for parts and components in this sub sector compels importers to ship in as much of the vehicle as possible in CKD kits. Further, by the very nature of motor vehicle production, the variety and complexity of the components used in the manufacture of a vehicle make it nearly impossible for a single assembler to produce all of its requirements. In the franchise holders category, the assembly process itself has to be contracted out since they do not have assembly facilities. There are also those difficulties raised by the proliferation of makes and models which works against economies of scale. Necessarily, therefore, the high set up costs (of frequent changes of equipment) would make it doubly difficult for in- house production. Based on these arguments therefore, there is a wide need for subcontracting and disaggregation within the sector.

The patterns of production in the motor vehicle industry indicate that there is potential for large firm disintegration considering that the production process can be 'de-coupled' and is easily divisible into sub processes (sub assemblies) and services. Despite

this intrinsic potential for subcontracting, Masai, (1991); Doner, (1993), Masinde (1996), found that large firms (LEs) were not voluntarily procuring their requirements from local firms, let alone small firms. Local sourcing, measured by local content levels, was used as an indicator of external sourcing.

Table 2.1 Locally Sourced Parts and Components: Aggregate Estimated Proportions

Item	Percentage
Tyres and tubes	100 %
Paints	100 %
Leaf springs	60-70 %
Exhaust and silencer systems	100 %
Wiring harnesses	50-60 %
Glass	90 %
Batteries	90-100 %
Shock absorbers	80-90 %
Seats, frames	100 %
Cushions and auto trims	70-80 %
Bulbs	65-70%
Metal parts (battery carriers)	10 %
Oils, fuels and lubricants	100 %
Radiators	95 %

Source: Masinde (1996)

The study by Masinde (1996) shows the items which were procured locally, giving an aggregate of approximate proportions by all the importers and assemblers who were involved in the study (Table 3). It is evident that even those items that were outsourced because they were mandated by the government were less than 100 percent of requirements ranging from 50 percent to 100 percent in proportion. One of the reasons advanced by many managers attributed this to what they regarded as poor quality of the supplier back-up: poor quality of parts and components or complete lack of suppliers for some items (Masai, 1991; 0wino, 1991; Masinde, 1996). As a result, assemblers and franchise holder have had ‘reasons’ to petition the government for permission to procure

their requirements from overseas sources since 'No Objection' certificates obtained from potential suppliers 'prove' that there were no local suppliers. The study goes on to state that interestingly; there was no way 'of proving' that the standards were lower than what was required by a buyer. Interestingly, the study states, some products were rejected because they did not meet the standards of the principle CKD supplier if even they could be considered satisfactory for the Kenya market. It was concluded that there was limited commitment by some franchise holders to the development of a local supply base, hence the outright rejection of items which could have been acceptable, perhaps with some improvement (Masai, 1991; Masinde, 1996).

It was also clear that assemblers and franchise holders did not outsource items not listed in the Legal Notices. It was only in two cases (the manufacture of jigs and some welding processes) that the assemblers outsource items not listed in the notices, an indication that in general, it was only pressure from the government that motivated the little outsourcing there was (Masinde, 1996). However, the study goes on to point out, while outsourcing of parts and components was minimal, the outsourcing of services was more widespread with the more technical services such as Research and Development (R&D), and Quality Control (QC) sourced externally but these tended to come from the suppliers of CKD kits, or the firm's parent company (Masinde, 1996).

2.5 Motivation behind Subcontracting Arrangements

Managerial explanations to the formation of subcontracting arrangements argue specifically from a managerial decision- making perspective. As Harrigan and Newman (1990) correctly argue, to understand inter-firm relationships, the motivation and propensity of firms to relate must first be understood. By this it is meant that the firm's desire to and inclination to relate with another firm, perhaps to access resources, markets

or technology is decided by the management. As already mentioned, recent global experiences suggests that answers can be found by examining the external pressures causing such developments, particularly those related to changes in demand patterns. These pressures are, however, difficult to replicate in an economy.

Since it is the decisions of individual firms which aggregate into what is considered industry behavior, other more intrinsic managerial explanations are suggested, namely: (i) that firms are searching for competitiveness by focusing on 'core competency' (Pralahad & Hamel, 1994); (ii) the increasing importance of the strategic implications of the efficiency of the supply chain to the competitiveness of the firm (Porter, 2001); (iii) the replacement of internal markets with external markets as one strategy to increase the value of the supply chain (Porter, 2001); (iv) the development of cooperative strategies by firms as strategy for entering markets and accessing resources and finally, (v) the development by smaller firms, of cooperative strategies for entering markets hitherto inaccessible because of scale related barriers (Brusco, 2004). Hence this category of explanations recognizes that the explanation for industry behavior can be found by examining individual firm behavior; decisions about production organization, organizational structure, sourcing activity and subcontracting.

Harrigan and Newman (1990) have also argued that this decision is largely predicted on the benefits of the linkage to the firm; whether the resource or the market offered by the 'partner' is critical to its activities; the costs of the cooperation/ linkage, including transaction costs, opportunity costs, strategic inflexibility resulting from cooperation and the damage to a firm's strategic advantage when such linkage occurs; whether alternative strategies exist or whether other sources of inputs or markets can be found; and the need to cooperate in order to access desired markets or resources; the centrality, urgency and necessity of the resource or market to the other activities of the

firm. Clearly, the central concern is the motivation of a firm to form relations with another firm, and how it perceives the possibilities of achieving its objectives using this strategy. The factors motivating firm to firm linkages with other firms as part of its business strategy is therefore of central interest to this study.

Casson (2000) makes a similar argument, but provides a useful categorization which brings together many of the issues raised in the literature. He groups the factors influencing the choice of contractual relationships against internal development into four broad categories: a) the nature of the advantage sought from the relationship. This means the advantage the firm is seeking in forming the relationships. Consequently, if a firm does not perceive an advantage, it is less likely to pursue subcontracting arrangements or any other form of inter-firm relationships; b) the nature of the firm, and its ability to 'support' the relationship; c) the nature of the industry, and norms, relative stability, levels of uncertainty and other factors. This means the industry environment within which the firm operates. Consequently, if the firm seeking a relationship concludes that the nature of competition or industry activity are best addressed using inter-firm linkages, then such a strategy will be used and d) the nature of the wider business environment. This refers to the country or international setting within which managers have to make their decisions. As Porter (2001) has argued, the wider environment determines, to a large extent, whether a firm uses internal or external sources such as suppliers. The most prominent of these conditions is the extent to which the supplier offers adequate infrastructure choices for a large firm to use it.

Kumar and Subrahmanya (2007), point out that a corporation participates in subcontracting activities for two basic reasons: because it good business and out of a sense of responsibility for community service. To say that it is good business means that linkage contracts provide the corporate buyer with needed inputs of the required quality

and quantity at competitive prices, delivered in a timely manner thereby reducing costs and enabling the corporation to concentrate its capital and management skills on a more limited range of activities (its ‘‘core business’’). Jenkins et al (2007), indicate that what motivates a company to engage in subcontracting are: to reduce and control operating costs in manufacturing, to improve company focus, and to access world class capabilities, to free resources for other purposes, to access resources not available internally, to accelerate re- engineering benefits, to improve the efficiency of functions difficult to manage or out of control and to make capital funds available to share risk to induce cash flow.

Large firms in the motor vehicle industry considered control over resources (suppliers), markets, the government and its competitors as more important in making decisions about subcontracting. The most frequently cited motive was access to and control of suppliers, in this case the CKD kits. This priority was linked to the need to comply with government regulations as a way of ensuring access to import licenses for scarce resources. Thus, allowing for variations depending on the activity in question, for various components and sub assemblies, decisions to externalize or internalize transactions were made not necessarily with cost in mind, but to maintain this control (Masinde, 1996).

A study in South Africa by Annim and Machethe (1998), established that the other reason why small firms seek linkages with large firms is the desire to avoid rules, specifically to avoid paying taxes, to escape the regulations, or to employ workers in patterns not consistent with union agreements or bargaining council decisions. However, even though this factor appeared significant, in general, the same study continues, there are linkage suppliers that are most competently managed, are growing most rapidly, and are generating the highest returns for both owners and workers within the enterprise. It is

not necessary for small suppliers to operate outside the rules for them to be part of a competitive and efficient supply system.

In industrialized countries, changes have also occurred at the level of the competition. The basis of competition changed from price to quality and product differentiation. Consequently, competitiveness is measured by the value delivered to the consumer, and also to the extent to which a firm can access a large number of market segments. Competition is on the level of scope, an ability to serve as many market niches as possible. Consequently, high product differentiation is demanded by the nature of the market. Secondly, the growing importance of the dis-aggregated organizational components of production implies that the organization has to restructure to deal with such high differentiation. These changes fundamentally recognize the primacy of organizational change in addition to the changes taking place at various levels of productive restructuring (Kaplinsky et al 2004).

According to Tumbull (2000), at inter-firm level, because of the need to control inventory costs and to outsource, the efficient use of outside suppliers has become imperative and competitiveness is defined by access to good quality, reliable suppliers, or denying competitors access to such suppliers. Hence, merely having more efficient production techniques is not enough for competitiveness. It has become important to have more efficient relationships with suppliers of inputs and distributors of inputs. The importance of the whole of the supply and distribution chains is emphasized. Consequently, the buyer-suppler relationship is increasingly changing from an adversarial one based on price, to a cooperative one based on collective competitiveness through customer satisfaction (and resultant loyalty). For example, in the Japanese model where zero defects means that the supplier has to work closely with the buyer in order to achieve the quality and delivery standards required, short term cost minimization is not important.

As Sako (2005) notes, buyers often invest time and personnel in making sure that the supplier's product meets the required quality standards without any rejects.

In the western model, the concept of zero defects does not exist. Instead, the quality of products is controlled at the end of the production process, often too late to make alterations. For the supplier, it is only the quality approved items which enter the buyer's production process. For example, Tumbull (2000) notes that in the UK, manufacturers have adopted 'corrupted' forms of JIT where warehouses are located close to the plant, timed deliveries are made to the buyer's plant and invoices are made only when parts enter into the assembly plant. Hence, the supplier has to bear the cost of defects in addition to warehousing as well as inventory costs (Thongpadke et al, 2002). The buyer is, therefore, unlikely to be interested in the problems causing such defects since the costs are borne by the supplier. Both the buyer and the supplier are then left with no basis for bargaining, other than price.

However, although competition based on cost minimization is important, it is not necessarily primary. Both the Japanese and European models assume that production organization is aimed at increasing productivity and efficiency; hence, subcontracting is seen as a function of these goals. Consequently, keeping the costs of the supplier chain low becomes one of the key elements for achieving efficiency, and by extension, competiveness. The main difference in the two models is that in the Japanese approach, competitiveness is seen in terms of the long term benefits while the British model takes a short term view to competitiveness (Sako, 2005).

In developing countries, however, supplier chain efficiency may not necessarily be a valid motivation since one of the primary concerns of industrialization is the localization of industry and capital. Subcontracting, particularly between SMEs and TNCs are more likely to be affected by political implications of resource ownership and

control. Hence, keeping the costs of the supplier chain low is not as important as gaining access to and controlling resources. Due to uncertain economic conditions in many developing countries, firms have had the incentive to integrate as assurance against endemic resource scarcity. In these circumstances, the government is more likely to make subcontracting mandatory to encourage it (Sako, 2005).

A study conducted on subcontracting in Thailand by Thongpadke et al (2002), points out that industries usually subcontract out for several reasons. The finished product usually consists of various parts and components parts. The cost of establishing several manufacturing capabilities for some of these components do not always justify themselves. Thus it is sometimes more desirable for firms to establish subcontracting agreements when the cost savings exceed the transaction costs of such arrangements. Second, the production of these industries is usually in the mature stage of their respective product cycle. Therefore, there is no critical or strategic technology involved in the production of these parts and components. Finally, since these industries are modern and involve high technology, entrepreneurs in these industries are relatively well educated compared to others. They know how to manage the subcontracting arrangements. Furthermore, since the industries are rather competitive, subcontracting agreements to reduce costs sometimes become a necessity (Thongpadke et al, 2002).

The reasons for engaging in subcontracting arrangements vary among firms. The most frequently cited reasons for large firms are production flexibility, subcontractor's specialization, local content requirements, and avoidance of labour management problems. Reasons given by SMEs involved in the subcontracting arrangements include greater use of production capacities, assistance from parent firms and reduction of marketing costs. The most important consideration of the large firms is the ability of the SME to meet delivery schedules. The quality, price of the products and

technologicalcapability of the suppliers is also important. Suppliers, however, have tended to overlook the importance of on time deliveries, thinking that product quality and price are the large firms main priorities (Thongpadke et al, 2002).

2.6 Characteristics of SMEs in Subcontracting Arrangements with Large Enterprises

Trans National Companies (TNCs) attach a lot of importance to building up and maintaining a positive brand image and a reputation for high brand quality and responsiveness. They, therefore, place much emphasis on ensuring that the entire value chain be organized with modern SMEs and a few untypical ones which possess state of the art technology and a professional management (Alttenburg, 2000). The main criteria for the choice of supply outlets are: the quality and content of the offered service, and the price of the service. The selection decision is based on data of the company and its reputation in the industry (Kumar & Subrahmanya, 2007).

Small suppliers with business linkages have larger number of family members employed in the business. This could suggest that these businesses are in a more advantageous position in terms of labor required to produce goods and services sold to buyers than small suppliers without linkages. Employment of more family members in business could also contribute to small business with linkages being more profitable than those without linkages as they do not have to pay high wages. Small suppliers with business linkages have a higher level of education, which is positively associated with business linkages (Skae, 1998).

According to Mead (1998) in study on business linkages in Kwa Zulu, Natal, there were more entrepreneurs who were sole proprietors in the group with linkages than in the group without linkages. This could mean that linkages are easier to establish in sole proprietorships because of less complex decision making than in partnerships (that is,

decision making in partnerships involves higher transaction costs than in sole proprietorships).The proportion of small suppliers that had drawn up business plans was higher among suppliers with than in those without business linkages. This could suggest that suppliers that drew up business plans were the more successful ones and buyers were interested in establishing linkages with them. Furthermore, selling to other business requires some sophistication and the more sophisticated businesses will often have drawn up business plans (Bbenkele, 1998).

The same study established that there was a larger proportion of business that had a recognition agreement with workers in businesses with linkages than in those without linkages. This could mean that buyers prefer to have linkages with businesses that have a recognition agreement. Perhaps buyers regard recognition with a trade union as an indication of stability in the supply of goods and services by small business. Business linkage experience seems to be an important consideration for buyers in deciding whether to establish linkages with small suppliers (Annim & Machethe, 1998). Small businesses with linkages tend to be those that have done business with large firms before. This suggests that buyers prefer establishing linkages with small suppliers that have had dealings with other buyers. This also implies that once a small supplier starts selling to another business, it becomes easier for the supplier to find an additional buyer (Skae, 1998).

The majority of small business with linkages indicated that buyers provided advice, business counseling, financial training and credit. These services were aimed at helping small suppliers to become successful businesses. It was also established that those businesses with linkages tend to be the more successful ones. On the other hand, small suppliers that had linkages (but terminated them) tend to be those that were less successful. This could suggest that buyers prefer to do business with successful small

suppliers and are prepared to make them more successful by providing support services because this would also benefit the buyers (Kumar & Subrahmanya, 2007). Both small suppliers with and without linkages considered the following factors as important in satisfying buyers: good price, good quality, timeliness of delivery and volume of sales of products. However, the proportion of small suppliers that indicated that these factors were important was higher among small suppliers with linkages than those without linkages (Aw, 2001; Ajayi, 2003).

2.7 Benefits of Subcontracting to SMEs

Inter-firm linkages between vertically related firms involve coordination of the activities through continuous mutual exchange of information (Lall, 1980). These linkages are more important for less developed countries where technological capacity is limited and where the market itself cannot provide the necessary means for potential suppliers to reach an adequate level of technological and managerial competence. Economies of scale are ideally combined with the flexibility of small enterprises in supplier relations to have a well-balanced structure of enterprise sizes. SMEs can profit from this situation in a number of ways. Large enterprises, in addition to opening up new markets for SMEs, facilitating a regular receipt of payment and relieving SMEs development and marketing tasks, can be an important impetus for modernization and growth (Altenburg, 1999). The typical economic logic of large-small subcontracting lies in the fact that large firms can do some things better than small ones but other things less well (Berry, 1997).

The main constrains on SME development in developing economies are poor access to markets, market information, raw materials, capital, modern technology, managerial skills, sufficient production facilities and others. TNC parent firms, through subcontracting systems, may provide better access to these resources (Hayashi, 2005).

According to Hondai (as quoted in Hayashi, 2002), the main benefits SMEs can obtain from subcontracting transactions with large scale parent firms are: (a) the reduction of information and transaction costs through subcontracting ties, which includes easy and cheap acquisition from large scale parent firms of new technologies, product design, production process, management methods, marketing and input materials (b) the reduction of risks and uncertainty and an increase in expected rate of profit as a consequence of stable orders and better payment conditions and (c) the improvement of credit worthiness (Kumar & Subrahmanya, 2007).

Inter-firm linkages are characterized by the diffusion of technology and skills to suppliers, customers and institutions with which they have direct dealings. Most industries have dense vertical networks of information exchange and cooperation to facilitate production, planning and technology development. Firms outsource components and services more than they ever did and they have more close collaboration with suppliers and buyers in their technological efforts. Globalization gives such collaboration an international dimension with supply contracts extending over national boundaries, suppliers following their customers overseas and having new suppliers operating in cheaper areas (UNCTAD, 1999).

2.7.1 Large Enterprises and Knowledge Transfer to SMEs

The comparative advantage of most developing countries lies traditionally in primary commodities and unskilled-labor-intensive manufactures. Over time, as they grow and accumulate these resources, it brings out the need for them to upgrade their primary and labor-intensive exports into higher value added items and they have to move into new, more advanced export-oriented activities. But this up gradation requires greater inputs of skill and technology. Countries can attain these objectives in several ways: by improving

and deepening the capabilities of domestic enterprises, by tapping into LEs networks as conduits for trade, or by attracting FDI into export activities and upgrading these activities over time. These strategies may be complementary or alternatives. In most cases they are found together but different countries deploy different combinations of domestic enterprise-led and FDI - led export development (UNCTAD, 1999).

Inter-firm linkages are especially important in developing countries where technological capacity is often underdeveloped and where the market does not provide the means for potential suppliers to reach adequate levels of competence in technology or management (Iversson & Alvstam, 2004). Many large enterprises, also referred to in this study as Transnational Companies (TNCs), are setting up their production bases in developing countries where better conditions of manufacturing (mainly labor and infrastructural conditions) prevail to have advantages of productivity and distribution. Technology transfers from industrialized to these developing economies are to a large extent based on local inter-firm linkages arising from the regular production of these TNCs, and not just from more advanced R & D operations (Iversson & Alvstam, 2005). Various institutional mechanisms created by these assembler firms can play a major role in upgrading the skills of the suppliers, thus transforming the supply chain into a learning chain (Okada, 2004).

Trans National Companies transfer technologies in two ways: internalized to affiliates under their ownership and control, and externalized to other firms. Internalized transfer takes the form of direct investment and is, by definition, the preserve of large enterprises. Externalized modes of transfer by TNCs take a variety of forms: minority joint ventures, franchising, capital goods sales, licenses, technical assistance, subcontracting or original equipment-manufacturing arrangements. TNCs are not the only source of externalized technology, of course. But they are very important in high-

technology activities and in providing entire “packages”, that is,. technology together with management, marketing and so on, External technology transfers can have a high potential to contribute to technology upgrading, since local firm can more easily absorb, adapt, improve the acquired technology, given that they have the capabilities to undertake efficient earning (UNCTAD, 1999).

Backward linkages involving subcontracting can provide one of the major benefits that developing countries seek from large enterprises in the form of stimulation of local firms as suppliers of components and semi-processed goods and materials as per the specification of the large enterprises. These linkages can play a major role in the creation, growth and technical development leading to the independent existence of the linked enterprises (Kumar & Subrahmanya, 2007). But large enterprises demand high levels of technological capabilities and other performances from the suppliers and hence domestic suppliers face tougher competition from international supplier companies that follow their large enterprise customers abroad. A major share of the local procurement by large enterprises in developing countries is from their traditional “follow-source” suppliers, headquartered in the industrialized countries (Iversson & Alvstam, 2004; Meyn, 2004). But at the same time, large enterprises accepting the institutional preconditions of host countries of choosing local suppliers to be present in the local market, investigate whether some of the imposed local suppliers, through technological transfers, can be upgraded to become global suppliers within the internal production network of the large enterprises (Iversson & Alvstam, 2005).

The most important decision for large enterprises regarding the linkages is sourcing: the purchase of inputs, components and services from local as opposed to foreign suppliers. Sourcing decisions of foreign firms depend only on relative cost, quality and delivery, and reliable information on supplier capabilities. All other things

being equal, firms prefer local procurement because proximity lowers transaction costs, allows for close monitoring and gives greater flexibility in changing specifications and developing new inputs. Face-to-face contacts with suppliers are essential where building of trust through direct interaction is crucial because of tight technical specifications and quality of products and processes. For these reasons, as long as the costs of doing so are lower than resulting savings, firms invest in helping local suppliers upgrade their technology (UNCTAD, 1999).

Large enterprises that can be powerful sources of demand for the output of local SME suppliers can be more effective than linked domestic firms in enhancing capabilities and quality of these suppliers to international levels by transmitting technical or market information, skills, finances and other forms of assistance. Benefits that TNCs transfer in terms of financial, technological and human resources will provide the supplier firms access to state-of-the-art technologies and to large international markets (Lall & Mortimore, 2000).

Technological assistance can be mainly of two categories: for product related technology and process related technology (UNCTAD, 2001). Product-related technology transfers include the provision of propriety product know-how, product designs and technical specifications, technical consultations with suppliers to help the latter master new technologies and regular feedback on product performance. Process-related technology transfers include the provision of machinery and equipment, technical support in product planning, quality management, inspection and testing, and advice on tooling, maintenance, production layout and operations. Moreover, large enterprises can also transfer organizational and managerial know-how related to inventory management, delivery and logistical systems. Large enterprises may also offer training to their

suppliers and assist them by sharing business information, not only their own business plans, but also on general technical, market and business matters (Aw, 2001).

Large firms can continue the upgrading of management and organization systems in host countries through beneficial spillover effects on local firms (suppliers, buyers and competitors). This has been particularly noted for Japanese large enterprises investing in other overseas countries and it is also true of developing host countries where foreign investors have often triggered the adoption of modern management techniques (Lall & Mortimore, 2000). Subcontracting linkages between host firms and large enterprises are of great importance to the developing countries because they provide a means of diffusing valuable knowledge throughout the economy not only through direct flows to the linked firms but also by ways of spillovers to other firms in the economy. Spillovers can take place through demonstration effects, mobility of trained labor, enterprise spin-offs and competition effects (UNCTAD, 2001).

Technological assistance provided by large enterprises to small, inexperienced suppliers has more impact on performance as compared with the same assistance to large, experienced, international suppliers with substantial in-house resources (Iversson & Alvstam, 2004). Hence SMEs of developing countries should make use of the assistance that they are able to receive through subcontracting relationship with large enterprises for their development. According to Aw (2001), a study done on subcontracting in Taiwan, China, established that even small firms are able to subcontract the production of many of their components. This means that they do not have to spend much on fixed assets such as machinery, which in turn, reduces the cost of exiting the market.

2.7.2 Benefits of Subcontracting in the Motor Vehicle Industry

Many researchers have investigated the role of SMEs in the economic development of a country and some of the studies have analyzed the role of inter-firm linkages, especially subcontracting, in the development of SMEs. Based on experiences in East Asia economies, Hayashi (2005), consolidates the major benefits extended to SMEs through subcontracting relationship with large enterprise firms as follows: a) guaranteed purchase of parts and components produced by SME supplier over a long period of time; b) provision of raw materials and intermediate inputs contributing to a saving in scarce working capital for SMEs and provision of technical assistance and second-hand equipments to SMEs enabling them to improve on quality, cost and delivery of products.

Hayashi (2002) indicated the positive role of vertical inter-firm cooperation, involving subcontracting, in improving productivity of Indonesian SMEs. Small and medium enterprises with limited human and financial resources have difficulty to acquire technology, develop markets and arrange financing by themselves. Collaborative inter-firm linkages with large firms help SMEs to overcome these limitations. Deardorff and Djankov (2000), exploring the importance of subcontracting as a source of knowledge transfer and increase efficiency for the Czech firms, found out that there was a positive correlation between subcontracting and knowledge transfer which resulted in increased firm efficiency. Iversson and Alvstam (2005), using the study of suppliers of AB Volvo in four countries, revealed the evidence of technology transfer to domestic suppliers even when follow-source suppliers have captured the dominant part of the local purchases by the foreign TNC. Even relatively, short-term relationships can generate important benefits for domestic suppliers when long-term relationships are very much important for close, inter-firm learning and collaboration between customers and suppliers (Kimura, 2001).

Iversson and Alvstam (2004), using the study on the business relationship of Volvo Trucks, and its suppliers, showed that the technological assistance given by contractor to suppliers to the long term improvement of the suppliers with enhancement of productive and flexibility. Volvo contributed to improved performance of suppliers by introducing international quality product and processed standards, helping them to meet more stringent requirements. Most important areas in which Volvo gives assistance is in the introduction of new product technology and designs along with new process technologies leading to improved product and process quality. Improved technological competence can also spill over to process technologies used for the production of components supplied to other customers and to production layout as a whole. Volvo's assistance had improved suppliers' relations with other customers and good-will and reputation benefits of being an approved Volvo supplier have enhanced customer base. By gaining access to new components and raw materials and through the experience gained from manufacturing new customer-specific components, the suppliers also strengthened competitiveness in India as well as export markets.

The introduction of stringent international quality standards and new process technologies to first-tier suppliers was also passed on to second-tier suppliers, thereby contributing to long-term improvements among the small companies that make up the lower tiers of Indian auto-component sector. A report by UNCTAD (1999), based on the empirical study from India, Peru and Morocco, indicates that backward linkages by large enterprises can be important to a developing economy for increasing local production and upgrading local industrial capacity by way of transfer of technical knowledge to small local suppliers and upgrading of their products. Okada (2004), revealed the significant role that inter-firm linkages played in fostering workers' skill of domestic suppliers, particularly small firms of India in the globalization era. Changes in the

patterns of skill development of suppliers reflect the formation of close supplier relations entailing performance-based reciprocity, similar to the Japanese model. Frequent interactions between customers and suppliers through various channels ensured rapid information flow leading to quick diffusion of knowledge, skills and values among suppliers. This type of collaborative reciprocal relationship between assemblers and suppliers transformed the supply chain into a learning chain.

Firms should develop innovative capabilities for their survival in the era of global competition. Firms rely on their internal capabilities and or their external linkages as the sources of innovation. Technological innovation capabilities of a firm have a positive effect on competition performance of that firm (Yam, et al, 2004). Empirical evidence shows that large firms tend to rely more on internal factors like formal R&D and accumulated technology (Yin and Zuscovitch, 1998) while small firms rely more on external linkages with customers and suppliers for their innovations (Lee, 1995). Soderquist et al. (1997), based on the study of innovation in French SMEs, consider demands placed on business by customers/clients, close working relationship with a key customer, and input from their own R&D department as the most relevant sources for successful innovation in product/service.

Rothwell (1991), based on the data on SMEs of UK that subcontract, explains that manufacturing can be an important means of gaining access to new production technologies for many small firms and can enable firms to innovate products requiring new production techniques, without having to invest initially heavily in expensive, sophisticated production equipment. Most of the SMEs, which are basically subcontractors for other companies, do not perform R&D in any formal sense and much of their technology is derived from their customers. Engaging in external technical and other linkage activities can increase the technical, market and managerial know how of

the small firm and can form an important part of its overall innovatory activities leading to competitiveness (ILO, 2005).

2.8 Constraints to Sub-Contracting Arrangements

Annim and Machethe (1998), in a study on business linkages in Kwazulu-Natal, point out that constraint on the expansion and improvement of linkages are, according to suppliers: limited application of new technology, poor product quality, unreliable delivery of goods or services, and high products prices as important constraints on linkages. Most suppliers with linkages considered the matching of requirements of buyers and suppliers as a constraint on the expansion of linkages when considering the issue of intermediaries in linkages. This is an indication that suppliers consider intermediaries as not helpful in solving their problems (Bbenkele, 1998). Suppliers also consider the issue of intermediaries not selling their services aggressively as one of their major constraints. More businesses with linkages, than those without linkages considered this factor as a constraint. It was not surprising more businesses with linkages indicated that they did not know of any intermediary agency (Annim & Machethe, 1998).

As regards buyers, it seems that certain factors impede them from establishing linkages with small suppliers. The majority of buyers who indicated that they did not have linkages with small suppliers had linkages with large suppliers. Although the same issues that were identified as important constraints by small suppliers were also identified by buyers, limited application of new technologies by small suppliers was mentioned by most buyers (with and without linkages) as a constraint of business linkages. It is worth noting that issues of product quality, price and delivery are important for suppliers with linkages but less important for buyers and suppliers without linkages. This could suggest that these issues become important as suppliers get involved in linkage activities (Bbenkele, 1998).

Lack of incentives (for example, tax rebates and subsidies) on the part of the government was mentioned by a little over half the buyer without linkages with small suppliers as an important constraint on linkages, but was viewed as important by most of the buyers with linkages with small suppliers. This could suggest that lack of incentives on the part of government is not the real reason for buyers not to have linkages with small suppliers (Annim & Machethe, 1998). In evaluating the competitiveness of SME's through linkages (Kumar & Subrahmanya, 2007), state that large companies, especially multinationals assert that there is no lack of opportunities for them to forge linkages with local SME's in host countries but rather a lack of suitable SME suppliers who could meet the TNCs corporate standards or international standards of corporation. SMEs therefore lose such opportunities because they lack information, experience, contacts and above all the human and financial resources to implement urgently required systems and technological base of their enterprises. In South Africa, some suppliers complained that racial discrimination influenced the allocation of Approved Supplier Status (those on this list apparently receive larger orders at minimum tender prices), with priority being given to white and Asian suppliers (Skae, 1998).

Another constraint seems to be unreliable and small orders especially where SME owners invest heavily on equipment to meet the suppliers. One investor had invested R 300,000 in equipment to enable him to supply the corporate with motor vehicle component parts, yet after ten months of cooperation he received no further orders for two years with no explanation as to why these had been cut off (Kimura, 2001). There was also the issue of late payment. This imposed serious hardship on them as they needed to pay their workers and sometimes their own suppliers more frequently. Another complaint by SMEs is that they find themselves at the mercy of the buyers and they have no choice but to accept the terms offered even when they recognize that these terms are

exploitative (Skae, 1998). In Thailand, most of the subcontracting arrangements that were cancelled was due to poor product quality (Thongpadke et al, 2002).

Studies have established that while large firms have an inherent capacity to subcontract with the local SMEs, there were no incentives in the environment to encourage this for example; the proliferation of makes and models continues to prevent a rationalization of productive organization in the industry. This is aggravated by the importation of cheap second hand vehicles. In turn, the parts and components sub sectors were not able to cope with the complexity and variety of requirements of the of the replacement market. Consequently, it is difficult to accumulate experience to meet the quality standards demanded by the assemblers and franchise holders (Masinde, 1996).

Due to their multinational status, manufacturing firms in developing countries are largely modeled on western organizational forms, generally organizing production along the principles of mass production. Consequently, inter-firm relations are unlikely to be used. While some research (McCormick & Ongile, 1996; Yankson, 1996) documents some transition from mass production to flexible specialization in developing counties, in Kenya to be specific, little is yet known about the specific elements of inter-firm relations in these countries, and even less about their motor vehicle industries. However, other factors affect the development of inter-firm linkages, the most prominent being market failures brought about by, among other factors, the impact of state intervention in market mechanisms, liberalization of the economy, among others. Failures in input markets of developing countries have made it easier for firms to integrate rather than use external markets.

In developed countries, the availability and quality of suppliers is assumed. In developing countries on the other hand, the supplier base has not developed at the same rate. One of the factors affecting the localization of input procurement is the perceived

"quality" of the supplier base. The vertical integration literature argues that one of the main reasons for vertical re- integration by firms is market failure – market failure affected by asset specificity, frequency of transactions, the number of buyers and sellers in that market and the balance of power between them. Although the localization strategy has been used in developing countries to develop a supplier base, the conditions that encourage vertical integration continue to exist. In the Asian countries, for example, competition is undermined by collusion among foreign firms or by the restrictions on input sourcing in contracts between local suppliers and their foreign customers. The government has contributed to this market failure by mandating local sourcing and concomitant localization levels (Mardon, 1990).

Assemblers can also hinder the development of local suppliers by withholding financial and technical support from them, either to justify their opposition to local sourcing or to justify vertical integration. According to Doner (1993), by failing to provide prototypes, technical training, sufficient lead time for new products or product changes, and favorable terms of payment, the uncertainty of suppliers increases. Evidently, this environment does not allow for cooperative relationships. Yet, it is clearly evident from the Japanese inter- firm relations that a more cooperative relationship offers a better environment in which to promote mutually acceptable criteria for analyzing costs, establishing prices, sharing profits and transferring technology (Womack et al, 1990). In Korea, for example, pressure from the government helped to encourage assemblers-supplier co-operation by promoting the suppliers through financing and training and encouraging the formation of the Korean Automobile Industry Co-operative Association. The strength of the supplier base is often evaluated in terms of product quality and supplier performance (Doner, 1993).

2.9 The government of Kenya's policy on subcontracting

This study recognizes that one of the salient features of developing countries is the role of the state, which Austin (2000) views as the 'mega force' operating at the macroeconomic level. The actions of the state substitute for and change the dynamics of market forces, by occasionally intervening directly (through licensing, tariffs and other factors) to influence the adaptation choices and processes of firms within industries, thus changing the competitive environment drastically. In this context, the government can influence organizational choices by limiting the alternatives available in the market. Import licensing for example, plays an important role in determining managerial choices about sourcing, while employment restriction can limit access to skilled manpower.

Austin (2000), documents the role of the state in dictating domestic content in production activities, in effect, controlling the sourcing possibilities in many industries. Doner (1993) also gives the examples of Malaysia, Thailand and Korea in stating that the motives of economic nationalism have led these governments to legislate the levels of local content to be used in some industries. The result, he argues, is a larger indigenous supplier base, using more 'local' technology. Kenya has followed a similar strategy in the motor vehicle industry (Republic of Kenya, 1989), although with limited success. Current market orientation approaches advocate less 'interference' by the state, yet, recent experiences of South East Asian countries, offer a compelling, rationale for state guidance in economic development. Austin (2000) argues that in fact the state can play a positive role in the industrialization process by prescribing conducive business environments and 'guiding' resource use for predetermined periods in the country's development process.

Like many developing countries faced with the realities of poor economic performance, and spurred on by the successes of formerly developing countries in Asia (known as Newly Industrialized Countries- NICs), Kenya saw SSEs as a vehicle for

developing an indigenous entrepreneurial capacity. Initially arguing that indigenous entrepreneurs were limited by a lack of resources, particularly finance and managerial training, the initial programmes or strategies aimed to reduce these limitations. The policy measures or programmes which have been designed specifically to guide the development of the sector range from developing assistance institutions which support small enterprises, those which initiate institutional and regulatory reforms to assist the SSE sector, and those seeking to directly offer support to small enterprises.

These strategies were formulated to promote entrepreneurship by focusing on small enterprises, arguing that SSEs were predominantly set up by indigenous Kenyans, and could constitute the basis for developing an African business class in Kenya. Little was done to find "real" entrepreneurs in the economy; hence all SSE owners were considered potential candidates for the various assistance programmes such as finance, training and marketing, which were specifically designed for SSE owners. Since the sixties, for example, in addition to various special programmes in the commercial banks, various development banks have been set up to finance 'indigenous entrepreneurs'. Some examples include Kenya Industrial Estates (KIE), Development Finance Corporation of Kenya (DFCK), Kenya Commercial Finance Corporation (KCFC), Small Enterprise Finance Company SEFCO), Industrial Development Corporation (IDB) and the Joint Loan Board Scheme (JLBS). The Exchange Control Notices 19 and 36 particularly short term loans of 1971 reinforced this strategy by regulating the foreign companies' access to local capital, particularly short term capital, thus freeing large proportions of local capital to be used by local SSE owners.

In addition, the Kenya Industrial and Business Training Institute (KIBTI) was set up specifically to train indigenous business owners and their staff. To a large extent, these have continued to be the bases for the small and medium enterprise development

programmes initiated and supported by the government as indicated in the PSDS (Republic of Kenya, 2006 - 2010). In addition to these set of promotional strategies, African businesses were given preference in particular areas of business through the Trade Licensing Act of 1967. The same act also established the Kenya National Trading Corporation (KNTC) which was to affect directly the activities of the foreign owned commercial firms. The Transport Licensing Regulations Act of 1967 restricted domestic transportation to Kenyan owned firms, even in the lucrative oil and oil products transportation Bureau regulated employment of non citizens through work permits forcing foreign farms to 'train' Kenyans in industrial jobs (Masai, 1991). The conclusion arrived at by the Sessional Paper No 1 (Republic of Kenya, 1986) provided through the political basis, a change of emphasis in the promotion of MSMEs in Kenya.

However, the most noticeable change in focus has been the development of a coherent strategy for MSME development articulated in the Sessional Paper No 2 (Republic of Kenya, 1992). In this paper, the government, recognizing the fact that one way of enhancing MSME growth was through business linkages between large businesses and small ones, recommended that the Ministry of Finance and Planning initiate studies on the feasibility of subcontracting as a means of promoting the growth of small businesses. Sessional Paper No 2 (Republic of Kenya, 2005) points out those poor business linkages is one of the causes of lack of market access by MSMEs and proposes subcontracting between large enterprises and MSMEs as one way of tackling this problem.

A second change in approach has been the increasing shift to private sector participation in implementing assistance programmes to the sector, with the government coming up with the PSDS (Republic of Kenya 2006-2010). In this strategy paper, the Government has developed a strategy to address the constraints which restrict the growth

and competitiveness of the private sector in the country. The two strategic objectives of the PSDS are to create a conducive business environment for the private sector growth by alleviating major constraints and to enhance the growth and competitiveness of the private sector, especially the MSMEs (Republic of Kenya, 2004 – 2010). In order to achieve this overall objective of the PSDS, five specific goals have been identified. They are: a) improving Kenya's general business environment, b) accelerating public sector institutional formation, c) facilitating economic growth through greater trade expansion, d) improving the productivity of enterprises and e) supporting entrepreneurship and indigenous enterprise development The last objective will be achieved through four contributing objectives namely: a)facilitating the development of new enterprises; b) improving access to capital; c) facilitating graduation and evolution of enterprises and d) promoting firm to firm linkages especially subcontracting.

2.10 Conceptual Frame-Work

A conceptual framework is a diagrammatic explanation of the relationships among the various variables of the study. The descriptive categories are systematically placed in a broad structure of explicit proposition statements of relationships between two or more empirical properties. It comprises of independent and dependent variables. An independent variable (IV) or the exploratory variable is the presumed cause of changes in the dependent variable (DV). It is caused or influenced by the independent variable(s). The dependent variable is the variable the researcher wishes to explain; it is also called criterion or predictor variable (Kothari, 2004). Coopers and Schindler (2006), state that the intervening variable (IVV) is a conceptual mechanism through which the IV might affect the DV. It is the factor which theoretically affects the observed phenomenon but cannot be seen, measured or manipulated.

The study adopted a conceptual frame-work of strategic importance to identify some underlying forces behind different aspects of the key concept of subcontracting. It suggests an inter-relationship among six groups of variables in this study (see Figure 3). It posits that the subcontracting arrangements in the motor vehicle manufacturing industry in Kenya between large enterprises and SMEs in Kenya is determined by the motivation behind the arrangements; the demographic and operational characteristics of SMEs engaged in subcontracting arrangements with large enterprises; benefits of subcontracting to both SMEs and large firms and internal and external constraints experienced by both sides. The study first established the nature of any existing subcontracting in the industry.

The subcontracting arrangements are also affected, to a significant extent by the policy adopted by the government. As pointed out by Sako, (2005) due to uncertain economic conditions in many developing countries, firms have had the incentive to integrate as assurance against endemic resource scarcity. In these circumstances, the government is more likely to make subcontracting mandatory to encourage it. This has aided the study in establishing the reasons for the gap in subcontracting arrangements between large firms and SMEs in Kenya.

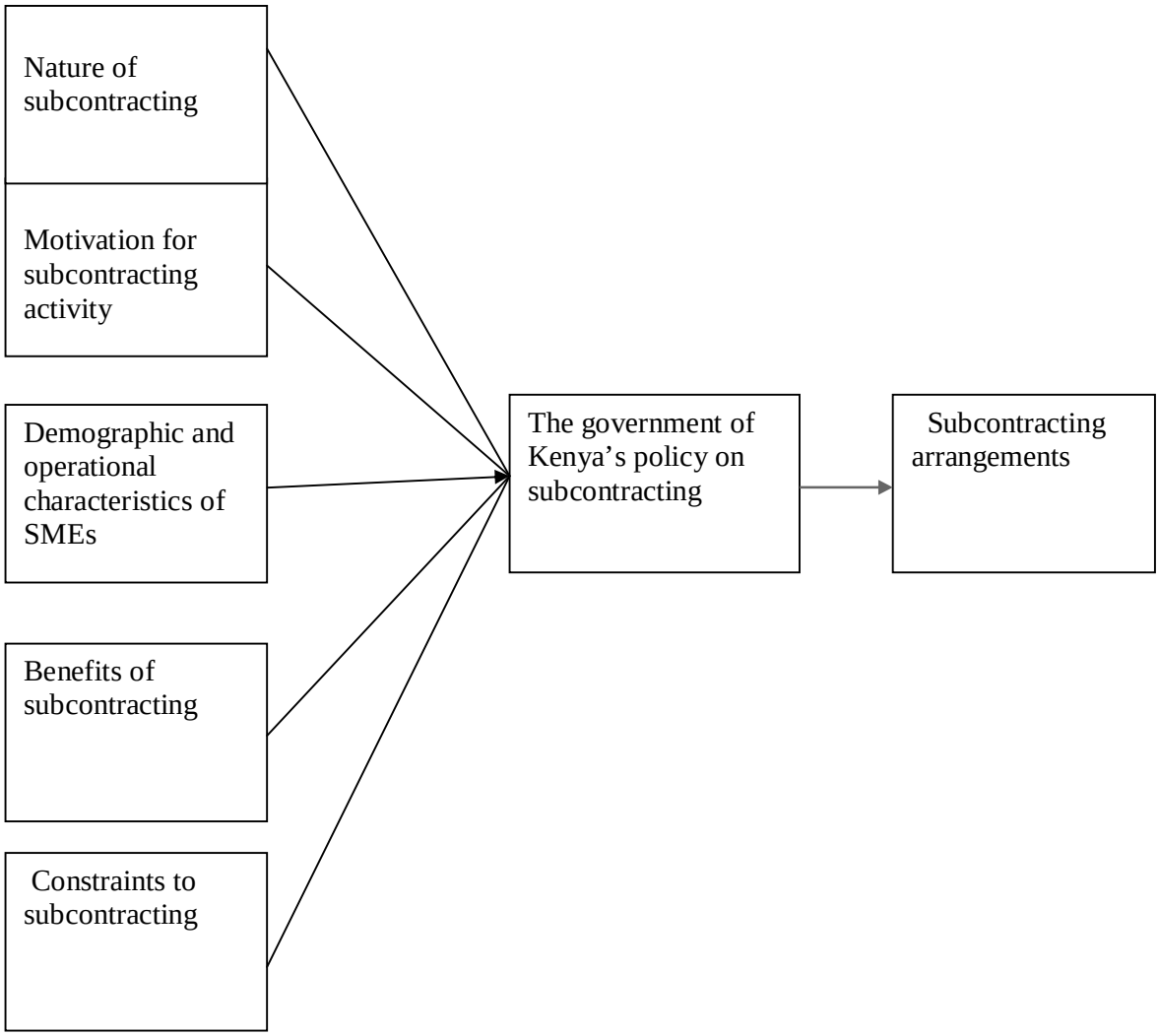

Figure 2.1: Conceptual framework

2.11 Summary

This chapter reviewed literature on the various factors affecting inter-firm relationships in the motor vehicle industry, highlighting the differences in the Japanese and 'western' approaches to inter-firm linkages, and the implications of these approaches to developing countries. It also discussed various theoretical approaches to inter-firm linkages. It discussed the transaction cost theory approach, the organization theory approach, the strategic behavior approach, and finally it suggested that the decision to make parts in-house or buy though subcontracting arrangements with SMEs may require large firms to adopt the flexible specialization paradigm. It discussed the nature of subcontracting in Kenya's motor vehicle manufacturing industry, the possible motivation behind the subcontracting arrangements, the demographic and operational characteristics of the SMEs involved in subcontracting with large enterprises, the benefits derived by SMEs from engaging in the subcontracting arrangements and finally, it examined literature on the internal and external constraints that affect the arrangements Chapter three focuses on the methodology that was employed in the study.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

The previous chapter reviewed relevant literature and approaches regarding the research problem. This chapter discusses an overview of the research design, the research design of the study, population and study area, sampling, validity, reliability, triangulation, instruments, data collection procedure and data analysis methods.

3.2 The Research Design

This was a qualitative study. In any research, the research strategy depends on the nature of the research question, and the ability of that approach to address the pertinent questions more accurately than alternatives (Coopers & Schindler, 2006). It is also determined by the extent, to which there exists knowledge about the subject, which may guide a more specific answer to the question (Yin & Zuscovitch, 1998). The alternative approaches to research include surveys, experimentation, qualitative research the analysis of secondary data. Although these approaches are all used in contemporary research, the most favored approaches are surveys, relying on quantitative data, and qualitative research. While surveys are favored for their 'explanatory' properties, (Borg, Gall & Gall, 2003) or in the study of static and stable forms of behavior, (Bogdan & Biklen, 1992), qualitative approaches are favored in both the 'explanatory' and 'exploratory' studies (Yin & Zuscovitch, 1998; Eisenhardt, 1989) or in processual analyses (Coopers & Schindler, 2006).

This, in itself, does not indicate when to use surveys, experimentation or qualitative research. The distinguishing factor is the question that research seeks to answer. Yin and Zuscovitch (1998) provide a succinct schema which guides the choice of

a particular approach to research. In summary, they argue that survey and secondary data analysis approaches are appropriate in 'who', 'where', 'when', 'how many' or 'how much' questions, while the experimental, historical analysis and qualitative approaches are appropriate for 'how' and 'why' questions since such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence (Gall, Borg & Gall, 2003). Consequently, qualitative approach is usually used where the survey or experimental approaches are not appropriate and vice versa. Investigators have, therefore, often pitted them against each other, yet these approaches are not mutually exclusive. Indeed, there are opportunities for multiple approaches in the same piece of research. For instance, Eisenhardt (1989) has used qualitative data within a survey. There are also possibilities for using qualitative data within an experimental approach and vice versa. Hence, while one approach may predominate in a particular piece of research, other approaches may be used to augment that particular approach, suggesting that in reality, they can be mutually dependent. Again, it is the nature of the research question which determines to what extent a combination of the two approaches can be used. In this research, a strategy which combines these approaches was used to address the research at two levels. The qualitative approach was used for the analysis of large firms given the small number of cases in the population of study (two assemblers and nine franchise holders), while the quantitative approach was used for the analysis of their suppliers who numbered 66 in all.

Recent developments in qualitative research methods (Yin & Zuscovitch 1998; Miles & Huberman, 1994) demonstrate that is possible to analyze qualitative data systematically using a variety of regimes. Secondly, judgment is often made about the superiority of quantitative data over qualitative data. While acknowledging the controversies in the literature (Eisenhardt, 1989; Yin & Zuscovitch, 1998) it is important

to note that the polarization of these forms of data is somewhat artificial. Over the years, social researchers favoring this methodology have tried to move away from the criticism that qualitative methods are simply exploratory, in effect, neutralizing their generative possibilities. Prominent in these debates have been Miles and Huberman, 1994) who argue in defense of qualitative methods that there is no fundamental clash between the purposes and capacities of qualitative and quantitative methods or data. What clash there is concerns the primacy of emphasis on verification or generation of theory- to which heated discussions on qualitative versus quantitative have been linked historically.

The qualitative approach is argued to be more efficient in focusing on the dynamics present within single settings (Yin & Zuscovitch, 1998; Eisenhardt, 1989). Yet this approach has often been discounted by proponents of rigour in scientific research as weak on three grounds: (i) the lack of rigour emanating from sloppiness of investigators; (ii) that qualitative studies take too long to carry out and result in massive, imprecise reports; (iii) and, more critical to scientific research, that they provide little basis for scientific generalization which arises from the non reprentativeness of the data and possible investigator and respondent biases. Without making excuses for some of the weaknesses of the qualitative approach, it can be noted that very rarely do these critics highlight the rich qualitative data generated by this approach. Neither do they highlight the fact that all research approaches are susceptible to biases of one nature or another. For example Bogdan and Biklen (1992) argue that during the design of questionnaires for surveys, biases can be introduced into what might be perceived as an ‘objective’ design while Bernard (1994) also highlights the dangers of bias in experimental research approaches.

The traditional answer to the weaknesses attributed to the qualitative strategies enumerated above, is usually the survey method, arguing that its wider sample base, and

its dependence on statistical sampling and analysis techniques, introduce more objectivity into a study. However, it can be argued that because of the generalization levels achieved by the survey method, the richness of relationships and behavior is lost. Despite controversies associated with qualitative research, researchers in organizational behavior have continued to use qualitative methodologies and data, to explain various phenomena. For example, Eisenhardt (1989) demonstrates in her research on coalitions in organizations that qualitative data is often particularly useful in explaining the underlying dynamics of quantitative data, explaining why or why not emergent relationships hold. Although this implies that the qualitative approach is used to augment quantitative methodologies, work by Yin and Zuscovitch (1998) and also by Saunders, Lewis and Thornhill, and 2003) demonstrate that qualitative research can be used independently to generate and test theory.

Qualitative approaches are also often used when the population of interest is not large; when it is considered inappropriate to use the survey approach for the analysis of phenomena. Surveys aim to explore magnitudes, incidences, tendencies and deviations from norms about a large number of sites in a given population (Pettigrew & Whipp, 1991) while qualitative studies, on the other hand, aim to explore the dynamics of phenomena in smaller settings, hence offering this research this advantage. As indicated later in this chapter, the population of interest in this study had only a small number of elements- three motor vehicle assemblers, 13 franchise holders and 72 component parts suppliers.

The research question in this study entailed exploring the ‘explanations’ for inter-firm relations or subcontracting between large and small firms in Kenya. Essentially, therefore, the research question entailed more than a mere quantification of phenomena (Saunders, Lewis & Thornhill, 2003). It involved an exploration of underlying reasons for

the sourcing or subcontracting activities of large firms, those of their inter-firm linkages, if any, and the requisite conditions for the formation of such linkages. Hence, because of this exploratory nature of the research and the small size of the population of study, qualitative research was the major research design although quantitative research was also adopted.

Kothari (2005) defines research design as the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the conceptual structure within which research is conducted. It constitutes the blue print for the collection, measurement and analysis of data. The purpose of this research was to establish the determinants of subcontracting arrangements between large firms and their SME suppliers in Kenya's motor vehicle manufacturing industry.

In order to respond to the research questions, the research adopted mainly a qualitative approach. However, a quantitative approach was also used. According to Saunders, Lewis and Thornhill (2003), one of the characteristics of qualitative research is that it is a naturalistic enquiry, which entails studying real world situations as they unfold naturally. Qualitative research is non-manipulative and none controlling. There is openness to whatever emerges. There is lack of predetermined constraints on outcomes. Qualitative studies involve collecting data in order to test a hypothesis or answer questions concerning the current status of the subject of the study. Since the purpose of this study was to examine the current of subcontracting in the country so as to establish the reasons for the gap in subcontracting, both qualitative and quantitative approaches were adopted.

Kothari (2005) states that typically, qualitative research is concerned with the assessment of attitudes, opinions, demographic information, conditions and procedures.

The purpose is to portray an accurate profile of events or situations. The approach provides an insight into attitudes of the parties involved in subcontracting. The study is exploratory in that the emphasis here is on studying the subcontracting situation in order to establish the relationships between variables, in this case, between the SMEs suppliers and large enterprise contractors. The research, therefore, employed both inductive and deductive reasoning. The study also adopted a quantitative approach using a descriptive research design which ensured ease in understanding the insight and ideas about the problem. It aimed to investigate the objectives of the study and answer the research questions. According to Saunders, Lewis and Thornhill (2003), descriptive designs are used in exploratory studies to allow researchers to gather information and interpret it for purposes of clarification.

3.3 Population

The population for this study consisted of motor vehicle assemblers and franchise holders as well SMEs and a few large companies engaged in supplying the two groups with component parts. According to the Kenya Association of Manufacturers (2006), the motor vehicle sector includes the three vehicle assemblers, 13 franchise holders and 72 component parts manufacturers. The key players in the sector are therefore the three motor vehicle assembly plants namely: Kenya Vehicle Manufacturers (KVM), Associated Vehicle Assemblers (AVA) and General Motors East Africa (GMEA). Who is also a franchise holder for Isuzu, Japan. The first two companies assemble vehicles on contract for the franchise holders who can also import the same brands. KVM is also involved in reconditioning of old vehicles especially Land Rovers for the armed forces. Other franchise holders who can also import completely built vehicles include: Toyota E.A., Marshalls, E.A., D.T. Dobie LTD, Subaru E.A. LTD, Ryce Motors LTD, Kenya Grange

Vehicle Industries LTD, Cooper Motor Corporation, Simba Colt Motors, Bruce Trucks and Equipment, Twiga Motors, Trans Africa Motors ltd and Associated Motors.

There are 72 formal motor vehicle component manufacturers. These manufacture various vehicle component parts used during vehicle assembly and for spare parts (replacement) market. The parts include vehicle bodies, batteries, leaf springs, gaskets bolts and nuts, air and fuel filters, oils, lubricants and greases, paints and thinners, speedometer cables, welding gases and wire, tyres and tubes, radiators, fibre glass bodies, exhaust systems and silencers, rubber products, jacks, brake linings, sets and trimmings and others. Since the aim of the research was to establish the current status of subcontracting in the sector and establish the reasons for the existing gap in subcontracting arrangements between SMEs with their large firm customers, the study included the three assemblers, the 13 franchise holders and all the 72 tier one component suppliers who are registered and have been in business for at least three years. The total population for the study was therefore 88 businesses.

3.3.1 Choice of the area of study

The motor vehicle industry was chosen for the study for three main reasons. First, as earlier mentioned in this study, apart from the service inputs for example, a typical vehicle model uses at least 10,000 different parts of components. Inter-firm linkages therefore, seem to be a logical production organization since no single manufacturer could possibly provide all these parts internally. It would appear therefore, that the very nature of the technical processes of vehicle manufacturing necessitates linkages involving several firms (Womack et al, 1990). Secondly, global developments in the motor vehicle industry offer a ready example of the success of inter-firm linkages. Hence findings from the study could be compared directly with those in the vehicle industries in other

economies. The changes taking place in the vehicle industry, globally, largely account for subcontracting in this industry. It highlights the importance of the industry to the Japanese, American, British and German economies, and that of some developing countries such as those in South East Asia, particularly in relation to the extensive forward and backward linkages within the industry and with other sectors of the economy. During the inception of the motor vehicle assembly industry in Kenya, the government acknowledged the potential for such linkages with other sectors (Republic of Kenya, 1986). This study, therefore, aimed to contribute to understanding on how this potential can be exploited.

Thirdly, as part of Kenya's industrialization strategy, and particularly in an effort to promote small and medium enterprises (SMEs), the government of Kenya selected the motor vehicle assembly subsector to pilot the development of a subcontracting exchange. The rationale behind the project is the sector's potential for extensive backward and forward linkages. The government of Kenya envisaged that the developments in the global motor vehicle industry, focusing increasingly on subcontracting between TNCs and SMEs, if replicated in Kenya, would benefit the country's industrialization (Republic of Kenya, 1989). Until the establishment of the subcontracting exchange programme in 1991, Kenya had done little to utilize the potential offered by linkages between large firms and SMEs. Together with a specific rationalization strategy aimed at streamlining the motor vehicle industry and encouraging local procurement of components this was expected to develop a local capacity to supply in the vehicle assembly industry. Yet as indicated elsewhere in this study, there is still a gap in subcontracting activities in Kenya. The study sought to establish the reasons for this gap.

3.4 Sampling

Since the population of interest of the study was small, no sampling was done. A census was conducted on the three motor vehicle assemblers; the 13 franchise holders listed by the Kenya Association of Manufacturers (KAM) and the 72 component parts suppliers. Out of the target population of three assemblers (GMEA, KVM and AVA), the researcher interviewed the managers of two assembling plants (General Motors (E.A) in Nairobi and Kenya Vehicle Manufacturers Ltd in Thika). The researcher also observed the production processes (motor vehicle assembly) at the two plants. The researcher also interviewed nine franchise holders out of the 13 that made up the population. These were: Cooper Motor Corporation (CMC), D.T. Dobie, Toyota, E.A., Ryce Motors E.A., Grange Vehicle Industries Ltd, Marshalls E.A. Ltd, Associated Motors E.A. Ltd, Trans Africa Motors Ltd and General Motors E.A. Ltd, which is both an assembler and the franchise holder for Isuzu, Japan. Out of the 72 questionnaires issued to the suppliers, 66 were filled and returned to the researcher.

3.4.1 Validity

A major aspect of quality control of any research study is its internal and external validity. Internal validity is relevant in explanatory or causal studies and not in descriptive or exploratory studies (Yin & Zuscovitch, 1998). It is the concern for the generalisability of the data results, by establishing a causal relationship whereby certain conditions are shown to lead to certain outcomes. On the other hand, external validity means establishing the domain to which a study can be generalized. It also refers to the extent to which inferences can be made from the data about the population of interest. This study falls within the descriptive or exploratory category and is therefore not concerned with internal validity but with external validity.

The validity of qualitative research could be threatened by any number of factors, mainly those related to the design of the study and the actual process of data collection. Qualitative research has been criticized on the grounds of laxity on validity arising from factors such as the absence of precise research instruments and factors related to sample selection. In this approach, validity is threatened right through from design to analysis as the process of qualitative research itself can be a continuous design activity (Gall, Borg & Gall, 2003). The following discussion attempts to address the strategies which this study has adopted to deal with such threats to validity: sampling, triangulation and multiple data sources, and reliability. While internal validity was not of concern due to the exploratory nature of the study, external validity was critical. Also critical was the general reliability of the data collected.

3.4.2 Triangulation and multiple data sources

Triangulation is a strategy which qualitative researchers often use to ensure both internal and external validity by eliminating some of the biases which arise from, and because of the research process. It involves the use of several data sources (respondents and/or secondary data sources) during data collection, or the use of several data collection strategies. In her example, Eisenhardt, (1989), uses triangulation of data collection strategies, arguing that when qualitative and quantitative data are used together, the qualitative data is useful in understanding the rationale underlying the relationships revealed in the quantitative data. Yin and Zuscovitch (1998), on the other hand, advise the use of triangulation by various data sources rather than various methods or approaches. Borg, Gall and Gall (2003) and Bazeley, (2009), add that by triangulating data sources, analysts can efficiently employ the same methods to maximum theoretical advantage. This research used such triangulation between various sources of information as well as

between methods. Several data sources (respondents) were used in this study, which made it possible to corroborate information, or to underline some findings. On a second level, observation was used as a way of corroborating information provided by respondents about processes. In addition, secondary data was also used regarding the sourcing behavior of the large firms, to establish the firm size of the suppliers, their products and their contractors.

3.4.3 Reliability

Another quality control measure is the reliability of a piece of research, that is, the extent to which the operations of a study can be repeated with the same results (Borg, Gall & Gall, 2003). One of the criticisms leveled at qualitative research, is that there is a high level of 'subjectivity' emanating from the lack of 'objective' measures among others (Nielsen, 2004). One way of dealing with this objection is to standardize the research procedure so that the data collection can be replicated. Data source and method triangulation are some of the approaches used by researchers such as Eisenhardt (1989) to address this problem. This study 'standardized' data collection by using an interview guide which addressed similar issues across the population of the study, although these were not treated as pre defined but as potentially evolving during data collection to include variables not included (Miles & Huberman, 1994). Questionnaires that addressed similar issues among the suppliers were also used. A second way is to study specific pre defined constructs and variables as described by the RAND Corporation in their case survey approach. Consequently, the study explored the research question along five lines of enquiry: the extent of subcontracting, the motivation behind the subcontracting, the demographic and operational characteristics of the suppliers, the benefits of subcontracting and the constraints to the subcontracting arrangements. This way it was

possible to ‘standardize’ the research process and follow only particular variables, although care was taken not to confine the respondents to particular responses.

3.5 Instruments

Saunders, Lewis and Thornhill (2003), define instrumentation as the whole process of data collection. It involves not only the selection of or design of instruments, but also the condition under which the instruments will be administered. To ensure that internal as well as external threats to validity were minimized, instruments were carefully selected. For the purposes of this study, two in-depth structured interview guides and questionnaire were employed to collect data. Observation of the motor vehicle assembly process was done. Secondary data was also perused.

3.5.1 Interviews

The interview was one of the data collection instruments of the study. The interview instrument was chosen to collect data since it allows respondents to express themselves freely and the researcher can probe the respondent for clearer and more detailed answers. It also allows new questions that spring from the response given by the respondent to be posed (Gall, Borg & Gall, 2003; Kothari, 2004; Saunders, Lewis and Thornhill (2003). The in- depth interviews guides were designed and used to collect data from managers of the two out of the three assemblers (GMEA and KVM) and nine out of the thirteen franchise holders to establish the extent of any subcontracting between SMEs and large enterprises, their motives for subcontracting, the characteristics of the suppliers they prefer to deal with and the constraints that hinder subcontracting in the industry. Two interview guides were used to collect data. These guides were adopted from an in-depth interview guide used in a similar study (ILO, 2005). However since some of the questions were modified to suit the current study, it was necessary to pilot test them on one of the

three categories of the population. The researcher was also able to observe the assembly process as she carried out the interviews.

The assembler and franchise holder interview guide (see Appendices A and B) had questions addressing all the research questions. Research question 1 was addressed by item I on the interview guides; research question 2 was addressed by item 2 and item; research question 4 was addressed by items 4 and research question 5 was addressed by item 5. Apart from the information from the interview guide, information was obtained perusing the archival sources of the firms to establish past behavior and to analyze changes in structure and size of the firms. In addition to the formal interviews, informal discussions were held with various industry experts including two officials at Kenya Association of Manufacturers and an official at Federation of Kenya Employers.

3.5.2 Questionnaires

The second method of obtaining data was the questionnaire. This was used to obtain data from the suppliers. The main reason why this method was preferable here was because of the nature of SME businesses. Such businesses are not as complex as that of assemblers for example. Also no observation of processes was required here. Moreover, information obtained earlier had indicated that SME owner managers, who usually have fewer employees and are therefore pressed for time, prefer that questionnaires are dropped and picked later.

3.5.3 Observation

The third method of obtaining information was through observation of the production processes of two of the three assemblers (GMEA and KVM) in Thika. Observation was useful mainly as a way of triangulating the data collection process. The main advantage of this method is that the information obtained under this method relates to what is currently happening. It is not complicated by either past behavior or future intentions or attitudes (Kothari, 2005). First, the assembly process was observed, right from the time the inputs arrived at the assembly plant to the final product. This was necessary to establish at what points in the assembly process inputs were required and what form the inputs took, that is, at what point in the process local content, if any, was used since the CKD is in effect, several groups of broken down parts and components. Thus, observation provided information into the various categories of input sourcing, sub-assembly, assembly and distribution. This was necessary to understand the production organization within the sector. As pointed out by Swanson, Watkins and Marsik, (1997) first hand observation provides first tier information that cannot be deduced from the interview. The versatility of observation makes it an indispensable primary source method and a supplement for other methods (Coopers & Schindler, 2006).

Observation identified four basic levels of operation for the assemblers as: (i) input procurement of CKDs kits and local content (ii) sub-assembly (iii) assembly and (iv) distribution. This led to the conclusion that the franchise holders, who are the main decision makers in the industry, are mainly traders, while the assemblers, who make fewer decisions (apart from GMEA, who is both an assembler and franchise holder) about the input and distribution, were the real value adding agents.

3.5.4 Secondary Sources of Data

Secondary data of the assemblers, the franchise holders and the suppliers were perused. At the two assembly plants (GMEA and KVM) and the nine franchise holders, the researcher reviewed lists of local content outsourced by the assemblers and the firms who supplied the parts. The researcher also accessed information on the production organization of the two assembly plants. With regards to the suppliers, the researcher reviewed lists of the number of employees to determine the firm size, the products they manufacture or stock for supply and the large firms they supply with parts. These records were most useful in establishing the current status of subcontracting in the motor vehicle industry.

3.6 Data Collection

A letter of introduction was obtained from JKUAT to the respondents. The concerned managers of the assembling plants (GMEA and KVM and AVA) and franchise holders were contacted and interview dates were established. The owner managers of the SMEs and the big suppliers were also contacted so as to arrange when questionnaires could be dropped to them. In order to ensure validity and reliability of data, the data collection instruments were pilot tested on three businesses, one assembler, one franchise holder and one SME supplier. The objective of the pilot study was to evaluate the relevance, difficulty and how long it would take to conduct each interview. The pilot study revealed that some of the questions were not very clear to the informants because they were verbose. They final versions of the interview guides and questionnaire, (see appendices A, B, C) however, retained the main themes of the original instruments.

The researcher managed to interview two assemblers (GMEA in Nairobi and KVM in Thika) and nine out of the 13 franchise holders targeted by the study. These managers were quite cooperative in granting the researcher an interview unlike some of

the SME owner managers. The interviews, which took two to three hours long, were personally conducted by the researcher herself at the offices of the managers. The interviewer took down substantial notes during the interview to ensure that no relevant information was left out. The researcher interviewed on informant per day so that she could transcribe the interview information immediately to ensure accuracy and completeness of the interview information. This schedule was possible because of the small sample the researcher was dealing with. A computer file was created for each informant.

The researcher had obtained a list of the GMEA suppliers from the GMEA manager, as well as letter of introduction to the GMEA suppliers. A list of SMEs involved in the manufacture of motor vehicle component parts and other suppliers was also obtained from Kenya Association of Manufacturers. The researcher was then able to establish contact with the relevant managers of the enterprises that are involved in subcontracting arrangements with large firms in the motor vehicle industry. The questionnaires were then dropped and it was agreed on when the researcher would pick up the completed questionnaires. This proved to be the most difficult part of the data collection procedure as a number of SME managers took the questionnaires and then proceeded to return them unfilled or kept on postponing their return. In the end the researcher managed to get back 66 out of the 72 initial questionnaires that were given out to suppliers.

3.7 Data Analysis

Content analysis, specifically thematic analysis also known as thematic approach was employed to analyze the qualitative data. Thematic content analysis is a qualitative research tool used to determine the presence of certain words or concepts within the text.

It uses inductive reasoning by which certain words, patterns, concepts, phrases, themes emerge from raw data. Kombo and Tromp (2006), propose use of themes to analyze qualitative data. Gaskill (2001) used the same approach. The raw data is condensed into categories based on valid inference and interpretation (Palmquist, Carley, & Dale, 1997). The text is examined and coded for the existence of certain words. By reading the text line by line, the key words and phrases that were used repeatedly by the respondents were identified. These then became the basis for coding the data. The process of coding is basically one of selective reduction. By reducing the text to categories consisting of a word, set of words or phrase, specific words are focused on and coded for specific concepts or patterns that are indicative of the research question. By breaking down the contents of materials into meaningful and pertinent units of information, certain characteristics of the message may be analyzed and interpreted (Palmquist, Carley, & Dale, 1997).

Codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study (Miles & Huberman, 1994). When developing the codes, the researcher operated within the context of subcontracting within the motor vehicle manufacturing industry. Using the "open coding" process, the researcher identified potential themes putting together real examples from the text (Agar, 1996; Bernard, 1994; Bogdan & Biklen, 1992). The codes were used to retrieve and organize the volume of data assembled during the study. The code categories were based on the research questions of the study and also reflected the information that was obtained from the process of interviewing, questionnaires, observation and perusal of archival sources. The theme categories evolved during data collection but the researcher ensured that the categories are relevant to the research questions of the study.

After coding the text (see Appendix E) the codes were entered into a computer. The researcher then ran Statistical Package for Social Science (SPSS) program which sifted through and summarized the codes from the coding which would have been done manually. The program helped the researcher give structure to the data by sorting and grouping the data so that similar statements appeared next to each other. The software therefore aided in fracturing and reorganizing the data. Pattern codes were developed to group the summaries of data into a smaller number of sets, themes or constructs (Miles & Huberman, 1994). Pattern codes, which revolve around themes, causes or relationships among people, are potential explanations. The researcher then used the results of the data analysis to answer the research questions, draw conclusions and write the report.

Content analysis, like any other research method has its advantages and disadvantages. The advantages, according to Palmquist, Carley and Dale (1997) are that content analysis looks directly at communication via texts or transcripts, and hence gets at the central aspect of social interaction; it can allow for both quantitative and qualitative operations; can provide valuable historical/cultural insights over time through analysis of texts; allows a closeness to text which can alternate between specific categories and relationships and also statistically analyzes the coded form of the text. It can be used to interpret texts for purposes such as the development of expert systems (since knowledge and rules can both be coded in terms of explicit statements about the relationships among concepts). It is an unobtrusive means of analyzing interactions in addition to providing insight into complex models of human thought and language use. Finally, when done well, is considered as a relatively "exact" research method, based on hard facts.

Nielsen (2008), however, points out that content analysis suffers from several disadvantages, both theoretical and procedural. In particular, content analysis can be extremely time consuming, is subject to increased error, particularly when relational

analysis is used to attain a higher level of interpretation, is often devoid of theoretical base, or attempts too liberally to draw meaningful inferences about the relationships and impacts implied in a study. It is inherently reductive, particularly when dealing with complex texts; tends too often to simply consist of word counts; often disregards the context that produced the text, as well as the state of things after the text is produced and finally, it can be difficult to automate or computerize. However it has been used extensively to analyze qualitative data. Some of the studies where content analysis has been used to analyse the qualitative data include: Masai (1991), Masinde (1996), Gaskill (2001), Mukulu (2004), Oketch, Mitullah, & Atieno (2004) and Nkirina (2010), among others.

Quantitative analysis was also used to analyze the coded data of quantitative nature. The responses were coded into numerical values: 1,2,3,4 and 5 (see Appendix F) to denote the various categories of responses. Descriptive statistics was used to analyze the coded data. This included measures of central tendencies, percentages and frequency distributions. This was to establish the proportion of firms involved in subcontracting arrangements; the proportion of motivation behind the subcontracting arrangements; ways in which the suppliers benefit from subcontracting arrangements with large firms; distribution of products outsourced by suppliers; the number of firms that met the demographic and operational characteristics demanded by large firms and the proportion of firms affected by specific constraints. Coopers and Schindler (2006), note that the use of percentages is important for two reasons: first, they simplify data by reducing all the numbers to range between 0 and 100; secondly, they translate the data into a standard form with a base of 100 for relative comparisons. After the initial coding and classification, the data was subjected to Statistical Package for Social Science (SPSS) and

the analyzed data was hence presented and interpreted. The results of the quantitative data have been presented using tables.

3.8 Summary

In this chapter, the methodology, that is, the research design, population and sample, instruments: interviews, questionnaire, observation and the perusal of records, as methods of data collection were described. Qualitative research design was the main research design, but the study was also quantitative. The population of the study was defined as the three motor vehicle assemblers, 13 franchise holders and 72 components parts suppliers with whom the former two are engaged in a subcontracting arrangements. A structured interview guide was used to collect data from two of the three assemblers and nine of the thirteen franchise holders. The researcher received back 66 questionnaires. Observation of the assembly process was also done. Records were also be perused. Thematic content analysis was used to analyze the coded qualitative data which was presented in the form of free flowing text. Descriptive statistics, including percentages and frequency distributions, was used to analyze the quantitative data. The quantitative data results was presented using tables, and charts.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Introduction

The main objective of this study was to explore the factors that determine subcontracting arrangements between SMEs and large enterprises in motor vehicle manufacturing industry in Kenya so as establish the reasons why subcontracting in Kenya remains to a large extent, untapped. The study was guided by the following research questions: (1) what is the nature of subcontracting in the motor vehicle industry? (2) What is the motivation behind the subcontracting arrangements? (3) How do demographic and operational characteristics of SMEs influence subcontracting arrangements with large enterprises? (4) How do the firms' benefits influence the subcontracting arrangements? (5) What are the external and internal constraints to the arrangements?

The findings are divided into five sections: section one presents data from the nature of subcontracting currently existing within the industry. It first analyses the assemblers then discusses findings general to both assemblers and franchise holders; section two gives results regarding the motivation behind the subcontracting arrangements; section three provides information regarding characteristics of the suppliers is presented in section three; information regarding benefits of subcontracting is provided in section four and lastly in section five is information on the constraints to subcontracting.

4.2 Nature of Subcontracting in the Motor Vehicle Manufacturing Industry in Kenya

It was imperative to start by establishing the nature of any existing subcontracting in the motor vehicle manufacturing industry before moving on to establish the motivation behind it, and other determinants. There are three motor vehicle assemblers in Kenya,

namely: General Motors East Africa (GMEA) in Nairobi; Kenya Vehicle Manufacturers Ltd. (KVM) located in Thika and Associated Vehicle Assemblers Ltd (AVA) located in Mombasa. These three assemblers are engaged in the importation of CKD (Completely Knocked Down) kits and then assembling motor vehicles and other forms of transport such as motor cycles. The researcher interviewed managers of two assembling plants: General Motors EA in Nairobi and Kenya Vehicle Manufacturers in Thika as well as and managers of nine franchise holders: Toyota (E.A.) Ltd, D.T. Dobie (E.A). Ltd, Cooper Motor Corporation (CMC) (E.A.) Ltd., Ryce Motors (E.A.) Ltd. (franchise holders for Daihatsu and distributors for Opel), Marshals (E.A) Ltd., Kenya Grange Vehicle Industries Ltd., Associated Motors (E.A.) Trans Africa Motors LTD and GMEA. The researcher got back 66 questionnaires from the component parts suppliers. Some of the assembling activity that was taking place at the time of the study is indicated in Table 4.1

At the time of the study, the assembling activity in the industry was minimal. All the three assembly plants had ceased to assemble saloon vehicles. They now concentrate on the assembly of trucks, buses and pickups (see Table 4). Buses, and especially mini buses, are the most popular because of their demand for use as public transport vehicles for long distance transport across the country and as ‘matatus’ within and outside the urban areas. They are also in high demand by various institutions for transport of employees, of students and others. According to the manager at GMEA, when such vehicles are brought in as CBUs, they take too much space in the container. The players in the industry therefore prefer to import CKDs and assembly the vehicles locally. The cessation of the assembly of saloon cars is attributed mainly to competition from cheap, second hand reconditioned vehicles from Japan, Singapore and of late, from Europe (locally assembled vehicles tend to be more expensive) and also to the proliferation of

makes and models. The latter has contributed significantly to the low level of subcontracting in the industry.

Table 4.1 Assembling activity in Kenya

Franchise holder	Assembler	Assembled vehicle
Cooper Motor Corporation LTD	KVM	IVECO trucks Land Rovers Buses, pick up trucks
D.T. Dobie LTD	KVM	Nissan pickup trucks Nissan Urvan
Priority Motors LTD	KVM	Eicher trucks and buses
Toyota E.A.LTD	AVA	Toyota Hilux pick ups Toyota panel van Hiace mini bus 3 ton DYMA trucks Buses
Simba Colt Motors LTD	AVA	Mitsubishi pick up and trucks
Kenya Grange Vehicle Industries LTD	AVA	Trucks and buses
Bruce Trucks and Equipments LTD	AVA	Mitsubishi Fuso Buses Prime movers
Associated Motors LTD	GMEA	Trucks and buses
GMEA LTD	GME	Isuzu single and double cabin pick ups buses prime movers

4.2.1 Production organization of the assembly plants

The study established that two types of production organization or “models “exist within the motor vehicle assembly plants. In the case or “model “of GMEA, the sourcing or input procurement and assembly functions are carried out by the same firm because GMEA is both an assembler and a franchise holder for Isuzu Motor Corporation.

The implications of this type of production organization is that GMEA makes its own decisions regarding subcontracting and unlike the other two assemblers does its own procurement of parts and is therefore the one to decide whether to subcontract locally or not. This is further illustrated in Figure 4.1.

In the second type of production method, (KVM and AVA), the sourcing and assembly activities are carried out by separate firms. The franchise holders (most of who own a certain percentage of the assembler company) do the sourcing and then pass the parts to the assembler who has very little or no say at all in the sourcing of parts. This is illustrated further in Figure 7.

4.2.2 Organization of production activities at GMEA

Production organization at GMEA differs significantly from the other two assemblers (KVM and AVA). Unlike the other two, being both an assembler and franchise holder for Isuzu, Japan, GMEA combines both assembly and input procurement roles. In the case of KVM and AVA, input procurement is done by the franchise holders (most of whom also own part of the assembly plants) and then passed on to the assemblers. As a result, GMEA’s production organization includes both the sourcing of materials, assembly and marketing. The company, however, does not own distribution outlets. Its retailing and after-sales service activities are handled by dealers all over the country. This structure is illustrated in Figure 4, which indicates the activity flows between materials, sourcing and

assembly. It clearly indicates that General Motors East Africa controls a large part of the production activities unlike KVM and AVA, whose production activities are controlled by the franchise holders. The implication here is that GMEA can be targeted as a single entity when trying to encourage subcontracting between SMEs and large firms.

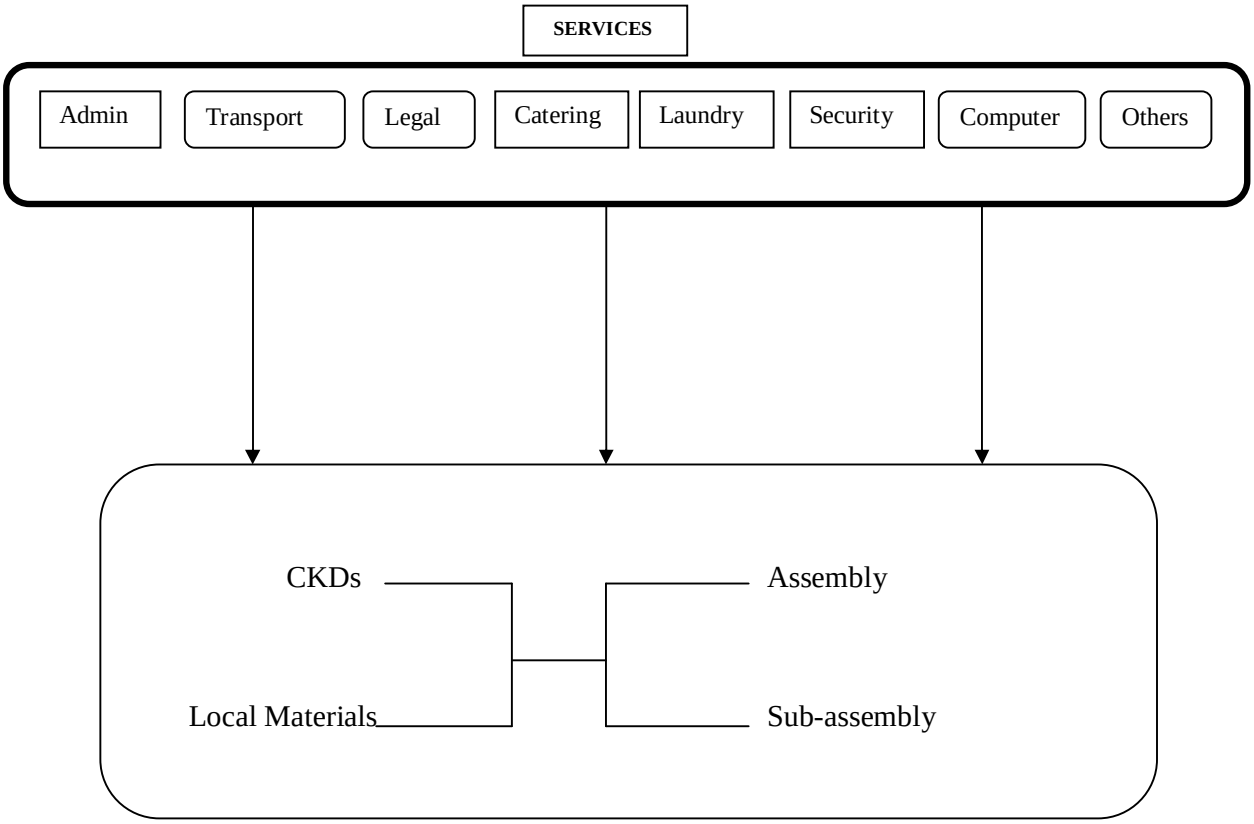

Figure 4.1 Organization of Production Activities at GMEA

The motor vehicle assembly process is illustrated by Figure 4.2. As the diagram clearly illustrates, apart from the entry point for CKDs and related materials, all the other processes are relatively 'integrated', making de-coupling difficult. That is, once the shell has been welded together in the frameworks section, parts and components are simply

fitted into it without any further manufacturing or adjustment. It therefore becomes difficult to de-integrate the assembly process.

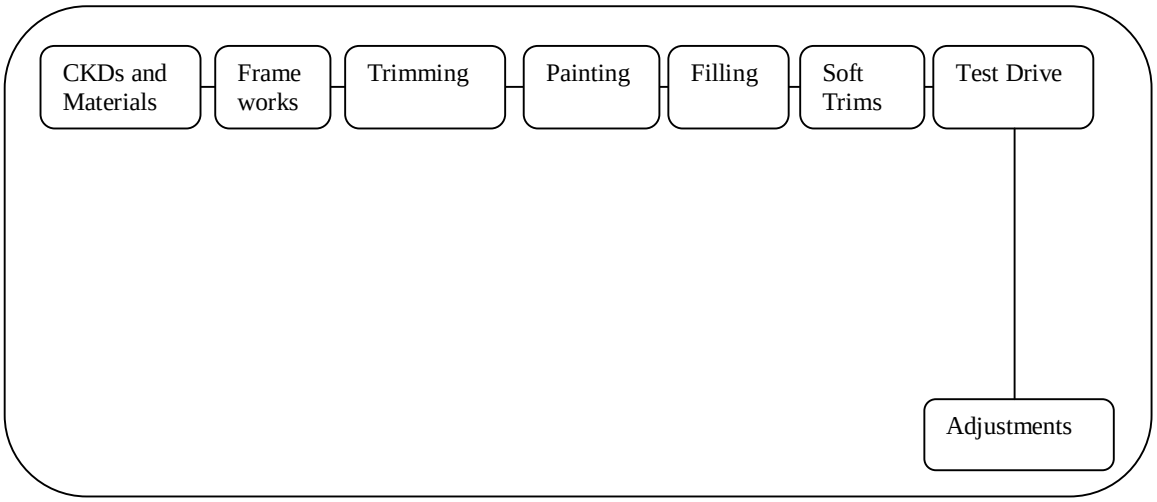

Figure 4.2 Motor Vehicle Assembly Processes

The ownership structure of GMEA is of importance to the study because it has implications on the subcontracting behavior of the assembly plants. The main decisions regarding procurement of parts is made by the owners of the assembly plants who are also franchise holders. These decisions are dictated, to a certain extent, by the parent company abroad (see Table 4.2).

Table 4.2 GMEA Ownership Structure (2010)

General Motors - USA	57.8%
ICDC	20%
ICDCI	17.8 %
ITOCHU-JAPAN	4.4%

4.2.3 Nature of Subcontracting in General Motors (EA)

The first objective of the study was to establish the extent of any existing subcontracting arrangements in the motor vehicle manufacturing industry. The study first established what determines this extent and then went on to explore the reasons for the gap in subcontracting in Kenya. It is important to state at this point that the term local content as used in this study includes all component parts obtained from local sources rather than only those that are produced locally. The main rationale for this approach is that subcontracting as is evident in the motor vehicle industry in developing countries such as Kenya does not always only involve goods manufactured locally but also imported by some of the suppliers. The enhancement of SME competitiveness and subsequently the growth of an enterprise culture in the country depend on both the service and manufacturing industries. This study established that GMEA imports CKDs from Isuzu (Japan), Brazil and Germany. It uses some local content outlined in the Legal Notices no 22 of 1980, 124 0f 1986 and 241 of 1990 (see Appendix J). At the time of this study, GMEA was locally assembling only Isuzu pick -ups. All other activities such as the body building of buses and trucks were subcontracted to SMEs body fabricators, the main one being Labh Singh Harnam Singh (LSHS). The company, like all the other assemblers and franchise holders has stopped the local assembly of saloon cars and now imports them. At the time of the study, CKD material accounted for 65% of the total cost of direct materials while local content accounted for 35 % including the labuor input. A large proportion of the required services are provided in-house. However, the manager at GMEA pointed out that local content should not be interpreted strictly in terms of component parts. Motor vehicle assembly is not a simple process. It involves “substantial transformation.” This involves use of intensive local labuor to put together almost the 4000 different parts of the CKD kit. As the same manager pointed out: ‘an assembler or

franchise holder can claim to be sourcing locally yet, he is sourcing only one or two component parts.'

When choosing the suppliers to contract, GMEA uses the Supplier Audit Questionnaire. (See Appendix G). If the applicant meets the requirements, he is given a one year contract. This contract is renewable unless the supplier ceases to be competitive in terms of cost and/or quality, that is, if they increase their prices arbitrarily or compromise on quality. General Motors East Africa has a local content department which assists SMEs in meeting GMEA specifications. This department helps the SMEs by making recommendations on their production lines, sometimes suggesting the kind of technology they can use to meet GMEA specifications. The company has a local content engineer who visits the selected SME supplier to ensure that GMEA specifications have been met. However, GMEA no longer involves itself in the Supplier Development Programme that it had adopted in the 1980s. This contradicts findings by Masinde, (1996) who indicated that through the above programme, GMEA was the only assembler actively involved in the improvement of local suppliers of items listed in the legal notices. Table 4.3 provides the list of outsourced parts and components for Isuzu model together with the suppliers.

All the items in the list in Table 4.3 are those contained in the legal notices (see Appendix J). GMEA has not voluntarily added any items to the list. The reasons given for this were that: (a) even though the local content parts might be lower, the amount of local labour content that goes into the production is extremely high (this is known as substantial transformation); (b) it is difficult to find suppliers who meet GMEA quality required standards; (c) it was more expensive to delete items from CKD kits since Isuzu penalizes any deletions and d) local products are significantly more expensive and of relatively poor quality. However, the manager at GMEA pointed out that subcontracting

within the manufacturing process has a future in Kenya. Seat assembly, for example, used to be done in-house by GMEA but was now being subcontracted to an SME supplier who has been given space at the assembly plant to make seats for the motor vehicles. This kind of arrangement is advantageous to the assembler since he can keep a close eye on the SME to ensure quality. It also reduces lead time and transport costs.

Table 4.3 Local content at General Motors (EA)

Local Content Description	Qty per Unit	Supplier	Cost (Ksh)	Total Cost
GLASS BACKLIGHT	1	Impala Glass Ltd	1200	1200
DOOR GLASS LH	1	Impala Glass Ltd	1450	1450
GLASS RR QUARTER R	1	Impala Glass Ltd	1450	1450
GLASS RR QUARTER LH	1	Impala Glass Ltd	450	450
GLASS WINDSHIELD	1	Impala Glass Ltd	450	450
SUPPORT; DR GLASS RUNNER RH	1	Impala Glass Ltd	8024	8024
SUPPORT; DR GLASS RUNNER LH	1	Impala Glass Ltd	486	486
TRIM COVER CUSH;PASS	1	Megh Cushion/Highway Cushion	486	486
TRIM COVER BACK CTR SEAT	1	Megh Cushion/Highway Cushion	770	770
TRIM COVER CUSH CTR SEAT	1	Megh Cushion/Highway Cushion	370	370
TRIM ASM COVER BACK DRIVER	1	Megh Cushion/Highway Cushion	370	370
MAT FLOOR LH	1	Megh Cushion/Highway Cushion	840	840
MAT FLOOR RH	1	Megh Cushion/Highway Cushion	395	395
PAD ASM BACK CTR SEAT	1	Megh Cushion/Highway Cushion	395	395
PAD ASM CUSH CTR SEAT	1	Megh Cushion/Highway Cushion	675	675
PAD ASM CUSH PASS	1	Megh Cushion/Highway Cushion	840.5	840.5
PAD ASM BACK PASS	1	Megh Cushion/Highway Cushion	1555.1	1555.1
BOARD BK	1	Megh Cushion/Highway Cushion	1230.8	1230.8
FRAME ASM; BACK CTR SEATCTR	1	Megh Cushion/Highway Cushion	112.8	112.8
FRAME ASM; CUSH CTR SEAT	1	Megh Cushion/Highway Cushion	584.2	584.2
SUSPENSION WIRE; LENGTH * DIA 360mm* 2	4	Auto Springs	1209	1209
	4	Auto Springs	6.5	26
SUSPENSION WIRE; LENGTH * DIA 300* 2mm	2	Auto Springs	4.7	18.8
	1	Auto Springs	5.9	11.8
SUSPENSION WIRE; LENGTH * DIA 360mm* 2	1	Auto Springs	1555.4	1555.4
	1	Auto Springs	1555.4	1555.4
FRAME ASM: DRIVER CUSHION	1	Auto Springs	821.9	821.9
FRAME ASM:	2	Auto Springs	20.5	41
FRAME ASM: PASSENGER CUSHION	2	Auto Springs	23.4	46.8
FRAME ASM: PASSENGER BACK W	2	Megh Cushion/Highway Cushion	100	200
SEAL; WATER B	1	Megh Cushion/Highway Cushion	770	770
SEAL; WATER DRA	1	Megh Cushion/Highway Cushion	840	840
INSULATOR; BACK PANEL	1	Megh Cushion/Highway Cushion	2240	2240
TRIM COVER CUSH DRIVER	1	Megh Cushion/Highway Cushion	1230.8	1230.8
TRIM COVER BACK DRV	1	Megh Cushion/Highway Cushion	1561.7	1561.7
MAT; FLOOR CTR	8	Pipeman/ Turn-o-Metal	5.6	44.8
PAD ASM BACK DRIVER	1	Pipeman/ Turn-o-Metal	821.9	821.9
PAD ASM CUSH DRIVER, CUSHION	1		194.14	194.14
SUSPENSION WIRE; LENGTH* DIA	1	Pipeman/ Turn-o-Metal	3942	3942
FRAME ASM: DRIVER BACK W/R/D	4		28.25	113
VIN PLATE FRR TRUCK	1		3348	3348
BRACKET TIRE FRONT FRR BUS	2		1566.22	3132.44
BOLT BRKT FRAME	1	Mann Manufacturer	8674.16	8674.16
BRACKET SPARE TIRE REAR	1	Mann Manufacturer	7955.28	7955.28
CLAMP ASM; EXH SILENCER WITH M10*50L	8		1.8	14.4
EXH SILENCER ASM	8		194.93	1559.44
EXH PIPE TAIL	1		701.73	701.73
POP RIVET (DIA 3.0 BY 10L)	4	Auto Springs	285.6	1142.4
RUBBER	4	Auto Springs	560	2240
BRACKET TAIL PIPE	2	Auto Springs	8008	16016
	1			

U-BOLT W/NUTS; FRONT SPRING	1	Chloride Exide	185.82	185.82
U-BOLT W/NUTS; REAR SPRING	1	Auto Springs	462.46	462.46
LEAF SPRING ASM W/HEALPER	1	Auto Springs	1989.6	1989.6
REAR	1	Auto Springs	390.83	390.83
CABLE BAT (+) – (-)	1	Auto Springs	139.33	139.33
HARNESS: BUMPER	1	Auto Springs	433.13	433.13
HARNESS: ENGINE	1	Auto Springs	15926.04	15926.04
HARNESS: ROOF	1	Auto Springs	762.3	762.3
SERVICE BOOKLET	1	Auto Springs	1705.24	1705.24
FLOOR HARNESS FRR/FVZ	1	Auto Springs	1473.78	1473.78
HARNESS: INTRU, LOWER	2	Auto Springs	10346.95	10346.95
HARNESS: A/TANK	2	Auto Springs	393.02	786.04
HARNESS: FRAME REAR	3	Chloride Exide	3480	6960
HARNESS: STARTER	1.7	Total (k)	198.5937	595.7811
HARNESS: FRAME FRONT	30	Total (k)	279.385	474.9545
HARNESS: DOOR	1	Total (k)	73.35	2200.5
EXIDE BATTERY ASM NS70R 65AH	14	Total (k)	83.35	83.35
MOBIL ATF 220	200	Total (k)	131.66197	1843.26758
MOBIL UNIV. BRAKEFLUID DOT 4		Total (k)	228.0105	45602.1
AUTOMOTIVE DIESEL				
PREMIUM UNLEADED GASOLINE				
MOBILUBE HD 85W/140				
MOBILUX EP2 (GREASE)				

Source: GMEA (2009)

Local Content

Distributor: General Motors East Africa Ltd
Make: Isuzu
Model: FRR
Hino equivalent: 500 Series

*NB-Isuzu local content is more than 35% hence
Meets export requirements to other COMESA/EAC countries without incurring tariffs.

The study revealed that the outsourcing of the body building work to a number of companies is currently the most thriving of the activities in the motor vehicle manufacturing industry. In 2009, for example, GMEA entered into an agreement with identified body builders to build bodies for GMEA, who is to import the CKD and do the assembling, producing only up to the chassis then giving the skeleton to the body builders for onward construction into a fully finished vehicle. Among the approved body builders that GMEA is dealing with are Labh Singh Harnam Singh (LSHS) Dodi Auto Tech, and 2M which builds bodies for their own use as shuttles for public service. Others include Axel Engineering Development, Dyna Corp, Randon Ltd, Ban Bros Ltd and Kehar Singh Ltd. The last three specialize in building bodies of trailers, trucks and pickups. According to GMEA director in charge of Special Programmes, the company gives direction of the

standards to be maintained during the body building process and the kind of material and measurements to be used. He commented:

> We draw and give directions to the body builders. This includes the seating arrangements
>
> This is in consideration to the Kenya Bureau of Standards approved materials.

At every stage of the body building process, GMEA sends inspectors to confirm whether the builders meet the required standards and present a report on the same. Upon completion of the body building process, the vehicle is delivered back to GMEA with invoices for payment of the work done. Among the directions GMEA highlights to the body builders is the inclusion of modifications to strengthen vehicles to withstand the harsh road terrain in Kenya. This includes the addition of strong rails to the chassis. This is what makes Kenya build vehicles different from those imported as finished units.

4.2.4 Kenya Vehicle Manufacturers

Kenya Vehicle Manufacturers (KVM) is one of the three vehicle assemblers in Kenya. Kenya Vehicle Manufacturers (KVM) and Associated Vehicle Assemblers (AVA) differ from GMEA in that they are contract assemblers, and their activities are tied to those of the franchise holders (contractors), CMC and DT Dobie and the government of Kenya in the case of KVM and Toyota East Africa, Ryce Motors, Simba Colt Motors Kenya Grange Manufacturers and Marshalls East Africa in the case of AVA. Incorporated in Kenya as Leyland (K) in 1974 the company changed its name to KVM LTD in 1989 and it was the first vehicle plant to be incorporated in Kenya. In 1976 it started production with the first vehicle rolling off the assembly line in 1976. The plant was originally designed to produce light and heavy commercial vehicles including Land Rovers, Volkswagen Microbuses, Leyland trucks and buses. The vehicle model range produced at KVM has increased considerably over the years.

The range of vehicles produced by KVM today includes Nissan series, Land Rover, buses and trucks. The plant covers an area of 40 acres of which 18 acres are reserved for further development. The company undertakes contract assembly, that is, the customer (distributor) buys/ imports (CKD) kits and transports them to the plant at Thika. The customer/contractor also buys all special jigs and tools and provides all local content except fuel oil, sealants, sand paper (consumables) which are outsourced by the assembler. The company also has a bus body building facility started slightly over two years ago. The facility has so far produced over 500 buses. The company builds mini buses, medium and large buses of carrying capacities ranging from 29 – 67 seaters. The buses are built according to customer specifications and Kenya Bureau of Standards requirements. KVM has standardized body frame works by building them off jig.

The company has also introduced fibre glass rear on the 62 – 67 seater bus. Bus production facilities are laid out in a flow line and actual body building is carried out on a trolley. Kenya Vehicle Manufacturers has a production capacity of 6600 in a single shift. This has never been utilized to capacity. The company has a total of six assembly lines, each capable of adjustment to produce the particular make or model introduced on the assembly line although only two are currently being utilized due to low demand for locally assembled motor vehicles. The highest utilization was in1990 when the company assembled 4500 vehicles (68% capacity utilization). The lowest was in 1999, when the company only assembled 382 vehicles (5.9% capacity utilization). Cooper Motor Corporation (CMC) and D.T. Dobie Ltd are KVM's main contractors. Together they hold 70% of the equity, and thus have a significant influence on the assembler's activities because. KVM is largely dependent on them for its operations, as indicated in Table 4.4. Hence, strategic decisions at both firms significantly influence KVM's decisions. For

example, they are the ones who decide what makes and models are to be assembled, thereby determining, to a large extent, KVM's production operations.

Table 4.4 Ownership structure of Kenya Vehicle Manufacturers

Cooper Motor Corporation (CMC) Ltd	35%
D.T. Dobie Motors Ltd	35%
Government of Kenya	30%

However, the assemblers also assemble vehicles for other companies that are not shareholders. KVM, for example, assembles vehicles for Priority Motors, who are the franchise holders for Eicher Motors, India. All the three assemblers also build trailer, lorry, truck, bus, and pick up bodies for many other companies. This is proof that the assemblers are not entirely at the mercy of the franchise holders. They are free to take in work of their own, especially since their capacity like the manager at KVM put it: "is grossly underutilized"

4.2.5 Organization of production activities at Kenya Vehicle Manufacturers

Kenya Vehicle Manufacturers is organized around the assembly activities entering the assembly line at various stages. The assembly line itself is completely flexible, allowing the assembly of a variety of makes and models over short periods of time. The CKD's and materials are delivered to the plant by the importers (or their agent). These constitute the main inputs into the assembly process, with an input of services at all levels. For example, the security services which are vital to KVM's activities due to its responsibility to importers, goes into all levels of the process. Laundry, security, legal and insurance services are outsourced. Kenya Vehicle Manufacturers has no further involvement

beyond the assembly process as distribution and after-sales service activities are handled by the franchise holder. Prospects for outsourcing, therefore may be only possible in the assembly channel in the form of sub-assemblies, yet, this is limited by the CKD procurement policy which 'forces' importers to buy-in as complete a kit as possible.

Clearly, this mode of production organization differs significantly from that observed at GMEA. Whereas GMEA controls both procurement of component parts and the assembly process, in this type of production the procurement function is clearly separated from the assembly as it is controlled by the franchise holder/importer. The implication here is that, by separating procurement from assembly, it is difficult to target the assembler with regards to subcontracting. First more actors are involved. Secondly, the assembler is removed from the supplier chain decision-making process. This has implications for the concepts of quality, delivery, and buyer-supplier relations. The assembler has limited involvement in the procurement, quality control and delivery of vital inputs. Consequently, the success of supplier chain management depends on closer association between the franchise holder and the SME supplier.

In order to allow work to be organized to suit the requirements of new makes and models, KVM's assembly line itself is flexible. For example, jigs and related equipment can be moved from one production line to another. They can also be adjusted at short notice to cater for variations in specifications. However, the process of assembly itself is integrated. For instance, once a kit goes onto the assembly line, little else goes into it in terms of sub-assembly or specific inputs, except for various services. These results from the fact that the assembly kit arrives at the plant in a relatively complete form, including already assembled sub-components such as gear boxes, engines and chassis. Hence, there are few prospects for outsourcing at this level. Production at KVM is organized in such a way that there is a clear separation between assembly and procurement of components as

indicated in Figure 4.3. This is in clear contrast to GMEA's model of production (discussed earlier), where procurement and assembly are both handled by GMEA.

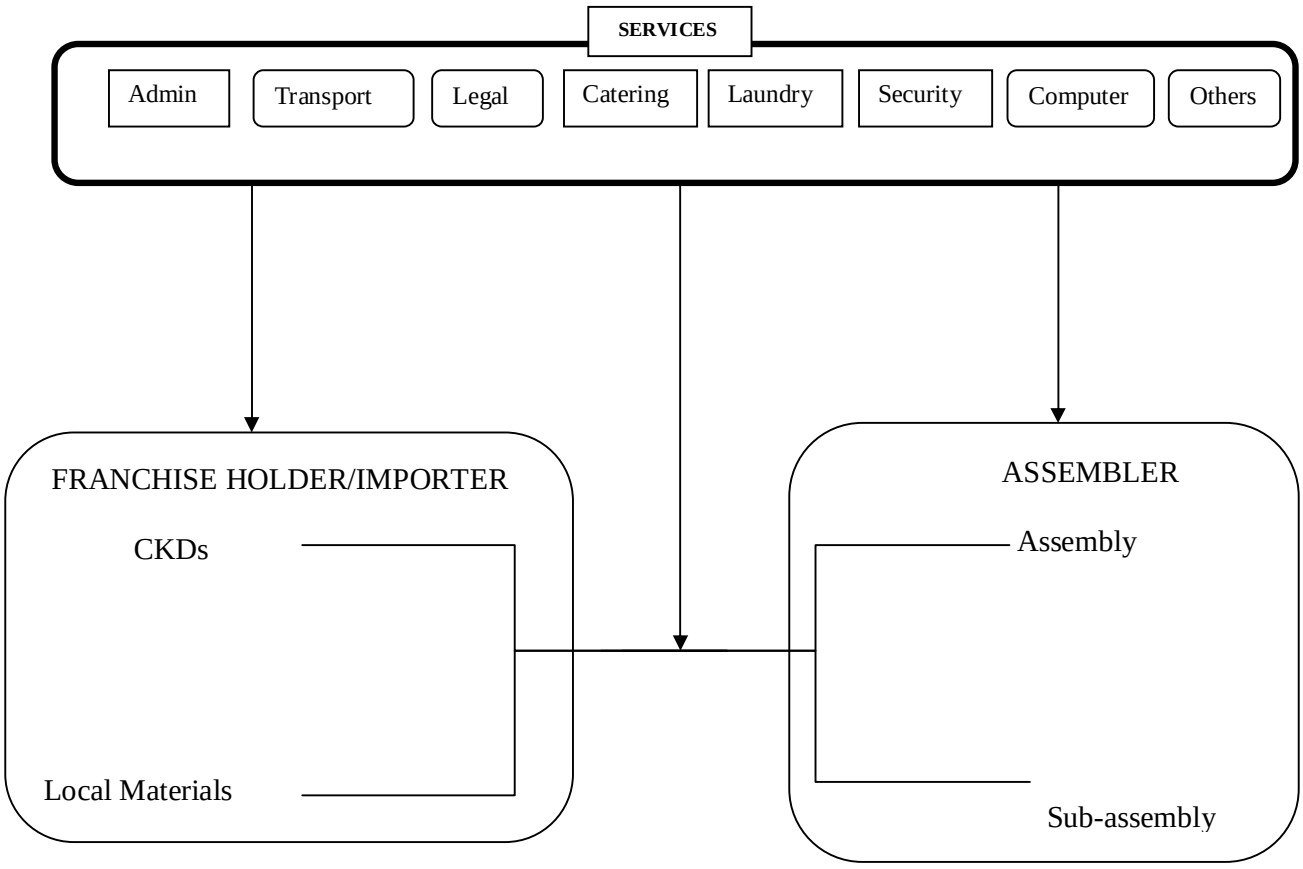

Figure 4.3 Organization of production activities at Kenya Vehicle Manufacturers

The nature of subcontracting, indicated by the local content at KVM at the time of the study is indicated in Table 4.5. It also indicates the suppliers the assembler is involved with. Interestingly, most of them are the same suppliers used by GMEA.

Table 4.5 Local content at KVM

Item	Supplier
Exhaust pipe tail & silencer	Pipe Manufacturers
Batteries	Chloride Exide
Interior trims	Megh Cushions LTD
Tyres	Tread setters
	Kajulu Holdings
	Sameer Group, Pirelli LTD
Suspension springs	Auto Spring Manufacturers
Wiring harness	Auto Spring Manufacturers
Paint	Sadolin paints, Crown Berger E.A. LTD,
	Galaxy Paints LTD
Adhesive solutions	Henkel E.A. LTD
Air cleaner	Auto performance
Chassis inserts	Pipe manufacturers
Shock absorber brackets	Pipe Manufacturers
Fuel tanks	Pipe manufacturers
Shock absorbers	Rob's magic
Leaf springs	Auto Spring Manufacturers
	Auto Ancillaries
Glass	Impala Glass Manufacturers
U bolts & nuts	Auto Springs manufacturers
Automotive diesel	Total (K)
Harness materials	Auto Spring Manufacturers
Suspension wire	Auto Spring manufacturers Turn-o-Metal
frames	Auto Spring Manufacturers
Seal water	Auto Spring manufacturers
Radio/music systems	Sight & Sounds LTD
Welding rods	Welding Alloys
Radiators	City Radiators ltd
Acetylene/welding gases	BOC Gases
Metallic sheets & pillars	ACME Steel, Tononoka Steel Industries
Fuels and lubricants	Total (K), Oilibya,

The utilization of the assembling plants has not improved over the years as clearly indicated by the performance of two of the assemblers; GMEA and KVM for the period 2007-2009 (see Table 4.6). As can be seen, the production capacity has been going down steadily. This is mainly due to liberalization in the early 1990s, which allowed an influx of cheap second hand vehicles into the country as well as the proliferation of makes and models which requires a frequent change of technology which the assemblers are unable to keep up with, among other factors. All the assembly plants have also ceased the assembly of saloon cars.

Table 4.6 Plant capacity utilization of GMEA and KVM (2009)

Name of Assembling plant	Installed Capacity	Vol. of Assembled vehicles (2007)	Capacity Utilization %	Vol. of Assembled vehicles (2008)	Capacity Utilization %	Vol. of Assembled Vehicles (2009)	Capacity Utilization %
GMEA	7,100	2,629	37	2700	38	1993	28%
KVM	6,600	1,108	17	980	15	900	13.8%
Totals	13,600	3,737	54	3680	53	2893	41.8%

4.2.6 Responses from both Assemblers and Franchise Holders/importers

It is not really possible to draw a clear demarcation between assemblers and franchise holders as the activities of the two parties are closely connected. The assemblers are owned by both the Government of Kenya and the franchise holders/importers. The latter are the real decision makers in the motor vehicle industry. However, at the end of the day, they are merely traders. The people who add real value are the assemblers. The franchise holders who were interviewed included managers of: CMC, D.T Dobie, Toyota (EA), Marshalls East Africa, Ryce Motors, Grange Vehicle manufacturers LTD, Associated

Motors, Trans Africa Motors and GMEA, which is both a franchise holder for Isuzu and an assembler.

Regarding the criteria used for deciding which assembler to use, the franchise holders indicated that not only are they the appointed dealers of certain makes of vehicles but they also own part of the assembly plants. This is supported by the fact that CMC Holdings and DT Dobie EA own 70% of KVM while the Government of Kenya owns 30%. Toyota (EA) LTD and Marshalls (EA) LTD own 49.5% of AVA while 25.5% is owned by the Government of Kenya and the remaining 25% by Industrial Development Bank. Regarding the form in which the imports are made, all the franchise holders who were interviewed said they import CKDs, as well as SKDs (mainly for motor circles) and CBUs (Completely Built Units- mainly saloon cars). Apart from Land Rover which is locally assembled by KVM, local assembly now concentrates on pickups, buses and trucks. GMEA is the Kenyan franchise holder and assembler for Isuzu, Japan..

Of the three assemblers, GMEA is the only one that does the importation of the CKDs therefore playing both roles of procurement and assembler for the other two, who are contract assemblers, the critical question regarding local subcontracting is done majorly by the franchise holders. The assemblers are not involved in the decision except in very rare occasions. According to the manager at KVM:

> The contractors bring their requirements. We build the vehicles. Essentially, importers/franchise holders provide us with the requirements, complete with delivery schedules, and provide the CKDs and other materials required for assembly and subsequent distribution. The only local contents we purchase are consumables.

Sometimes however, the decision regarding local content is made by the franchise holder and the assembler who is the one in a position to know as to whether the local supplier has really met the required standards. The assembler makes the decision mainly on consumables (oil, lubricants, and adhesives). It therefore also follows that the

purchasing of the component parts is done mainly by the franchise holders who then pass them on to the assembler. The reason for this is because the franchise holders are the ones in touch with the parent company abroad, (since they are the importers and mostly also distributors). The parent company gives specifications regarding the standards for the assembly of their vehicles. The franchise holders are also the ones directly in contact with customers, who give specifications regarding what they want. As revealed by the study, the franchise holders also own parts of the assembly plants and are therefore bound to have a say on their activities.

The study established that when it comes to choosing the local supplier, a number of variables come into play. Although the choice is made mainly by the franchise holder followed by the assembler, in a number of cases, it is sometimes determined by the customer's preference. It is sometimes done through tendering process. Some local suppliers have established a name for supplying quality parts on schedule and are therefore given preference when it comes to subcontracting as they are preferred by the assemblers and franchise holders. Sometimes the parent company may even make a referral to existing or old suppliers who are known to do good work. In other cases, the contract is given based on the local suppliers approaching the assembler/ franchise holder and demonstrating that they can supply the required items successfully.

When asked what percentage of the local content they were required to purchase, both the franchise holders and assemblers admitted that they were aware that the government requirement for locally assembled vehicles was at least 30% local content. However, the amount of local content purchased (of a particular part) could be more or minimal or none at all. This depends on a number of factors such as the requirements of vehicle being assembled. The manager at CMC, for example, indicated that there are times when the local content can go as high as over 50% or even up to 75% especially in

the assembly of trucks such as IVECO. The same manager pointed out that some local parts were better suited for local conditions. The locally manufactured leaf springs, for example, last much longer on the local roads than imported ones. Sometimes, the local content could be zero on a certain item because there is no local supplier at all to supply the part or the available local suppliers cannot meet the specifications of the parent company. As indicated by the manager at GMEA:

> In as much as we would like to purchase locally from the local SMEs, sometimes there is none available to supply a certain item. Take for example, the case of laminated glass for car windshields. We have not been successful in getting this locally from any supplier ever since we started vehicle assembly in this country. We are left with no alternative but to import the part.

The percentage of the local content also depends on other factors such as the demands of the purchaser, especially where the vehicle being assembled is highly customized to meet the demands of a particular customer. When asked the criteria used in choosing the supplier, the buyers indicated that they prefer dealing with firms that have proved they can supply best quality goods on schedule. Some indicated that the supplier they used was determined by the customer's preference. Others used the suppliers who approached them provided they passed the test for supplying the parts. Some suppliers are selected as a result of a tendering process for local suppliers. On occasion the parent company will insist that an old supplier who has proved himself in the past should be used. The initial contact that results in the subcontracting relationship can be made by either party that is by the buyer or the supplier or through a tendering process. Whatever the case, however, the supplier must demonstrate an ability to meet the demands of the buyer (franchise holder/assembler). However, what is apparent from the study is that it is a tightly knit world of buyers and suppliers and it is not easy for new comers to penetrate.

When asked if they entered into a formal agreement with their suppliers, the majority of the franchise holders (58%) said they do while 25% said they don't. 17 % of

the assemblers said they enter into formal agreement with their suppliers. The franchise holders and assemblers said the normally entered into a one year formal agreement but this was with suppliers who had proved their worth and could be relied upon to deliver quality parts on time (see Table 4.7). With other suppliers the buyer preferred an informal arrangement which could be terminated immediately if the supplier failed to meet his obligations. Supplies were then made on receipt of a local purchase order (LPO) which was settled within 60 days after delivery of the parts. However, a number of them had entered into short term (utmost one year) written contracts with their suppliers because it was required by auditors for ISO certification.

Table 4.7 Nature of the contractual agreement by buyers

Formal contract	Franchise holder	Assembler	Total
Yes	58%	17%	75%
No	25%	0%	25%
Total	83%	17%	100%

It is apparent that the number of suppliers who are able to meet the demographic and operational requirements so as to meet the needs of the assemblers and franchise holders is limited. The nature of buyer-supplier relations has implications for inter-firm relationships. The majority (75%) of both assemblers and franchise holders retain more than one supplier for all the locally sourced inputs (as shown in Table 4.8), except in those cases where a supplier holds a monopoly power in an industry but monopolies are rare in these days of liberalization. The manager at CMC argued that this was prudent as a safeguard against delays, failures to deliver, and unwarranted price increases. It was also prudent to have someone to fall back on if one of the suppliers was unable to come through.

Table 4.8 Reasons why buyers prefer several suppliers

Reasons for number of suppliers used	One Supplier	Many Suppliers	Total
Readily and easy to get variety in quality, services & commodities	0%	75%	75%
Timely delivery & discounted rates in supply due to competition	0%	8%	8%
The only one the company has identified, reliable & convenient	17%	0%	17%
Total	17%	83%	100%

The suppliers were more serious when they were aware that there is competition and the contractor could drop them immediately they failed to meet delivery schedules or became unreliable. This sourcing from several suppliers was also possible because now there were no longer monopolies unlike in the past where for example, like other franchise holders, GMEA previously had price fixing problems with monopoly suppliers such as Firestone Ltd (now Sameer Africa; suppliers of tyres and tubes) and Hill Products Ltd (suppliers of hydraulic dampers and shocks) claiming that they increased prices often and without cause. It was obvious that this was not the preferred position of GMEA as GMEA had little bargaining power. In addition to price negotiation, and fixing problems, single source procurement introduced uncertainties in the assembly process as suppliers did not take delivery schedules seriously. However, this situation has now changed with the liberalization of the economy. In addition to Sameer Africa which is the major manufacturer of tyres locally, there are now a number of tyre importers in the country such as Kingsway Motors Ltd, Treadsetters Ltd, Kajulu Holdings among others.

This was also one of the main reasons why most buyers prefer not to enter into long term formal agreements with suppliers. They preferred to have an informal arrangement which can be terminated at short notice in case of problems. They, however,

have a one year contract with those suppliers who have proved their worth. As the manager at GMEA commented:

> Previously, before liberalization, due to monopolies, you had to be on the phone to the supplier all the time. When that failed, you then went to his premises just to remind him that you must have the order filled in as quickly as possible. You would think that they have had an adequate lead-time for the order! The problem was that they did not take the order seriously until they had only a few days to the deadline, and then they could not meet the deadline. This then also meant that the assembler could also not meet his schedule to the customer.

As it turned out, buyer-supplier relations were relatively adversarial, with buyers retaining more than one supplier for most items. When asked the reasons for having more than one supplier, one manager put it candidly: 'in this business, dealing with supplier is taking unnecessary risk. We have learnt the hard way. These days we prefer to spread the risks!' It was evident that buyers were keen to avoid dependence on one or few suppliers, mainly because of the uncertainty in the suppliers' business environment. In addition, as a measure against quality fluctuations, the franchise and assemblers maintained control over the transactions by providing time and quality specifications for the various orders, while also taking measures to control price fluctuations.

When asked whether they provided their suppliers with any help, the assemblers and franchise holders (17%) indicated that the main help from the buyers was giving them a steady business or market for their goods and also helping to maintain and improve on quality standards. Providing suppliers with technical specification (drawings and designs) was the next reason at (10%). The buyers also (10%) indicated that they kept suppliers updated about and advised them on the new technology so as to meet the buyers standards. Some buyers (8%) indicated that they go to the extent of importing samples of required supplies to give to the suppliers so that they can get the exact copy of the required part. This is illustrated in Table 4.9.

Table 4.9 Help to the suppliers by big firms

Help to suppliers	% of firms
Giving them business	17%
Help to maintain and improve on quality control and management	17%
Engineers give feed backs and technical advice on performance of supplied products	4%
Technical specification provided by the buyers (drawings, designs etc)	10%
Update and advice on the new technology so as to meet the buyers standards	10%
Buyers import samples of the required supplies for suppliers to copy	8%
Total	67%

GMEA takes the lion's share with regard to subcontracting (see appendix A). This could be attributed to the fact that the company is both an assembler and also a franchise holder for Isuzu, Japan and is therefore responsible for both procurement for parts and assembly of vehicles. A lot of subcontracting is on outsourcing of body building to SMEs by the franchise holders and assemblers especially GMEA which as indicated earlier, signed a contract in 2009 with the major body builders for the building of bodies of buses, trucks and trailers. Body building is currently the most thriving activity in the motor vehicle industry. The reason given for this was mainly that importing the Completely Built Unit (CBU) took too much space in the container. When the CKD is imported for local assembly, space is saved in the container to import more parts.

4.3 Motivation behind subcontracting

The second objective of the study was to establish the motivation behind the subcontracting arrangements between the assemblers, franchise holders and their suppliers. As established by this study, the main force behind subcontracting in Kenya is the mandatory requirement by the government that assemblers include at least 30% local content in their locally assembled motor vehicles. All the managers in the study who were

interviewed indicated that the main reason why they sourced locally was because they were required to do so by the government The manager who was interviewed at GMEA argued that in view of the current supplier infrastructure status, it is logical to continue importing as complete a CKD as possible. However, one manager at CMC noted that despite this mandatory requirement, other internal organizational considerations have contributed to their subcontracting strategy. He stated that local sourcing is needed to promote the local industries so as to create employment. He added that it was a pity that the local content issue is not being strictly enforced. According to the manager at KVM, a number of SMEs who used to supply the company with certain items have now closed down because franchise holders now prefer to import almost complete vehicles from abroad. This was supported by the manager at KVM who stated that a number of SME had closed down due to competition from China. The manager added that:

> We procure locally because some local products are cheaper and lead time is reduced considerably since it takes about six months for imported parts to arrive into the country. Local suppliers are also more flexible in terms of meeting assembler demands.

The other reason given for sourcing locally was tax exemption. There was a penalty for importing items or parts listed as protected in the legal notice. The other factor that has forced local assemblers to source locally is the East African Customs Union. Tanzania, for example, has insisted that Kenyan assemblers have to meet at least the required 30% local content before they can export locally assembled vehicles to Tanzania. Information obtained from managers at Toyota E.A. and GMEA, indicated that inspectors from Tanzania have even been to their assembly plant to physically inspect the assembly process to establish the level of local content. The manager at GMEA, however, protested quite strongly that this insistence on a specific percentage of local parts is rather misguided for the specific reason that:

> CKD assembly is not just a 'simple assembly' but a 'substantial transformation' which involves the intensive use of local labour. This employment of intensive local labour should not be ignored when local content is being measured.

The only manager who said that one of the reasons for sourcing locally was the good quality of the local inputs was the logistics manager at CMC who pointed out that for example, leaf springs that are manufactured locally are more suitable and last much longer on the poor roads than imported ones. The main vehicles that are currently being assembled in Kenya that do not seem to have been much affected by the proliferation of makes and models or importation of second hand and reconditioned vehicles are pickups and trucks. This is because importing CKD kits for trucks and assembling them locally is cheaper as it conserves space in the container to carry more units. As mentioned elsewhere in this study, importing the completely built unit (CBU) would take too much space in the container. This is not the case when it comes to importing saloon cars as they take less space. This, together with the proliferation of makes and models of saloon vehicles in the country has forced the three assemblers to halt the local assembly of saloon cars. The importation of saloon cars is also driven by market demand or customer preference; economic drive or affordability is another factor as locally assembled vehicles are more expensive due to a number of factors. Most Kenyans are now buying cheaper reconditioned vehicles from Japan, Singapore and Europe. The parent company of the vehicles also has a say in the awarding of franchises for local assembly.

Another reason that was often quoted was that they sourced locally to avoid paying import duty charged on imported component parts. However the suppliers complained that the 10% duty levied on imported component parts is not heavy enough to deter assemblers and franchise holders from importing parts. One manager at CMC indicated that the company sourced locally because they wanted to promote local industries and create employment. Another reason that came up was that it was for the

sake of after sales service as it is easier and cheaper to replace local parts with than imported parts. End user specification was also raised as some end users clearly specified whether local parts may be used or not.

Contrary to the motive of the primacy of cost (efficiency) as a determinant of transaction behavior, all the firms interviewed considered control over resources (supplies), markets, the government and its competitors more important in making decisions about their transaction patterns or about their organizational structures. The most frequently cited motive was access to and control of supplies, in this case, CKD kits. This priority is linked to the need to 'remain in the good books of the government' as a means of ensuring access to import licenses for scarce productive resources. The franchise holders make specific efforts to target specific government officials in order to ensure that licenses were issued on time. Thus, allowing for variations depending on the activity in question, for the various services, components, and sub assemblies, decisions to externalize transactions were made not directly with cost reduction in mind, but to maintain this control.

However, even in cases where cost was an important consideration, for example, in the case of choosing between alternative suppliers, the actual selection of the supplier was not predicted on lower costs. Rather, firms tended to choose the supplier who was willing to supply on the terms stated by the buying firm, particularly those assuring the buyer of good quality products delivered on time, and who could cope with the technological demands of the buyer. This is not surprising since observers view the components market as a buyer's and not a supplier's market, allowing buyers to state their own terms.

The assumption made by traditional economic theories regarding the primacy of cost and efficiency implies that if the market price is lower, firms will transact externally

when choosing between external and internal supply. Based on this argument, it would also be expected that because small firms are postulated to have lower overheads, such cost saving can be achieved by transacting with them. Contrary to these expectations, all of the firms interviewed considered a price differential between in-house supply and external sourcing, and between large and small firms, less important than prompt delivery and quality assurance. It was therefore unlikely that firms in the market or small firms quoting lower prices, perhaps due to lower overheads, would be preferred to larger firms quoting higher prices, if the small firms did not demonstrate an ability to deliver good quality products on time.

A previous study on the sector by Masinde (1996) found that GMEA, keen on building a local supply network of components as a matter of company policy, had embarked on a quality and delivery standards improvement programme for its current suppliers. In addition, a rigorous selection criterion ensured that progressive suppliers independently improve their standards before entering into contract with this particular franchise holder. They would then enter into a supplier development programme. At the time of this study, however, GMEA had stopped this, hence these findings contradicting the findings of Masinde (1996). The only evidence of supplier development at GMEA was a car upholstery supplier, who has been given space within the GMEA assembly plan to make and supply GMEA with car cushion materials. It was clear that all the other franchise holders buy products from suppliers who meet their quality standards themselves, and will immediately change suppliers when they fail to do so. What this implies is that there is yet a limited commitment by many franchise holders to the development of a supplier base, the weakness of which is used to justify imports of parts and components.

The various reasons that motivates assemblers and franchise holders to enter into local sourcing arrangements with local suppliers are indicated in Table 4.10. The majority do it merely because it is mandatory government requirement that they use at least 30% local content. This was so that the government does not deny them license required to import the CKD kits required for motor vehicle assembly. This was followed closely at (33%) by those who source locally to avoid paying import duty since you only pay VAT when you source locally. However, a number of SME suppliers were of the opinion that a heavier penalty should be imposed on imported parts. Also, one of the reasons quoted frequently for sourcing locally was that the lead-time, which is much shorter and in one case, quality, specifically leaf springs, because they are better suited to the local conditions such as the poor state of the local roads.

Table 4.10 Motivation for subcontracting

	Franchise holders	Assemblers	Total
Government requirement	37%	17%	50%
To avoid paying import duty since you only pay VAT when you source locally	25%	8%	33%
Shorter lead time	18%	14%	33%
End user specification	4%	0%	8%
To concentrate on the core business	4%	4%	8%
To provide employment to locals	3%	4%	8%
To conform to the local conditions such as roads	4%	4%	8%
Wanted to promote local industries	8%	0%	8%
After sales services available locally quickly for local parts	8%	0%	8%
Total	67%	33%	100%

4.4 Characteristics of the Suppliers

One of the objectives of the study was to find out the characteristics of the SMEs and other suppliers involved in subcontracting relationships with the assemblers and franchise holders. A total of 72 questionnaires were administered, out of which 66 were returned and found usable resulting in a sample size n = 66. This reflected a 92 percent response rate that was considered adequate for the study. Using normality tests, the data was found to be normally distributed, while a reliability test of the 66 item scale instrument revealed a Cronbach's alpha value of 0.872 which meant the instrument was reliable, and the study proceeded with data analysis.

The characteristics analyzed in this section are of suppliers who in one way or another conduct business with either the franchise holder or the motor vehicle assembler. The firms were categorized as per their type of business and also the size of their work force. It was established that local component falls not only under manufacturing but also stockists/distributors and dealers. Manufacturing firms formed the majority at 56%, distributors formed 23% while stockists made up 21 %. The firms were further grouped as follows: large enterprises with a workforce of over 100 employees, medium enterprises with between 51 to 100 employees and small enterprises with up to 50 employees.

Table 4.11 Size of the business according to number of Employees

	Number of employees		
Size business		f	%
SBEs	1-50	36	55
MEs	51-100	22	33
LEs	Above 100	8	12
	N	66	100

The study revealed (Table 4.11) that eight (12%) out of the 66 suppliers are large enterprises such as Total (K), Henkel EA, BOC Gases, Oilybya and others. Medium firms were 22 (33%) while the small firms were the majority of suppliers at 36 (55%) thus bringing the total of SME suppliers to 58. Except in the case of the suppliers of tyres and tubes, oils, fuels and lubricants and paints, most suppliers to the sector had less than 100 employees. The study also revealed that assemblers and franchise holders prefer to deal with large suppliers rather than with SME suppliers. A manager at GMEA reported that:

> All in all, it is preferable to deal with large firms. They are able to cope with the technological and volume requirements as they are already well established unlike small firms. You can also count on them when it comes to maintenance of quality standards and keeping of schedules.

Hence, given prevailing circumstances, GMEA, like the other assemblers and franchise holders, would rather transact with larger firms for organizational and quality assurance reasons. The same manager was keen to add that large firms do not necessarily mean lower prices (often assumed to result from higher volumes). He argued on the contrary, owing to their levels of efficiency, large firms are likely to charge higher prices. The fact that MSEs make up the majority of suppliers is not accidental. According to the manager at Toyota, E.A., the demand levels in the sector are so low that large firms have found it uneconomical to invest in the components sub-sector. Most of the investors in this sector are, therefore small to medium firms. Further, precisely because of these low levels of demand, no economies of scale are possible, and, as larger firms have been reluctant to enter the auto ancillary subsector, only the small firms remain as operators in this market.

The findings of the study indicate that out of the 66 firms in the study, 31 (47%) of the suppliers have been in business for a period of over 10 years. The majority (52%) have existed between six to ten years. There seemed to be a correlation between the age

of the business and the subcontracting arrangements. Contractors seemed to prefer suppliers who had been in business longer. (see Figure 4.4).

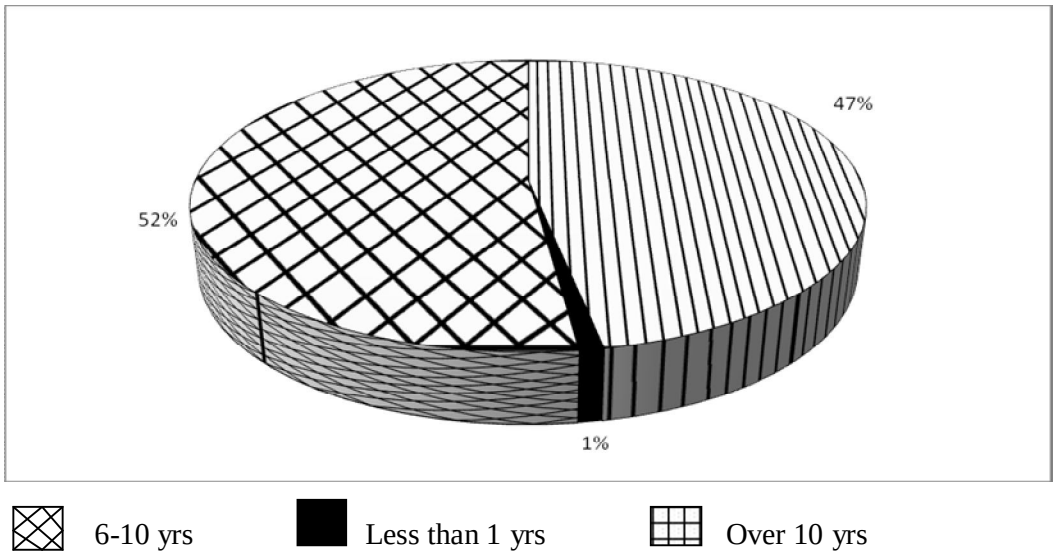

Figure 4.4 Age of business

This study established that only a small number of SMEs are involved in subcontracting arrangements with large firms. Megh Cushions ltd., Labh Singh Harnam Singh(LSHS) and Chloride Exide Batteries are some of the SMEs that supply almost all the buyers. This fact indicates that experience in doing business with other large firms is considered important by the buyer. These findings support the findings of Skae (1998), which established small businesses with linkages tend to be those that have done business with large firms before. This suggests that buyers prefer establishing linkages with suppliers that have had dealings with other large buyers. This also implies that once a small supplier starts selling to another business, it becomes easier for the supplier to find an additional buyer.

A profile of the respondents in Table 4.12 indicates that a majority of the businesses are operated by the owner managers whose titles include general manager (27.3%), human resource manager (19.7%), and marketing manager (25.85%). Up to 47.0% of the respondents were in a manufacturing type of business while distributorship comprised 37.95% of the respondents. Figure 1 further indicates that most of the participating respondents have been in business for between 6-10 years (51.5%) and 47.0% of the SMEs had been in business for over 10 years, confirming that these businesses are relatively stable.

The managers of the firms interviewed confirmed that their main buyers were franchise holders comprising of 66.75% of their customer while 24.2% of the firms they supplied were assemblers with the Government and others compromising only 6% of the buyers. This is not surprising because most of the franchise holders are also contract assembler, they own part of the assembly plants that they contract to assemble their motor vehicles. They are also the ones who do the sourcing for the assemblers that they do business with.

Table 4.12 Demographic and Operational Characteristics of SMEs

Sample Profile

Variable	Description	Frequency	Percent	Valid Percent	Cumulative Percent
Designation of Respondent	General manager	18	27.3	27.3	27.3
	Human Resource Manager	13	19.7	19.7	47.0
	Marketing Manager	17	25.8	25.8	72.7
	Finance Manager	6	9.1	9.1	81.8
	Engineer	12	18.2	18.2	100.0
Type of Business	Manufacturer	31	47.0	47.0	47.0
	Distributor	25	37.9	37.9	84.8
	Dealer	10	15.2	15.2	100.0
Years in Business	Less than 1 year	1	1.5	1.5	1.5
	6-10 years	34	51.5	51.5	53.0
	over 10 years	31	47.0	47.0	100.0
Number of Employees	1-50	16	24.2	24.2	24.2
	51-100	10	15.2	15.2	39.4
	over 100	40	60.6	60.6	100.0
Major Customers	Assemblers	16	66.7	66.7	66.7
	Franchise holders	44	24.2	24.2	90.9
	Government	6	9.1	9.1	100.0
	Total	n = 66	100.0	100.0	

A Pearson correlation of number of employees and years in business registered a significant relationship between the two with a $p = 0.000$ at 0.01 level of significance. A cross tabulation of the number of employees and years in business shown in Table 4.13 shows that the large number of employees also exhibited a longer life in business.

Table 4.13 Years in Business versus Number of Employees

		Employee Number			
		1-50	51-100	OVER 100	Total
Years in Business	Less Than 1 Year	0	1	0	1
	6-10 Years	2	3	29	34
	Over 10 Years	14	6	11	31
Total		16	10	40	66

The study established that manufacturers were the main traders in the industry (31%) followed by distributors (25 %). This could be explained by the fact the franchise holders and assemblers such as General Motors, (E.A.) are, not only manufacturers, but sometimes distributors as well. The study results in Table 4.14 below shows limited business prevails between the three business types and Government agencies, implying subcontracting is more rampant in a business to business relationship.

Table 4.14 Type of Business and Major Customers

		Major Customers			
		Assemblers	Franchise Holders	Government	Total
Type of Business	Manufacturer	14	17	0	31
	Distributor	20	1	4	25
	Dealer	7	1	2	10
Total		44	16	6	66

This relationship is further illustrated in Table 4.15 below. The results indicate who the major buyers in the industry are and their major suppliers. The small firms are the major suppliers (24%), closely followed by medium firms at 23% and large firms at only 11%. With regard to large firms. GMEA is the largest buyer at (58%); followed by CMC at

(23%) and Simba Colt Motors at 21% and Toyota E.A. at 15%. This could be attributed to the fact that GMEA is both an assembler and a franchise holder for Isuzu, Japan (see Table 4.15).

Table 4.15 Distribution of the major buyers and their suppliers

Contractor	Large firms	Medium Firms	Small Firms	Distributor & Stockist	Dealer	Manufac-turing firms	Total
General Motors EA ltd.	11%	23%	24%	9%	9%	39%	58%
CMC Motors Group	3%	14%	6%	3%	2%	18%	23%
Simba Colt Motors ltd.	3%	11%	8%	3%	3%	15%	21%
D.T Dobie ltd.	2%	5%	9%	5%	2%	9%	15%
Toyota E.A. ltd	2%	5%	8%	3%	2%	9%	14%
Kenya Grange Vehicles Industry ltd	2%	8%	2%	0%	0%	11%	11%
Motor Vehicle Dealers	3%	3%	3%	2%	2%	6%	9%
TATA Africa	0%	2%	5%	2%	2%	3%	6%
Associated Motors Ltd.	0%	2%	5%	0%	0%	6%	6%
Kenya Vehicle Manufactures (KVM)	0%	3%	3%	2%	2%	3%	6%
Ryce Motors Ltd.	0%	3%	3%	0%	0%	6%	6%
Marshalls EA Ltd	2%	0%	2%	0%	0%	3%	3%
Associated Vehicle Assemblers (AVA)	0%	0%	2%	0%	2%	0%	2%
Others (Government/Corporations & Institutions, NGOs etc)	11%	26%	26%	8%	23%	21%	62%
Total	12%	33%	55%	23%	21%	56%	100%

Analysis to determine if the firms preferred to deal with more contractors was affirmative from all the respondents, with a majority (57.6%) of them reporting that contracting more would allow them produce more variety, 21.2 % reporting it would give them a better bargaining power and another 21.2 % suggesting it additional subcontracting would boost their sales levels. Table 4.16 further indicates that 90.9% of

the firms under study do sell component parts in their enterprise, with a paltry 9.1% reporting service parts offer.

Table 4.16 Nature of Subcontracting in the Motor Vehicle Manufacturing Industry

Variable	Description	Frequency	Percent	Valid Percent	Cumulative Percent
Preference to deal with more contractors	Yes	66	100.0	100.0	100.0
Reason for preferring more contractors	Produce a Variety	38	57.6	57.6	57.6
	Better Bargaining Price	14	21.2	21.2	78.8
	More Sales	14	21.2	21.2	100.0
Type of components offered	Component Part	60	90.9	90.9	90.9
	Service Part	6	9.1	9.1	100.0
Sub contracted other firms	Yes	29	43.9	43.9	43.9
	No	37	56.1	56.1	100.0
Products outsourced	Supply of Raw Materials	55	83.3	83.3	83.3
	Labour	7	10.6	10.6	93.9
	Machinery	1	1.5	1.5	95.5
	Bodyworks	3	4.5	4.5	100.0
Who initiated the subcontracting arrangement	Contractor	18	27.3	27.7	27.7
	My Company	25	37.9	38.5	66.2
	Both of Us	22	33.3	33.8	100.0
	Total	65	98.5	100.0	
	Missing	1	1.5		
Formal agreement with contractors	Yes	42	63.6	63.6	63.6
	No	24	36.4	36.4	100.0
Type of Contract	Full year	56	84.8	87.5	87.5
	1/2 Year	3	4.5	4.7	92.2
	1/4 Year	1	1.5	1.6	93.8
	Indefinite	4	6.1	6.3	100.0
	Total	64	97.0	100.0	

The study required the suppliers to state whether they met the demands of the contractors by themselves or whether they also subcontracted other firms so that they could meet the demands of the contractor. It was revealed that the suppliers themselves

are further involved in tier two subcontracting to meet their contracts with the franchise holders and assemblers (see Table 4.17). Out of the three categories of suppliers: large, medium and small, the small firms are the majority (29%) when it comes to subcontracting other firms so that they can meet the demands of the contractors. This could be attributed to their poor technological capacity. Only 6% of the medium enterprises subcontracted other firms. This could be because they are better equipped technology wise. As many as 23% of the large enterprises outsource some of the materials required to meet the demands of the supplier probably because their volume of production is much higher as they serve not just the contractors but the larger market as well.

Table 4.17 Tier two subcontracting

Supplier involvement in subcontracting to meet order	Large Firms	Medium Firms	Small Firms
Involvement in sub-contracting	23%	6%	29%
Not involved in sub contracting	22%	6%	26%
Total	33%	12%	55%

The study also revealed that the majority of the firms who further subcontract others are the manufacturing firms at 32%. This could be attributed to the need for raw materials which have to be outsourced since they cannot be made in-house. It could also be because they are the majority suppliers in the component parts sub sector. The main businesses that are involved in this second tier sourcing are the body builders of buses, trucks and trailers which are imported as CKD kits. The chassis is put together by the assembler who then subcontracts a body builder to build the body. As one manager put it,

this is to save space in the containers so that more parts can be imported. Fully Built Units (FBUs) take too much space in the container. Currently, body building seems to be the most active sub sector in the motor vehicle industry, as revealed by the study. As indicated elsewhere in this study GMEA has recently entered into arrangement with a number of body builders to build bus bodies for GMEA. Raw materials were seen as taking the highest share at 83%. (This is illustrated in Figure 4.5). This could be explained by the fact that manufacturing firms must outsource the raw materials needed for production. Tier two subcontracting also involved the outsourcing of labour (11 %) and machinery and equipment (1%).

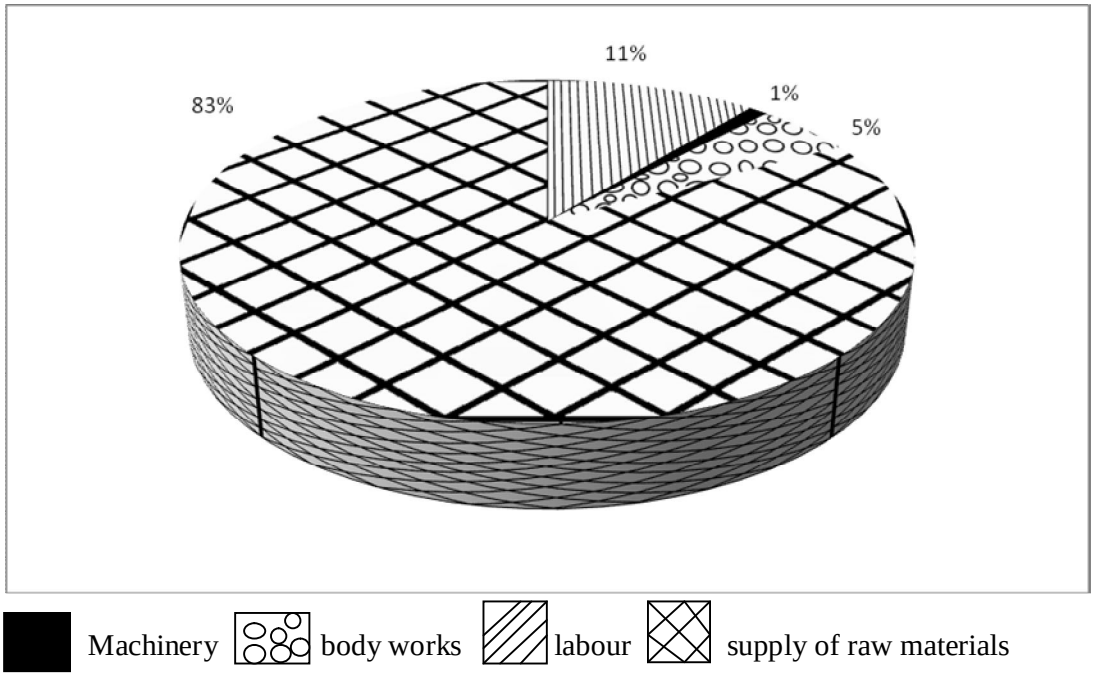

Figure 4.5 outsourcing by suppliers

The study sought to establish if a formal subcontracting agreement existed between the firm and the contractors, with 83.6% of the respondents confirming the existence of these

agreements. Figure 4.6 shows that the most prevalent contractual agreement was one (1) year contracts.

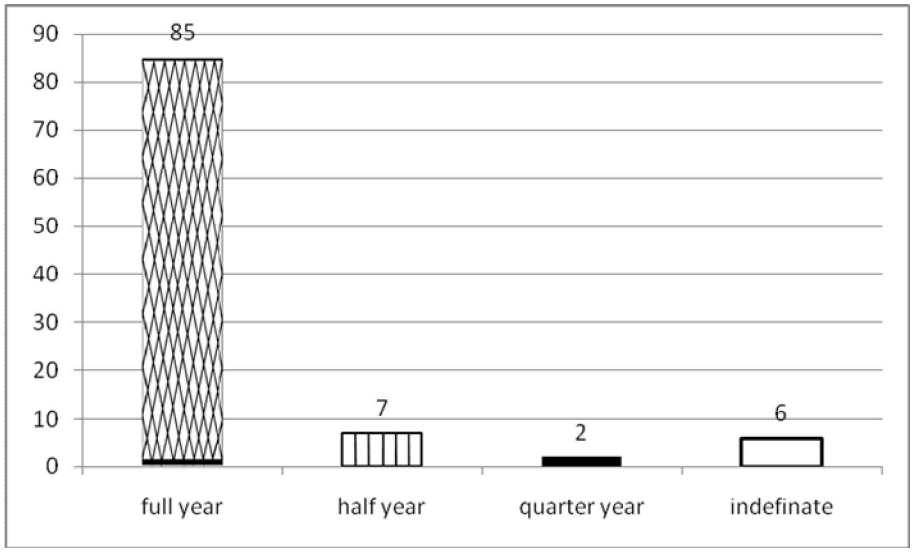

Figure 4.6 Types of Contracts

The study established that a number of firms (90%) had a written contractual agreement with the assemblers and franchise holders **(**see Table 4.18). As the manager at CMC put it:

> These are firms we have been doing business with for a very long time and they have never let us down. Some are small but they have proved their worth and we trust them to deliver. Also, quite a number are large firms who have the technology and the manpower required for quality production and can be trusted to deliver on schedule.

Surprisingly most of the firms with the one year written contracts were small firms (27%) mainly due to the reason given by the CMC manager above. The reason for this was that ISO certification required them to give the suppliers written contracts for auditing purposes. The firms in manufacturing take the lion's share as they the main players in the sector since they supply the assemblers with component parts for the assembly of motor vehicles. This was followed closely by large firms (24%) since as

stated elsewhere in the study, the assemblers and franchise holders prefer to deal with them than with SMEs. However, most of the large firms in the study are not in manufacturing but supply things like industrial gases. The fact that MSEs make up the majority of suppliers in manufacturing is not accidental. The reason for this is because of the low sales and lack ok of economies of scale in the sector which makes big businesses reluctant to invest in the manufacture of component parts business. The reason given by the assemblers and franchise holders for not entering into longer contractual arrangements was that: "it is a free market and if we are not satisfied with a particular supplier, we simply move on to their competitors. This keeps the suppliers on their toes."

Table 4.18 Distribution of types of contracts among suppliers

	Large Firms	Medium Firms	Small Firms	Distribtrs & Stockists	Dealers, Sales & Service	Manufac -turing	Total
Full Yearly renewal	24%	8%	27%	12%	20%	27%	59%
½ yearly renewal	0%	0%	2%	0%	0%	2%	2%
¼ yearly renewal	0%	0%	2%	2%	0%	0%	2%
Indefinite renewals	2%	0%	0%	0%	0%	2%	2%
Piece work	2%	0%	2%	2%	0%	2%	3%
Total with contracts	27%	8%	32%	15%	20%	32%	67%
N/A (No contracts)	6%	5%	23%	8%	2%	24%	33%
Total	33%	12%	55%	23%	21%	56%	100%

The buyers have stipulated certain conditions which have to be met by the suppliers upon being contracted for supplies. The majority of the suppliers indicated that they are expected to satisfy the buyers' quality standards, meet deadlines and transport goods to the buyer. Others indicated that they are expected to offer their goods at reasonable

prices; offer after sales services and meet the contractors' scope, designs and specifications (as indicated in Table 4.19).

Table 4.19 Contractual obligations of suppliers

Conditions	Large Firms	Medium Firms	Small Firms	Distribts & Stockists	Dealers, Sales & Service	Manufac -turing	Total
Satisfy contractor's quality levels	33%	11%	50%	21%	20%	53%	94%
Meet deadlines/Time delivery	30%	9%	45%	18%	18%	48%	85%
Transport goods to contractor	27%	9%	30%	12%	14%	41%	67%
Offer discounts/credit facilities & reasonable rates/prices	23%	3%	35%	17%	12%	32%	61%
Make specific designs	20%	5%	24%	8%	9%	32%	48%
After sales service & warranty	6%	0%	8%	0%	3%	11%	14%
Meet contract scope, designs and terms as specified	5%	0%	3%	2%	3%	3%	8%
Total	33%	12%	55%	23%	21%	56%	100%

When asked whether or not the contractors/buyers supported them in their businesses in any way, the majority (41%) said the main benefit to them was that the buyers provided them with a steady market for their supplies (14%). Some indicated that some contractors provide capital, marketing/ promotion of business, advertisements and/or compliments and technical assistance such as provision of machinery. Only 5% of the businesses said they had never been aided in any way by a contractor. They were also

given a chance to provide after sales supply services and repairs and benefited from the research done by the contractors.

Regarding other ways the suppliers would have wished the contractors to help them: the response was that they wished that the contractors would give priority to local products, give prolonged contracts to sustain them in the business, provide market research and technical training through seminars on new technology and also give them feedback on product performance for improvement. They want contractors to facilitate/ guarantee loans and/or make up front payment on orders. They also felt that contractors should always adhere to contractual obligations and control price fluctuations. Prompt payment upon delivery of goods/ services was another issue the suppliers felt the contractors should seriously consider.

However, while outsourcing of parts and components was minimal, the outsourcing of services was more widespread. These included maintenance and cleaning, transportation, warehousing, laundry, catering and security services. One of the reasons given for subcontracting more services than components, as described by one manager at CMC, was that 'providing services in-house requires more management time than we are willing to dedicate to such a peripheral activity.' However, it was also evident that when the service determined the smooth operation of the manufacturing process, for example, computer services, it became **'**absolutely necessary to provide it ourselves.'

The prospects of SME development lie in the inherent capacity of the sector to accommodate subcontracting. Data from in-depth interviews reveal that the underlying reason for reluctance by big firms to buy from SMEs is the "lack of trust" by the large companies, perhaps emanating from their ignorance of the scope of support that SMEs can give. In an environment where these large firms have traditionally relied on themselves or on other large firms, the threat of loss of control over resources and

markets in working with other firms appears dominant in the perceptions of large buyers and franchise holders. This supports expected behavior as recommended by core competence proponents like Pralahad and Hamel (1994) who posit that a manufacturing enterprise is likely to outsource more services than it provides in-house.

4.5 Benefits of Subcontracting

4.5.1 Benefits to the assemblers and franchise holders

The third objective of the study was to establish the benefits derived by both the buyers and

suppliers in subcontracting arrangements. As already mentioned with regard to motivation, one of the most important reasons for local sourcing is the lead time required between making an order and delivery for use in the production system. Sourcing from foreign suppliers requires, on average, three to six months lead time, yet the fluctuations in demand are significantly shorter than three months. At the same time, opportunities for holding large inventories in CKDs are limited. This means that it is difficult to respond quickly the fluctuations in demand patterns since inputs (including CKD kits) have to be built into the production system at least three months in advance. This situation implies that franchise holders and assemblers have a critical internal incentive to source locally as much as possible.

As pointed out by the manager at CMC, another benefit of local sourcing was that some local parts were more suited to the poor status of our local roads. An example of this is leaf springs which can withstand the poor condition of the local roads better than imported ones. They therefore make the vehicle more suitable for local use to end users specifications. Local sourcing also means avoiding the tedious documentation involved in importation of parts. Local parts are also cost effective to use as pointed out by several of the managers interviewed because of the low quality of the Kenya shilling which makes

importation of parts costly. Local sourcing is also beneficial because the assembler/franchise holder do not have to pay import duty. Another reason for local sourcing is that it reduced cost in terms of machinery, equipment and personnel required for in-house production, leaving the franchise holder/assembler to concentrate on the core business. Another benefit is that they would not have to pay import duty on component parts when buy locally.

4.5.2 Benefits to the suppliers

The study sought to know how the suppliers benefit from subcontracting arrangements with the assemblers and franchise holders. Almost all the suppliers admitted that the franchise holders and assemblers assisted them in some way. To the majority (54.5%), the assemblers and franchise holders provide a much needed market for their goods. This was followed by 22.7%, who indicated that the assemblers and franchise holders provided them with technical assistance, followed by provision of training at 13.6%. The other forms of benefits include credit assistance to meet the contract, a number were provided with machinery. These benefits accruing from subcontracting arrangements are summarized in Table 4.20.

Table 4.20 Benefits of Subcontracting Arrangements to the Suppliers

Variable	Description	Frequency	Percent	Valid Percent	Cumulative Percent
Advsub	Technical assistance	15	22.7	22.7	22.7
	Provide credit	2	3.0	3.0	25.8
	Marketing and promotion	4	6.1	6.1	31.82
	Provide a steady business	36	54.5	54.5	86.4
	Provides training/ efficiency	9	13.6	13.6	100.0
	Total	66	100.0	100.0	

The suppliers were, apparently, not satisfied with the various ways in which the assemblers and franchise holders aided them. They wished the buyers could offer more help than currently provided (this is summarized in Table 4.21). This leads the study to conclude that suppliers, especially SME suppliers, feel that their fate is in the hands of the buyers. They feel that if they have to do better, help has to come from the government, the franchise holders or assemblers This kind of attitude does not augur well for the SMEs in the country. The push to stay competitive and survive in a business world that becomes more competitive by the day due to globalization should originate with them.

Table 4.21 Other ways in which the suppliers want aid

	Large Firms	Medium Firms	Small Firms	Distri -butor & Stockist	Dealers, Sales & Service	Manufact -turing	Total
Priority to local products and giving prolonged contracts to sustain us in the business	11%	2%	11%	3%	3%	17%	23%
Provide market research and technical training through seminars etc on new technology and feedback on products performance for improvement	6%	5%	6%	5%	3%	9%	27%
Facilitate/guarantee loans and/or make up front part payment upon orders	0%	0%	5%	0%	0%	5%	5%
Adherence to contractual obligations and control of price fluctuations	2%	0%	2%	0%	2%	2%	3%
Prompt payment upon delivery of goods and services	0%	0%	3%	2%	0%	2%	3%
Total	18%	6%	26%	9%	8%	33%	50%

Subcontracting comes with its own disadvantages as captured in Table 4.22 below. The greatest disadvantage of subcontracting is risks involved (60.0%) as the suppliers are never sure whether their contracts would be renewed by the buyer; the likelihood of doing poor quality work and getting your work rejected by the buyer

(24.2%) thus incurring losses. The study reports that some firms perceive subcontracting to be expensive (9.1%), though their number is insignificant**.**

Table 4.22 Disadvantages of Subcontracting Arrangements to the Suppliers

Variable	Description	Frequency	Percent	Valid Percent	Cumulative Percent
Disasub	Poor quality work	16	24.2	24.2	24.2
	More money/costly	6	9.1	9.1	33.3
	Risky	40	60.6	60.6	93.9
	Late payment	4	6.1	6.1	100.0
	Total	66	100.0	100.0	

4.6 Constraints to Subcontracting Arrangements

It must be noted that factors that affect the level of local content are internal and sometimes external as well. Managers argued that suppliers of the CKD kits often exert pressure, using deletion penalties, to coerce CKD buyers to buy complete kits. However, when asked what influenced subcontracting behavior, several factors were identified. These range from intrinsic weaknesses of existing and potential suppliers to such external factors as government regulation to lack of suppliers, among others.. The overall perception of assemblers and franchise holders regarding local SME suppliers was that they were ineffective and insufficient to meet the needs of the large enterprise. These shortcomings of the SME suppliers are elaborated below.

4.6.1 Low quality of local component parts

The reason for not sourcing components parts locally that was quoted by all the managers who were interviewed at GMEA, KVM and the franchise holders, was the poor quality of local products. These managers argued that while they would like to buy locally because

sometimes local parts were cheaper and the SME supplier in close proximity to assemblers (reducing the problems of lead- time, shipping costs, and losses through shipping mishaps), this is limited by the low quality of local products. Franchise holders demand very high standards for their vehicles and will even go the extent of sending their quality experts to Kenya to vet the SME supplier before giving consent for local sourcing.

4.6.2 Technological capacity and poor methods of production

According to managers at D.T. Dobie and CMC, the poor quality of the SME products is due to lack of technical capacity of most SMEs in Kenya. Most of them use outdated technology. Some SMEs may not see the need to invest in expensive technology because the volume of orders they get from the assemblers is not big enough. Most local suppliers have old machines and equipment which are inadequate to produce some parts to the required standards of the franchiser**.** The manager at GMEA indicated that most local suppliers have outdated machines, measuring devices and tools, which are all inadequate to produce some parts to equivalent quality as imported parts.

Most suppliers use their own technology and production techniques to produce a 'best fit' for what they interpret to be the technical specifications of a given item. The GMEA manager was even surprised that given the level of technological development of some suppliers, they are able to produce some of the complex items required at all. The manager at GMEA pointed out that:

> Suppliers are also limited in their production methods. Some SMEs use very basic production techniques geared to small scale production. Coupled with inappropriate equipment and poor quality raw materials, the quality of end products is adversely affected. In addition to this, most SMEs are small or medium family businesses which suffer from poor management capacity, particularly related to quality consciousness. Also, because the small scale of operations does not allow reasonable profits, the SME suppliers are not able to attract the kind of highly skilled personnel required to deal with the technical production of vehicle component parts.

Consequently, the quality levels of their products are perceived to be low. This often resulted in rejection of SME products by the assembler's quality manager. This resulted in the SME supplier incurring heavy losses. This problem of lack of appropriate technology, however, was not limited to SMEs**.** According to the manager at GMEA, suppliers are also limited in their production methods, using in some cases, elementary production techniques geared towards small scale production. Coupled with inappropriate equipment and poor quality raw materials, the quality of end products is adversely affected.

4.6.3 The management capacity of the SME suppliers and inability to access skilled manpower

Even though the study also included some large suppliers who made up 33% of the suppliers, the majority of the suppliers were small businesses who made up 55% of the study while medium enterprises made up 12%.according to the franchise holder managers and assemblers, most of the SME businesses in the study are family businesses which suffer from poor management capacity particularly related to quality consciousness. Consequently, the quality standards of their products are perceived to be low. This was contradicted by the CMC logistics manager and D.T. Dobie who argued**:**

> Some of the local components are preferable to imported ones. An example of this is locally produced leaf springs. It has been proved that they last much longer on our poor roads.

Another related factor is the skill level of employees. Since most of the suppliers are family businesses, and because the small scale of operations does not allow reasonable profits, the type of employees they attract are of lower skill level than is necessary to deal with the technological requirements of vehicle parts and components production**.**

4.6.7 Poor quality control by suppliers

Because of reasons mentioned above, suppliers do not have the capacity or "consciousness" for bench testing of products to determine various performance characteristics. Consequently, there are some defects in products (estimated to be about 20-25% of delivered inputs) delivered to the assemblers. Although these are usually returned and replaced, there are significant costs in terms of lost time to the assembler and loss to the supplier as well. These observations have two major implications for the operations of the assemblers namely. First are development costs. If the assemblers are to benefit from such suppliers, they have to incur costs in improving the technology of potential and existing suppliers through production standards and engineering support; secondly are high warranty costs. If these low technological levels are not addressed, there are high warranty costs emanating from high failure rates of parts and components. It must be stated here that this study did not intend to pursue the correctness of the statements made about quality of products, but rather to those factors considered important by assemblers and franchise holders when making decisions as to whether to produce in-house or outsource.

4.6.8 Lack of SME suppliers

The manager at GMEA stated that in as much as the assembler would like to source locally, sometimes there were no local SMEs to supply certain products. General Motors E.A., for example, had wanted to procure certain components for their vehicles locally but no SME supplier was available to do this. An example is GME.A.'s inability to source laminated glass locally for windshields for their locally assembled vehicles. They have therefore been left with no alternative but to import these parts.

4.6.9 Adequacy and timeliness of supplies

A different problem tempering buyer-supplier relations is the adequacy and timeliness of supplies. According to the manager at GMEA, because the supplier serves other assemblers, and also the replacement market, there are delays in meeting orders. Although other factors were considered pertinent in explaining this position, all the managers who were interviewed believe that a lot has to do with the way local suppliers conduct business. Another problem frequently associated with this was that of quality. Because of this delay, production was then rushed through the system, the pressure was on delivering the parts or components, and often, quality slips. This implies that one of the problems facing local suppliers is the inability to organize production efficiently, most inefficiencies emanating from lack of professionalism. When asked whether the larger suppliers could be placed in this category of non-professionalism, it was clear that most managers interviewed regarded their larger suppliers as generally more reliable and therefore preferred them to SME suppliers.

4.6.10 Costly raw materials

Suppliers have limited control over the quality of raw materials they use in their production. One of the reasons issuing out of interviews was the lack of proper standards in the country. Consequently, local suppliers have not had adequate pressure to produce high quality products. According to GMEA managers, this has also limited the extent to which parts and components can be standardized. One other factor cited by managers at GMEA and KVM is the high and transient costs of local inputs. Many of the raw materials used by local suppliers are imported, and are, therefore, subject to import duty.

Hence, the actual products supplied to the assemblers and franchise holders are considered to be relatively more expensive than equivalent imported products. For

example, while noting that these estimates were provided by GMEA, only four of the thirty one items outsourced by GMEA used 100% local materials and labour and as many as fourteen of the 31 items used no local material at all, except a small local labour content. The estimates also indicate that only three items out of 31 use 40-50% of local inputs. This is an indicator that the perception by assemblers and franchise holders that local inputs reduce the competitiveness of the motor vehicle industry may have some basis. This was, however, contradicted by one of the managers at CMC, who stated categorically that it is cheaper to buy locally, given the exchange rate of the local currency against the dollar.

4.6.11 Liberalization of the economy and the importation of new, second hand reconditioned vehicles

As stated by the manager at Toyota East Africa, one of the factors that has seriously affected the local assembly of motor vehicles and subsequently, local sourcing is the importation of second hand vehicles from Japan and more recently from Singapore and Europe, which started in 1993. Their massive importation has reduced the capacity of local assembly plants drastically. This came about as a result of liberation of the economy. When asked why they prefer to import saloon cars that used to be assembled locally instead of assembling locally, the managers at Toyota (E.A) and CMC replied:

> We are in business because of the customer and if the customer prefers imported rather than locally assembled vehicles, we oblige. We also have to look at what the competition is doing so that we don't get left behind and lose market share. We also go by the policy of the mother country abroad.

Therefore all the saloon cars that used to be assembled locally are now imported. These include Toyota saloon cars, Mitsubishi, Mercedes Benz, Volkswagen saloon among others.

4.6.12 Fines for deletion of CKD kit items

Another factor influencing outsourcing is “deletion allowances”. When an assembler agrees to source locally, it must remove or “delete” those components from the CKD packed in the manufacturer’s country. The deletion allowance refers to the price reduction of the kit after the local components have been removed. This however is rarely a simple deduction matter. It is claimed by assemblers that the deletion allowances are too small, yet the locally sourced equivalents cost more. This makes vehicles assembled using local parts much more expensive than those without.

When franchise holders and assemblers buy component parts locally, they have to pay a penalty to the parent company for deletion of products from the CKD kit. GMEA, for example, still pays to Isuzu for omitting any item from CKD kits. The effect of omission penalties has concerned the motor vehicle industry for a very long time since the penalties affect the assembler (or franchise holder) twice: first because of the penalties imposed by the franchiser, and secondly because of the higher costs locally. This study found that the deductions from the cost of the CKD were far less than the price paid for the locally sourced item. Speculating on how assemblers and franchise holders dealt with this problem, an official from Kenya Association of Manufacturers commented that assemblers find it very difficult to comply with the Legal Notice requirements because of the extra costs of buying locally. In order to beat this, they resort to some unorthodox methods.

Furthermore, some of them simply collude with potential suppliers to issue a No Objection Certificate for an item they would like to buy abroad or retain in the CKD. The government’s verification and policing system is so poor that it takes a long time authenticate a claim that an item cannot be obtained locally. Deletion allowances are smaller for critical components, and assemblers are in a solid position to suppress the

deletion allowances for popular makes and models (Doner, 1993). Similar conclusions have been made about the industry in Kenya by this study. Arguably, however, the critical factors likely to influence the formation of inter-firm linkages in developing countries is the adoption of lean or flexible production organization as a precursor to inter-firm linkages.

4.6.13 Proliferation of models and volume levels

One of the most pertinent factors that affect sourcing is the implications of the frequency of changes in makes and models owing to fluctuations in consumer tastes. The main effect of this on the assemblers is the frequency of re-tooling (scrapping moulds and dyes) by local suppliers, which not only creates considerable difficulties for the suppliers, but also complicates the issue of help provided to suppliers by franchise holders such as GMEA. On the one hand, some suppliers are not flexible enough to re-tool at the rate at which makes and models change (at least once every year). According to the manager at KVM, some suppliers give up when they cannot cope with the continually changing specifications. In some cases, the assembler or franchise holder has to terminate the sourcing agreement when the supplier continually fails the requirements for quality and delivery schedules. On the hand, even if they could re-tool as frequently as necessary, the costs would be passed to the buyer. The implication here is that local sourcing ends up being expensive and not an option to be adopted. According to the manager at KVM:

> The biggest hindrance to the development of motor vehicle assembly in Kenya has been the proliferation of brands. These change so quickly that Kenyan assemblers are not able to keep up with the level of technology required to make them. Investing in jigs is too expensive considering the limited local market.

This proliferation of makes and models also affects suppliers as it limits the extent to which local suppliers can achieve economies of scale owing to the low volumes.

Consequently, the suppliers incur the penalties of small batch production and pass them on the franchise holders and/or assemblers. The manager at GMEA noted that it is not possible for local SME suppliers to develop reasonable quality standards and to offer competitive prices because of the low volumes they have to produce. There are times we require at least six types of exhaust systems from our suppliers at any one time. The suppliers have to supply perhaps less than 100 of each type in the order, even if the same supplier is supplying other franchise holders as well. This low volume of production makes costs to go up, making local components expensive and uncompetitive. According to the manager at KVM, the proliferation of models at any one time in Kenya can be more than 200 vehicle types. This means frequent changes in technology installation by the supplier so as to meet assembler requirements. As stated by the manager at KVM:

> You need to buy different jigs for every new model and this is not worth the investment by either the assembler or the franchise holder. The radiator, for example, is different for every vehicle model. It is not reasonable to expect the SME supplier to keep up to date with the technology required for this as the local market for new vehicles in Kenya and other African countries is far too small**.** This has resulted in the halting of the assembly of most saloon cars. For example, even though we had been assembling the V12 locally, we could not assemble the V13 because the jig was not worth the investment, considering the small size of the local market.

The conclusion that can be made here is that assemblers in Kenya no longer assemble saloon cars because the makes and models of saloon cars change too fast and local assemblers cannot keep up with the required technology. They now assemble mainly pickups and trucks because these models do not change as frequently. Because of the proliferation of makes and models of vehicles, it is difficult to gain experience in the production of various parts and components required by the motor vehicle industry. There are currently thousands different makes of vehicles imported into Kenya as new, used or reconditioned vehicles. Typically, each make offers an average of major variants, doubled

every five to ten years. Hence, of the millions of vehicle models available in the world, Kenya imports quite a number of these and assembles only a few.

4.6.14 The parent company's policy and strategy

General Motors East Africa's sourcing decision, like that of the franchise holders, is affected by the policy of the parent company abroad. General Motors had in the earlier years systematically followed a local supplier development policy in its global operations. Effectively, this global strategy accounts for GMEA's use of local suppliers. The thinking behind this was that a local supplier base addresses the specific needs of the locality, and, is therefore, sensitive to consumer needs and close enough to operations to limit problems associated with distance. The advantage in the long run is higher consumer benefits emanating from efficient analysis and solution of consumer problems. The company no longer pursues supplier development. The study identified only one cushion maker who had been given a place within GMEA's assembly plant to supply seat cushions. This lack of development of local SMEs discourages subcontracting of local SME suppliers. The parent companies also insist on sending their technical experts to verify the ability of the local supplier before the supplier can be subcontracted. This sometimes restricts the activities of the local franchise holder.

4.6.15 High prices of locally assembled vehicles

The relatively higher prices of locally assembled vehicles, as compared to imported equivalents, brought about by high taxation, high duty, dealers' mark ups and the high cost of local components, in addition to the higher production costs emanating from lack of efficiency which is caused, in turn, by a proliferation of makes and models. The

implication of this high pricing of locally assembled vehicles is that they command a very small market share. This reduces their production and subsequently local sourcing.

4.6.16 Abundance of foreign exchange

It is an irony that the abundance of foreign exchange is affecting local assembly of motor vehicles negatively. According to one of the mangers at CMC, local assembly of motor vehicle is dying very fast. It has no future mainly because of the reasons already mentioned above. However, one surprising reason that came up as a result of liberalization is the unchecked availability of foreign exchange. As the manager put it:

> In the 1970s and 1980s, business was very good when there was restriction of foreign exchange. We would require foreign exchange to import sixty vehicles, for example, but the government might allow us enough foreign exchange for only twenty vehicles. We would collect orders from about twenty buyers, who were required to deposit about 30% of the cost of the vehicle with the company as a down payment. The vehicles that arrived were sold strictly on a first come first served basis to the buyers who had given orders and put a down payment. If the buyer delayed, the vehicle was then quickly sold to the next buyer on the register of enquiries. The company was selling vehicles as soon as they arrived.

Kenya therefore needs to do what South Africa has done and invite the major motor vehicle assemblers in the world to take residence in the country and manufacture motor vehicles from within. South Africa now assembles BMW, Mercedes Benz and other vehicles locally. Unless this is done urgently, motor vehicle assembly in Kenya has no future.

4.6.17 Constraints faced by the SME suppliers in meeting the subcontracting contracts

According to the suppliers they faced a number of problems which affected their meeting their contractual agreements with assemblers and franchise holders. These are: Delays in the supply of raw materials especially imported raw materials due to bureaucracy in imports and clearance. There is lack of readily available raw materials and lack of capital

to stockpile raw materials for future use. The locally available raw materials are also of poor quality and lack of expertise of the workforce leads to compromise of quality standards. Frequent power failure and rationing of both power and electricity are other factors, not to mention the fact that electricity is very expensive in Kenya. Machine breakdowns, abrupt changes in modifications and price fluctuations seriously affect the suppliers as they cannot keep up with the frequent re-tooling and technological up date that this demands. Consequently, some of them just give up or their contracts are terminated due to inability to deliver to specification as required. The other mentioned factors are delays in payments for deliveries and lack of warranty which reduces cash flow required by the suppliers for their operations.

There was also lack of a steady market as the suppliers were never sure whether the arrangement would continue as the assemblers and franchise holders preferred not to enter into long term contractual agreements with suppliers. They also felt that there was poor pricing of products by the buyers who they believe should pay better considering the high cost of production of the parts. There was also the feeling by some suppliers that the standards set by the assemblers and franchise holders were too high. Here, one cannot blame the contractors as industry standards must be maintained if locally assembled vehicles have to remain competitive, as their survival is already seriously threatened by the influx of cheap reconditioned vehicles from Japan Singapore and more recently from Europe. There was also the issue of bureaucracy and corruption in tendering and clearance. Fluctuations in exchange rates also affected importation of raw materials by suppliers who also indicated that getting skilled labour was a problem to them. The implication here is that the above factors seriously affect the performance of the suppliers and continue to hinder the fragile relationship between the two sides and subsequently, seriously hamper local sourcing. This is summarized in Table 4.23)

Table 4.23 Constraints to suppliers

Variable	Description	Frequency	Percent	Valid Percent	Cumulative Percent
Problems with contracts	Delay in Supply of raw materials	44	66.7	66.7	66.7
	Power failure	19	28.8	28.8	95.5
	Quality problem	3	4.5	4.5	100.0
Capital problem	Yes	43	65.2	67.2	67.2
	No	21	31.8	32.8	100.0
	Missing	2	3.0		
Lack of information	Yes	30	45.5	46.9	46.9
	No	34	51.5	53.1	100.0
	Missing	2	3.0		
Lack of market	Yes	33	50.0	50.0	50.0
	No	33	50.0	50.0	100.0
Access	Yes	24	36.4	37.5	37.5
	No	40	60.6	62.5	100.0
Pricing	Yes	22	33.3	33.3	33.3
	No	44	66.7	66.7	100.0
Technonoly	Yes	40	60.6	63.5	63.5
	No	23	34.8	36.5	100.0
	Total	63	95.5	100.0	
	Missing	3	4.5		
	Total	n = 66	100.0		

It can be concluded that in as much as government policy and the external business environment is largely to blame for the many constraints to subcontracting, the players in the motor vehicle industry, especially the SME suppliers, need to be more entrepreneurial by becoming more innovative and creative.

4.6.18 Measures to Promote Subcontracting

The study sought the opinion of the respondents on the measure that can be adopted to promote subcontracting and their responses are summarized in Table 4.24 below. A majority (45.5) of the suppliers felt the contractual standards were not adequate and suggested the Government should streamline the standards to ensure an even playing ground. It was also suggested by 24.2% of that the Government should reduce import

duties on raw material inputs to rejuvenate business in the sector, while, 22.7% felt the Government should strive towards creating a friendly business environment.

Table 4.24 How the Government could promote subcontracting

	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Promotion by Government	Set Contractual Standards	30	45.5	46.2	46.2
	Reduce import duty	16	24.2	24.6	70.8
	Create friendly business Environment	15	22.7	23.1	93.8
	Support local industries	1	1.5	1.5	95.4
	Eradicate corruption	2	3.0	3.1	98.5
	Provide capital	1	1.5	1.5	100.0
	Total	65	98.5	100.0	
	Missing	1	1.5		
	Total	66	100.0		

It was established that a majority (60.6%) of the respondents were of the opinion that subcontracting can be promoted by suppliers improving the level of technology they employed. All the managers of the assembly plants and managers of franchises said that lack of appropriate technology was the major hindrance to subcontracting as the SME suppliers were not able to supply component parts of the standards demanded by the contractors. The other major suggestion (25.8 %) to the improvement of subcontracting was that SME managers needed to improve their management capacity as poor management styles of the sup suppliers is a major constraint to subcontracting. This could be because most SMEs are family businesses run by family members who often lack the required expertise. The suppliers also need to be more professional in their approach to business and they need to engage more qualified personnel. This is shown in Table 4.25 below**.**

Table 4.25 Measures that can be employed by suppliers

	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Promotion by contractors	Improve their level of technology	40	60.6	61.5	61.5
	Improve their management capacity	17	25.8	26.2	87.7
	Operate professionally with timely decisiveness	2	3.0	3.1	90.8
	Engage qualified personnel	2	3.0	3.1	93.8
	Others	4	6.1	6.2	100.0
	Total	65	98.5	100.0	
	Missing	1	1.5		
	Total	66	100.0		

The majority of the SMEs interviewed (40.9 %) further suggested that contractors should give them longer contract periods. If they are sure of the contracts, they argued, they would be able to invest in modern technology. They also needed more time to deliver parts (15.2 %) as the time they often given was sometimes too short and this put a lot of pressure on them to meet delivery schedules. Subcontracting could also improve if the contractors offered more competitive prices (16.7 %), the SME suppliers are paid promptly once they deliver the goods (6.1 %) and if the contractors were to supply them with the required technology to help them produce better component parts.

Table 4.26 Measures that can be employed by Contractors

	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Promotion by suppliers	More time for delivery	10	15.2	16.7	16.7
	Offer competitive prices	11	16.7	18.3	35.0
	Pay promptly	4	6.1	6.7	41.7
	Offer credit facility	5	7.6	8.3	50.0
		1	1.5	1.7	51.7
	Longer contract periods	27	40.9	45.0	96.7
	Provide them with the required technology	2	3.0	3.3	100.0
	Total	60	90.9	100.0	
	Missing	6	9.1		
	Total	66	100.0		

4.7 Summary

This study described and analyzed the production organization of GMEA and KVM and the various franchise holders highlighting factors the determinants of their sourcing strategies. It reveals that the level of subcontracting arrangements in the motor vehicle manufacturing industry in Kenya is extremely low. Assemblers and franchise holders are reluctant to enter into subcontracting arrangements with local suppliers especially local SMEs. They only subcontract those items mandated in the legal notices, and some services. Reasons provided by the study range from the inadequacy of the supplier base to the reluctance of its CKD kit suppliers to delete more items. It also reveals that GMEA no longer uses a supplier development programme as a strategy to build a local supplier base. Its relationship with its suppliers like that of the other assemblers and franchise holders is relatively arms-length in nature (adversarial), characterized by multiple sourcing and relations lasting the duration of the order. This implies that there is some potential for future transaction but this could be limited by the arms length approach to inter-firm relationships. Thus, even though the assemblers and franchise holders had an

organizational intention to use external sources, this, however, is now done mainly for local body building of buses and trucks. The motor vehicle industry has been hit very hard because of liberalization which has brought an influx of second hand vehicles into the country. The proliferation of makes and models affects both assemblers and franchise holders.

On the issue of what SMEs manufacturers should do to become more competitive and thus encourage local sourcing by contractors, the response was that SMEs need to improve the quality of the technology they use so as produce best quality products. They need to operate more professionally with timely decisiveness. They should also be ready to have back up material for on time urgent delivery. Regarding the question of how the problems that hinder the promotion of local sourcing can be minimized: the response was the government needs to ensure the strict regulation and harmonization of taxes and maintain strict control measures on the industry to curb corruption. The state agencies concerned with taxes should put strict measures on non compliance especially by the assemblers and franchise holders. Quality control measures should also be taken to ensure industry standards are adhered to. The government should also limit the importation of second hand vehicles.

4.8 Discussion of Major Findings

The major findings are discussed according to the research questions of the study.

4.8.1 Research question one

What is the nature of subcontracting in the motor vehicle industry?

This study established that there is definitely a gap in subcontracting arrangements between large enterprises and SMEs in the motor vehicle manufacturing industry in Kenya. Even though patterns of production in the industry indicate that there is potential

for large firm to subcontract, considering that the production process is easily divisible into sub processes (sub assemblies) and services. In spite of this intrinsic potential for subcontracting, this study found that the level of subcontracting that takes place in the motor vehicle manufacturing industry was minimal and it was clear that assemblers and franchise holders only purchased some of the items indicated in the legal notices. This concurs with the findings of Masinde (1996) which indicated that apart from jigs and welding materials, assemblers and franchise holders were not willing to purchase items not listed in the legal notices. The reasons given by the managers for this reluctance to purchase locally were what they regarded as the poor quality of parts and components or complete lack of suppliers for some items. The findings of this study concur with those of Masinde (1996) who established that assemblers and franchise holders purchased some components locally but were generally reluctant to purchase parts from local SMEs and went as far as recommending that research should be carried out to establish why assemblers and franchise holders were reluctant to purchase from local SME suppliers. The findings of this study however, contradict earlier findings by Masai (1991) which had indicated that subcontracting was not done at all because the assemblers were seeking to improve product quality and productivity in their own installations.

The study confirmed that large firms were not voluntarily procuring their components from local firms, let alone SMEs.. The extent of subcontracting has reduced. However, the study established that, while outsourcing of parts and components was minimal, the outsourcing of services was more widespread. These included maintenance and cleaning services, transportation, warehousing, laundry and catering, and security services. These findings support those by Masinde (1996) which stated that the more technical services such as Research and Development (R&D), and Quality Control (QC)

were sourced externally but these tended to come from the suppliers of CKD kits, or the firm's parent company.

As Sako (2005) notes, buyers often invest time and personnel in making sure that the supplier's product meets the required quality standards without any rejects. Hence, the supplier has to bear the cost of defects in addition to warehousing as well as inventory costs. The buyer is, therefore, unlikely to be interested in the problems causing such defects since the costs are borne by the supplier. Both the buyer and the supplier are then left with no basis for bargaining, other than price. These findings support the findings of this study which established that GMEA no longer pursues supplier development and contradicts findings by Masinde (1996) who pointed that GMEA pursued an aggressive supplier development programme.

Previously, GMEA's policy was that if the company wanted the best possible quality, it was not enough to give a supplier the technical standards and specifications. The company had to help the local supplier clean up his whole operations so that the GMEA was not just getting a good quality product, but getting it on time as well. That means that GMEA had to help the local SME supplier look for his engineering, managerial and stock control problems and find realistic solutions to suit him and GMEA. This is no longer the case as established by this study. Although all the assemblers and franchise holders in the study give their long established suppliers some kind of help, it is no longer on an aggressive basis as previously pursued by GMEA.

Technological assistance provided by large enterprises to small inexperienced suppliers has more impact on performance as compared with the same assistance to large suppliers with substantial in-house resources (Iversson & Alvstam, 2004). This was supported by this study which found that even though SME suppliers are given some kind of help by the large enterprises, the main hindrance to subcontracting in Kenya among

SMEs is the poor quality of products. This points to the fact that this problem would be solved if the SME suppliers were given technical assistance. This study establishes that quite a number of SME suppliers further subcontracted other firms so that they could meet their contractual obligations. This supports findings by Aw (2001), in a study done in Taiwan, China, which established that even small firms are able to subcontract the production of a number of their components. This means that they do not have to spend much on fixed assets such as machinery, which in turn, reduces the cost of exiting the market.

4.8.2 Research question two

What motivates motor vehicle assemblers and franchise holders to engage in subcontracting arrangements with SME suppliers?

This study established that the main reasons why firms procure locally are: the short time required for local procurement (lead time) and the desire to remain in the good books of the government so that they could get licenses and continue in business. The other reason was to avoid paying tax charged on imported components. These findings contradict those of Kumar and Subrahmanya (2007). In a study on linkages in the motor vehicle industry in India, their study found that corporations participate in subcontracting activities with local SMEs because they are 'good business.' This means that the SMEs provide the corporate buyer with needed inputs of the required quality and quantity in at competitive prices, delivered in a timely manner thereby reducing costs and enabling the corporation to concentrate its capital and management skills on a more limited range of activities (its ''core business''). In Kenya, the situation is the opposite, as this study reveals. None of the managers of the large enterprises who were interviewed consider local SMEs as good business. Most of the SMEs in the sector have been unable to produce quality components on time as required by corporate buyers. In fact, the poor

quality of local products was the major reason given by all the mangers as to why they prefer not to source locally.

Jenkins et al (2007), indicate that what motivates a company to engage in outsourcing are: to reduce and control operating costs in manufacturing, to improve company focus, and to access world class capabilities, to free resources for other purposes, to access resources not available internally, to accelerate re- engineering benefits, to improve the efficiency of functions difficult to manage or out of control, to make capital funds available to share risk to induce cash flow. The Kenyan scenario is quite different where out sourcing seems to be more because they have to and not for the above advantages. The buyers are not able to reduce manufacturing costs because the local components are more expensive than imported ones. This is because the component parts SME manufacturers themselves import raw materials, as this study established.

The findings of this study indicate that decisions to externalize or internalize transactions were made not necessarily with cost in mind, but because of the need to remain in the good books of the government as a way of ensuring access to import licenses for the supply of CKD kits. However, even in cases where cost was an important consideration, for example, in the case of choosing between alternative suppliers, the actual selection of the supplier was not predicted on lower costs, but rather on who was willing to supply on the terms stated by the buying firm, particularly those assuring the buyer of good quality products, delivered on time and who could cope with technological demands of the buyer. These concur with findings by Masinde (1996), which established that cost took second place as assemblers and franchise holders purchased locally mainly because it was mandatory for the to do so.

This study established that it was also evident that buyers were keen to avoid dependence on one supplier, mainly because of the uncertainty in the supplies component

parts business environment and therefore retained more than one supplier for most items. This contradicts findings by Masinde (1996) who established in her study that GMEA had problems with monopoly suppliers because they inflated prices at will and GMEA had little control over this decision by the supplier to dictate prices. As a result of liberalization buyers now have a variety of suppliers to choose from.

The SME suppliers in this study contend that they have little say in the transactions and that they were entirely at the mercy of the large enterprise buyers; in addition, as a measure against quality; the assembler maintained control over the transactions by providing time and quality specifications for the various orders, while also taking measures to control price fluctuations. They concur with the findings (Kimura, 2001) which indicated that SMEs felt sometimes they were not fairly treated by assemblers and franchise holders as having invested a lot of money on machinery to meet orders, they were not guaranteed of future orders. The findings of this study support those of Annim and Machethe (1998) which found that one of the reasons large enterprises source locally is to avoid paying taxes. Buyers in this study stated categorically that one of the main reasons why they engaged in local sourcing was to avoid paying import tax.

4.8.3 Research question three

How do the characteristics of suppliers influence subcontracting arrangements with motor vehicle assemblers and franchise holders?

Trans National Companies attach a lot of importance to building up and maintaining a positive brand image and a reputation for high brand quality and responsiveness. They, therefore, place much emphasis on ensuring that the entire value chain be organized with modern SMEs and a few untypical ones which possess state of the art technology and a professional management (Alttenburg, 2000). The main criteria for the choice of supply

outlets are: the quality and content of the offered service, and the price of the service. The selection decision is based on data of the company and its reputation in the industry (Kumar & Subrahmanya, 2007). This concurs with the findings of this study which established that the sector is dominated by a few constant suppliers, for example, Megh Cushions ltd, Impala Glass ltd, Chloride Exide ltd and a few others supply almost all the franchise holders and assemblers. This concurs with a study by Annim and Matheche, (1998) which established that small business with linkages tends to be those that have done business with large business before. This suggests that buyers prefer establishing linkages with small suppliers that have had dealings with other buyers. It therefore leads to the conclusion that once a supplier starts selling to another business, it becomes easier for the supplier to find an additional buyer. Business linkage experience by an SME seems to be an important consideration for buyers in deciding whether to establish linkages with small suppliers.

According to Kumar and Subrahmanya (2007), the majority of the SMEs in their study indicated that buyers provided advice, business counseling, financial training and credit. These services were aimed at helping small suppliers to become successful businesses. It was also established that those businesses with linkages tend to be the more successful ones. This could suggest that buyers prefer to do business with successful small suppliers and are prepared to make them more successful by providing support services because this would also benefit the buyers. These findings are contradicted by the findings of this study which established even though corporate buyers did provide some help to the SMEs in the study not to the extent they wished. In some instances, however, as the study established, the buyers use this as an excuse to import components rather than help suppliers. General Motors, E. A., which had invested in intensive supplier development in the earlier years, had stopped the programme. This study also established

that the suppliers who had managed to be retained by buyers were those who delivered quality products to schedule. These findings are supported by those of Aw, (2001) and Ajayi, 2003) who found that suppliers with linkages considered the following factors as important in satisfying buyers: good price, good quality, timeliness of delivery and volume of sales of products.

4.8.4 Research question four

How do the firms' benefits influence subcontracting arrangements in the motor vehicle industry?

This study revealed that one of the major benefits that SME suppliers derive from the large firms was that large firms provided a steady market for their products. This concurs with the findings of a study carried out in East Asia economies by Hayashi (2005), which found that one of the major benefits extended to SMEs through subcontracting relationship with LE firms is guaranteed purchase of parts and components produced by SME supplier over a long period of time. Some SME firms in Kenya such as LSHS, impala Glass Ltd, Megh Cushions Ltd and Chloride Exide are some of the suppliers that have had a steady relationship with buyers in the motor vehicle industry for a very long time.

Hayashi (2002) indicated the positive role of vertical inter-firm cooperation, involving subcontracting, in improving productivity of Indonesian SMEs. Small and medium enterprises with limited human and financial resources have difficulty to acquire technology, develop markets and arrange financing by themselves. Collaborative inter-firm linkages with large enterprises help SMEs to overcome these limitations. Deardorff and Djankov (2000), exploring the importance of subcontracting as a source of knowledge transfer and increase in efficiency for the Czech firms, found out that there

was a positive correlation. These findings are supported by the findings of this study which established that SME suppliers are given technical specifications, and designs from the parent company by the franchise holders so that they can copy the design to specification, and improve their product quality. This translates into knowledge transfer from large enterprises to SMEs at the end of the day.

Iversson and Alvstam (2004), using the study on the business relationship of Volvo Trucks, and its SME suppliers, showed that the technological assistance given by contractors to suppliers led to the long term improvement of the suppliers with enhancement of their productivity and flexibility. Kenyan SMEs, as this study established, are not really given technological assistance by large enterprises, but as mentioned above are assisted with designs and samples to copy. Volvo contributed to improved performance of suppliers by introducing international quality product and processed standards, helping them to meet more stringent requirements. This goes for Kenyan suppliers as well, as established by this study. Before a local supplier can be awarded a contract, the buyer ensures that the supplier can meet the parent company standards and specifications. In GMEA, for example, there is a supplier evaluation form used for analysis of suppliers before a contract is awarded.

A report by UNCTAD (1999), based on the empirical study from India, Peru and Morocco, indicates that backward linkages by large enterprises can be important to a developing economy for increasing local production and upgrading local industrial capacity by way of transfer of technical knowledge to small local suppliers and upgrading of their products. Okada (2004), revealed the significant role that inter-firm linkages played in fostering workers' skill of domestic suppliers, particularly small firms of India in the globalization era. Changes in the patterns of skill development of suppliers reflect the formation of close supplier relations entailing performance-based reciprocity, similar

to the Japanese model. Frequent interactions between customers and suppliers through various channels ensured rapid information flow leading to quick diffusion of knowledge, skills and values among suppliers. This type of collaborative reciprocal relationship between assemblers and suppliers transformed the supply chain into a learning chain. The findings of this study does not quite concur with above results as it found that although the relationship between buyers and suppliers in Kenya is not collaborative but adversarial, the frequent interaction between the two sides results in rapid information flow resulting in quick diffusion of knowledge skills and values among Kenyan SME suppliers.

As Rothwell (1991) explains, based on the data on SMEs in the UK that subcontract, manufacturing can be an important means of gaining access to new production technologies for many small firms and can enable firms to innovate products requiring new production techniques, without having to invest initially heavily in expensive, sophisticated production equipment. Most of the SMEs, which are basically subcontractors for other companies, do not perform R&D in any formal sense and much of their technology is derived from their customers. The findings of this study concur as the SME suppliers in the study admitted that they benefit from the R&D done by the large firms.

4.8.5 Research question five

What are the internal and external constraints to subcontracting arrangements in the motor vehicle manufacturing industry?

This study established that the main constraints to subcontracting in the motor vehicle industry is lack of up to date technology which results in poor quality products and inability to meet the deadlines set by the assemblers and franchise holders.. This concurs

with a study by Annim and Machethe (1998), on business linkages in Kwazulu-Natal, which pointed out that constraint on the expansion and improvement of linkages, are, according to suppliers: limited application of new technology, poor product quality, unreliable delivery of goods or services, and high products prices as important constraints on linkages. This study found that buyers prefer to do business with large suppliers rather than local SMEs. They claim that large business are better equipped technologically, have more skilled manpower and are therefore more likely to deliver quality goods to schedule. This supports a study by Bbenkele (1998) which found that as regards buyers, it seems that certain factors impede them from establishing linkages with small suppliers. The majority of buyers who indicated that they did not have linkages with small suppliers had linkages with large suppliers.

Lack of incentives (for example tax rebates and subsidies) on the part of the government was viewed as important by most of the buyers with linkages with small suppliers. This could suggest that lack of incentives on the part of government is not the real reason for buyers not to have linkages with small suppliers (Annim & Machethe, 1998). This contradicts the findings of this study which established that while large firms have an inherent capacity to subcontract with the local SMEs, there were no incentives in the environment to encourage this for example; the proliferation of makes and models continues to prevent a rationalization of productive organization in the industry. This is aggravated by the importation of cheap second hand vehicles. In turn, the parts and components subsectors are not able to cope with the complexity and variety of requirements of the of the replacement market. Consequently, it is difficult to accumulate experience to meet the quality standards demanded by the assemblers and franchise holders. The overall perception of assemblers and franchise holders regarding local SME suppliers is that they were ineffective and insufficient to meet the needs of the assemblers

and franchise holders. To some extent, however, buyers sourced locally to avoid paying import duty that is charged on imported parts. A number of them, however, added that the ten percent import duty levied on imports was not really adequate deterrent to encourage local sourcing.

In evaluating the competitiveness of SMEs through linkages, Samurai and Samurai (2007), state that large companies, especially multinationals assert that there is no lack of opportunities for them to forge linkages with local SME's in host countries but rather a lack of suitable SME suppliers who could meet the large enterprises' corporate standards or international standards of corporation. SMEs therefore lose such opportunities because they lack information, experience, contacts and above all the human and financial resources to implement urgently required systems and technological base of their enterprises. This concurs with the findings of this study. GMEA, which is both assembler and a franchise holder for Isuzu, pointed out that ever since they started assembling motor vehicles locally, they had never managed to get laminated glass for wind shields and have therefore been forced to continue importing the parts.

Most of the SME suppliers in this study expressed a wish that the assemblers and franchise holders could engage them in longer contracts so that they could be able to plan better (the longest formal contracts awarded to suppliers in the study was one year). The short contracts mean that they are not sure whether they will continue to be awarded contracts. This contributes to their inability to invest in expensive technology. This concurs with findings of a study in South Africa by Kimura (2001) which found that another constraint seems to be unreliable and small orders especially where SME owners invest heavily on equipment to meet the suppliers. One investor had invested 300,000 Rand in equipment to enable him to supply the assembler with motor vehicle component parts, yet after ten months of cooperation he received no further orders for two years with

no explanation as to why these had been cut off. There was also the issue of late payment. The suppliers in Kenya are paid 60 days after delivery, and, like their South African counter parts, this imposed serious hardship on them as they needed to pay their workers and sometimes their own suppliers more frequently.

It evident from the Japanese inter- firm relations that a more cooperative relationship offers a better environment in which to promote mutually acceptable criteria for analyzing costs, establishing prices, sharing profits and transferring technology (Womack et al, 1990). In Korea, for example, pressure from the government helped to encourage assembler-supplier co-operation by promoting the suppliers through financing ant training and encouraging the formation of the Korean Automobile Industry Co-operative Association. The strength of the supplier base is often evaluated in terms of product quality and supplier performance (Doner (1993). These findings are contradicted by the finding of this study, which established that in Kenya, the relationship between the buyers (assemblers and franchise holders) and their suppliers is not one of cooperation but mainly arms length and adversarial with the buyers ready to drop suppliers at once if they do not meet their part of the contract. This supports another complaint by SMEs owners that they find themselves at the mercy of the buyers and they have no choice but to accept the terms offered even when they recognize that these terms are exploitative (Skae, 1998). This comes as no surprise because, in actual sense, the main decision makers in the motor vehicle industry are the franchise holders and assemblers and not the suppliers, especially not SME suppliers with whom the large enterprise buyers relate, not by choice but mainly due to pressure from the government.

Contrary to expectations, this study established that the abundance of foreign exchange hinders subcontracting as it encourages the importation of reconditioned second hand vehicles since every one can now access as much foreign exchange as they need.

This contradicts findings by Masinde (1996), which found that the scarcity of foreign exchange hampered importation of CKDs, thereby affecting the local assembly of motor vehicles and by extension, local sourcing of component parts, there by hindering subcontracting.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study was designed to establish the reasons for the gap in subcontracting arrangements between local SMEs and large firms in Kenya's motor vehicle manufacturing industry. The study first explored the nature of any existing subcontracting arrangements in Kenya. It sought to establish the motives behind the arrangements. It examined the influence of the characteristics of the suppliers in determining subcontracting arrangements; the influence of firm benefits on the subcontracting arrangements and finally, it examined the constraints faced by both suppliers and large firms who engage in the subcontracting arrangements. The purpose of this chapter is to present and discuss the conclusions and offer recommendations for future research and practice. This chapter is organized in the following four main sections: summary of major findings, conclusions and recommendations for practice and recommendations for future research.

5.2 Summary of findings

This study sought to establish determinants of subcontracting arrangements between large firms and SMEs in the motor vehicle manufacturing industry in Kenya in order to establish the reasons for the gap in those arrangements. The sector was chosen for the study because on the average, one motor vehicle is made up of about 10,000 component parts, all of which are impossible for one company to manufacture in-house. The government also targeted this industry to promote subcontracting arrangements between SMEs and large enterprises. The target population of the study was three motor vehicle

assemblers, thirteen franchise holders and seventy two component parts manufacturers. The study interviewed managers of two of the three motor vehicle assemblers and nine franchise holders. Sixty six managers of component parts suppliers filled and returned questionnaires. Observation and perusal of records was also done. The study adopted the transaction cost theory, the organization theory, the strategic behavior approach and the flexible specialization paradigm to explore the research problem. Both qualitative and quantitative research approaches were adopted. Thematic content analysis approach was used to analyze the qualitative data and descriptive statistics to analyze the quantitative data.

The results established that even though some subcontracting takes place in the motor vehicle manufacturing industry in Kenya it is quite limited. This limited subcontracting is motivated mainly by the desire of the assemblers and franchise holders to remain in the good books of the government and not to minimize cost of production. The main benefactors of the arrangements are the SME suppliers who get a steady market for their products and also technological advice from the buyers. The main benefit derived by the corporate buyers is lead time. The large firms are more willing to buy from large suppliers than SME suppliers.

The main constraints to subcontracting in the motor vehicle manufacturing industry in Kenya is the reluctance of the motor vehicle assemblers to buy component parts from local suppliers and especially local SME suppliers. The main reasons given by managers for this reluctance were: the inability of the SMEs to supply quality products to schedule, lack of local suppliers for certain parts, the low technological capacity and poor methods of production by the SMEs; the poor managerial ability of the SME suppliers and inability to access skilled manpower; poor quality control and testing procedures by SMEs; low volume levels; the high cost of and poor quality of locally available raw

materials. The other reasons contributing to the gap in subcontracting are: the competition from imported second hand vehicles from Japan, Singapore and lately from Europe; the proliferation of makes and models which requires frequent technological changes which both assemblers and SMEs owners find difficult to keep up with and fines for deletion of CKD kit items by the parent company. The little available subcontracting is because the assemblers and franchise holders want to remain in the good books of the government so that they do not lose the license for importing CKD kits and also to avoid paying import duty.

The study recommends that the government should reduce the age of imported second hand vehicles to not more than five years and find a way of compelling the franchise holders and assemblers to buy parts locally. SMEs should also find a way to acquire up to date technology and become more competitive.

5.3 Conclusions

The production organization in motor vehicle assembly has an inherent potential for outsourcing and external transaction, given the complexity of the production process and the myriad of parts and components that go into it. Secondly, the current production organization in the firms interviewed allows subcontracting to take place. Finally, given the small and fragmented market for cars in Kenya coupled with high set up costs in the sector, the assemblers and importers are reluctant to invest in in-house production. Despite this amenability of the sector to subcontracting, the findings reveal a reluctance to subcontract locally, particularly from local SMEs.

Several reasons touching on the lack of competitiveness in the supplier market were suggested by managers interviewed to explain this reluctance to transact with local SMEs. In addition to a poor policy framework governing the sector, lack of control over

imported Fully Built Units (FBUs) and poor incentives to motivate to procure locally, the quality of the products in the market was perceived to be lower than that of the imported parts and components. There was also widespread concern that because of the production deficiencies and poor technical and managerial capacity of local firms, the local products were relatively more expensive than their imported counterparts. Consequently, only those items listed in the Legal Notices were currently being outsourced with little indication that further voluntary deletion of items from CKD kits would be implemented in the near future. Whereas in these circumstances firms are compelled to outsource in order to maintain good relations with the government, this kind of situation is not likely to have a long lasting positive effect on the growth of small enterprises. As it is, buyers are continually looking for exemptions from local sourcing for existing components, stating that locally procured products do not meet the required specifications. To achieve more lasting solutions, institutional and policy support is required to improve the assemblers' confidence in the capabilities of suppliers, particularly SMEs.

The government must take measures to rationalize the industry and remove policy and institutional impediments which make small suppliers riskier and more expensive for the assemblers. The proliferation of makes and models must be controlled, while providing institutional support for small firms in the ancillary sub sector by removing impediments in the import licensing system. Further, smaller firms need to understand the principal reasons why large firms are reluctant to deal with them. For these local small firms to benefit, the government must focus on removing the policy impediments which prevent the assemblers from using local suppliers of parts, components and services.

Assemblers and franchise holders, therefore, appear to have little incentive to procure their requirements locally, particularly from small manufacturers, unless the government intervenes. Yet, according to current thinking, government should reduce its

regulatory role in industry, and should, instead, provide a conducive policy and institutional framework for the sector. The current dependency of the motor industry on the government legislation requiring assemblers to procure certain items locally is a manifestation of the fragile relationship between buyers and suppliers in the sector and the lack of commitment of large buyers towards supplier development, owing to lack of incentives. It is apparent that there is need for incentives within the sector's environment itself, rather than government regulations and controls. This may have been a sound strategy in the business environment prevailing ten or more years ago, but it is no longer feasible in an environment where market forces predominate.

The capacity of the three assembling plants is grossly underutilized and things are not getting any better. According to the Economic Survey (2010), manufacturing in the transport equipment subsector registered a drop in production for the second consecutive year. Production of assembled motor vehicles dropped by 12.0 per cent from 5,747 to 5,060 in 2009 as motor vehicle assemblers continued to face intense competition from importers of second hand motor vehicles. Further, the production of lorry and trailer bodies dropped by 37.7 per cent whereas those of coaches and buses went up by 19.2 per cent.

5.4 Recommendations

The following specific recommendations can be made. Motor vehicle assemblers should be encouraged to use local suppliers and locally manufactured products and only import those parts that are not available locally**.** This should involve specific efforts to motivate assemblers and franchise holders to source voluntarily from local SMEs. The study revealed that it is the perceived inherent weakness of the capacity of local SMEs that has that has hindered more linkages with them. One of the most important starting points is an evaluation of the supply side of the ancillary sector in order to highlight the weakness of

the suppliers as perceived by the buyers. Comments by respondents regarding their perception of SME suppliers, in the words of one manager are that “they are ineffective and insufficient for our needs”. Approaches which have helped ameliorate such deficiencies in other countries include strategies which reduce the atomization of small firms through networking and clustering at industry and enterprise levels. In Kenya, this is even more critical, given the atomization and weakening of small firms, particularly African owned small firms. It was interesting to note that all suppliers in this industry are Asians. The only African was the one given space in the assembly yard at GMEA to make and supply seats for locally assembled vehicles. Thus, in strengthening the supply side as well as motivating the buyers to source locally, policies must be put in place to address the institutional frame work to strengthen the capacity of SME component suppliers.

There is need for the government to support the sector by sourcing all its major vehicle requirements locally. These include not just the Government ministries but also its major departments like the Department of Defense, Kenya Ports Authority, the Police Department, and the Kenya Tea Development Authority, among others. By so doing, it would not just be the assemblers, but many downstream producers of components for local assembly and spare parts would also benefit from such a policy. This would also indirectly support upcoming small scale operators in the informal sector, which would have a cheaper for their spare parts requirements, arising out of the support given to local component manufacturers to produce at higher capacities. Stiff competition due to the massive importation of second hand motor vehicles, which started with liberalization of the economy in 1993, has reduced the capacity utilization in vehicle assembly plants drastically. A major loophole has been the valuation method used to determine the dutiable value, which leads to under- invoicing. There is need to make the valuation clear

and transparent. It should be considered that this system has resulted in huge tax revenue losses to the exchequer.

The government must provide guidance within a sound, well articulated industrial policy, for industrial development in general, and the development of the motor vehicle industry in particular. As things stand, it is difficult to identify a specific and coherent policy towards the sector. It is therefore the role of the government, in consultation with the concerned parties, to set out the policy aspirations. Also, it is critical that the participants of the sector come together regularly to decide how best to develop the sector within the articulated policy framework. These should include the assembly and components sub-sector representatives, the representatives of the importers, the Ministry of Industrialization and the Ministry of Planning and National Development. While it is clear that each interested party has different expectations from their investment, these need not contradict the national development objectives.

A supporting environment must be put into place. The study revealed that while large firms have an inherent capacity to outsource from local firms, there were no incentives in the environment to encourage this. For example, the proliferation of makes and models continues to prevent a rationalization of production organization in the industry. This is aggravated by the importation of cheap second hand vehicles. In turn, the parts and components sub sectors are not able to cope with the complexity and variety of requirements of the replacement market. Consequently, it is difficult to accumulate experience to meet the quality standards demanded by assemblers and franchise holders. If this vicious cycle is to be broken, it is imperative that the rationalization programme proposed in the 1980s be enforced seriously, and the importation of cars be limited. Kenya can also go the South African way and invite the major vehicle assemblers in the world to take residence in the country and manufacture motor vehicles from within.

5.5 Suggestions for Future Research

1) Further research could be conducted to establish factors that determine subcontracting of services in the motor vehicle industry as this appeared rampant. This study was limited to the study of subcontracting in the motor vehicle manufacturing industry.

2) Subcontracting is just one form of business linkage. Research needs to be carried out on licensing and franchising as forms of business linkages between large firms and SMEs.

3) Various forms of strategic alliances and collaborations are quickly gaining ground as a form of productive organization which access scarce inputs and wider markets. Research could be carried out in this area.

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APPENDICES

APPENDIX A

OUTSOURCED LOCAL CONTENT BY BOTH ASSEMBLERS AND FRANCHISE HOLDERS

(2009-2010)

Supplier	Buyer	Item
Numerical Machining Complex Ltd	GMEA	brake disks, worm wheels, worm shafts
Trical & Hard Ltd	GMEA	Bolts & nuts, fasteners
Aqua Pet Stationers Ltd	GMEA, Simba Colt Motors ltd	
Selleys Trading Ltd	GMEA, AVA, KVM	Tak rags, tak oven coat, automotive paint, metal pre treatment chemicals, spray painting equipment
Highway Car Cushions Ltd	GMEA	Foam materials, lining materials
Tool Master Industrial Suppliers Ltd	GMEA	Fasteners, pipes, midge wire
Amity Equipments Ltd	GMEA, KVM, DT Dobie ltd, Toyota E.A.	Consumables, welding equipment
Scania LTD	GMEA, D.T. Simba colt, CMC	Body builders for buses
Auto Ancillaries Ltd	GMEA, Kenya Grange Vehicle Industries ltd	Leaf springs shackle pins for leaf springs, u bolts and u nuts
Crown Berger EA Ltd	Simba Colt Motors ltd, AVA, KVM	Paints, thinners, paint removers
Sameer Africa	GMEA	Tyres, tubes
Chevron (K) Ltd	GMEA	Lubricants, fuel gas, bitumen
Auto Spring Manufacturers ltd	GMEA, KVM. Simba Colt Motors ltd CMC	U bolts& nuts, wiring harnesses, assorted bolts,
Bhachu Engineering Works ltd	GMEA, CMC	Trailer body builders
Axel Engineering and Manufacturers ltd	GMEA, Simba Colt Motors ltd	Cargo body repairs, accident repair of trucks
City Radiators ltd	GMEA, D.T. Dobie ltd,	Radiators, air coolers, oil coolers, heat exchangers
Mutsimoto Motor Company	On request	Automotive filters
Indian Spray Painters ltd	D.T. Dobie ltd	Conversion of motor vehicles to customer specification
Trans Africa Motors E.A ltd		Vehicle repair and body building???
Associated Battery Manufacturers ltd	GMEA	Lead acid, automotive and solar battery acid, battery water
Kehar Enterprises ltd	CMC, GMEA, Toyota E.A. ltd	Trailer and trucks body building
Prodex E.A ltd	GMEA, Toyota E.A, Ryce Motors E.A., Associated Motors ltd	Vin plates, branding of motor vehicle
Henkel Chemicals ltd	GMEA,CMC, Simba Colt Motors ltd, DT Dobie	Fibre glass products, body filler, adhesives
East African Motor Industries ltd	Toyota EA, Simba Colt Motors, Subaru (K) ltd	Exhaust systems, welding wires
Thames Electricals ltd	On request	Electrical and hardware
Tyre Masters ltd	On request	Tyres and tubes

Chui Auto Springs Industries ltd	On request	automobile leaf springs
Mann Manufacturing ltd	GMEA, CMC, DT Dobie ltd, Simba Colt Motors	Exhaust systems, silencers, chassis re- enforcement
Industrial Coating and Paints ltd	AVA	Car refinishing paint
Dodi Autotech ltd	GMEA, Associated Motors, CMC, Toyota E.A.ltd	Body building and fabrication
Kenya Coach Industries ltd	On request	Body fabricators
Agro Manufacturing Company ltd	GMEA, Simba Colt Motors ltd, Ryce Motors E.A. E. A.	Body fabricators
Chloride Exide (K) ltd	GMEA, Simba Colt Motors ltd, CMC, KVM	Automotive batteries
Choda Fabricators ltd	Kenya Grange Vehicle Industries, CMC, GMEA, Simba Colt Motors ltd, Ryce Motors	Body fabricators
Soilex P ltd	The various franchise holders	Clearing and forwarding
MPPS (K) ltd	On request	Car accessories e.g. car keys
Auto Express ltd	GMEA, Simba Colt Motors, Toyota E.A. ltd	Importers and distributors of tyres and tubes, batteries and wheel rims
Varsani Brake Linings ltd	GMEA, Simba Colt, Toyota E.A., Kenya Grange Vehicle Industries	disk brake pads, clutch copper segments, clutch pressure plates, clutch facings etc
Sadolin Paints E.A.	GMEA	Automotive paints
BOC (K) ltd	GMEA, KVM, CMC, Simba Colt Motors, D T. Dobie, Kenya Motors ltd., Kenya Grange Vehicle Industries	Industrial gases, welding gases
Patmose Technical Services ltd	GMEA	Finished parts
Pipe Manufactuers ltd	GMEA, KVM,CMC, DT Dobie, Simba Colt, Toyota E.A. ltd, TATA Africa ltd	Fuel tanks for trucks and buses, hydraulic brake pipes and connectors
Unifilters (K) ltd	GMEA, KVM, Simba Colt Motors, Toyota, E.A. DT Dobie	Diesel filters
Labh singh, Harnam singh (LBHS)	GMEA, CMC, Simba Colt Motors Kenya Grange Vehicle Industries, Ryce Motors E.A	Body fabricators
Theevan Enterprises ltd	D T Dobie, KVM, GMEA, CMC, Toyota E.A.	Air, fuel and oil filters
Henkel (K) ltd	GMEA	adhesives
Treadsetters ltd	CMC, GMEA	Tyres, rims tubes
Turn-o-metal Engineers ltd	GMEA	Electrical and mechanical engineering, motor vehicle accesories
Auto Fine ltd	CMC	Cushioning, welding
Sameer Africa ltd	GMEA, CMC, Toyota E.A., Simba Colt, D.T. Dobie,	Tyres, tubes, mounting grease
Pak Sounds ltd	TATA Africa ltd	Rims, sound systems
Bhagwaji Motors ltd	On request	Automotive spares and repairs
Kisumu Radiator services	Associated Motors ltd	Radiator assemblers
Rakwel Body Builders ltd	Associated Motors, TATA Africa	Spraying, painting, body building
Rallytech Motors ltd	Associated Motors ltd	Spraying, painting and body building
General Auto Hardware ltd	Associated Motors ltd	Spring bolts and nuts
Banbros ltd	GMEA, CMC, Kenya Grange Vehicle Industries , TATA Africa	Trailer, bus coach buiders
A.I.B.M LTD	TATA Africa ltd	Battery acid, distilled water
Relac ltd	GMEA, Marshalls E,A.CMC	Radiators, air conditioners
Master Fabricators ltd	CMC, Kenya Grange Vehicle	Upholstery, body building and

	Industries ltd	fabrication
R.S.A (K) LTD	Toyota, CMC. D.T. Dobie	Heavy duty shock absorbers
Dante Burba ltd	GMEA, Simba Colt Motors, DT Dobie, CMC Toyota E.A.	Pumps, nozzles for diesel injection
Total (K) ltd	Dt Dobie CMC, Simba Colt Motors, Toyota E.A, GMEA	Fuel and lubricants

APPENDIX B

INTERVIEW GUIDE FOR MOTOR VEHICLE ASSEMBLERS

The purpose of this study was to examine the determinants of subcontracting arrangements between SMEs and large firms in the motor vehicle manufacturing industry in Kenya so as to establish the reasons behind the gap in subcontracting in the country.

Interviewee's name _____ date: _____

Designation ----------

Name of business----------

Determinants of subcontracting arrangements in the motor vehicle manufacturing industry in Kenya.

1) Extent of subcontracting in the motor vehicle industry in Kenya.

Elaboration and follow up questions:

a) Which vehicles is your company currently assembling locally?
c) Who decides which vehicles you assemble?
d) Is there any local content in these locally assembled motor vehicles?
e) Who does the procurement of local content?

2) Motivation behind subcontracting arrangements with local suppliers?

Elaboration and follow up questions:

a) Why do you include local content in your locally assembled motor vehicles?
b) Who makes the decision regarding what is to be purchased locally?

4) Characteristics of the suppliers in subcontracting arrangements with large firms.

Elaboration and follow up questions:

a) Which firms supply you with the local content?
b) What criteria do you use to choose your local suppliers?
c) Do you prefer to deal with one or several suppliers for each product?
d) Do enter into a formal agreement with your suppliers?
e) Does the parent company have any say regarding the use of local content in their locally assembled vehicles?

3) Benefits of subcontracting

Elaboration and follow up questions:

a) What are the advantages of subcontracting to your company?
b) Do you give any aid to the SMEs to help them meet the contractual agreement with your company?

5) Constraints to subcontracting arrangements in the motor vehicle manufacturing industry.

Elaboration and follow up questions:

a) Do the SME that you subcontract with meet their part of the contract as required?
b) What other issues affect subcontracting in the motor vehicle manufacturing industry in Kenya?
c) Do you think that there is a future for subcontracting in the motor vehicle manufacturing industry in Kenya?

APPENDIX C

INTERVIEW GUIDE FOR FRANCHISE HOLDERS

The purpose of this study was to examine the determinants of subcontracting arrangements between SMEs and large firms in the motor vehicle manufacturing industry in Kenya so as to establish the reasons behind the gap in subcontracting in the country.

Interviewee's name: _____ Date: _____

Designation: _____

Name of business:_____

Determinants of subcontracting arrangements in the motor vehicle industry in Kenya.

1) Nature of subcontracting in the motor vehicle industry in Kenya.

Elaboration and follow up questions:

a) Which vehicles is your company currently assembling locally?
b) Which assembling plant assembles these vehicles?
c) What criteria determine which assembler to use?
d) Is there any local content in these locally assembled motor vehicles?
e) Who does the procurement of local content?

2) Motivation behind subcontracting arrangements with local suppliers?

Elaboration and follow up questions:

a) Why do you include local content in your locally assembled motor vehicles?
b) Who makes the decision regarding what is to be purchased locally?

4) Characteristics of the suppliers in subcontracting arrangements with large firms.

Elaboration and follow up questions:

a) Which firms supply you with the local content?
b) What criteria do you use to choose your local suppliers?
c) Do you prefer to deal with one or several suppliers for each product?
d) Do enter into a formal agreement with your suppliers?

e) Does the parent company have any say regarding the use of local content in their locally assembled vehicles?

3) Benefits of subcontracting

Elaboration and follow up questions:

a) What are the advantages of subcontracting to your company?
b) Do you give any aid to the SMEs to help them meet the contractual agreement with your company?

5) Constraints to subcontracting arrangements in the motor vehicle manufacturing industry.

Elaboration and follow up questions:

a) Do the SME that you subcontract with meet their part of the contract as required?
b) What other issues affect subcontracting in the motor vehicle manufacturing industry in Kenya?
c) Do you think that there is a future for subcontracting in the motor vehicle manufacturing industry in Kenya?

APPENDIX D

QUESTIONNAIRE FOR SUPPLIERS

Interviewee's Name: _____

Date: ----------

Designation: _____ Contact: _____

Name of business:_____

Type of business_____

Age of business_____

1. How many employees do you have? (*Indicate no. by category/or as it is categorized in your firm*)

Category	**No**
Management	
Technical	
Clerical	
Support Staff	
Auxiliary/Subordinate Staff	
Other (*Specify*)	
Other (*Specify*)	
Total	

2. Which component motor vehicle parts do you manufacture/ stock?

i)
_____

ii)
_____

iii)
_____

iv)_____

v)
_____

3. Who are the major customers (Firms/Enterprises) that you supply with products/services and when

did you start the contract with them? (*List the names and date of commencement*)

No.	**Names**	**Dates**
1		

2		
3		
4		
5		
6		
7		
8		
9		

4. Would you prefer to deal with many more contractors/customers?

[ ] YES [ ] NO [ ] N/A

If yes, why would you prefer to deal with several?

[ ] I produce a variety of goods

[ ] Better bargaining position for me

[ ] More sales

[ ] Other (*Specify)*……

[ ] Other (*Specify)*……

If No, what are your reasons?

_____

_____

_

5. When you got the contract to supply the products/services, did you sub-contract other firms/Individuals to supply you with some parts in order to meet your contractual obligation?

[ ] YES [ ] NO [ ] N/A

If Yes, List the products/services that you outsourced:

_____

_____

_____

_____

____

If YES, but you are no longer in the arrangement, what made the arrangement stop?

_____

_____

_____
___

7. Who initiated the sub-contracting arrangement?

[ ] The Contractor [ ] My Company/Firm

[ ] Both of us [ ] Others
(*Specify*)……

What were the reasons for doing so?
_____

_____
_____
__

7. Where/how did you get information about your contractor(s)/customer(s)?
_____
_____
__

8. Do you have any formal (written) contractual agreement with the contractor(s)/ customer(s)? [ ] YES [ ] NO [ ] N/A

If Yes, for how long. _____

If No, would you prefer to have a formal arrangement? [ ] YES [ ] NO

Why?
_____

_____
_____
__

9. In which ways do the contractor(s)/customer(s) help you in your business?

(*Indicate all that applies*)

[ ] Provides capital

[ ] Provides machinery

[ ] Provides training

[ ] Provides a steady market

[ ] Other
(*specify*)……..

[ ] Other
(*specify*)……..

[ ] Other
(*specify*)……..

[ ] Does not help at all

10. In which other ways (a part from the above mentioned) would you have wished the contractor(s)/customer(s) to help you in your business?

_____
_

_____
_

_____
_

_____
_

11. What conditions do the contractor(s)/customer(s) expect you to fulfill, upon being given the contract? (*Indicate all that applies*)

[ ] Satisfy contractor's quality levels

[ ] Meet deadlines

[ ] Make specific designs

[ ] Offer discounts

[ ] Transport goods to contractor

[ ] Other
(*specify*)……..

[ ] No conditions

12. How would you judge these condition(s) given by the contractor/customer(s)?

[ ] Good [ ] Moderate [ ] Fair [ ] Bad

13. What are the advantages/disadvantages obtained from subcontracting arrangements?

Advantages	**Disadvantages**

14. Does your firm face any kind of problem in meeting the contractual obligations?

[ ] YES [ ] NO

If yes, List the kind of problems you are faced with?

i) _____

ii) _____

iii) _____

iv) _____

v) _____

15. What would you say, are the problems hindering sub-contracting arrangements in Kenya?

[ ] Lack of investment capital

[ ] Lack of information about contractors

[ ] Lack of a steady market

[ ] Problem of in accessing site location

[ ] Poor pricing of products

[ ] High standards set by contractors

[ ] Lack of appropriate technology

[ ] Others,
(*specify*)……..

[ ] Others,
(*specify*)……..

[ ] Others,
(*specify*)……..

16. What measures do you think should be taken by the following to promote subcontracting in Kenya?

i) Government of Kenya:
_____

_____
_

_____
_

_____
_

ii) Contractor:
_____

_____
_

_____
_

_____
_

iii) Supplier:
_____

_____
_

_____
_

_____
_

iv) Other parties involved
(*Specify)*……

_____
_____
__

_____
_

_____
_

17. Do you have any other comments regarding subcontracting in Kenya?

_____
_____
_____

APPENDIX E

OBSERVATION SCHEDULE

The researcher scheduled observation schedules with two of the three assemblers.

1) The first observation schedule was organized with General Motors EA at their assembly plant in industrial area.

2) The second observation was arranged with Kenya Vehicle Manufacturers in Thika.

The researcher was taken through the process of motor vehicle assembly.

The four basic levels of operation for the assemblers that the researcher was taken through were: (i) input procurement of CKDs kits materials and local content (ii) sub-assembly (iii) assembly and (iv) distribution.

The details of this assembly process itself are shown below.

APPENDIX F

LIST OF CODES

Element	Code	Element	Code
Nature of subcontracting	N	Motivation	M
Local content	Nlc	Goverment requirement	Mgr
Supplier	Ns	Cost element	Mce
Nature of contract	Nnc	Import duty	Mid
Number of suppliers	Nns	Concentrate on core business	Mcb
Help to suppliers	Nh	Lead time	Mlt
		Quality	Mq

Element	Code	Element	Code
Characteristics of the suppliers	CH	Benefits of subcontracting	B
Large supplier	CHl	Lead time	Blt
Medium firm	CHm	Import duty	Bid
Small firm	CHs	Cost reduction	Bcr
Manufacturing	CHmn	Concentration on core business	Bcb
Products/Services	CHps	Steady market for products	Bsm
Types of contracts	CHc	Provision of capital	Bc
		Marketing	Bm
		Technical assistance	Bta
		Provides training	Bt
		Provides machinery	Bm
		After sales services and repairs	Bas
		Research services	Br
		No help	Bnh

Element	Code
Constraints	C
Quality of local products	Cqp
Technological capacity	Ctc
Management capacity and skilled labuor	Cmc
Quality control	Cqc
Availability of suppliers	Ca
Adequacy and timeliness of supplies	Cat
Quality and cost of raw materials	Ccr
Liberalization	Cl
Fines for deletion	Cdf

Proliferation of models	Cpm
Parent company's policy	Cpc
Cost of locally assembled vehicles	Ccl
Abundance of foreign exchange	Cafr

F.4 List of codes

Element	Codes	Codes
	Alpha	Numeric
Nature of subcontracting	N	
Plant capacity utilization	Npc	1.1
Supplier	Ns	1.2
Nature of contract	Nnc	1.3
Why buyers prefer several suppliers	Ns	1.4
Help to suppliers	Nhs	1.5
Plant capacity utilization	Npc	1.6
Nature of contract	Nnc	1.7
Reasons for preference of many suppliers	Nps	1.8
Help to suppliers	Nhs	1.9

Element	Codes	Codes
	Alpha	Numeric
Motivation for subcontracting	M	
Government requirement	Mgr	2.1
Import duty	Mid	2.2
Lead time	Mlt	2.3
Concentrate on core business	Mcb	2.4

Element	Codes	Codes
	Alpha	Numeric
Characteristics of suppliers	CH	
Buyers	CHb	3.1
Tier two subcontracting	CHtt	3.2

Tier two products/services	CHtps	3.3
Types of contracts	CHc	3.4
Contractual obligations of suppliers	CHco	3.5

Element	Codes	Codes
	Alpha	Numeric
Benefits of subcontracting	B	
Steady market	Bsm	4.1
Capital	Bc	4.2
Marketing of suppliers' products	Bm	4.3
Technical assistance	Bta	4.5
Provides training	Bt	4.6
Offers credit	Bc	4.7
Provides machinery	Bm	4.8
After sales supplies	Bas	4.9
Research	Br	4.9.1
No help	Bn	4.9.2

APPENDIX G

SOURCE SURVEY QUESTIONNAIRE BY GMEA TO POTENTIAL SUPPLIERS

Survey date:

Supplier name:

Supplier details

Pin no:

Vat no:

Postal Address:

Location:

Tel:

Contact Person:

E-mail:

Bankers:

Proprietors:

2. Nature of business:

3. Other business involved in:

4. Management/organization structure: (attach organization chart)

5. Give the company clientele (customers):

6. Is company licensed to do this kind of business and for how long?

7. State qualification and experience of staff:

8. What procedures do you follow once an order is placed?

9. List equipment and facilities owned:

10. Business capacity / month:

11. Warehousing and storage facilities:

12. Quality control procedures in place:

13. What credit limit can your company offer (amount and period):

14. Any other products of interest to General Motors East Africa:

15. Environmental management systems/plans in place:

Recommendations:

Survey conducted by:

1.

2.

Reviewed by:

Recommendation: