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**The Challenge of Competitiveness in Worker Co-operatives in Britain: An Integrative
Strategy Framework Perspective**

Joshua Makokeyo Wanjare

A thesis submitted to the University of Huddersfield in partial fulfillment of the requirements for
the degree of Doctor of Philosophy

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**The University of Huddersfield
Huddersfield University Business School**

Abstract

This study responds to the need for further research on worker co-operatives as an alternative business model following the resurgence of interest in co-operatives by many international organizations including the United Nations. The study particularly seeks to fill the gaps identified in the previous research studies with regard to worker co-operatives' competitive environments and to their strategy formulation processes.

The main objective of this thesis is to establish that an integrative strategy framework offers a more effective analysis of the challenge of competitiveness in worker co-operatives in Britain. Unlike most previous studies in this field, the point of departure for this thesis is the contention that the challenge of competitiveness in worker co-operatives in Britain can be better understood if their strategic variables are considered together in an integrative strategy framework. The thesis aims at finding the rationale for formulating strategy frameworks that integrate variables from both the external and the internal environments of the worker co-operatives in order to effectively achieve objectives.

This thesis additionally seeks to establish that despite all the external and internal forces that work against the growth and development of worker co-operatives in Britain, they still perform very well and are satisfied with their performance. This would confirm that a non-hierarchical management structure based on the principles of democratic control actually works. It would also confirm that loyalty, commitment and greater participation from members (co-operative environment) is the main force behind worker co-operatives' successful performance.

The thesis utilizes a typology for strategy classification that identifies the strategic variables in both the external and the internal environments that are critical to the competitiveness of worker co-operatives in Britain. It specifically focuses on the strategic integration of the key variables in worker co-operatives' environments and the strategic alignment of their internal environment (e.g. financial, physical and entrepreneurial) with their external environment (e.g. social, economic, political and legal). The thesis additionally examines how worker co-operatives are influenced by a unique environment that arises from their strong adherence to the universal co-operative principles and core values. This unique environment, known as the co-operative environment, consists of the multi-faceted relationships that exist between worker co-operatives and their members and among the members themselves.

According to the Worker Co-operatives Statistical Review 2nd Revision 2005, which is published by Co-operatives-UK (the umbrella body for worker co-operatives), there are approximately 390 worker co-operatives in Britain. One hundred and thirty one (131) of these worker co-operatives participated in the research study. The research method adopted for the thesis integrated the quantitative data collection and analysis methods with the qualitative and, hence, more descriptive approaches. Interviews were conducted and survey questionnaires were also completed on various factors that influence the competitiveness of worker co-operatives.

The study concludes that the use of an integrative strategy framework provides a richer picture of the challenge of competitiveness in worker co-operatives in Britain. It also concludes that many worker co-operatives attribute their satisfactory performance to loyalty, employee empowerment and unparalleled commitment from the members. This confirms that a non-hierarchical management structure based on the principles of democratic control actually works and that the revival of worker co-operatives in Britain will be maintained, and will probably expand.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This thesis examines the strategic competitiveness in worker co-operatives within the economic, social and cultural landscapes of Britain. In particular, it seeks to establish that an integrative strategy framework offers a more effective analysis of the challenge of competitiveness in worker co-operatives in Britain. The thesis looks at the role integrative strategy-formulation processes can play in the effective achievement of objectives by worker co-operatives. Many writers (Porter, 1998; Kaplan and Norton, 2004; Parnell, 2006; Chandler, 1962) are in agreement that competitiveness normally results from an effective strategy formulation process. Unlike most previous studies in the field, the point of departure for this thesis is the contention that the external and internal environmental factors, when strategically aligned together in an integrative framework, will positively influence the level of competitiveness in worker co-operatives in Britain.

A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise (MacPherson, 1996). In many economies, the co-operative sector is viewed as the “third arm” in industry alongside private and state ownership (Cockerton, Gilmour-White, Pearce, & Whyatt, 1980). The different types of co-operative enterprises that exist in Britain include consumer co-operatives, producer co-operatives, financial co-operatives (credit unions), housing co-operatives and worker co-operatives among others. Worker co-operatives, which are the focus of this thesis, are owned by the workers. Workers are accepted as co-operative members according to

criteria set by the co-operative, by working in the business, and through the purchase of a membership share. Each member of the worker co-operative becomes an owner with rights and obligations, including participating in workplace decisions, contributing labor and skills, and receiving an equitable share of profits. Worker co-operatives are therefore distinct from the other types of co-operatives in that they are enterprises that are owned and controlled by those who work in them.

1.2 Background of the Study

The interest in this study arises from the great attention currently being given to the role of co-operative enterprises in achieving the United Nation's Millennium Development Goals (MDG) of reducing poverty, promoting gender equality, providing health care services and ensuring environmental sustainability. The UN "sees co-operatives as an important means of creating employment, overcoming poverty, achieving social integration and mobilizing resources effectively" (Birchall, 2003, p. 12). In his report to the Fifty-sixth session of the General Assembly, the UN Secretary General recognized the potential and contribution of co-operatives in the attainment of economic and social development goals. He recommended that governments should be urged to create a supportive environment in which co-operatives can participate on an equal footing with other forms of enterprises. He further recommended that co-operatives' potential to help members achieve their individual goals and to contribute to society's broader aspirations should be protected and advanced (United Nations, 2001).

Co-operatives' role in providing men and women with decent work encompassing conditions of freedom, equity, security and human dignity as recommended by the International Labour Organization (ILO) has equally been given great attention in the recent past. Decent work means

productive work, with adequate social protection, that generates adequate income and in which rights are protected. It also means sufficient work that allows all people full access to income-earning opportunities. The ILO has placed great emphasis on the employment creation and poverty alleviation activities of co-operatives and their capacity to provide social protection. In its 90th International Labour Conference in June 2002, the ILO adopted Recommendation 193, which deals with the promotion of co-operatives. It recognized the importance of co-operatives in job creation, resource mobilization, and investment generation.

The recommendation also recognized that co-operatives in their various forms promote the fullest participation in the economic and social development of all people. The main features of recommendation 193 are: recognition of the importance of co-operatives in economic and social development; reaffirmation of the co-operative identity; equal treatment for co-operatives; definition of the governments' role in creating a supportive policies and legal frameworks; and in facilitating access to support services and finance (ILO, 2002).

Co-operative enterprises have also attracted special attention from the European Commission which, on 23 February 2004 adopted a Communication on the promotion of co-operative societies titled: Communication on the promotion of co-operative societies in Europe [COM(2004)18], which pointed out what Member States and co-operatives themselves can do to exploit the co-operatives' business potential. The main issues of the Communication were:

- The promotion of the greater use of co-operatives across Europe by improving the visibility, characteristics and understanding of the sector
- The further improvement of the co-operative legislation in Europe

- The maintenance and improvement of co-operatives' place and contribution to community objectives.

The need for more research studies on co-operative enterprises which results from the current attention directed towards the co-operative enterprises as highlighted above was given support by a report from a UN Expert Group meeting on the supportive environment for co-operatives which was held in Ulaanbaatar, Mongolia, in May 2002, and which concluded that:

Co-operatives need access to the results of research into organization management theory as well as the utilization or deployment of innovative technologies. Research that documents positive and negative co-operative practice can form the basis for future co-operative development. In general, co-operatives may not be in a position to establish their own research centres and, therefore, they will have to depend on the research of others or seek external aid to fund their own research activities. The establishment and ongoing operation of such centres is an important part of creating an enabling and sustainable environment for the long-term development of co-operatives (United Nations, 2002b, p.8).

The research study for this thesis was therefore carried out in response to the need for further research in areas relating to the co-operatives' competitive environments and to their strategy formulation processes.

1.3 Objectives of the Study

As already stated at the beginning of this chapter, this thesis seeks to establish whether an integrative strategy framework offers a more effective analysis of the challenge of competitiveness in worker co-operatives in Britain. This key objective is intended to be achieved by providing answers to the key research questions given in section 8.2 in chapter 8 and to the tests of research hypothesis in section 8.4 of the same chapter. The thesis focuses on the role and the strategic integration of the key variables in worker co-operatives' environments and the strategic alignment of their internal environment with their external environment. The thesis additionally examines how worker co-operatives are influenced by a unique environment that arises from their strong adherence to the universal co-operative principles and core values.

For many decades worker co-operatives have been relegated to the periphery and have not played a mainstream role in the social and economic development of Britain. The history of these enterprises has been replete with tales of poor performance and failing businesses (Linehan & Tucker, 1983; Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980; Davies, 1996).

With the global economic outlook remaining gloomy and with globalization and increased competition posing even greater threats to businesses, the competitiveness of the co-operative enterprises should be, more than ever before, a subject worth greater attention from academics and practitioners. The thesis therefore focuses on the challenges posed to these enterprises as they respond to their dynamic environment and leverage their core competencies in striving to meet their members' social and economic needs in a manner that promotes development and improves standards of living in their wider communities. It examines the worker co-operatives' marginalization in the

commercial marketplace and their unique vulnerability to threats in their social and economic environments.

The overall structure of the thesis therefore focuses on the relevance of integrative strategy frameworks to the competitiveness of worker co-operatives in Britain and utilizes a typology for strategy classification that identifies the strategic variables in both the external and the internal environments that are critical to the competitiveness of these worker co-operatives. The stereotyped image of worker co-operatives as inefficient and unreliable are discussed. The thesis examines their performance in light of their economically and ideologically hostile external environments. It also examines why worker co-operatives in Britain concentrate in the crisis-prone sectors of construction, textile and furniture unlike their counterparts in, for example, Spain that operate within the mainstream industrial production sectors.

The thesis seeks to explain the reasons why worker co-operatives in Britain remain on the fringes of the commercial market place, unlike their counterparts in other countries, even though Britain is the birthplace of the co-operative enterprise. It additionally examines how co-operative enterprises are influenced by a unique environment that arises from their strong adherence to the universal co-operative principles and core values. This unique environment, known as the co-operative environment, consists of the multi-faceted relationships that exist between worker co-operatives and their members and among the members themselves. These relationships demand and nurture mutuality, trust and cohesion necessary for the achievement of the worker co-operatives' economic and social goals (Linehan & Tucker, 1983; Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980; Davies, 1996).

The thesis explains how the multi-faceted relationships between a worker co-operative and its members and among the members themselves account for the favourable development of these enterprises' social capital. Field (2003) confirms that social capital is a relational construct that emphasizes correct relationships, norms and values as being critical to the achievement of an organization's objectives.

An integrative strategy-formulation process that includes the internal environment (resources, capabilities and core values) of worker co-operatives and their strategic orientation within their external environment (economic, political, legal, social and demographic) are therefore the basic components of the thesis framework that seeks to explain the challenges of competitiveness in worker co-operatives in Britain.

1.4 Outline of the Structure of the Thesis

There are fourteen chapters in this thesis. This chapter points to the resurgence of great interest in co-operative enterprises by the international communities and institutions leading to various recommendations and policy pronouncements in both national and international fora. It is also in this chapter that the thesis gives an insight into co-operatives' potential and contribution in the attainment of economic and social development goals. Professor Joseph Stiglitz, the former chief economist of the World Bank, argues that development strategies must incorporate both economic and social components through "open, transparent and participatory processes" (2002). He adds that social development that entails the provision of decent jobs leading to low level of crime, corruption and violence promotes economic development (Stiglitz, 2002).

Chapters 2 to 6 review the literature that is currently available which is relevant to this study.

According to Punch (2000), existing literature in an area of study is extremely valuable as a storehouse of knowledge and thinking about the topic since the research may “sit in line with the main trends in the literature” (p.44). A research project may also seek to extend the previous studies in the literature or may want to “take a quite different direction from those in the literature” (Punch, 2000, p.44).

Chapter two describes co-operative enterprises and explains the unique features of the co-operative model. The chapter also describes the co-operative principles and core values which form the bed-rock upon which co-operative enterprises are anchored. Chapter two also examines the significant attention directed towards co-operatives in the 21st century and the role played by co-operatives in the promotion of the social economy and progressive social change. Chapter two ends by identifying the general co-operative areas which are considered as being ripe for research studies. It examines previous research work on co-operatives and identifies the gaps that currently exist which should be the targets for further studies.

Chapter 3 reviews literature on workers’ co-operatives which are the main focus of the thesis. The chapter discusses the distinguishing features of these enterprises and how they can be formed. The different types of worker co-operatives are also discussed here. The chapter then reviews the existing literature on worker co-operatives in Britain. Their historical perspective, their management and their organizational structure are described. Chapter 3 also gives a general indication of the performance of worker co-operatives in the countries of Spain, Italy, USA and Japan.

It is in chapter 3 that the thesis discusses the role of worker co-operatives in promoting employee ownership, capital anchoring, and asset-based strategies for community revitalization. The role of worker co-operatives in promoting social capital is also discussed here. Chapter 3 also reviews literature on the history and the past performance of worker co-operatives in Britain. The chapter then ends by looking at the previous research work on worker co-operatives and the gaps that currently exist which should be the targets for further studies.

Chapter 4 reviews literature on the business environment of worker co-operatives and the implications of the environmental forces on worker co-operatives' organizational structure, strategies and performance. According to David (2005), a worker co-operatives' contextual environment includes political, economic, social, technological, legal, ecological and competitive forces. The need to align worker co-operatives' internal environment of resources and capabilities to strategically fit within the contextual environment is also discussed in chapter 4.

Since worker co-operatives are membership-based organizations, a unique environment, the co-operative environment (advantage), results from the multi-dimensional relationships that exist between the members and their co-operative and between the members themselves. The co-operative environment and worker co-operatives' social capital are also discussed in chapter 4.

Literature on strategy formulation processes is reviewed in chapter 5. Many writers (Porter, 1998; Kaplan and Norton, 2004; Parnell, 2006; Chandler, 1962; Feurer and Chaharbaghi, 1995b) contend that the key to competitiveness lies in the formulation of effective strategies. Several strategy-formulation frameworks including the Porter's Five Forces Model, The Boston Box, the Value Chain analysis, the SWOT analysis, the PEST analysis and the Balanced Scorecard analysis are therefore

discussed in chapter 5. Literature on the nature of these generic frameworks and on their limitations is reviewed in this chapter.

Chapter 6 examines some of the issues in support of integrative strategy frameworks that have arisen from recent contemporary studies. It is noted in the chapter that highly dynamic environments render the use of traditional strategy frameworks very unreliable. A move towards a concept of more dynamic strategy frameworks is therefore recommended.

Chapter 7 deals with the conceptual framework that guides and informs the thesis. The substantive theory and the conceptual framework upon which this thesis is grounded have been drawn from the disciplines of strategic management and organization development. The conceptual framework acts like a map in giving coherence to different parts of this thesis. It defines pathways between the key external and internal environmental forces, the worker co-operatives' long-term objectives and the effective achievement of those objectives.

The conceptual framework guides the study to examine the extent to which strategic variables in the worker co-operatives' environments can influence the achievement of stated objectives. Integration of the Industrial Output (I/O) and the Resource Based View (RBV) models of strategy-formulation frameworks is reviewed in this chapter. A strong case for the adoption of an integrative strategy-formulation framework put forward by many researchers (David, 2005; Schoemaker & Amit, 1997; Cummings & Worley, 2001) is discussed.

The role of perspective framework in the form of a philosophical position, paradigm, meta-theory or epistemology is discussed in chapter 8. Adoption of a particular perspective framework obviously

influences research in terms of fundamental assumptions made and the adoption of certain systems of meaning. The study upon which this thesis is based had to “proceed from the more ‘pragmatic’ approach of questions that need answers or problems that need solutions” (Punch, 2000. p.36). According to Robson (2002) pragmatism is itself a respectable philosophical position (2002). He adds that for “pragmatists, truth is what works” (p.43).

Chapter 8 also describes how the research process for this thesis was designed and the methodology used. Recommendations by researchers (Porter, 1998; Kaplan and Norton, 2004; Parnell, 2006; Chandler, 1962; Feurer & Chaharbaghi, 1995a) on how to design research processes that can help organizations facing highly dynamic and uncertain environments to formulate and implement successful strategies were taken into consideration. Both quantitative and qualitative methods have been adopted for this thesis since different methods have different advantages and disadvantages and can be mutually supportive.

Chapters 9 and 10 deal with the description and the exploratory analysis of the data that was gathered in the research study in order to gain an overview of the data as a whole as well as the relationships between the various variables in the study. It particularly presents the frequency distributions of the various categories of the study variables. Percentage and cumulative distributions have also been presented alongside the frequency distributions in order to give an overall view of the findings and to identify and display the relationships between the various categories of the study variables. Responses on the level of satisfaction with the performance of worker co-operatives and on the various external and internal variables have been summarized and presented in this chapter.

Chapters 11 and 12 seek to ascertain the type, direction and strength of relationships between the study variables. Various tests of hypothesis are carried out and discussed in chapter 11. Chapter 12 examines regression models that can be used to predict one variable (called dependent variable) from another (called the independent variable). The chapter seeks to establish whether the external environmental factors or the internal environmental factors correlate maximally with the level of performance satisfaction in the worker co-operatives. Computations regarding the measures of association in chapters 11 and 12 are all done using SPSS. Since none of the predictors in either the external environment or the internal environment is considered more important than the others, forced entry method, which is the default method in SPSS, has been used for all the regression models to force the predictors into the model simultaneously.

Chapters 13 and 14 deal with the research findings, discussions thereon and the conclusions arrived at. Findings have been discussed as they are presented in chapter 13 whereas chapter 14 contains the conclusions and the recommendations given following the research study.

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CHAPTER 2

CO-OPERATIVE ENTERPRISES

2.1 Introduction

Co-operative organizations are formed to provide goods and services, create employment, and stimulate community development. Their goals therefore include not only economic but also social and environmental objectives such as overcoming poverty, securing productive employment and encouraging social integration. Co-operatives can help communities to take control of their lives and livelihoods in the face of globalization, competition and the concentration of power in the hands of few multinational corporations (Stefanson, 2002). They are enterprises with both economic and social goals. They aim to give people control over their lives and democratize the process of work.

Co-operative enterprises are now found in every industry including agriculture, manufacturing, mining and services. They are present in childcare, energy, financial services, and food retailing. They are also found in technology, healthcare, insurance, and housing. Co-operatives have also been used efficiently in the purchase and distribution of inputs; in the production and marketing of goods; and in the integration of production, marketing and community development. Britain is credited with being the home of the first modern co-operative, the grocery store that opened in Rochdale in 1844.

According to Spear (quoted in Wylie, 2001), the co-operative model has distinct advantages in the following areas:

- Co-operatives are effective in responding to market failures and state crises;

- Co-operatives provide a trust dimension in the provision of goods and services, and operate along ethical lines;
- Co-operatives are participatory and empowering and possess flexibility and resilience;
- Co-operatives build upon self-help and solidarity within the community and enhance social capital;
- Co-operatives have greater social efficiency. (pp. 9-10)

2.2 Co-operative Principles and Core Values

According to the International Co-operative Alliance, co-operatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of their founders, co-operative members believe in the ethical values of honesty, openness, social responsibility and caring for others (MacPherson, 1996).

The co-operative enterprises are further guided by a set of seven principles. These principles define the features unique to co-operatives and the characteristics important to the success of a co-operative enterprise. MacPherson (1996) lists the seven principles as follows:

- Open and voluntary membership - co-operatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.
- Democratic Member Control - co-operatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary co-

operatives members have equal voting rights (one member one vote) and co-operatives at other levels are also organized in a democratic manner.

- Member Economic Participation - members contribute equally to, and democratically control, the capital of their co-operative. At least part of that capital is usually the common property of the co-operative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their co-operative, possibly setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the co-operative; and supporting other activities approved by the membership.
- Autonomy and Independence - co-operatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by the members and maintain their co-operative autonomy.
- Education, Training and Information - co-operatives provide education and training for their members, elected representatives, managers, and employees so that they can contribute effectively to the development of their co-operatives. They inform the general public – particularly young people and opinion leaders – about the nature and benefits of co-operation.
- Co-operation among Co-operatives - co-operatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures.
- Concern for Community - co-operatives work for the sustainable development of their communities through policies approved by their members.

2.3 Co-operatives in the 21st Century

This re-emergence of greater interest in co-operatives in the 21st century has seen various institutions and policy declarations come into being both nationally and internationally. For example, The Committee for the Promotion and Advancement of Co-operatives (COPAC) has been created to promote and coordinate sustainable co-operative development through policy dialogues, technical cooperation and information, and concrete collaborative activities. COPAC's membership includes the Food and Agriculture Organization of the United Nations (FAO), International Co-operative Alliance (ICA), International Federation of Agricultural Producers (IFAP), International Labour Office (ILO), United Nations (UN), and World Council of Credit Unions (WOCCU)

Stiglitz (2002) argues that as the world embraces change from industrial economies to knowledge economies, greater participation of individuals in decision making becomes critical. He adds that participation “brings with it commitment and commitment brings with it greater effort” (p. 168). Participation is, in deed, one of the pillars upon which co-operative enterprises are built. It is not surprising therefore that in 2002, the General Assembly of the United Nations passed resolution 56/114 recognizing that:

Co-operatives, in their various forms, promote the fullest possible participation in the economic and social development of all people, including women, youth, older persons and people with disabilities, and are becoming a major factor of economic and social development.

The UN resolution 56/114 therefore encouraged:

Governments to keep under review, as appropriate, the legal and administrative provisions governing the activities of co-operatives, with a view to ensuring a supportive environment for them and to protecting and advancing the potential of co-operatives to help them to achieve their goals (United Nations, 2002a).

To justify their relevance in the competitive global economy of the 21st century however, co-operatives must re-evaluate their reasons for existence. Correct identification of the needs of their stakeholders and the strategic exploitation of their unique resources and capabilities to gain the required comparative advantages, can be critical to their competitiveness and survival. Spear, Davis, and Wilkins (2000) contend that various research studies and general statistics indicate that much of the co-operative movement's recent history has been one of loss of market share and retrenchment even though there have been signs of growth and development. Spear *et al* (2000) add that the international context of transition economies in Eastern Europe, deregulation in much of the rest of the world and globalization has also increased the competitive pressures on co-operatives in the UK and abroad.

According to Fairbairn (2003), "changing times make it critical to find new and renewed ways of understanding and expressing co-operative approaches to business and society" (p.1). The 'dualistic' role (social and economic) of co-operatives makes this task an onerous one. While their competitors, the conventional corporations, have only one clear economic objective of profit maximization, co-operatives usually have social and environmental bottom lines in addition to the financial one (Fairbairn 2003). Return on capital is not the sole driver but rather the drivers are a matrix of

concerns such as financial sustainability, high quality work places, and support for the future of the broader community.

In fact, co-operative enterprises consider profit maximization as a means of achieving their common objective of economic and social promotion and not as the ultimate objective of entrepreneurship (Pflimlin 1996). Davies (1996) argues that “the co-operative social dimension is itself a commercial asset of central importance in the development of ...marketing, human resource, and service / product delivery strategies” (1). Co-operatives, therefore, bridge the economic and the social needs of members by providing employment and income-generating business opportunities.

Co-operatives fight for social and economic integration and equal opportunities. They fight against marginalization and social exclusion. Competitiveness of co-operatives should therefore be examined within the context of what has become known as the co-operative advantage with its ‘virtuous circle’ (see Appendix 1). That is, the attainment of social goals provides an advantage in competitiveness leading to a commercial success that further reinforces the ability to meet the social goals.

The theory of the ‘co-operative advantage’ posits that enterprises within a community that enjoys a high standard of living arising from more employment opportunities and more social benefits are more likely to be commercially successful. According to Levin (1984) “the organization behaviour of producer co-operatives tends to create more jobs per unit of output and to require less capital for the creation of each job than do the underlying dynamics of capitalist firms” (p.21). He reports that the same level of investment in large industrial worker co-operatives creates four times as many jobs as in comparable capitalist firms.

2.4 Co-operatives and the Social Economy

According to the Western Economic Diversification Canada (2005), the term social economy refers to an entrepreneurial, not for profit sector that seeks to enhance the social, economic and environmental conditions of communities. Western Economic Diversification Canada (2005) adds that apart from the private sector and government, the social economy includes co-operatives, foundations, credit unions, non-profit organizations, the voluntary sector, charities and social economy enterprises. Also that they operate in sectors ranging from housing to communications and in areas such as recycling, home care, forestry co-operatives, restaurants, catering and manufacturing.

Social economy enterprises are a component of the social economy that are run like businesses, producing goods and services for the market economy, but manage their operations and redirect their surpluses in pursuit of social and environmental goals. Common objectives for social economy organizations include alleviating poverty, providing affordable housing, improving employment and economic opportunities, addressing environmental concerns and providing access to services and programs that can assist individuals and groups to improve their personal circumstances (Western Economic Diversification Canada, 2005).

Other writers (Fairbairn, 2003; Lawless and Reynolds, 2004; Wylie, 2001; Shaffer, 1999; Shragge, 1998) contend that the social economy is made up of economic initiatives founded on solidarity, autonomy and citizenship, as embodied in the following principles:

- A primary goal of service to members or the community rather than accumulating profit;
- Autonomous management as distinguished from public programs;

- Democratic decision-making; and
- Primacy of persons and work over capital and redistribution of profits.
- Operations based on the principles of participation, empowerment, and individual and collective accountability.

MacPherson (2005) however thinks that within the co-operative tradition, the term “Social Economy” is sometimes given a narrow meaning that refers to the portion of the surplus (or profit) from co-operative enterprises that is annually designated for the common good. That is, what is left after patronage dividends have been declared and reserves allocated. MacPherson (2005) continues that in classical co-operative thought, the surplus is indivisible and does not belong to individual members -- it is the “common property” to be used for the benefit of the collectivity. In fact, it should not even be divided among members upon the dissolution of a co-operative; it should be given to a like organization or in support of a cause associated with the basic social purpose of the organization.

The European Commission (2005) states that the importance to the European economy and society of co-operatives, mutual societies, associations, foundations and social enterprises (which together are sometimes referred to as the Social Economy) is now receiving greater recognition at Member State and European levels. Not only are they significant economic actors, they also play a key role in involving their members and European citizens more fully in Society. Social Economy enterprises are helping to meet the demands of a changing Europe. They are important sources of entrepreneurship and jobs in areas where traditional "investor driven" enterprise structures may not always be viable (The European Commission, 2005).

Social Economy entities spring from the economic and social needs of their members. There are certain common characteristics shared by Social Economy entities:

- Their primary purpose is not to obtain a return on capital. They are, by nature, part of a stakeholder economy, whose enterprises are created by and for those with common needs, and accountable to those they are meant to serve
- They are generally managed in accordance with the principle of "one member, one vote"
- They are flexible and innovative since they are created to meet changing social and economic circumstances
- Most are based on voluntary participation, membership and commitment (The European Commission, 2005).

The Social Economy is found in almost all economic sectors. Co-operatives are particularly prominent in certain fields, such as banking, crafts, agricultural production and retailing. Mutual societies are predominantly active in the insurance and mortgage sectors, whilst associations and foundations figure strongly in the provision of health and welfare services, sports and recreation, culture, environmental regeneration, humanitarian rights, development aid, consumer rights, education, training and research. Some Social Economy bodies work in competitive markets while others work close to the public sector. Co-operatives, for example, which are formed on the basis of fulfilling the interests of their members, play an important role in several markets and contribute to effective competition (The European Commission, 2005).

2.5 Co-operatives and Progressive Social Change

Co-operative organizations provide suitable environments for progressive social change since by their very nature they promote participation and teamwork thereby empowering their worker-members.

Stiglitz (2002) points out that participation leads to better results because it encompasses transparency, openness and voice at the workplace. Also, given that co-operatives are people's organizations, they respond to the social challenges of their communities thereby promoting social integration. Social care co-operatives like child-care and elderly-care co-operatives and co-operatives of the disabled have become a prominent part of the co-operative movement.

Wylie (2001) observes that there has been a need to rationalize expenditures and service provision in the area of social services which has led to a decentralization of many areas of welfare provision in many European countries. The co-operative response to this change has been to develop more efficient service provision strategies that are simultaneously more cost-effective and responsive to the specific needs of the communities within which they operate (Wylie, 2001).

Co-operatives offer unique services that are less commonly found in other forms of private services. Those created specifically for the needs of the local community, are better able to guarantee the quality of services and to create a system of trust between the consumers and the producers (Borzaga & Maiello, quoted in Wylie, 2001). They are active members of the community and contribute to the social health of the community in ways that private or public sector enterprises are not able to do (Wylie, 2001).

Co-operativism is seen as a social process through which to over-come social inequality and to reduce class exploitation. In many cases, co-operatives emerged as a response to the inequalities brought about by the industrial revolution. Other marginalized groups have continued to see the co-operative model as a means to collectively overcome systemic injustices (Lawless and Reynolds, 2004; Wylie, 2001; Shaffer, 1999; Shragge, 1998).

The co-operative model offers a number of unique attributes that are not seen in other forms of economic organizations. Shaffer (1999) has argued that co-operatives offer group harmony in problem solving, democratic participation, social equality, development of leadership, and solidarity. “New Wave” co-operatives emphasize the social side of co-operative activities, such as the promotion of healthy living alternatives, environmental responsibility, and services for social services disadvantaged groups (Lawless and Reynolds, 2004; Wylie, 2001; Shaffer, 1999; Shragge, 1998).

Researchers (Fairbairn, 2003; Spear, 2002; Lawless and Reynolds, 2004; Wylie, 2001) argue that co-operatives offer a more feasible model for social service development because they are more responsive to the needs of the community. Most co-operative organizations are formed because of a desire among members of the community to provide a service they do not have access to. They are a model through which to identify community needs and provide those services, while at the same time offering meaningful economic and employment opportunities for members of the community (Fairbairn, 2003; Spear, 2002; Lawless and Reynolds, 2004; Wylie, 2001).

Co-operatives offer economic democracy through the principle of a common sharing of power. This model allows for equal participation on the decision-making process, regardless of the economic

position of the various members involved. The focus on developing group solutions to economic problems is an empowering experience for people facing common problems.

The role of co-operatives in the provision of health and social services has been recognized by the United Nations which has identified the following factors as influencing the development of co-operatives in health and the social sectors:

- The extent of public sector responsibility in these areas;
- The policy position of governments on co-operatives;
- Citizens' perceptions of co-operatives;
- Perceptions of the co-operative movement and the availability of capital;
- Perceptions and positions of other stakeholders in health and social care;
- Perceptions and positions of health and social care professionals;
- Perceptions and positions of other stakeholders in society, including employers;
- Technical and organizational determinants (United Nations 1997, pp. 8 8-90).

Since in most European societies, welfare states are under significant transition due to both downsizing and the lack of responsiveness to the needs of communities, opportunities for co-operatives to take up the responsibility of social service provision have increased. Governments are also showing increased interest in the possibility of co-operatives as more cost-effective health and social care delivery models (Spear, 2002; Lawless and Reynolds, 2004; Wylie, 2001).

Governments have begun to recognize the importance of community-based services with higher participation of the citizenry in improving overall health and social well being (United Nations, 1997). The general population is similarly showing an increased interest in co-operative

enterprises as better able to promote community and individual responsibility in the provision of services. There has been a growth in interest in developing co-operative enterprises to respond to the crisis in welfare state services (United Nations, 1997).

2.6 The Need for Further Research on Co-operatives

Many writers (Spear, 2002; Lawless and Reynolds, 2004; Davies, 1996; Birchall, 2003) agree that entrepreneurship and technological innovations which are essential for competitiveness in co-operatives cannot be achieved without greater emphasis on the need for applied and longer-term theoretical research. The focus of research studies should include co-operatives' responses to competitive environments, strategic management principles and practices, and applications of technology to processes, logistics, marketing, human resources, quality and management information systems. The studies should also look at governance and member relationships under conditions of national and international co-operative activities. Professional management development in the co-operative context and the application of co-operative values in management methodologies also deserve further research (Davies, 1996; Stefanson, 2002; United Nations, 2002b).

Theoretical research is necessary to explore a wide range of issues emerging for co-operatives in the new co-operative models for business and organizational development. Of particular significance are areas dealing with learning organization, knowledge management, the impact of technology on business structures, employment, member relationships, product and service innovation and their impact on growth, capital accumulation and community. Further studies are also necessary in the areas dealing with the potential and actual impact of co-operative business forms on the broader

economic system. For example, further research is needed in the role of co-operatives in making economic activities more human-centred (Stefanson, 2002; United Nations, 2002b).

The United Nations (2002b) recommend that co-operatives should collaborate with researchers to engage in the development of applied research projects and should support co-operative teaching and research institutes within universities in order to encourage research-based education in co-operative management and in all other aspects of co-operative organizations.

Fairbairn (2004) observes that many studies relating to agricultural co-operatives have been documented. This includes studies of agricultural co-operative sectors, competitive pressures and capitalization. He, however, adds that very little literature is available on case studies of recent successes and failures of co-operative enterprises. He also states that little research is focused on issues of added value, either in the conventional economic sense of vertical integration and processing, or in the more innovative sense of co-operative added value in serving distinctive member needs.

Accordingly, there is room for new research on possible roles of co-operatives on adding value in relation to food safety, food quality, and compliance; on innovation, particularly in leadership and management; and on member commitment. There is also room for new research on the role of co-operatives in global causes, community development, social integration and environmental sustainability (Spear, 2002; Stefanson, 2002; Fairbairn, 2004).

Other areas that merit further research work include the role of social cohesion in co-operatives, the application of co-operative models for alternatives to public service delivery, and the responses of

communities to environmental issues through the formation of co-operatives. Additional areas include the innovative funding models that are coming into place, particularly for the worker co-operatives and the role of co-operatives in the formation of social capital (Wylie, 2001; Spear, 2002; Fairbairn, 2004). According to Fukuyama (1999), social capital, encompassing cooperation in groups and virtues like honesty, keeping commitments, reliable performance of duties and reciprocity, is the *sine qua non* for an efficient functioning of organizations.

Fairbairn (2004) points to a very scanty literature on the role of co-operatives in environment sustainability, public policy formulations and entrepreneurship promotion. He similarly points out to the inadequacy of studies on the social impact of co-operatives on local communities as well as local economies. He therefore recommends further research regarding the application of the co-operative model as an alternative to be used in public service delivery, environmental conservation, sustainable development, and even in investor owned enterprises. Other researchers (e.g. Spear, 2002; Lawless and Reynolds, 2004; Davies, 1996) have also pointed out that although reasonable amount of work has been published on co-operative governance, co-operative management, and co-operative planning, studies on the uniqueness of the co-operative model and strategies and the distinctive manner in which co-operatives pursue their economic and social objectives are still not available.

Additional research is also necessary on issues pertaining to the commitment and involvement of members in co-operative governance and management; co-operative leadership; the impact of globalization and global social movements on co-operatives and the global solidarity of co-operatives. Additional areas include co-operative development and the international transfer of co-operative knowledge.

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CHAPTER 3

WORKER CO-OPERATIVES

3.1 Introduction

As mentioned in chapter 1, the main focus of this thesis is on the worker co-operatives in Britain. Worker co-operatives are business entities that are owned and controlled by their members, the people who work in them. The central characteristics of worker co-operatives include the fact that workers invest in and own the business and that decision-making is democratic, generally adhering to the principle of one worker-one vote. That is, workers combine their skills, experience and financial resources to achieve mutual goals. Decisions as to how the business is run are made democratically by the co-operative system of one member - one vote. Because the members collectively develop the policies that determine the co-operative's daily and long-term operation, trust, communication and co-operation are vital to their co-operative's success.

According to Hansen, Coontz and Malan (1997), a worker co-operative is a business owned by the workers. Workers are accepted as co-operative members according to criteria set by the co-operative, by working in the business, and through the purchase of a membership share. Each member of the worker co-operative becomes an owner with rights and obligations, including participating in workplace decisions, contributing labor and skills, and receiving an equitable share of profits.

In a worker co-operative, ownership and control of the business derive from working in the company, rather than from simply investing capital in it. A central element of the business structure is that

labour should hire capital rather than that capital should hire labour (Cockerton *et al.*, 1980). The standard worker co-operative model prohibits non-workers from holding membership voting shares, thus retaining control of the firm within the workforce. Profits and losses from the business are allocated to worker-owners according to either the hours worked or gross pay. Skill and seniority determine wage rates, which are often set by an equitable ratio between the highest and lowest paid worker-owners (Cockerton *et al.*, 1980; Hansen *et al.*, 1997).

3.2 A resurgence of Interest in Worker Co-operatives

A resurgence of interest in worker co-operatives has been witnessed in Britain as workers look for a form of industrial organization that is more rewarding to work in and for greater workers' control of industry through the co-operatives. This has partly resulted from widespread dissatisfaction with work conditions and from situations where groups of people encounter economic difficulties within an existing economic infrastructure that is not able to provide them with opportunities. The economic and social challenges presented by chronic unemployment and the potential dislocation of workers caused by industrial decline and technological displacements have all pointed towards the need for a greater control by workers (Cornforth, 1983; Oakeshott, 1978; Wylie, 2001; Linehan & Tucker, 1983; Bibby, 2004).

The resurgence of interest in worker co-operatives can also be attributed to the popular support that the so called "alternative movement" has received among the middle class and the well educated members of the workforce. They believe passionately that it is increasingly difficult to reconcile autocratic practices within conventional corporations with the democratic political practices of one person one vote occurring outside the firms (Cornforth, 1983; Oakeshott, 1978; Bradley & Gelb,

1983; Linehan & Tucker, 1983). Worker co-operatives therefore provide an ‘alternative’ to the investor-owned private corporations and the government-owned enterprises. They are, hence, the “third arm” in industry.

The interest in greater workers’ control of industry through co-operative enterprises has been fuelled by the extraordinary success of the Mondragon group of worker co-operatives in the Basque provinces of Spain. Efforts have been made to replicate the Mondragon-style worker co-operatives in most western industrialized countries including United Kingdom and USA. Lawless and Reynolds (2004) report that by the year 2004, the International Organization of Industrial, Artisanal and Service Producers’ Co-operatives (CICOPA) had a membership of over 70 organizations in 57 countries and that the estimated number of member/workers in employee-owned organizations had risen from six million in 1975 to 50 million.

Another reason for this resurgence of interest in worker co-operatives in Britain has been the wave of closures, amalgamations and redundancies which have been associated with the British industry in recent decades. However, many writers (Cornforth, 1983; Bibby, 2004; Oakeshott, 1978; Bradley & Gelb, 1983) agree that the formation and growth of workers’ co-operatives in Britain owe much of their success to the promotional efforts of the Industrial Common Ownership Movement (ICOM) which produced Model Rules for workers co-operatives in 1975.

Much has also been achieved due to the passing of the Industrial Common Ownership Act in 1976 which provided funds to promote co-operatives and to establish a revolving loan fund. In 1978, the government set up the National Co-operative Development Agency (CDA) to promote the growth of co-operatives and this led to a rapid growth in local CDAs and other co-operative support

organizations. With the creation of these support organizations to promote the development of a stronger co-operative sector in the British economy, there has been a steady growth of workers' co-operatives in Britain.

3.3 The Nature of worker Co-operatives

Job-ownership researchers (Postlethwaite, Michie, Burns, & Nuttall, 2005; Hansen *et al*, 1997; Bibby, 2004) point out that the worker co-operatives are unique both as co-operatives and as businesses. They provide the worker-members with employment and income along with the ownership and control of the enterprise. Through their ownership and control, the worker-members receive a fair share of the profits and enjoy workplace democracy. The difference between worker co-operatives and other types of co-operatives is the fact that members of worker co-operatives both own and work for their co-operative. In contrast, members of a consumer co-operative own the store they shop at, but do not necessarily work at the store. Similarly, in a producer co-operative, the members get dividends from the co-operative based on the product they produce and sell to the co-operative but they need not work for the co-operative.

Worker co-operatives therefore constitute a vital form of workplace democracy in a society where workers do not often have control over their work settings. They are businesses in which the workforce takes collective responsibility for the business which employs them, while enjoying fair reward from the profits which they create (Postlethwaite *et al* 2005; Hansen *et al*, 1997; Cockerton *et al.*, 1980; Oakeshott, 1978). Worker co-operatives are found in many countries and all business areas, including manufacturing, services, ship-building, food products, restaurants, computer software, engineering, construction, and many other industries. There are also many forms of worker co-

operatives. Many people initiate them to overcome barriers to employment, such as disabilities, racial, sexual or ethnic prejudices, or a simple lack of employment options.

Many writers (Postlethwaite *et al* 2005; Hansen *et al*, 1997; Cockerton *et al.*, 1980; Oakeshott, 1978; Spear, 2002) admit that worker co-operatives embody the concepts of worker participation and ownership, people-centered economic development, social well-being and quality of life. Worker co-operatives involve their member-workers at all the levels of risk-taking, management, operations and added-value distribution. A private company can also be turned into a worker co-operative if the owner wants to leave the business due to retirement, illness, etc. The employees buy shares from the owner and assume control of the business. This form of mutualisation often appeals to the former owners, as it allows them to become members and remain active in the company (Bradley & Gelb, 1983).

The worker co-operative model for business enterprise assures any group of individuals an effective means to combine their resources, however small. It permits a larger resource mobilization than that within the capacity of most individuals and small enterprises. As direct beneficiaries, co-operative members have a strong incentive for efficient operation and continuous innovation in response to changing business environments achieving thereby high rates of both initial success and long term viability. They favour long term development of their enterprise compatible with the interests of the communities in which it operates. The stability they assure within local communities itself induces further entrepreneurial expansion (United Nations, 1996).

The distinction between worker co-operatives and other forms of employee owned business, such as Employee Stock Ownership Programs (ESOPs), can be confusing. ESOPs have now become a

common form of employee ownership in the United States, Canada, Europe and Japan. ESOPs allow the employees of a business to invest in that business. They often form so that the company can receive tax benefits and/or because of the belief that employees are more efficient if they have a vested interest in the business. Some companies in crisis also develop ESOPs.

The workers' investment, through buying shares in the company, helps pull the company through the crisis, thus securing the workers' employment. ESOPs, like worker co-operatives, can also take many different forms. However, the main difference between an ESOP company and a worker co-operative is in democratic structure. A worker co-operative is governed on the principle of one member-one vote. Also, though most worker co-operatives have an average of about ten members, ESOPs normally have up to hundreds of members (Michie, Oughton, and Bennion, 2002; Bradley & Gelb, 1983).

Historically, worker co-operatives have often emerged in the UK and in other Western industrialized countries as a response from workers and local communities to economic and social problems caused by industrial decline in major sectors, technological displacements, chronic unemployment, inflation and widespread dissatisfaction with job conditions. These pressures have partly been caused by the "decrease in competitiveness of the Western industries relative to those of Japan and the newly industrialized countries" (Bradley & Gelb, 1983, p.1). In attempts to raise their competitiveness, conventional (investor owned) industries have, at times, ironically turned to policies and practices embodied in co-operative principles.

These include participative management, worker empowerment, employee stock ownership schemes (ESOPs) and other practices credited for the success of Japanese firms and Ouchi's 'Z' firms of the

western industrialized economies. These moves towards an ‘alternative way’ have given credence to the impetus towards workers-owned enterprises. As already indicated above, another motivation towards an ‘alternative way’ is the fact that it is increasingly difficult to reconcile autocratic practices within conventional corporations with the democratic political practices of one person one vote occurring outside the firms.

3.4 Worker Co-operatives and Employee Ownership

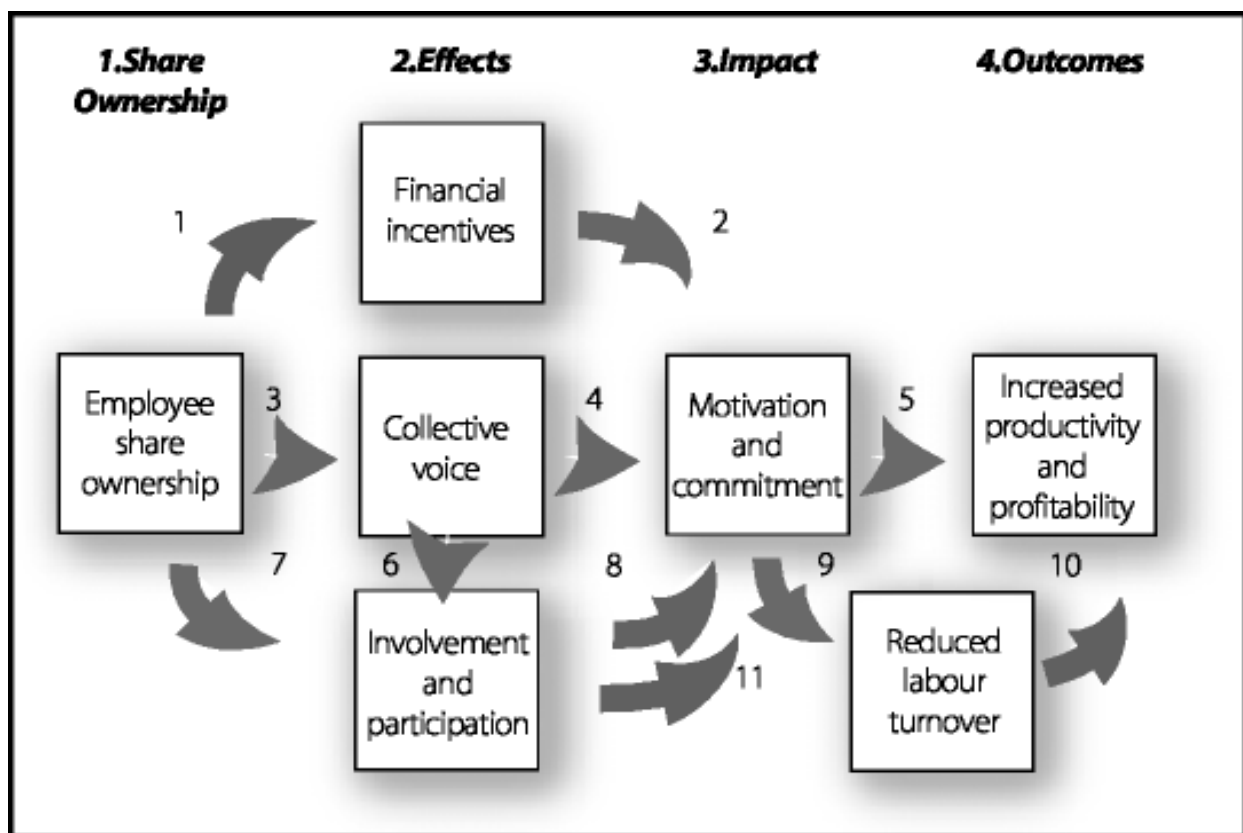
A worker co-operative model of enterprise is one form of employee ownership. Postlethwaite *et al* (2005) note that the employee and co-owned business sector in the UK has grown too big, too diverse and too effective to be ignored. They estimate the turnover of the co-owned sector as exceeding £20-25 billion. A research study by Michie *et al* (2002) which involved 101 worker co-operatives indicates that the co-operative ownership structure motivates employees. People have a sense of ownership and are prepared to put in extra effort because they like the ethos of the organization. Collective ownership makes people feel they have an influence over big (strategic) questions. Ownership over the company’s values gives meaning to jobs. People take responsibility to make things happen (Postlethwaite *et al*, 2005; Michie *et al*, 2002).

In a follow-up survey with 53 employees of worker co-operatives, Michie *et al* (2002) found that the overwhelming majority (89%) felt that employee involvement and participation does increase employee commitment and motivation. Of these, 72% thought that the increased commitment and motivation resulted in reduced labour turnover, and 85% thought that the increased commitment and motivation resulted in increased productivity. Asked whether they agreed or disagreed with the statement that “without employee ownership, there would be less commitment by the company to

informing and involving employees”, 72% responded, of whom 63% agreed with the statement (Michie *et al*, 2002).

According to Michie *et al* (2002), the worker co-operatives’ survey support causal linkages suggested in Figure 1 below:

Figure 1: Links from share ownership to organizational outcomes



Source: Michie, Oughton & Bennion, 2002 p.19

Postlethwaite *et al* (2005) contend that employee owned companies are now arguably setting the pace on at least one of the most prized yardsticks for competitiveness: the ability to harness the true

commitment and creativity of their employees. Other enterprises have looked at the co-owned sector and concluded that the secret is simply employee share ownership, or perhaps simply good communication, or clever participation systems. They have consequently tried to copy different aspects of the employee-ownership model (Postlethwaite *et al*, 2005).

Many writers (e.g. Bradley & Gelb, 1983; Hansen *et al*, 1997; Michie *et al*, 2002) contend that extensive employee stake-holding tends to foster a sense of individual enterprise that directly fuels productivity. Employees in co-owned companies tend to be relatively entrepreneurial because they are owners. They typically have a more creative attitude to their own work and the future of the business. They are more comfortable taking responsibility for decisions and accepting a lot of discretion about the way they carry out work tasks (Postlethwaite *et al*, 2005).

The relatively high levels of trust and consultation in co-owned companies also mean they tend to be highly innovative. Whereas change is often seen as a threat, not to mention a surprise, in other kinds of companies, co-owned companies routinely do the kind of communication and consultation that allows employees to see the purpose of change and adapt to it successfully (Postlethwaite *et al*, 2005; Michie *et al*, 2002; Bradley & Gelb, 1983).

Also, the way employee owned companies are structured means they achieve high standards of accountability and corporate social responsibility. The employee co-owners, as shareholders, tend to demand and impose relatively exacting levels of corporate transparency and integrity (Postlethwaite *et al*, 2005; Hansen *et al*, 1997; Michie *et al*, 2002). It has been argued further by Postlethwaite *et al* (2005) that aside from the employee-ownership ‘micro’ effects at the level of the individual companies, the UK’s economy benefits from having the additional, different and vibrant business

paradigm. The employee owned business sector enriches the diversity of ownership models capable of operating successfully – widening choice for consumers, funders, job seekers, suppliers and purchasers.

Studies by different researchers (Bradley & Gelb, 1983; Hansen *et al*, 1997; Michie *et al*, 2002; Postlethwaite *et al*, 2005) conclude that many employee-owned companies out-perform those owned entirely by external shareholders and often demonstrate higher productivity, greater innovation, increased customer loyalty, and enhanced talent recruitment and retention. This is because successful employee ownership plans combine three key factors; financial incentives, employee involvement mechanisms and an ‘ownership culture’ to foster an environment where employees are motivated and empowered to act in the best interests of the organization.

3.5 Worker Co-operatives and Capital Anchoring

In a worker co-operative, workers own their jobs, and thus have not only a direct stake in the local environment but the power to decide to do business in a way that is sustainable. The worker co-operative movement is therefore increasingly recognized as part of the larger movement for sustainability. Worker co-operatives tend to create long-term stable jobs, sustainable business practices, and linkages among different parts of the social economy.

The Secretary General of the United Nations (1996) reported that the co-operative form of organizing a business enterprise assures any group of individuals an effective means to combine their resources, however small. It permits a larger resource mobilization than that within the capacity of most individuals and small enterprises. He continued that co-operatives are catalysts for local

entrepreneurial growth and that they retain within the communities in which they operate the capital that they mobilize there, as well as surplus derived from outside transactions, both accumulating for further entrepreneurial development. As direct beneficiaries, co-operative members have a strong incentive for efficient operation and continuous innovation in response to changing business environments, thereby achieving high rates of both initial success and long-term viability. The Secretary General of the United Nations (1996) further stated that co-operatives favour long-term development compatible with the interests of the communities in which they operate. The stability they assure within local communities itself induces further entrepreneurial expansion (A/51/267).

3.6 Worker Co-operatives and Asset-Based Strategies to Solving Social and Economic Problems

Worker co-operative businesses build local assets and increase economic stability for worker-owners and their communities. Participatory decision-making systems enhance productivity, improve product and service quality, promote workers' skill development, and give individuals tools and information to help them increase control of their economic lives. Several writers (Temkin & Rohe, 1998; Stagner and Richman, 1996; Sherraden, 1991; the Aspen Institute, 2005), maintain that asset-based strategies often supply surprisingly effective responses to social and economic needs by directly providing income or savings, by facilitating the development of locally based jobs and enterprises, by building up and stabilizing local assets and wealth, and by enabling local governments to apply existing resources more efficiently to better serve more citizens. Many asset-based approaches move beyond strictly economic activity to include cultural, educational, and other efforts that cross and blur conventional lines that mark the different sectors.

The need for community revitalization and the desire to achieve the social and economic objectives of individual members of the community can begin from one of two underlying paradigms of needs-based or capacity-focused (Kretzmann & McKnight, 1993; Temkin & Rohe, 1998; Stagner and Richman, 1996; Sherraden, 1991; Turner & Pinkett, 2000). . A needs-based paradigm focuses on a community's deficiencies and problems. Such an approach is often top-down, beginning with what is absent in the community, and outside-in, relying heavily on the efforts of external agents, such as technical assistants.

It can be argued that needs-based approaches not only teach local people that they cannot shape their own future, but also that they require services as an answer to their problems. Consequently, "many lower-income, urban neighborhoods are now environments of service where behaviors are affected because residents come to believe that their well-being depends upon being a client" (Kretzmann & McKnight, 1993, p. 2). Thus, needs-based approaches encourage both the residents and the professionals who service them to bypass local assets and resources. In essence, a needs-based paradigm deprives communities of problem solving capacities (Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Temkin & Rohe, 1998).

A worker co-operative's model encourages and promotes the development and utilization of the resources that are embedded in local communities and their residents. This capacity-focused paradigm, which is inherent in a worker co-operative model, becomes a better option since it recognizes the skills, talents and gifts of local community members. The approach is fundamentally bottom-up, beginning with what is present in the neighborhood, and inside-out, relying heavily on the efforts of internal agents, such as members/workers, federations and institutions. A capacity-orientation lies at the heart of worker co-operatives and is a model for community revitalization that

is focused on strengthening the capacity of members, associations, and organizations to work, individually and collectively, to foster and sustain positive neighborhood change (The Aspen Institute, 1997; Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Temkin & Rohe, 1998).

The capacity-focused approach to solving individual and community-based economic and social problems assumes that social and economic revitalization starts with what is already present within a community. That includes not only the capacities of residents as individuals, but also the existing commercial, associational and institutional foundation. This involves pinpointing, or mapping, all of the available assets in the community, mobilizing, them in ways that multiply their power and effectiveness. An asset-based approach to community building, inherent in worker co-operatives, perceives members/workers and other community stakeholders as active change agents rather than passive beneficiaries or clients (The Aspen Institute, 1997; Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Temkin & Rohe, 1998).

The focus on local assets redirects attention to the extensive social capital of communities. Putnam (1998), who popularized the application of social capital to political civic engagement, defines social capital as "the norms and networks of civil society that lubricate co-operative action among both citizens and their institutions" (p. v). Thus, the social capital of local communities represents "mutually supportive institutions within a neighborhood that residents can turn to when the going gets rough" (Temkin & Rohe, 1998, p. 63). The individual capacities of residents are the basic building blocks of any community. For example, Stagner and Richman (1996) found that both friends and extended family members were the main source of support in marginalized communities. They recommended that "informal supports in the community which encourage and enable friends and neighbors to care about each other should be strengthened" (p. 54).

As people exercise their capacities, they often find that they need the talents of others. This leads them to join with other individuals who will work with them toward a common goal. This is the essence of worker co-operatives where individual members combine their own talents with the capacities of others to form co-operatives that can make extensive and valuable contributions to the members and their communities. Worker co-operatives involve their workers / members in the formulation of missions, visions, objectives and strategies for their achievement.

In addition to providing meaningful jobs and asset-building opportunities for their members / workers, worker co-operatives can play an important role in building movements for economic justice and social change. They can be institutions where real democracy is practiced on a day to day basis and they can be models for the empowerment needed to create the changes envisioned.

3.7 The Resonance of Asset-based Approaches to the Goals of Worker Co-operatives

Proponents of asset-based approaches (Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Putnam, 1998; Temkin & Rohe, 1998; Stagner and Richman, 1996; Sherraden, 1991) define assets broadly and consider them as multidimensional. They include not only physical capital and financial assets, but also the knowledge and skills of individuals, their social bonds and community relations, and their ability to influence the policies and institutions that affect them. They regard low asset levels and the inefficient use of assets as both the causes and the consequences of poverty.

Worker co-operatives give their members opportunities to be owners and strategic managers of their asset portfolios. That is owners and managers who respond to changes in feasibility, relative costs, and expected returns in their enterprises. The asset-based approaches by worker co-operatives

underscores the importance of their members' active participation in the economic, social, cultural, and political aspects of their lives and their communities to ensure that their interests are reflected in decisions affecting them.

To effectively and efficiently achieve their objectives, worker co-operatives require not only the financial, physical and natural assets, but also the human, social and political assets. Many writers (Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Putnam, 1998; Temkin & Rohe, 1998; Stagner and Richman, 1996) have described these assets as follows:

- Financial assets are cash, savings, deposits, and other “paper” assets people use to make purchases and accumulate liquid wealth.
- Human capital is the skills, knowledge, and health status of household members that enable them to pursue productive social, political and economic lives. Human capital is required to make use of the other five categories of assets.
- Natural resources, such as land, forests, water, and clean air, are gifts of nature rather than the product of human effort. However, they can be enhanced or degraded through human activity. Many poor rural house-holds depend on continual access to natural resources for their economic well-being.
- Physical capital includes tools and equipment owned by households and businesses, as well as infrastructure, such as roads, power and communications networks, and water and sanitation systems. Housing, livestock, and jewelry are other forms of physical capital important to many poor households.
- Social capital is the kinship systems and community organizations that people draw on in their

livelihood strategies. Social capital fosters cooperation between households, often providing an informal safety net for the poor. It can also help them overcome market imperfections by facilitating information flows necessary for the completion of market transactions.

- Whereas social capital is based on trust, political capital (a newly defined asset) is based on the power relationships that affect poor people's access to assets. The exercise of political capital shapes institutions. That is the formal and informal rules or norms of a society.

Advocates of asset-based strategies (Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Putnam, 1998; Temkin & Rohe, 1998; Stagner & Richman, 1996) argue that the ownership of assets plays a critical role in motivations and behaviour that support long-term well-being. They maintain that there are causal relationships between the ownership of assets and increases in long-term income, and that these relationships may have both remedial and preventative impacts. They also argue that the ownership of assets may yield important effects beyond increased income since it will lead to capacity building and will exert impacts in ways that cut across economic, psychological and institutional effects. That is, the ownership of asset will:

- Improves household stability
- Creates an orientation toward the future
- Stimulates the development of human capital and other assets
- Enables focus and specialization
- Provides a foundation for risk-taking
- Increases personal efficacy
- Increases social influence
- Increases political participation and

- Enhances the welfare of dependents.

Marginalized people tend to be more short-term focused in their thinking and behaviour, not so much because of their values but because they are compelled by the environment within which they must make decisions. This can result in patterns of decision-making that may ultimately present structural barriers to escaping poverty, unemployment and social exclusion (Turner & Pinkett, 2000; Kretzmann & McKnight, 1993; Putnam, 1998; Temkin & Rohe, 1998; Stagner & Richman, 1996).

Assets also have an important role to play in social standing and access to institutions. Assets buy social capital in the form of contacts, networks of protection and access to information. For example, the ability to save links people to the financial services sector and vice versa. Through targeted asset acquisition, worker co-operative members can interact with financial institutions which will increase their financial literacy, reduce the stigma associated with unemployment and facilitate access to other beneficial financial services (Sherraden, 1991).

Worker co-operatives promote an enterprise model that employs asset-based initiatives which ensure that a framework for the efficient and effective delivery of products and services is established. The services are developed and delivered, not as a traditional social program, but as a range of market - driven services and products. This reduces costs, broadens accessibility, creates room for cooperation, allows for customization and improves accountability since the services and products developed are the result of cooperation between members and are based on the capacity of each member to add value to the service or product. This reduces costs, improves product and service marketability and strengthens individual and community commitment (Sherraden, 1991; Temkin & Rohe, 1998; Stagner and Richman, 1996).

3.8 Worker Co-operatives Promote Social capital

The notion of social capital came into prominence following the studies of Professor Robert Putnam on the collapse and revival of the American community. Putnam (2000) stated that:

Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called “civic virtue.” The difference is that “social capital” calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital. In other words, interaction enables people to build communities, to commit themselves to each other, and to knit the social fabric. A sense of belonging and the concrete experience of social networks (and the relationships of trust and tolerance that can be involved) can, it is argued, bring great benefits to people (19).

Valentinov (2004) argues that the co-operative principles promote social capital in worker co-operatives. He adds that the co-operative principles and core values which, set worker co-operatives apart from their investor-owned counterparts are particularly directed at the preservation of social capital both as the major resource and as the major organizational principle. He has tabulated the rationalization of the major co-operative governance characteristics laid down in the co-operative principles in terms of their social capital-supporting role as shown in table 1 below.

Table 1: Rationalizing the social capital-supporting role of the co-operative principles

Governance instrument	Main effect	Explanatory remarks
Voluntary membership	Anti-hierarchization	Social capital can be built only on the basis of voluntary approaches; hence, practising them promotes social capital as alternative to hierarchical authority, which replaces voluntary action by directed one.
Open membership	Anti-commercialization	A distinctive characteristic of social capital is that its stock does not shrink if it is shared by an additional person; therefore the size of membership can be indefinitely expanded with the effect of extending the beneficial economic effects of co-operation on all those who share the same norms and rules which constitute the essence of a given local social capital.
democratic control	Anti-hierarchization	The uniform voting rule reflects the fact that the amount of social capital is determined by the number of personal identities of its individual bearers; each bearer can have only one identity; therefore practising this voting rule is a direct expression of social capital as the organizational principle.
Limited compensation on capital	Anti-commercialization	This 'repressive' measure is evidently intended to keep down the incentives to build 'economic' capital through the co-operative, and in this way prevent the penetration of 'price-based' organization into the co-operative governance, which would destroy the stock of social capital.
Autonomy, independence	Anti-hierarchization	This governance characteristic also reflects the importance of voluntary approaches and prevents any attempts of hierarchical authority to occupy the place of social capital.
Education, training, and information	investment in social capital	These measures are directly intended at strengthening the internal stock of social capital by promoting the respective norms, values, and rules, and also increasing social capital of co-operatives in the eyes of the general public.
Co-operation among co-operatives	investment in social capital	Since all co-operatives are supposed to share a set of common values, they have a basis for developing a certain social capital between themselves, and it would be rational for them to use this opportunity, taking into account that it would also reaffirm social capital as the major organizational resource of co-operatives.
Concern for community	Investment in social capital	This measure is intended in building social capital in those communities where co-operatives are located, rather than only between the members or with the general public.

Source: Valentinov (2004). p.15

Valentinov (2004) distinguishes the two roles of social capital in the co-operative governance, and classifies the principles set out in the ICA's 1995 statement into two groups:

- Supporting social capital as the organizational resource by promoting it as the organizational principle.
- Supporting it as the organizational principle by promoting it as a resource.

The first four principles, namely voluntary and open membership, democratic member control, member economic participation, and autonomy and independence, arguably belong to the first group, as they mainly describe the essence of co-operative governance. The last three principles, namely education, training and information, co-operation among co-operatives, and concern for community, expressly relate to the processes of investing in social capital, both intra- and extra-organizational Valentinov (2004).

Social capital consists of a network; a cluster of norms, values and expectancies that are shared by group members; and sanctions that help to maintain the norms and the network (Halpern, 2005; Fukuyama, 1999; Field, 2003; Putnam, 2000). The norms and values must lead to cooperation in groups and are related to virtues like honesty, loyalty, the keeping of commitments, reliable performance of duties and reciprocity.

Worker co-operatives, by their nature, promote several benefits which Cohen and Prusak (2001) associate with social capital. These include:

- Better knowledge sharing, due to established trust relationships, common frames of reference, and shared goals
- Lower transaction and agency costs, due to a high level of trust and a co-operative spirit.

- Low labour turnover rates, reducing severance costs and hiring and training expenses, avoiding discontinuities associated with frequent personnel changes, and maintaining valuable organizational knowledge
- Greater coherence of action due to organizational stability and shared understanding (p.10)

These benefits of social capital complement one another since personal satisfaction and organizational reputation are valuable in themselves, and are bound up with competitive effectiveness.

Social capital depends on trust. The relationships, cooperation, and mutual commitment that characterize worker co-operatives could not exist without a reasonable level of trust. Working in an environment of trust increases loyalty and commitment from the members of a worker co-operative (Cohen and Prusak, 2001).

In everyday life, people are connected with one another through intermediate social structures – webs of associations and shared understandings of how to behave (Halpern, 2005; Fukuyama, 1999; Field, 2003; Putnam, 2000). It is this everyday fabric of connection and tacit cooperation that the concept of social capital in worker co-operatives captures. Social capital in worker co-operatives therefore refers to social networks and the norms and sanctions that underlie them. It includes the trust, mutual understanding, and shared values and behaviors that bind the members of a worker co-operative.

Social capital must be understood as a relational construct. It can be termed capital in so far as it gives rise to resources that can be deployed in order to enable actors, be they individuals or groups, to pursue their goals more effectively than they could without it (Field, 2003; Putnam, 2000; Halpern, 2005). It can only provide access to resources where individuals have not only formed ties with others but have also internalized the shared values of the group. For this reason, it is important to

treat the concept as a property of relationships because it embraces more than the individual level of behaviour. It is an attribute of the individual in relation to others and of the collectivity (Field, 2003; Putnam, 2000; Halpern, 2005).

In contrast to the investor-owned enterprises, in which allocation of resources heavily depends on market forces, worker co-operatives mainly depend on their social capital for their internal coordination and resource allocation. Increasing evidence shows that social cohesion is critical for a group of people to prosper economically and for the success to be sustainable. Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together (World Bank, 1999).

Worker co-operatives know that it is in their long-term interest to build links down into the communities in which they are based. This improves members' loyalty and strengthens a worker co-operative's bonding social capital and improves the quality of people it can attract. In the long-term it is to the advantage of the worker co-operative and those within it that the community in which it is based flourishes (Halpern, 2005; Fukuyama, 1999; Field, 2003).

Social capital is related to a worker co-operative in the same way as physical or financial capital is to an investor-owned enterprise or as the human capital is to an individual. It is not surprising therefore that one of the main objectives of co-operative enterprises is the development of social capital shared by its membership. Social capital performs the same organizational role for co-operatives as price does for markets (Valentinov, 2004).

Social capital can bind members of a worker co-operative and can also help in maintaining trust

relationships, networks, and shared aims and understandings in times of stress, change and potentially disruptive situations. Close ties to other members in the worker co-operative and identification with the worker co-operative's principles and objectives are more reliable bases for the retention of worker-members than the promise of a lot of money (Halpern, 2005; Fukuyama, 1999; Field, 2003; Putnam, 2000).

Members invest their capital, time, and loyalty in their relationship with a worker co-operative because they trust that doing so will be in their own interest as well as the interest of other members. Co-operatives earn this trust when members perceive them to be dedicated to serving the members' needs, not the needs of the organization or of any other group. Members support co-operatives because co-operatives are dedicated to making members better off. This dedication is reinforced by other aspects of the co-operative relationship, including shared values and member identification with the co-operative's purposes. That is, the members trust the co-operative when they perceive it as an effective agent for themselves (Halpern, 2005; Fukuyama, 1999; Field, 2003; Putnam, 2000).

As membership based organizations, worker co-operatives' main investment is on social capital. The dedication of worker co-operatives to serving members has been expressed in many forms like not for profit, not for charity, but for service to the members. What distinguishes Worker co-operatives from other forms of enterprises is that they exist not to maximize or optimize their own profits or welfare, but rather those of their members. They undertake those activities that promote the economic and social success or well-being of their members. This interlocking of the worker co-operative's interest and the members' interests promotes social capital and is part of what is called the economic linkage between the co-operative and its members. A co-operative that cannot form a close economic linkage with its members regarding shared operating success; products to meet specific needs; and convenient

format or location, or perhaps relational quality will have low social capital formation and will suffer from weak member commitment (Fairbairn, 2003).

The way in which worker co-operatives develop social capital depends on the extent to which their goals and objectives have been internalized. It is this internalization of group goals that distinguishes worker co-operatives from investor-owned enterprises. The difference is in the manner in which economic motives determine the behaviour of individual actors. The aspiration to promote the goals of the group in a worker co-operative means that individual gain is not the immediate motive for co-operation but is mediated by mutual self-help objectives. Internalization of group goals leads to commitment and trustworthiness without which no social capital can develop. In investor-owned enterprises, though, the immediate motive is undoubtedly represented by individual gain, taking the form of profit from market transactions (Valentinov, 2004).

Social capital researchers (Cohen and Prusak, 2001; Halpern, 2005; Fukuyama, 1999; Field, 2003) agree that the most important form of social capital is an organization itself. As an organization model, a worker co-operative still represents the best form of bonding social capital. A worker co-operative is inherently a social-capital-type organization. It is a closely coordinated network that brings together a group of individuals with complementary skills, shared understandings and mutual commitments for maximum productivity. A worker co-operative is also founded upon norms, principles and core values that promote and nurture trust, commitment and reciprocity. Finally worker co-operatives employ appropriate sanctions to maintain their internal networks and their norms and core values. Sanctions exist in various forms including peer pressure and both formal and informal reprimand procedures.

3.9 Workers' Co-operatives in Britain

Many writers (Linehan & Tucker, 1983; Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980; Davies, 1996) contend that the performance of worker co-operatives in Britain has been unsatisfactory. According to them, the history of worker co-operatives in Britain catalogues many cases of business failures and poor performance. Most of the worker co-operatives are in the micro-enterprises category with fewer than ten employees (Bibby, 2004). They are usually oriented towards the production of marginal goods while ignoring marketing and commercialization strategies. Because of their marginalization in the marketplace, worker co-operatives in Britain are uniquely vulnerable to threats in their social and economic environments (Greater London Enterprise Board , Undated). They often have inadequate access to the financial, physical and entrepreneurial resources. Some of the worker co-operatives suffer from poor leadership and weak management structures.

Co-operative scholars (Linehan & Tucker, 1983; Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980) agree that many worker co-operatives operate in economically and ideologically hostile environments and have a stereotypical image of being inefficient and unreliable. According to Oakeshott (1978), it would be absurd to compare the performance of worker co-operatives with those of the capitalist enterprises. He continues that although “there have been many more failures than successes,...once Mondragon has been included in the record an all together more positive assessment becomes arguable” (p 244). Cockerton *et al* (1980) also agree that although worker co-operatives in Italy, France and Poland are large and play a major role in the economy, the ones in Britain are small and are predominantly in the service sector.

Spear *et al* (2000), in their research study, observes that while the co-operative sector exhibits considerable strengths in a number of markets, it appears to be inward looking by focusing on internal issues. They add that the sector is strategically reactive to threats and opportunities in its external environment, which is changing rapidly. Most co-operatives do not appear to have clear consensus on market trends, product/process innovation, information on the customer base, and marketing strategies. Davies (1996) also recognizes that co-operatives have a “crucial strategic advantage inherent in their very culture, values and principles” (p. 2). He, however, raises very pertinent issues regarding the performance of these enterprises. He asks:

Why is their performance so patchy and why are they doing so badly in many contemporary contexts? Why are they so often the last to innovate rather than the first? Why have they had such difficulty communicating with and mobilizing their membership? Why have they struggled to grow market share? Why are their levels of productivity and price competitiveness so often lagging behind their rivals? (p. 2)

Several waves of worker co-operatives had come and gone during the time when the consumer co-operative movement was growing in strength. According to Thomas (1988), the main cause of the worker co-operatives’ failure was the lack of a clear model for worker co-operatives based on a prime role for the workers themselves. He adds that if there was a model at all, it was based on the idea of community and did not focus on the interest of members as workers. The ideological breadth and strength of the new worker co-operatives originated from three parallel waves that were sweeping across the co-operative landscape in the 1970’s. First, there were a few philanthropic business owners like Ernest Bader who, in the tradition of the nineteenth century Christian Socialists, converted their businesses to co-operatives, aiming to institutionalize what they felt to be the best aspects of

management practices and industrial relations in their family businesses (Thomas, 1988). Although few in number, they did promote a particular model for worker co-operation, namely that of common ownership, in which, the workers own and control the business. Shareholding is purely nominal, and the assets of the business are owned in common. The Industrial Common Ownership Movement (ICOM), formed around 1971, has become the main membership organization for worker co-operatives, and its model rules, first published in 1976, have become the main form adapted for the registration of new worker co-operatives.

The second new wave consisted of worker takeovers of failing businesses, or parts of them. These were seen by many of the active participants as a way of putting into practice the ideals of workers' control, as well as simple attempts to save jobs in declining industries. The three Tony Benn co-operatives formed in 1974-5 were the best known of these worker take-overs although rescues or phoenix co-operatives are still an important part of the worker co-operatives. The Tony Benn co-operatives were set up to rescue failing businesses when Tony Benn was Secretary of State for Industry in the British Labour Government of the 1974 -1975. These included the Scottish Daily News in Glasgow, Kirkby Manufacturing and Engineering in Kirkby and the Meriden Motocycles. These enterprises were under-financed and had huge workforces. By the time they were taken over by the worker co-operatives, they were probably no longer viable. Their eventual failure was a very painful disappointment to the worker co-operative movement in Britain (Linehan & Tucker, 1983).

Finally, there were 'alternativist' collectives, mainly in wholefoods, radical bookselling or community printing. These latter were generally critical of the alienative and ecologically destructive tendencies of big business and large bureaucracies. The common ownership model of co-operation suited these radical collectivists well. With the big increase in long-term unemployment, job creation

and job saving have become the overriding considerations in worker co-operative development, but the above ideological strands are all still present. Many of the collectives have grown and become more commercially oriented without losing their ideals (Thomas, 1988; Linehan and Tucker, 1983).

The national Co-operative Development Agency (CDA) was formed by the Labour Government in 1978, and developed various alternative models for worker and community co-operation. A network of independent local CDAs sprung up becoming a major force in the promotion of worker co-operation. ICOM and local CDAs helped in the promotion of the common ownership model of business in various forms.

Unlike their Mondragon counterparts in Spain, these new forms of worker co-operatives are based on the principle of common ownership of the assets of the enterprise and allow no outside shareholders (Thomas, 1988; Linehan and Tucker, 1983). The local CDAs were mostly funded directly or indirectly by local governments. This source of funding is, however, declining. For example, the Greater London Enterprise Board was for a period of time a major promoter of co-operative development in London, but since the demise of the Greater London Council it has ceased its operations.

Thomas (1988) and Linehan and Tucker (1983) agree that worker co-operatives have not done very well in Britain. They contend that the pioneer worker co-operatives failed due to outside interest and the conflict of interest between the predominant consumer co-operatives fronted by the Co-operative Wholesale Society (CWS) and the worker co-operatives through the Co-operative Producers' Federation. This was before the 'new wave' worker co-operatives of the 1970s. From 120 worker co-operatives in 1903, only 18 of them remained by 1976. Industrial Common Ownership Finance Ltd

(ICOF) was formed in 1973 to provide loan capital to common ownership enterprises including worker co-operatives. This was followed by the passing of the Industrial Common Ownership Act in 1976 to provide ICOF with funds for lending to these common ownership enterprises.

The number of worker co-operatives in Britain eventually began to increase faster and faster each year following the passing of the Industrial Common Ownership Act. Although the co-operatives began to spread throughout all the regions of Britain, they tended to be concentrated locally in areas of high unemployment and/or areas with active local CDAs. The successful formation and development of new wave worker co-operatives has therefore been attributed to the efforts of the Industrial Common Ownership Movement and not the old Co-operative Producers' Federation (Birchall, 1994).

Thomas (1988) and Linehan and Tucker (1983) argue that worker co-operatives in Britain would do much better if they collaborate to form strategic alliances. Networking and different forms of collaboration are expected to strengthen the worker co-operatives. Wholefood co-operatives have kept up informal links over the years, and the wholesalers in particular have been building on these. Worker co-operatives in the printing and publishing sub-sector have also begun collaborating with one another in London and in many other parts of the country. However, there are still too few worker co-operatives in any one sector or locality for enough concrete advantages to come from such collaborations.

When the origin and the motivation for starting worker co-operatives are considered, Stott (1986) identifies the following distinct groups as being in existence in Britain:

- Endowed co-operatives – those ones given away by their original owners to their employees.

- Rescue and Phoenix co-operatives – those formed to preserve jobs on the closure of a business or when a business goes bankrupt.
- Alternative co-operatives - those that arise from the ‘alternative movement’ of the well educated middle-class committed to democratic ideals and to producing for social needs also rather than for profit only.

Thomas (1988) notes that about 6% of the worker co-operatives are rescues and perhaps 3% are conversions or endowments by private owners to their workforce but the great majority of worker co-operatives are started from scratch as part of the alternative movement.

3.10 Worker Co-operatives and ‘Participatory Democracy’ in Britain

It is stated at the beginning of this chapter that one of the key principles behind the development of worker co-operatives is democratic control. Enthusiasm for workplace democracy in the 1970s and 1980s saw many heroic claims made on behalf of the humble worker co-operatives. Proponents argued that worker co-operatives could eliminate the exploitation of labour, create jobs, improve industrial relations, raise productivity and reduce worker alienation (Carter, 2006).

Pateman (1970) argues that democratic control and participation in workplace decision-making can spill over into wider society by increasing the probability of participation in decision making beyond the workplace. The primary focus is on worker cooperatives because they are organisations owned and controlled by the workforce and in which participation is most extensive and regular and therefore have most impact on individual members. Individual attitudes and behaviour are shaped by the institutions within which they act. So, where individuals actively engage in democratic institutions they are more likely to develop the necessary attitudes, skills and psychological qualities

that contribute to individual decision-making efficacy, which in turn will increase greater civic participation. Pateman (1970) contends that the act of participation is itself educative since “participation develops and fosters the very qualities necessary for it and the more individuals participate the better able they become to do so” (p. 43).

Carter (2006) and Pateman (1970) agree that most people spend a large part of their daily lives in the workplace, usually in authoritarian organisations where they exercise little influence over their work. The hierarchical, bureaucratic organisations in which they work give them little opportunity to hone their democratic skills. Yet, the workplace is in many respects a political system very similar to government, notably because ‘the business of the workplace provides an education in the management of collective affairs that is difficult to parallel elsewhere’ (Pateman, 1970:43). By democratizing the workplace, individuals will be able to participate in routine decision-making affecting their immediate work environment, an arena in which they have first-hand knowledge. Pateman (1970) argues that the effect of democratizing a workplace escalates beyond the factory gate; as workers find that they can exercise greater control over their working lives, they seek to shape other aspects of their lives by participating in civic and political institutions. Moreover, the author notes that having learned to participate at work they will have acquired the confidence, skills and desire to participate in civic society. In short, workplace democracy will turn workers into responsible citizens (Pateman, 1970).

According to Carter (2006), many workers clearly do prize the co-operative experience. Mondragon workers display high levels of vertical trust between managers and workers, and high commitment, involvement and motivation. He adds that workers in American plywood co-ops and Israeli kibbutzim value participation. Similarly in grass-root co-operatives in the US and the UK, members

are strongly committed, involved and satisfied in their work (p. 418). However, Carter (2006) identifies five variables that can shape the attitudes and behaviour of workers towards participation in worker co-operatives. These include: forms of informal control; member expectations; the external economic environment; job autonomy; and conflict (p. 418).

Carter (2006) explains that participation and efficacy in decision-making may be undermined when a small elite exercises informal control and the majority of workers do not engage actively in decision-making or when positive expectations of the process of participation are not fulfilled. They may be similarly undermined when the external environment constrains organizational autonomy particularly where the enterprise is economically troubled. Finally, participation may be undermined when members of the worker co-operative exercise little control over their immediate jobs and when there are high levels of interpersonal conflict (Carter, 2006).

There is certainly no guarantee that formal participatory structures will ensure active participation by all workers in practice, as Carter (2006) contends. He adds that numerous case studies show that many members prefer to let others get on with decision-making leading to a constant complaint from active co-operative members - notably managers and committee members – that the wider workforce does not participate actively in meetings or take responsibility for decisions. Indeed, many co-operatives experience a process of organizational degeneration whereby control becomes increasingly concentrated in the hands of a few in which case the elected leaders become a ruling elite (Carter, 2006: 418).

Degeneration can result from both internal and external pressures. Internal pressures include members' expectations, which can profoundly affect the impact of workplace participation.

Unrealistically optimistic expectations may have a negative long-term impact on member attitudes and behaviour (Carter, 2006: 419). The combination of emotional intensity, interpersonal conflict and tendency to overwork frequently results in the burnout of some of the most active members of small worker co-operatives resulting in disillusionment that the organization is not living up to their high expectations.

External pressures, on the other hand, arise from the critical tension facing worker co-operatives operating within a market economy that make it difficult for them to avoid falling back on capitalist organizational practices (Carter, 2006). The external economic environment is a crucial factor because participation in decision making in economically troubled worker co-operatives might undermine the positive link between workplace and civic participation. In dire economic circumstances, co-operative workers are effectively engaged in self-exploitation by working long hours for low pay in poor 'sweatshop' conditions. "How far can workers get a sense of mastery if all they do is struggle against apparently irresistible forces?" Carter (2006: p.420) asks. He maintains that individuals cannot develop a sense of mastery without possessing some control over their immediate work environment.

Effective participation can also be undermined by the absence of job autonomy which in turn contributes to the alienation that characterizes the work experience in many capitalist enterprises (Carter, 2006). Alienation has several dimensions, notably powerlessness, meaninglessness, isolation and self-estrangement. If the day-to-day work of cooperative members remains unchanged (if they feel powerless or if their job is boring) then the introduction of formal democratic decision-making structures may have little impact on their working lives. In a worker co-operative, members may feel a sense of ownership and involvement that is absent from the capitalist workplace such that even the

most mundane of tasks is invested with purpose and meaning. It is, however, hard to believe that such positive attitudes could be sustained over the longer term in the absence of job autonomy and hence job satisfaction.

As small businesses, many worker co-operatives are also locked into dependent sub-contracting relationships with powerful corporations that allow co-operatives minimal autonomy over the organization of the work process. If external constraints prevent workplace democracy from giving members increased control over the work process and reforming their day-to-day work experience, then members are likely to feel a sense of powerlessness that is a poor basis for the development of a ‘participatory democracy’.

3.11 Marginalization and the Future of Worker Co-operatives in Britain

Estrin and Jones (1992) carried out a research study on worker co-operatives focusing on the theory of their non-survivability or their tendency to self-extinction, and concluded that the contention of many theorists that worker co-operatives will either fail or necessarily degenerate into a capitalist environment is false. According to the authors, although most economists do not favour collective ownership structures there exists a growing body of empirical work that finds a positive impact of the worker co-operative model on productivity. The worker co-operative model fosters participation and commitment and serves as a powerful motivator, especially when work is autonomous. In most worker co-operatives, employees are likely to use their existing skills in the interests of the worker co-operative, and also likely to quicken the rate at which they accumulate such skills.

Bate and Carter (1986) have noted that the majority of worker co-operatives in Britain have either been short-lived or have developed into small businesses run on traditional lines. They add that the high failure rate amongst co-operatives may be taken as an indication that the conditions of emergence are different from the conditions of survival (p.60). They, however, point out that the failure of worker co-operatives (including the Tonny Benn Co-operatives) in the 70's succeeded in drawing political and public attention and, most important, in highlighting the fact that co-operatives could only be kept on the agenda by crystallizing the new-found values of co-operation into some institutional form that was capable of effectively responding to the relevant environmental forces.

Environmental forces in the form of economic recession and mass unemployment have moved many people to question the basis of industrial life and to consider ways of reducing insecurity and hardship. One such way has been found to be the co-operative alternative (Bates and Carter, 1986: p.59). According to Bates and Carter (1986), a distinction should be made between the internal and the external forces that are crucial during the period of formation and growth of worker co-operatives. They consider the internal forces to include “levels of conflict; discipline; worker commitment, motivation and satisfaction; flexibility; and skill levels (p.60). External conditions, in addition to the availability of a support structure, “relate to the security of the market, the appropriateness of the product, competitiveness, and the existence of discrimination (positive or negative) towards the co-operative (Bates and Carter, 1986: p. 61).

The key problems worker co-operatives face, according to Estrin and Jones (1992), are not degeneration, bankruptcy, or liquidation, but the over-accumulation of collectively owned assets and the under-utilization of external debt as the worker co-operatives mature. Individual worker co-operatives stop growing and fail to take full advantage of their good collateral position, though they

survive perfectly successfully in the marketplace. They recommend that a solution might rest in the formation of an inter-cooperative capital market in which the collective assets of aging worker co-operatives could be used to finance the creation of new ones (Estrin and Jones, 1992).

Gates (1999) agree that some firms now embrace the worker co-operative model of employee ownership as a component of their competitive strategy because of the belief that employee-owners are “more likely to exhibit the entrepreneurial drive and the flexibility required to identify and make the changes required as the technology changes and markets shift” (p. 62). The worker co-operative model also provides more stable employment in the face of economic fluctuations. Gates (1999) concurs that the worker co-operative model promotes involvement and participation from the workers and that this leads to unparalleled loyalty and commitment. Loyalty, he adds, “is one of the greatest engines of business success” (p. 66).

According to Gates (1999), the Mondragon group of worker co-operatives has become “a Mecca for fans of worker-co-operatives” because of its participatory governance structure (the Mondragon group employed about 30,000 people and generated more than \$ 5 billion in sales in 1996). He also cites the success of worker co-operatives in Northern Italy in support of the worker co-operative model and observes that the support for co-operatives is enshrined in the Italian constitution as a way “to foster common ownership and encourage mutuality” (p. 254). The most remarkable feature of the worker co-operatives in Northern Italy is not their financial success but the social impact that accompanies that success and according to Gates (1999), this positive social impact was confirmed by Professor Robert Putnam when he found a strong correlation between the cooperative civic communities of Northern Italy and those features most associated with civic virtues. For example, citizens tend to deal more fairly with one another and expect reciprocity (p. 255).

Gates (1999) concludes that worker co-operatives offer solutions to the challenges for capitalism which, often, does not provide a balance between the financial and the other social, cultural and environmental goals. He adds that despite challenges, “the fact remains that broad-based ownership is preferable to its alternative” (p. 67).

Although many small businesses face similar problems of weaker capital structure, and fewer resources and skills, worker co-operatives often meet with the additional problem of active discrimination from other businesses, traders, suppliers, and financial institutions. However, Bates and Carter (1986) believe that survival and growth of worker co-operatives do not depend solely on external conditions and support, but also upon what happens inside the co-operatives. Also, survival and the growth in numbers may not be the only issues in the long-term. Survival may be an important consideration, “but the meaning that a co-operative comes to have for its members may possess more lasting significance” (Bates and Carter, 1986: p. 61). Even though waves of interest in worker co-operatives are rooted in wider economic and political developments, personal and internal conditions have also played a prominent part in their emergence and survival.

It is therefore reasonable to conclude that the growing size, sophistication and outlook of the worker co-operatives, applying largely the participatory and community programmes to the problems of regenerating the local economies, should help ensure a relatively stable and prosperous future for what is now a vibrant movement. The contemporary revival of worker co-operatives will be maintained, and will probably expand.

3.12 An Overview of Comparative Studies in Workers' Co-operatives

One way of benchmarking the performance and measuring the competitiveness of worker co-operatives in Britain is by comparing them with the similar enterprises in the other free market economies of the EEC and elsewhere. According to the EEC report by the Competitiveness Advisory Group (1995), benchmarking is an important instrument in the identification of ways to raise the level of productive employment and to improve competitive performance. The Competitiveness Advisory Group (1995) added that “competitiveness implies elements of productivity, efficiency and profitability. But it is not an end in itself. It is a powerful means to achieving rising standards of living and increasing social welfare” (Competitiveness Advisory Group, 1995: p. 2). The report states further that “economic competition is thus the ally, not the enemy, of social dialogue” (p.3).

In their study on the role of social capital in financial development, Guiso, Sapienza and Zingales (2004) also concluded that greater economic development often exists in high-social-capital communities and that this may explain the widely different levels of financial developments across communities. The thesis therefore examines available literature on the competitiveness of worker co-operatives in Spain, Italy, USA and Japan as a way of benchmarking the performance of these enterprises in Britain.

Studies carried out in Spain and in USA confirm that worker co-operatives have the potential to be more productive than their conventional counterparts. Levin (1984) reports that there exist both personal and collective incentives in worker co-operatives that are likely to lead to higher productivity due to reduced worker dissatisfaction and to increased workplace democracy. The most exciting success story by worker co-operatives comes from Mondragon in Spain. This small town in

the Basque region of northern Spain has become the headquarters of a large worker-ownership movement.

From about 400 employee-members in 1960, the membership of Mondragon's worker co-operatives expanded to about 19,000 people in 1981 (Levin, 1984). They produce iron and steel, machine tools, refrigerators, electronic components and other household appliances. Overall, as reported by Bradley and Gelb (1983), "Mondragon has been profitable and appears to have outperformed its capitalist environment by a considerable margin" (p.16). These are workers who operate in the midst of a free enterprise economy and who enjoy complete ownership and control of their business enterprises. They have access to all the capital that they need and they enjoy better social and job security than any democratic state can provide (Campbell, 1983).

Italy also has a history of strong worker co-operatives that are competing very favourably in manufacturing and construction sectors. Their success has been attributed to the favourable government policies over the years since even some of the Italian railways were constructed, owned and managed by co-operatives (Linehan & Tucker, 1983). Greater London Enterprise Board (Undated), points to the fact that many worker co-operatives in Italy have as many as 200 members and that by 1980 Italy had 3,936 worker co-operatives with 145,197 workers and a sales turnover of £1,503 million.

Another case of comparison is the one of USA although relevant legal frameworks provide for two main types of worker ownership. The first one is the Employee Stock Ownership Plans (ESOPs) which is predominant in the larger organizations. Bradley and Gelb (1983) reports that about 4,000 firms took advantage of this option and between 50,000 and 100,000 jobs were directly saved. On the

other hand, worker owned enterprises in the form of worker co-operatives have been predominant mainly in the Pacific Northwest where plywood worker co-operatives have performed very successfully. In the 1980s, productivity was 30 percent above industry averages and each worker's income was 25 percent above those paid by the conventional firms (Bradley & Gelb, 1983).

Following the wave of worker co-operatives in the 1970s however, the Industrial Co-operative Association (ICA) was formed in 1978 in Massachusetts, USA to develop Mondragon-style worker-owned-and-controlled co-operatives. ICA has consultants including economists, lawyers, business analysts and community development specialists who provide technical advice to potential and existing worker co-operative groups. The organization receives funding from the federal government, private foundations, churches and individuals. It established a \$1 million risk capital fund for the promotion of worker co-operatives (Jackall & Levin, 1984).

The final case of comparison is that of Japan whose huge productive capacity from its capitalist economy is second only to that of the USA. Due to the mega-competitive working environment within the Japanese capitalist enterprises, "Karoshi" (death from overwork) became very common. Many workers began to look for an alternative work environment leading to the formation of a Mondragon-style Japanese Workers Co-operative Union in 1993. By 1999, the union had 8,000 members with a turnover of about 15 billion yen (Japanese Workers Co-operative Union, 1999). Professionals including architects, technicians, lawyers and business analysts forged a network whose objective was to look for new ideas about work, work-life and community.

This resulted from the formation in 1991 of the Institute of Co-operative Research to promote research into worker co-operative organizations. The institute is funded by members and it brings

together many professionals including professors, scholars and co-operative members who are committed to the success of worker co-operatives in Japan. The movement is considered a great success and has performed very well in the service areas of facility maintenance, elderly care and distribution of everyday goods. The co-operatives have now begun to venture into the agriculture and food areas with the view of providing healthy and safe food products (Japanese Workers Co-operative Union, 1999).

3.13 Previous Research on Worker Co-operatives

According to Fairbairn (2004), much of the published work on worker co-operatives focuses on their success as compared to the investor-owned enterprises and on worker co-operatives as tools of economic democracy and an alternative economic participation model. There is also some published work on worker co-operatives as economic and social development models in marginalized communities and in declining industries.

Much of the early research work on worker co-operatives in Britain was carried out by Beatrice Potter. As a supporter of consumer co-operatives, Potter, (1891) argued that worker co-operatives were not a viable form of organization and that democracies of worker co-operatives could not successfully organize production. She supported this line of argument by stating that worker co-operatives lacked capital and could only afford inferior plant and machinery and raw materials. She added that members of worker co-operatives lacked both commercial expertise and administrative discipline. She believed further that managerial hierarchy was vital to the success of an enterprise and that the practice of democratic control could reduce discipline among the workers as no manager could operate successfully if he were answerable to his subordinates (Potter, 1891).

As the number of worker co-operatives in Britain began to increase following the passing of the Industrial Common Ownership Act in 1976, most of the research studies began to focus on the factors affecting the formation and growth of the organizations. Wilson (1982) carried out a study involving 72 worker co-operatives on the problems faced during their formation and their early stages of growth. He concluded that worker co-operatives share the same problems as the other small business organizations. He identified some of the problems as including:

- Lack of adequate capital
- Unfavourable structure and incidence of taxation
- Lack of suitable premises
- Lack of requisite skills
- Information gap (Wilson, 1982).

Wilson (1982) concluded that worker co-operatives had difficulties in introducing innovations in their organizational structures, working relationships and decision-making processes due to the often skeptical and hostile nature of their environment.

Most recent research studies on the worker co-operatives by Professor Jonathan Michie, Dr. Christine Oughton and Yvonne Bennion examined the causal links between job ownership on the one hand and increased commitment and motivation of the workers on the other. They concluded that job ownership leads to increased commitment and motivation which in turn lead to increased productivity and profitability ((Michie *et al*, 2002). The study that involved 101 worker co-operatives concluded that employee involvement and participation does increase employee commitment and motivation.

Some recent studies sponsored by the Co-operative–UK (the umbrella body for worker co-operatives) have focused on the issues of capitalization for worker co-operatives and how these issues can be resolved through initiatives like the Co-operative Bank and the ICOF in the UK. However, there is still need for further research on the different funding options available to worker co-operatives depending on the legal and regulatory frameworks that are applicable.

Literature originating from the discipline of economics and focusing on comparative studies of the productivity and efficiency of worker co-operatives, investor owned firms and Employee Stock Option owned firms is available. The exploration of worker co-operatives as models for increased democratic participation and economic development can also be found in some publications.

Literature on the Mondragon co-operative complex lead in this area where the common theme explore individual participation in the democratic process and decision making, both in the organization and in civic engagement. Also included in this area are issues related to worker co-operatives as responses to unemployment and to economic participation on an individual level and as community economic development tools.

Fairbairn (2004) acknowledges the existence of discussions on worker co-operatives in the popular and alternative presses, as social alternatives to empowerment and economic democracy, particularly for members of marginalized groups. Although these articles are not based on research studies, their review highlights areas for potential future research. These areas include: the potential of worker co-operatives to provide employment and services for marginalized groups; the potential of worker co-operatives in social service delivery; and the potential of worker co-operatives as vehicles for sustainable development and social responsibility.

Further research is needed in the area of tax incentives that have been put in place, especially in the U.S., for the conversion of investor-owned firms to ESOPs. Many of the ESOP conversions have been well documented and although the ESOP structure is different from that of a worker co-operative, there may be instructive examples of the financial incentives that have been initiated to facilitate these conversions.

Adequate literature on worker co-operatives as an alternative model for small and medium-sized business succession planning and as a model for sustaining small and medium-sized enterprises is lacking. The UK's information campaign for worker co-operatives as an alternative business model therefore deserves further research. Such research studies must include, among other things, the competitiveness and effectiveness of worker co-operatives vis-à-vis the investor-owned enterprises. This thesis is based on a research study that responded to the desire to fill the above mentioned gap. The thesis is based on a study that examined the challenge of competitiveness in worker co-operatives in Britain. The study's main focus was a strategy framework that integrates the variables in both the external and the internal environments that are critical to the competitiveness of worker co-operatives in Britain. These strategic variables are discussed in detail in chapter 4 below.

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CHAPTER 4

THE BUSINESS ENVIRONMENT OF WORKER CO-OPERATIVES

4.1 Introduction

Many writers (Porter, 1998; Parnell, 2006; Chandler, 1962; David, 2005; Hitt, Ireland and Hoskisson, 2003; Kaplan and Norton, 2004) consider an organization's business environment as a complex array of interrelated forces that combine to influence its ability to achieve objectives. In order to develop a more integrated and holistic understanding of an organization's environment, it is first necessary to analyse the various forces at play. Only then can we attempt to analyze its implications for organizational structure and strategy frameworks (Chandler, 1962; David, 2005).

The array of environmental forces that influence the activities of a worker co-operative include political, economic, social, technological, legal, ecological and competitive forces. Apart from the worker co-operatives' contextual environment, there are also other forces for change within these organizations in the form of resources and capabilities that constitute their internal environments.

Organizations are not influenced equally by their environment. In fact what may prove to be a real threat for one organization could be an opportunity for growth and profitability for another (Parnell, 2006; Chandler, 1962; David, 2005). For example, the technological advances that led to the design and production of personal computers have proved a death blow to the manufacture of mechanical and electronic typewriters. According to Feurer and Chaharbaghi (1997), organizations' environment is a complex array of forces acting with unpredictable and unequal force upon the organizations at a

variety of geographical and political scales. The relationship and direction of influence between the environment and organizations is not just a one-way causal relationship. Organizations themselves also play a major part in influencing and shaping their environment (Feurer and Chaharbaghi, 1997; David, 2005; Hitt *et al*, 2003).

4.2 External environment

Co-operatives, just like other enterprises, face external environments that are highly turbulent, complex and global. The enterprises' objectives can only be effectively met by systematically analyzing the external environment within which they operate in order to identify opportunities and threats. An opportunity is a condition in the general environment that if exploited, will help a co-operative to achieve strategic competitiveness. A threat, on the other hand, is a condition that may hinder a co-operative's efforts to achieve strategic competitiveness (David, 2005; Hitt *et al*, 2003).

According to Thompson (1997) "if an organization understands the nature of its market and is generally aware of, and responsive to, changes in the environment as a whole, it can be a successful competitor" (p.51). What will be different in the case of co-operatives is only the "nature of internal and external forces which bear on the essential task" (Allison & Kaye, 1997: p. 5).

It is the contention of many writers (Linehan & Tucker, 1983; Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980; Thomas, 1988) that worker co-operatives have seen their operations significantly affected by external challenges in the political and economic environment in the past few decades. These challenges have included the impact of structural adjustments, economic liberalization, democratization, globalization, changing government policies, new trade groupings,

and pressures towards demutualization. However, in the light of the limitations of the free market in regard to social responsibility and equity, the advantages of decentralization of power, the importance of stakeholder and community involvement in economic and social life, and the growing role of the civil society, there is still a growing potential for the renewal and development of worker co-operatives (Bibby, 2004; Oakeshott, 1978; Cockerton *et al*, 1980; Davies, 1996; Thomas, 1988).

Worker co-operatives can use several sources of information to analyze the general environment. These sources of information include a wide variety of printed materials like newspapers, trade publications, business publications, public polls and academic research studies. They also include Co-operative-UK reports and publications, CDA publications, ICOM publications, trade shows, customers, central and local government authorities. Other sources are also available on the Internet. External network contacts can also be rich sources of information on the external environment. Much information can also be obtained by the people in a worker co-operative's boundary-spanning positions who interact with external constituents. These include salespersons, purchasing officials, public relations officers, and customer service representatives.

As noted in section 4.1 the general environment of worker co-operatives includes economic factors, governmental influence, technology, demographics, socio-cultural factors, and globalization. Economic factors include the nature, health and direction of the economy in which worker co-operatives operate. Among other things, the general economic factors that will influence the competitiveness of worker co-operatives include the level of unemployment, the level of consumer demand, tax rates and other government policies, availability of capital and the general changes in the level of disposable income (Jackson & Frigon, 1996; Macmillan & Tampoe, 2000; Wright, Kroll & Parnell, 1998).

The interfaces between worker co-operatives and their economic environment are numerous. They pay taxes, supply goods and services, buy raw materials and other factor services, and employ labour (Bennett, 1996; Macmillan & Tampoe, 2000; Wright *et al*, 1998). The economic environment influences the growth, stability and profitability of worker co-operatives. Economic factors also affect costs, consumer demands, financing options, availability of raw materials and pricing possibilities.

The political environment includes the ways in which the central and local governments influence worker co-operatives as well as how the co-operatives try to influence government policies (Hitt *et al*, 2003; David, 2005; Bennett, 1996). Governments define the limits of co-operatives' activities through regulatory frameworks. National and local governments will influence the competitiveness of co-operatives through policies and regulations regarding regional development incentives, employment protection, consumer protection, health and safety at work, subsidies and grants and the award of government contracts (Wright *et al*, 1998; Hitt *et al*, 2003; David, 2005).

Technological forces include the institutions and activities involved with creating new knowledge and translating that knowledge into new outputs, products, processes, materials and communication systems (Hitt *et al*, 2003; Bennett, 1996; David, 2005). By following developments reported in trade and business literature, searching the Internet and following reports of technological advances noted by suppliers or sales representatives, worker co-operatives can exploit technological innovations and information management for competitiveness. Due to technological innovations worker co-operatives can use flexible manufacturing systems to make customized products while simultaneously minimizing costs. Some writers (Hitt *et al*, 2003; David, 2005; Macmillan & Tampoe, 2000) however

argue that advanced technologies might require more professionally qualified and well-educated employees and might also demand differing forms of group leadership and management style. They add that new technologies might also require fresh attitudes towards acceptance of change.

Changes in demographic factors can have a significant impact on worker co-operatives if they indicate developing trends (Hitt *et al*, 2003; David, 2005; Macmillan & Tampoe, 2000).

Demographic factors are trends in population characteristics such as population size, age structure, geographic distribution, income distribution, ethnic make-up, education, family composition and gender distribution (Hitt *et al*, 2003; David, 2005; Bennett, 1996). Changes in these factors can affect the demand for co-operatives' products and services or their abilities to hire employees. For example, with the average age of the population of Britain rising, there is additional demand for products and services consumed by middle-aged people.

The demands for assisted-living facilities and for services focusing on seniors with special needs are also rising (Hitt *et al*, 2003; David, 2005). Recruitment difficulties in relation to young workers plus possible skill shortages in certain fields are also being experienced. There is also the need to retrain older workers and to extend training to high unemployment ethnic minority groups. Greater female participation in the workplace has also become commonplace (Hitt *et al*, 2003; David, 2005; Bennett, 1996). These demographic factors present opportunities for worker co-operatives in the areas of product and service offerings. They also present challenges in the areas of human resources.

Wright *et al* (1998) define socio-cultural factors as referring to the general attitudes, preferences, tastes, beliefs and cultural values of a society. Because attitudes and values form the cornerstone of a society, they often drive demographic, economic, politico-legal and technological conditions and

changes (Wright *et al*, 1998; David; 2005; Hitt *et al*, 2003). Social environment affects personal behaviour including behaviour at work. One of the recent social changes that have greatly influenced the food and dining industry is health consciousness. Wholefood worker co-operatives have successfully exploited this opportunity (Thomas, 1988). Worker co-operatives can also exploit new opportunities for creative businesses that offer services aimed at the needs of working women and single-parent households that have arisen from the current social trends. According to Bennett (1996), culture affects people's perceptions of correct behaviour and is the collective frame of reference through which a wide range of issues and problems are interpreted. The current prominence given to fair trade in Britain is a case in point.

Cummings and Worley (2001), contend that the British cultural values promote organizational policies that are steeped in formality, tradition and politics which, tend to reinforce the status quo and create high resistance to change. They add that applications, such as self-managed work groups have not readily diffused within British organizations and that the "individualistic values and inherently political nature of the culture tends to conflict with interventions emphasizing employee empowerment and teamwork" (p.287).

The global environment offers tremendous opportunities and potential threats for the worker co-operatives. They can realize significant benefits by either selling their products and services in foreign countries or importing raw materials in order to offer their products and services cost-effectively (Wright *et al*, 1998; David; 2005; Hitt *et al*, 2003). The Director-General of the International Labour Organization (ILO) acknowledges globalization's potential for promoting open societies, open economies, more opportunities and a freer exchange of goods, knowledge and ideas (ILO, 2004). He adds that co-operatives can be highly instrumental in enabling and empowering

women and men to seize the opportunities created by globalization and in providing a buffer against its downside (ILO, 2004).

Worker co-operatives harness local comparative advantages and draw on local strengths to open up market opportunities for small producers and to promote the well-being of members, their families and their communities. The importance of assessing global markets has become increasingly important as a result of the development of satellite communication, cheaper and faster modes of transportation, and the emergence of economic alliances among countries (Bennett, 1996; Wright *et al*, 1998; David; 2005). One potential risk posed by global forces is the loss of domestic market share as a result of the emergence of foreign competition (Hitt *et al*, 2003).

One of the more recent developments in the global market that may influence the way organizations do business is outsourcing. It is now common practice to outsource components to companies in Asia where lower labour costs could bring down the overall costs of products (Bennett, 1996; Wright *et al*, 1998; David; 2005). The effects of outsourcing have mainly been felt by those worker co-operatives in the clothing sub-sector.

4.3 Internal environment

Worker co-operatives' competitiveness can be realized when their internal environments in the form of resources and capabilities (core competencies) are aligned to strategically fit into their external environments of opportunities and threats. That is, when strategic preparedness meets with opportunities (Kaplan and Norton (2004). Core competencies (resources and capabilities) of worker co-operatives must therefore be leveraged to take advantage of the opportunities in the external

environment. Matching what a worker co-operative can do with what it might do allows the co-operative to develop a strategic mission, and to select and implement its strategies (Jackson and Frigon, 1996; Cummings and Worley, 2001; Hitt *et al*, 2003). Resources, capabilities, and core competencies are not inherently valuable, but they create value when a worker co-operative uses them to perform certain activities that result into competitiveness (Wright *et al*, 1998).

Resources include physical capital, financial capital, and human capital. They also include social capital and organizational structure. Many writers (Thompson, 1997; Schoemaker and Amit, 1997; Wright *et al*, 1998) point out that resources alone do not yield competitiveness. They add that competitiveness is created through the unique bundling of several resources. Some of the resources of a worker co-operative will be tangible while others will be intangible. Tangible resources include assets that can be seen and quantified. They include financial, organizational, physical, and technological (Cummings and Worley, 2001). Production equipment, manufacturing plants, and formal reporting structures are examples of tangible resources.

Intangible resources include assets that typically are rooted deeply in a worker co-operative's history and have accumulated over time. Because they are embedded in unique patterns of routines, principles and core values, intangible resources are relatively difficult for competitors to analyze and imitate (Thompson, 1997; Schoemaker & Amit, 1997; Wright *et al*, 1998).

Knowledge, trust between members and their co-operative, ideas, the capacity for innovation, managerial capabilities, organizational routines (the unique ways people work together), scientific capabilities, and worker co-operatives' reputation for their goods or services and how they interact

with people (such as customers, and suppliers) are all examples of intangible resources (Cummings and Worley, 2001; Hitt *et al*, 2003).

Because intangible resources are less visible and more difficult for competitors to understand, purchase, imitate, or substitute for, worker co-operatives can rely on them rather than tangible resources as the foundation for their capabilities and core competencies. In fact the more unobservable a resource is the more sustainable will be the competitiveness that is based on it (Kaplan and Norton, 2004; Cummings and Worley, 2001; Hitt *et al*, 2003).

Worker co-operatives are therefore challenged to understand fully the strategic value of their tangible and intangible resources. The strategic value of resources is indicated by the degree to which they can contribute to the development of capabilities, core competencies and ultimately, competitiveness. For example, worker co-operatives' competitiveness can stem from the manner in which member-workers integrate their actions internally and with other stakeholders, such as suppliers and customers (Schoemaker & Amit, 1997; Wright *et al*, 1998; Kaplan and Norton, 2004).

Capabilities refer to an organizations' capacity to deploy resources that have been purposely integrated to achieve a desired objective (Wright *et al*, 1998; David, 2005). As the glue that can bind a worker co-operative together, capabilities emerge over time through complex interactions among tangible and intangible resources. Critical to the forming of competitiveness, capabilities are often based on developing, carrying and exchanging information and knowledge through the human capital (Wright *et al*, 1998; David, 2005). Because a knowledge base is grounded in organizational actions that may not be explicitly understood by all members, repetition and practice increase the value of capabilities.

The foundation of capabilities in a worker co-operative lies in the skills and knowledge of member-workers and, often, their functional expertise (Wright *et al*, 1998; David, 2005). Hence, the value of human capital in developing and using capabilities and, ultimately core competencies cannot be overstated. The knowledge possessed by human capital is among the most significant in the determination of capabilities and may ultimately be at the root of a worker co-operative's competitiveness (Jackson and Frigon, 1996; Cummings and Worley, 2001; Hitt *et al*, 2003).

Core competencies are resources and capabilities that serve as sources of worker co-operatives' competitiveness over rivals (Wright *et al*, 1998; Kaplan and Norton, 2004). Core competencies distinguish worker co-operatives competitively and reflect their unique personality. Core competencies emerge over time through the process of accumulating and learning how to deploy different resources and capabilities (Wright *et al*, 1998). To be competitive, worker co-operatives must locate external environmental opportunities that can be exploited through their capabilities, while avoiding competition in areas of weaknesses.

Worker co-operatives can build core competencies by using their strategic capabilities that are valuable, rare, costly to imitate and non-substitutable (Cummings and Worley, 2001; Hitt *et al*, 2003; Bennett, 1996). Capabilities failing to satisfy the four criteria of sustainable competitiveness are not core competencies (David, 2005). Sustainable competitiveness results only when all four criteria are satisfied. Valuable capabilities allow worker co-operatives to exploit opportunities or neutralize threats in their external environment in order to create value for their members and their customers. Capabilities may be rare if they are not possessed by many others (Wright *et al*, 1998; David, 2005). They may be costly-to-imitate if they are based on the unique co-operative principles and core values

that members believe in, connect with, and feel inspired by (Schoemaker & Amit, 1997; Cummings and Worley, 2001; Hitt *et al*, 2003). Capabilities of a worker co-operative may also be costly-to-imitate due to the presence of very high social capital in the form of close interpersonal relationships, trust and friendship among members, managers and other stakeholders (Fairbairn, 2003).

4.4 Co-operative Environment / Advantage

According to the Co-operative Council (1994), although co-operatives, like other enterprises, require good management, financial probity, well trained and motivated employees, access to capital, the capacity to innovate and the capacity to respond to change, the essence of a co-operative enterprise is different. A co-operative is run by members for the benefit of members. Its main aim is to serve the interest of the members through their direct participation in both the benefits and the government of the enterprise. A co-operative's advantage therefore lies in its ability to serve members' interests be they economic or social (The Co-operative Council, 1994).

Worker co-operatives are therefore membership-based enterprises. They are, hence, social capital based organizations since they are defined by, and draw their strengths from the multi-dimensional relationships that they have with their members who are not only employees but also the owners. These relationships form the basis of not only the co-operatives' structures but also the nature of their operations. Fairbairn (2003) argues that:

Seeing a co-operative as defined by relationships is different from seeing it as defined by structures. A relationships-based view of co-operatives highlights the importance of issues of trust and of agency: how much and in what ways members trust the co-operative; to what

extent it is efficient in acting as an agent of their interests. When we focus our attention on the trust/agency relationship, we can understand it as a source of ideas, of commitment, or weakness or strength of the co-operative (p.6).

Fukuyama (1999), Field (2003) and Halpern (2005) observe that organizations form because people need one another to reach common material, psychic, and social goals. Mutual aid and generalized reciprocity are especially common to all functioning co-operatives. Co-operative membership is a more active attribute. It requires some investment in time, money, energy, and emotion and it includes the strong potential for reciprocity (Fukuyama (1999).

One of the defining characteristics of co-operative organizations is the goal of establishing relationships of trust based upon common principles and reciprocity. These relationships help to build up social capital in co-operative societies, which in turn strengthen the broader civil society (Spear, quoted in Wylie, 2001).

Different members have different identities, and a worker co-operative needs to connect with as many of these as it can. Cohesion, especially in a pluralistic and rapidly changing world, comes not from everyone being the same, but from people's differences fitting together in a coherent way. Coherence comes from communication and from mutual adaptation of people's views and understandings to fit together with each other (Valentinov, 2004; Fairbairn, 2003; Fukuyama, 1999). Cohesion in a worker co-operative is closely connected to membership, governance, and education, and to how the co-operative and its members are conceptualized and depicted.

A worker co-operative with a cohesive membership, whose practices and policies are transparent, and that thinks, as an organization, about its future, has distinct advantages over conventional business models. Instead of being seen as a marginal kind of business that has less access to capital and more onerous obligations than its competitors, such a co-operative has powerful advantages because of its integrated, flexible, and dynamic relationship with its members. In the best of all worlds, co-operatives can integrate members' economic activities to obtain efficiencies in ways that no other form of business can match (Valentinov, 2004; Fairbairn, 2003; Fukuyama, 1999).

According to Fairbairn (2003), membership of a co-operative implies connection and hence, social capital formation. That is, the trust, understanding, and mutuality that support collaborative and cohesive action. It implies commitment to the group and the work, cooperation, and the willingness to do more for a job that is not just a job (Fukuyama, 1999; Field, 2003; Halpern, 2005). Members of a membership-based organization like a worker co-operative shares the values, skills, practices and knowledge of the other members. An important implication of the sense of membership is therefore to know what the other members know (Field, 2003).

A sense of membership also opens the door to the intrinsic rewards that are so important to personal satisfaction and organizational success. The recognition and praise from colleagues and a sense of belonging to something are also very important and foster commitment and self-esteem that a good salary alone cannot guarantee (Fukuyama, 1999; Field, 2003; Halpern, 2005).

Understanding and adopting the norms, values, and aims of a worker co-operative is an essential part of becoming a connected and productive member of the co-operative. When people join a worker co-operative, they bring their varied tacit skills, assumptions, worldviews, and knowledge to the co-

operative. As they work together, knowledge slowly moves from person to person, each absorbing and contributing to the dynamic mix, discussing, negotiating, and adjusting until equilibrium is achieved (Fukuyama, 1999; Field, 2003; Halpern, 2005).

Worker co-operatives promote collaboration, especially voluntary collaboration that does not rely on external incentives to spur it (Fukuyama, 1999). For one thing, most co-operatives have norms of behavior which, they enforce. Also, worker co-operatives, like families, often provide a refuge for friendship, membership, and identity, a place where members know each other's name and the internal competition that limits cooperation is less evident (Fukuyama, 1999). Members want to adhere to the co-operative norms to fit in, to be full members, especially if the accepted behavior is generalized reciprocity (Halpern, 2005).

4.5 Co-operative Entrepreneurial Competencies and Innovation

Worker co-operatives must be entrepreneurial and innovative. Co-operative entrepreneurship involves engaging in an opportunity-seeking behaviour. That is, identifying opportunities and developing innovation (David, 2005; Hitt *et al*, 2003). Innovations are critical for worker co-operatives to differentiate their goods and services from competitors in ways that create additional or new value for customers (Wright *et al*, 1998; Kaplan and Norton, 2004). According to the United Nations (1996) an important contribution of the co-operative movement continues to be its capacity for promoting and supporting entrepreneurial development in forms compatible with the principles and objectives of the World Summit for Social Development held at Copenhagen from 6 to 12 March 1995.

Entrepreneurial opportunities represent conditions in which new products or services can satisfy a need in the market (Hitt *et al*, 2003). Thomas (1988) contends that one of the reasons for the relative success of worker co-operatives in wholefoods is that in market terms they have been innovative and have created a market niche for themselves in which they enjoy a certain degree of customer loyalty, based on the fit between ideas on healthy and simple eating and the image of an alternative lifestyle.

The essence of co-operative entrepreneurship is to identify and exploit similar opportunities. This requires an entrepreneurial mind-set that entails the passionate pursuit of opportunities (David, 2005; Hitt *et al*, 2003). After identifying the opportunities, entrepreneurs take action to exploit them and establish competitiveness. Entrepreneurship and the innovations resulting from it are therefore critical for worker co-operatives to increase productivity, promote growth and create jobs.

Entrepreneurship in worker co-operatives leads to innovation, which is the process of creating a commercial product from an invention which is the act of creating or developing a new product or process (Schoemaker & Amit, 1997; Wright *et al*, 1998; Kaplan and Norton, 2004). Thus, an invention by worker co-operatives brings something new into being, while their innovation brings something new into use. Accordingly, technical criteria are used to determine the success of an invention, whereas commercial criteria are used to determine the success of an innovation (Hitt *et al*, 2003).

Entrepreneurship in worker co-operatives can be facilitated through the effective use of the co-operatives' human capital. In other words, worker co-operatives need employees who think entrepreneurially (David, 2005; Hitt *et al*, 2003). Co-operative management should try to establish an

entrepreneurial culture that inspires members and employees to engage in entrepreneurship. Worker co-operatives require not only the intellectual capital but also an entrepreneurial mind-set and an entrepreneurial competence.

Entrepreneurial competence involves effective knowledge of the industry, business and technology as well as a passion for the business and a risk orientation (David, 2005; Hitt *et al*, 2003; Schoemaker & Amit, 1997; Wright *et al*, 1998). Knowledge must also be transferred to others in the worker co-operative to enhance its entrepreneurial competence. Transferring knowledge can be difficult, because the receiving party must have adequate absorptive capacity to learn the knowledge (Bennett, 1996). This requires that the new knowledge be linked to the existing knowledge. Thus, worker co-operatives will need to develop the capabilities of their human capital to build on their current knowledge base while incrementally expanding that knowledge (David, 2005; Hitt *et al*, 2003).

Since developing innovations and achieving success in the marketplace requires effective human capital, worker co-operatives must have strong human and intellectual capital if members and employees are to be innovative. Having the entrepreneurial capabilities is only part of the challenge. Worker co-operatives must strategically manage those capabilities in order to leverage their potential in realizing strategic competitiveness (Schoemaker & Amit, 1997; Wright *et al*, 1998; Kaplan and Norton, 2004).

Worker co-operatives must confront the fact that the future is unknown and must therefore create an environment that will allow their members and employees to talk openly, learn from each other, and think creatively (Fairbairn, 2003). This calls for the employment of a formal research process as a condition for the development of a worker co-operative's vision, planning, policies, and decisions

(Macmillan & Tampoe, 2000). Research should be carried out on the co-operative's business, what members require, what the competition is doing, and what new technology is coming. Without a research-based model, decisions are either based on the past or on hunches (Allison & Kaye, 1997; Fairbairn, 2003). Many worker co-operatives may not afford a formal research and development department. They can, however, share such functions through a network with other co-operatives, with universities, and with other research organizations.

One implication of an information society is that knowledge is the source of power (Allison & Kaye, 1997). Decision and policy makers in a worker co-operative need research, good analysis, and interesting new ideas as constant inputs (Hitt *et al*, 2003; Allison & Kaye, 1997). At the same time, research needs to be widely linked to board, manager, employee, and member training, and to educational activities of all kinds. Research cannot be treated as a matter of distributing information (Hitt *et al*, 2003). It has to be part of the processes of building knowledge within a worker co-operative. To do this, it has to feed into widespread learning.

Co-operative education needs to be seen as more than an activity undertaken to satisfy co-operative principles, and also more than upgrading of employee skills; it needs to be an agency for holding a worker co-operative and its members together and on course. Education, communication, research, planning, and marketing all come closer together and overlap in a networked world, and in a thinking, adapting, innovating worker co-operative (Kaplan and Norton, 2004; Allison & Kaye, 1997; Fairbairn, 2003).

The most important focus of research and learning activities in worker co-operatives has to be the understanding of the industry or sector in which the co-operative is situated (Fairbairn, 2003).

Knowledge of the co-operative model, of the history of the particular co-operative, of its present-day mission and activities, is important, too, but not so much as is the knowledge of the business or sectoral environment (David, 2005). The aim of research and learning is to bring these two areas together so as to understand the trends, competition, and opportunities in the industry, and to understand the worker co-operative's identity and unique mission within that environment (Kaplan and Norton, 2004; Allison & Kaye, 1997; Macmillan & Tampoe, 2000). That is, the trends and opportunities the worker co-operative aims to exploit or reinforce, and those it aims to cope with or resist.

Members need a form of this understanding, too, or they will not commit to their co-operative. Fairbairn (2003) contends also that while the lack of specific co-operative education among members should cause concern, a lack of understanding of the wider economic and social environment is more serious. Like the Rochdale Pioneers, co-operative leaders need to have some faith that if members understand what is going on in the industry, they will understand why they need a co-operative (Fairbairn, 2003).

4.6 Co-operative Environment and Social Capital

The effectiveness of worker co-operatives can be defined in a number of ways including meeting the dual economic and social goals of the co-operative and its individual members. It can be evaluated on a broad set of criteria that includes quality of work, quantity of work, initiative, cooperation with other co-operatives, ability to complete work on time, and ability to respond quickly to problems. This thesis examines how members' social relationships within and outside of their worker co-

operative and across multiple types of boundaries are related to the effectiveness of their co-operative.

Hongseok Oh, Myung-Ho Chung and Giuseppe Labianca (2004) argue that a complex and uncertain organization environment makes the understanding of how enterprises manage the delicate balance of social relationships within groups, across organizational groups, and across hierarchical levels increasingly important. As stated earlier in the previous sections, social capital is the set of resources inherent in the nature and structure of relationships between worker co-operative members and between the members and their co-operative. The relationships create a network of social exchanges in which members become trusted exchange partners who can be called upon for resources and support (Fukuyama, 1999; Field, 2003; Halpern, 2005). For example, when co-operative members work together and share common aspirations with other members, the trust, opportunity, and motivation to work hard develop (Oh *et al*, 2004).

Social capital in a worker co-operative can be considered as the configuration of members' social relationships within the social structure of the worker co-operative itself, as well as in the broader social structure of the society to which the worker co-operative belongs, through which necessary resources for the co-operative can be accessed (Oh *et al*, 2004; Field, 2003; Halpern, 2005). Hence, a worker co-operative is viewed simultaneously as both a whole unit and a collection of individual members. Doing so allows the consideration of optimal configurations of members' social relationships within the worker co-operative, outside the worker co-operative, and across different boundaries within the society (Fukuyama, 1999).

Because worker co-operatives exist in the broader social structure of communities, we need to consider a worker co-operative's boundary-spanning activities, which are also very critical in determining its social capital resources, and ultimately its effectiveness (Oh *et al*, 2004; Fukayama, 1999; Halpern, 2005). Worker co-operatives that communicate more frequently with other co-operatives and with different outside institutions and organizations have greater access to resources outside themselves (Fukayama, 1999; Oh *et al*, 2004; Halpern, 2005).

Worker co-operatives whose members have ties with people from a diverse set of other institutions and organizations will learn about developments in their economies faster because the relationships in which their members are engaged in often develop into trusting relationships (Oh *et al*, 2004; Fukayama, 1999; Halpern, 2005). Such worker co-operatives will be more likely to receive important tacit knowledge because their members spend time with a diverse set of people outside the co-operative, making it more likely that non-members will be motivated to share their knowledge and skills with the worker co-operative members.

For example, a worker co-operative may need to establish an active relationship with other co-operative organizations, employers' organizations, workers' organizations and also with concerned governmental and non-governmental agencies. If such a worker co-operative experiences a setback, it is more likely to be able to access a broad base of financial, emotional and political support through its ties with these organizations.

Some worker co-operatives may have greater social capital "liquidity" because of their members' positions in the overall social structure of the society. That is, the ability of their members to tap into needed resources through their social ties (Oh *et al*, 2004; Fukayama, 1999; Halpern, 2005). For

example, timely access to information or political support is likely to be better for worker co-operatives whose members have ties with different people of influence from different sectors of the economy. This liquidity is important in many situations, such as when a worker co-operative needs financial resources for operations and for growth.

The configuration of co-operative members' social ties within and outside a worker co-operative affects the extent to which the members connect to individuals who can convey needed resources, have the opportunity to exchange information and support, have the motivation to treat each other in positive ways, and have the time to develop trusting relationships that might improve the co-operative's effectiveness (Oh *et al*, 2004; Halpern, 2005; Field, 2003).

It is emphasized that the members of a worker co-operative can engage in beneficial relationships with people within their co-operative and outside their co-operative including leaders of their communities. These all represent different types of ties or conduits through which the social capital of a worker co-operative flows. Social capital of a worker co-operative needs to be understood from an optimal configuration perspective. It is the optimal overall balance of relationships that leads to the maximum flow of social capital in a worker co-operative (Oh *et al*, 2004; Halpern, 2005; Field, 2003).

There are relationships that draw a co-operative together into a cohesive whole and relationships that reach across different boundaries to other co-operatives and other institutions within the society (Oh *et al*, 2004). A worker co-operative must have the right configurations of each of these relationships to maximize its social capital resources and to ultimately improve its effectiveness (Cohen and Prusak, 2001; Fukayama, 1999; Halpern, 2005).

The kind of relationship that draws members of a worker co-operative into a cohesive whole and results into full connectedness among the members is called the bonding relationship. Through the bonding relationships worker co-operative members connected by strong ties benefit from embedded and dense networks in a closed co-operative (Fukayama, 1999; Halpern, 2005). In a worker co-operative in which members have strong ties to each other through the pursuits of common goals and through loyalty to their co-operative, more bounded solidarity, stronger reciprocity norms, greater trust, and sanctions against self-serving behaviors are expected than in worker co-operatives lacking those strong ties (Field, 2003).

Mutual trust develops from exchange reciprocity in an environment in which norms are well enforced and free riding is kept in check. Such an environment allows for greater "credit risk" to be extended (Field, 2003). That is, worker co-operative members are more willing to extend favors to one another because they know that the favors will ultimately be returned by another member of the co-operative. Thus, social capital in these worker co-operatives diminishes the probability of opportunism, reduces the need for costly monitoring, reduces transaction costs, and results in benefits for all members (Fukuyama, 1999; Oh *et al*, 2004; Field, 2003; Halpern, 2005).

Social capital in a worker co-operative that flows through bonding relationships demonstrates that members are willing to subsume their interests under those of the worker co-operative as a whole because of the strong bond among the members of the co-operative. Bonding relationships also bring expressive benefits in the form of emotional support (Field, 2003).

An often-undervalued resource that flows through social relationships is emotional support. There are many times when a member's setback might destroy morale, or when an unexpected tragedy might cause a member to lose his/her focus (Field, 2003). Although emotional support is generally ignored in social capital research, this thesis considers the ability to access emotional support during difficult times as an important aspect of the social capital in a worker co-operative that can determine the relative effectiveness of the co-operative (Oh *et al*, 2004; Fukayama, 1999; Halpern, 2005; Field, 2003).

Bonding relationships may impair a worker co-operative's effectiveness if they constrain members' contacts with diverse others outside the co-operative thereby restricting access to the more diverse resources and innovative information available beyond the worker co-operative. Even where relationships continue to be allowed with non-members, the resources and information that flow through those relationships can be ignored or discounted because of strong positive member biases and negative non-member biases (Oh *et al*, 2004; Fukayama, 1999; Halpern, 2005). These biases can combine to limit access to and absorption of innovative information from outside the worker co-operative.

Oh *et al* (2004) contend that for a worker co-operative to have diverse external ties is important, but to have external ties to people who have the power to influence a worker co-operative's competitiveness is more important. Every society has a dominant coalition of powerful actors, and connections to that dominant coalition facilitate a worker co-operative member's ability to upwardly influence as well as to gather needed resources in a timely manner to accomplish tasks (Oh *et al*, 2004; Fukayama). This is true for individual members, and it is also true for a worker co-operative as a whole. A worker co-operative, through its members, must be able to access the dominant coalition

in its society. These boundary management activities facilitate a co-operative's ability to absorb outside political pressure, protect itself from external threat, and coordinate and negotiate with outsiders, and they ultimately allow it to be more competitive (Oh *et al*, 2004; Halpern, 2005; Field, 2003).

Oh, *et al* (2004), discuss the concept of a dominant coalition which they define as the formal leaders and opinion shapers in a community. Access to these leaders can facilitate a worker co-operative's ability to engage non-members to assist them. They contend that members of a society's dominant coalition tend to have the ability to act quickly and with broader latitude. This obviously, makes access to dominant coalition members a very liquid source of a worker co-operative's social capital (Oh *et al*, 2004; Halpern, 2005).

The existence of ties between members of a worker co-operative and the dominant coalition makes the latter more motivated to assist the co-operative members when they need information, political support, or other types of assistance. Thus, worker co-operatives whose members have stronger cross-boundary relationships with the dominant coalition will be able to access resources more quickly and successfully than worker co-operatives whose members have fewer of these ties (Oh *et al*, 2004; Halpern, 2005; Field, 2003).

It can therefore be concluded that when members of a worker co-operative have cross-boundary relationships with members of a dominant coalition, the co-operative's social capital, and ultimately, its effectiveness are enhanced. For example, government policies and regulations that are beneficial to worker co-operatives can attract favourable attention if co-operative members have a quick access to important political and legal resources in the society. Quick reactions and quick mobilization of a

worker co-operative's social capital is therefore facilitated by the co-operative members' cross-boundary relationships with leaders within and around their communities (Oh *et al*, 2004; Halpern, 2005; Field, 2003).

Cohen and Prusak (2001) note that although they cannot guess what the organizations of 2028 will look like, they “do know, though, that trust, community, connection, conversation, and loyalty will make them work and will make work meaningful (p.186).

4.7 Mission, Goals and Objectives

Organizations can define their goals and objectives following an analysis of their internal and external environments. Missions, goals and objectives will describe an organization's unique purpose and will give direction to its operations (Wright *et al*, 1998; Hitt *et al*, 2003; David, 2005; Cummings and Worley, 2001). They will provide general description of the products and services to be offered and the markets to be served using available resources and core competencies. Missions, goals and objectives can provide the foundation for worker co-operatives' strategic actions to formulate and implement strategies. It is the formulation and implementation of effective strategies that are critical in the achievement of strategic competitiveness (Cummings and Worley, 2001; Hitt *et al*, 2003; Bennett, 1996).

This thesis therefore examines whether worker co-operatives in Britain set goals and have clear missions and visions and “anticipate the environment in which the organization will be working in the future” (Allison & Kaye, 1997: p. 2). According to Wright *et al* (1998), “without clearly stated

goals and objectives, strategic control becomes very difficult to achieve” (p.316). The thesis specifically looks at the traditional placement of emphasis with regard to the dual nature of worker co-operatives’ goals in terms of social objectives including the improvement of the community and the economic objectives of productivity and profitability. Thompson (1997) states that “if the organization is meeting the needs and expectations of its stakeholders, and achieving its objectives, then arguably it is successful. When it does not meet objectives and expectations, then it is failing” (p. 57).

Attention has been given to the question on whether worker co-operatives’ members are fully educated on the missions, visions and core values of their enterprises. According to Kaplan and Norton (2004) “successful companies had a culture in which people were deeply aware of and internalized the mission, vision and core values needed to execute the company’s strategy” (p.56). Jackson and Frigon (1996) also confirm that members of an enterprise must “understand the vision and believe in the possibility of achieving it. Moreover, the vision must be founded on a set of values held by the members” (p.15).

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CHAPTER 5

STRATEGY FORMULATION FRAMEWORKS

5.1 Introduction

Strategy-formulation frameworks are now widely used by large corporations, small enterprises, nonprofit organizations and government departments. Several strategy-formulation frameworks and their supplementary structured approaches have been recommended by many writers (Porter, 1980; Porter, 1998; Brooks & Weatherston, 2000; David, 2005; Schoemaker & Amit, 1997; Kaplan and Norton, 2004). These frameworks include the Porter's Five Forces Model, The Boston Box, the Value Chain analysis, the SWOT analysis, the PEST analysis and the Balanced Scorecard analysis.

All these frameworks imply that it is possible to determine a strategic direction for an organization on a systematic basis. However, it is increasingly being realized that such a notion can only be applied if the underlying assumptions are not changing fast and if the objectives of an organization are well defined (Brooks & Weatherston, 2000; David, 2005; Feurer and Chaharbaghi, 1995b).

5.2.0 The Porter's Five Forces Model

Porter's Five Forces Model is widely used for developing strategies in many industries (David, 2005). Unlike some of the models that deal with factors outside an industry that influence an enterprise's competitiveness, the Five Forces Model focus on the forces inside the industry. Porter (1980) contends that competitiveness in a given industry is a composite of five forces:

- The extent of competition among existing firms;

- The ease with which competitors can enter the industry;
- The ease with which substitute products can be introduced;
- The bargaining power of suppliers;
- The bargaining power of consumers

By studying these forces, an enterprise finds a position in an industry where it can buffer itself from the power of the forces in order to increase its competitiveness (Porter, 1980; Hitt *et al*, 2003).

Following a study of the five forces of competition, a worker co-operative can develop relevant competitive strategies. For example, a worker co-operative in an industry with stronger competitive forces should expect lower profit potential.

5.2.1 Limitations of the Porter's Five Forces Model

Some writers (David, 2005; Bennett, 1996; and Hitt *et al*, 2003) argue that since the model assumes a relatively static industry environment, it has limitations in today's constantly changing environment.

Competing firms learn from each other's mistakes and emulate rivals' successes. The model was based originally on the economic situation in the eighties with its strong competition and relatively stable market structures, it is not able to take into account new business models and the dynamism of the industries, such as technological innovations and dynamic market entrants from start-ups that will completely change business models within short times (David, 2005; Bennett, 1996; Hitt *et al*, 2003).

Another criticism is that the model describes situations at a particular moment in time and its ability to predict outcomes is questionable. Since businesses often change the industry in which they operate (e.g. through technical innovation), the criteria defining a particular industry sector are also likely to change. As firms find themselves in new competitive environments, their competitive strategies will

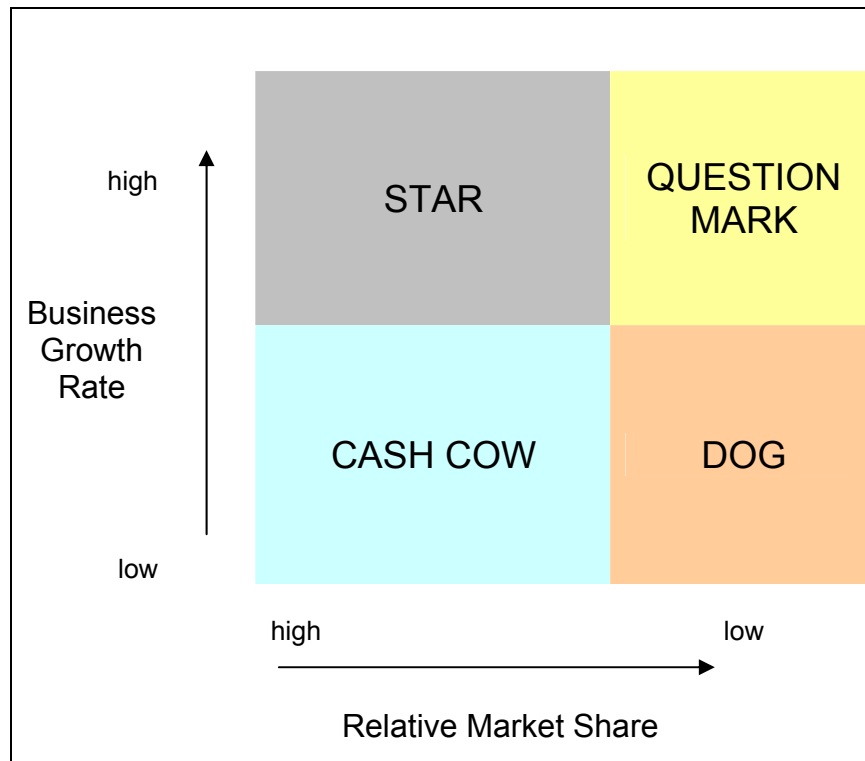
also need to change (Brooks & Weatherston, 2000; David, 2005; Hitt *et al*, 2003). The limitations should, however, not render the Porter's five forces model invalid. The model should instead be used as part of a larger strategy-formulation framework. That, indeed, is the approach adopted in this thesis.

5.3.0 The Boston Consulting Group (BCG) Matrix

The BCG Matrix was designed by the BCG, a private management consulting firm, to help enterprises whose multiple divisions compete in different industries to formulate strategies. It graphically portrays differences among the divisions (business portfolios) in terms of relative market share position and industry growth rate (Brooks & Weatherston, 2000; David, 2005; Hitt *et al*, 2003). A relative market share position is defined as the ratio of a division's own market share in a particular industry to the market share held by the largest rival firm in that industry.

An example of a BCG Matrix is shown in figure 2 below. Divisions in quadrant 1 are called Question Marks (?). Those in quadrant 2 are Stars; those in quadrant 3 are Cash Cows and those in quadrant 4 are Dogs. The major benefit of a BCG Matrix is that it draws attention to the cash flow, investment characteristics and needs of an enterprise's various divisions.

Figure 2: The BCG Matrix



Source: Own Presentation Based on Hitt *et al* (2003)

Limitations of the BCG Matrix

The BCG Matrix has some limitations. For example, viewing every business as a Star, Cash Cow, Dog or Question Mark is an oversimplification and, moreover, many businesses fall right in the middle of the BCG Matrix and cannot be easily classified (David, 2005; Brooks and Weatherston, 2000; Hitt *et al*, 2003). Furthermore, the BCG Matrix does not reflect whether or not various divisions or their industries are growing over time but rather it is a snapshot of an enterprise at a given point in time. Other variables besides relative market share position and industry growth rate in sales, such as size of the market and competitiveness, are important in making strategic decisions

about various divisions. BCG Matrix analysis has little quantitative rigour and ignores the human aspects of the enterprise.

5.4 The Value Chain Analysis

Porter (1998) developed the value chain analysis to describe the activities performed by an organization and to link those activities to the organization's competitive position. According to Porter (1998), the business of an enterprise can best be described as a value chain in which total revenues minus total costs of all activities undertaken to develop and market a product or service yields value.

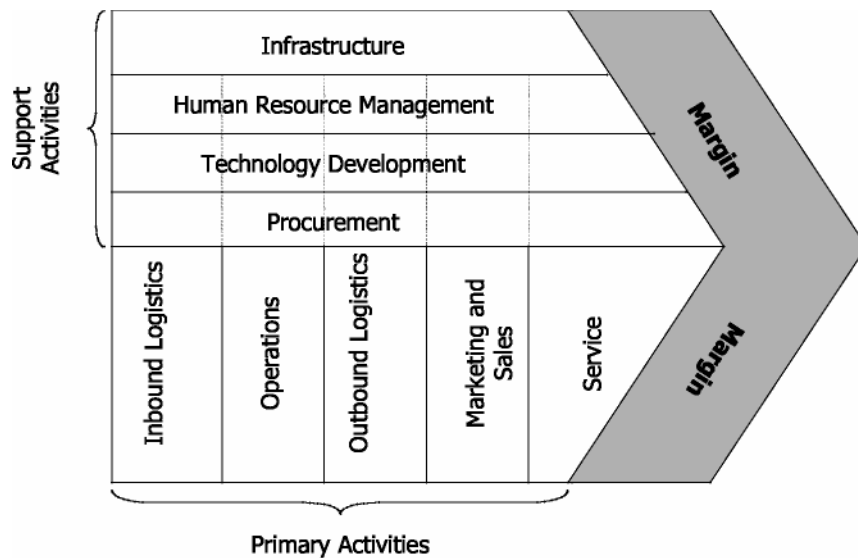
The concept of value added, in the form of the value chain, can be utilized to develop an organization's sustainable competitiveness in the business. All organizations consist of activities that link together to develop the value of the business, and together these activities form the organization's value chain. The aim of the value chain framework is to maximize value creation while minimizing costs (Porter, 1998; David, 2005; Brooks and Weatherston, 2000). Value chain analysis describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. It therefore evaluates which value each particular activity adds to the organization's products or services.

The value chain framework shows that the value chain of an organization is useful in identifying and understanding the critical factors necessary for competitive strengths and core competencies needed in the marketplace (Porter, 1998; David, 2005; Brooks and Weatherston, 2000). Value chain analysis

aims to identify where low costs advantages or disadvantages exist along the value chain and hence enables an enterprise to identify its own strengths and weaknesses (Porter, 1998). This idea was built upon the insight that an organization is more than a random compilation of machinery, equipment, people and money. Only if these things are arranged into systems and systematic activities will it become possible to produce something for which customers are willing to pay a price (Porter, 1998). Porter (1998) argues that the ability to perform particular activities and to manage the linkages between these activities is a source of competitiveness.

Porter (1998) distinguishes between primary activities and support activities. Primary activities are directly concerned with the creation or delivery of a product or service. They can be grouped into five main areas including inbound logistics, operations, outbound logistics, marketing and sales, and service. Each of these primary activities is linked to support activities which help to improve their effectiveness or efficiency. There are four main areas of support activities that include procurement, technology development (including R&D), human resource management, and infrastructure (Porter, 1998). The basic model of Porters Value Chain is shown in figure 3 below.

Figure 3: Porter's value Chain analysis



Source: Porter (1998).

The term 'Margin' implies that organizations realize a profit margin that depends on their ability to manage the linkages between all activities in the value chain (Porter, 1998). In other words, the organization is able to deliver a product / service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain. More enterprises are using VCA to gain and sustain competitiveness by being especially efficient and effective along various parts of the value chain (David, 2005).

5.4.1 Limitations of the Value Chain Analysis

Some writers (Brooks and Weatherston, 2000; David, 2005; Bennett, 1996; Hitt *et al*, 2003) have identified various weaknesses of the value chain analysis. One of the limitations of the value chain model is that it describes an industrial organization which essentially buys raw materials and transforms them into physical products. The applicability of this model to service enterprises is

questionable. Secondly, the real value of the product is assessed when the product reaches the final customer, and any assessment of that value before that moment is only something that is true in theory. Different items along the value chain may impact other items positively or negatively therefore judgment may be required to deal with the complex interrelationships (David, 2005; Brooks and Weatherston, 2000; Hitt *et al*, 2003).

In most industries, it is rather unusual that a single company performs all activities from product design, production of components, and final assembly to delivery to the final user by itself. Most often, organizations are elements of a value system or supply chain. Hence, value chain analysis should cover the whole value system in which an enterprise operates for the analysis to be of greater assistance to enterprises (David, 2005; Bennett, 1996; Hitt *et al*, 2003).

5.5 The SWOT Analysis

SWOT stands for strengths, weaknesses, opportunities, and threats. Strengths and weaknesses are internal factors. Opportunities and threats are external factors. David (2005) notes that strategy can sometimes be defined as the matching an enterprise makes between its internal resources and core competencies and the opportunities and threats created by its external factors. SWOT analysis is a framework for matching external opportunities and threats with internal strengths and weaknesses. Matching external and internal critical success factors is the key for generating effective strategies (David, 2005; Brooks and Weatherston, 2000; Bennett, 1996).

According to David (2005), the matching helps enterprises to develop four types of strategies:

- Strengths-opportunities (S-O) strategies that use internal strengths to take advantage of external opportunities
- Weaknesses-opportunities (W-O) strategies that aim at improving internal weaknesses by taking advantage of external opportunities
- Strengths-threats (S-T) strategies that use internal strength to avoid or reduce the impact of external threats
- Weaknesses-threats (W-T) strategies that are defensive tactics directed at reducing internal weaknesses.

Figure 4: The SWOT Matrix

	Strengths	Weaknesses
Opportunities	S-O strategies	W-O strategies
Threats	S-T strategies	W-T strategies

Source: Own presentation

David (2005) lists the actions involved in performing a SWOT analysis as including:

1. Listing of an enterprise's key external opportunities
2. Listing of an enterprise's key external threats

3. Listing of an enterprise's key internal strengths
4. Listing of an enterprise's key internal weaknesses
5. Matching the strengths and weaknesses with the opportunities and threats to get appropriate strategies (S-O, W-O, S-T, W-T)

5.5.1 Limitations of the SWOT Analysis

What one manager sees as an opportunity, another may see as a potential threat. Likewise, a strength to one manager can be a weakness to another. Different assessments may reflect underlying power considerations within the firm or differing factual perspectives. Also, opportunities external to the company are often confused with strengths internal to the company.

A typical organization usually has so many strengths, weaknesses, threats and potential opportunities that the enumeration and detailed analysis of each and everyone may be very costly and time consuming. In some cases, it is unclear whether a situation represents a threat or an opportunity.

5.6 The PEST Analysis

As already stated in section 4.1 of chapter 4, worker co-operatives do not exist in a vacuum, they exist within an external environment that consists of political, economic, social, technological and ecological forces. According to Brooks and Weatherston (2000), the PEST analysis, or the many variants upon it (e.g. PESTEL), is an analysis of the external environment factors mentioned above and is usually undertaken within organizations as a prelude to a more strategically orientated

technique – the SWOT analysis, already described . It is a framework for collecting and evaluating political, economic, social, technological and ecological information.

The PEST analysis aims at identifying and examining the key external factors and at evaluating the impact these factors have on an enterprise operations and success. It analyses the present forces and also attempts to project trends and anticipate changes. Enterprises that do not identify, monitor, forecast and evaluate key external forces may fail to anticipate emerging opportunities and threats and may eventually fail (Brooks and Weatherston, 2000; David, 2005; Bennett, 1996). Although PEST analysis may be less formal in small enterprises, the need to understand key trends and events in the environment is no less important for these firms.

5.6.1 Limitations of the PEST Analysis

As already stated above, PEST analysis is essentially a prelude to a more strategically oriented technique – the SWOT analysis.

PEST analysis involves collection of information regarding external factors from sources outside of the organization. It is therefore necessary to utilize secondary data sources of current events and projected future trends. The issue of information validity, reliability and relevance therefore arises.

5.7 The Balanced Scorecard analysis.

Balanced Scorecard (BSC) is a framework developed in 1993 by Harvard Business School professors, Robert Kaplan and David Norton. It has, however, been refined continually throughout

the years (David, 2005). BSC is a strategy evaluation and control framework that enterprises use to verify that they have established both strategic and financial controls to assess their performance (Kaplan and Norton, 1996; Hitt *et al*, 2003; Brooks and Weatherston, 2000). BSC derives its name from the perceived need to balance financial measures which are oftentimes used exclusively in strategy evaluation and control with non financial measurers (NFM) like product quality and customer service. Realizing the need of an integrated management system that would incorporate both traditional quantitative and more abstract qualitative performance measures, Kaplan and Norton (1996) developed the concept of the Balanced Scorecard (BSC), which aims at providing a framework that translates strategy into action.

According to Kaplan and Norton (1996), using the BSC allows an enterprise to understand how it looks to shareholders (financial perspective), how customers view it (customer perspective), how to gain competitiveness (internal perspective) and how to improve performance and grow (learning and growth perspective).

Financial measures have been the most widely used performance measure in the past. Examples would be return on equity (ROE), profit margin, etc. Companies have developed sophisticated systems to help measure financial performance. These systems, however, do not measure non-financial performance, which is an area of increasing importance. Non-financial measures like quality, customer satisfaction and innovation became increasingly important, and competitors were focusing on these non-financial areas.

Although a generic framework for the balanced scorecard approach was presented by Kaplan and Norton (1996), each organization should have its own version of the scorecard. Different

organizations should have different measurements, which are important in achieving the organization's strategy. The most commonly used measurement categories are financial goals, customer satisfaction, employee satisfaction, productivity, and growth and innovation (David, 2005; Hitt *et al*, 2003).

5.7.1 Limitations of the Balanced Scorecard analysis.

- The balanced scorecard requires that an enterprise's strategy be defined first. The scorecard does not define the best strategy for an enterprise to take.
- The scorecard also cannot select the best measurements of strategy. The scorecard does require management to focus on creating strategy and defining ways that performance can be measured in accordance with strategy.
- The scorecard does not provide guidance as to how to improve performance to achieve the desired strategic results
- Part of the difficulty in using the balanced scorecard is trying to automate the system. The balanced scorecard measures items that are often difficult to relate and/or measure. Financial measures are not a problem; they have been used effectively for many years. It is the non-financial measurements that are difficult to establish.
- The scorecard must be constantly up-dated. This is good because it requires re-alignment with changing strategies or corporate structure. This also has a negative impact. It takes a great amount of time and resources to keep the scorecard updated and effective.
- Measures may be difficult to quantify and the approach can lead to too many performance measures.

It is obvious from the foregoing discussion that due to the multifaceted character of the concept of strategy, researchers (Porter, 1980; Miles and Snow, 1978; Chandler, 1962; Child, 1972; Lorange and Vancil, 1976) have made several attempts to develop frameworks that integrate different strategic variables. This has led to different and, often, confusing classification schemes. Some classifications have focused on the planning process and particularly on how the resources of the organization should be used to achieve planned goals (Chandler, 1962; Child, 1972; Lorange and Vancil, 1976). Others have turned to the organizational environment and its effect on competitiveness. A number of scholars have even attempted to provide recipes and systems for generic classification of strategies (Rumelt, 1974; Porter, 1987).

With the accelerating dynamics of competition, however, the key to competitiveness lies no longer in employing strategies that have been successful in the past or emulating the strategies of successful competitors. The real competitiveness results from a constant process of developing and implementing new strategies that will differentiate worker co-operatives from other organizations in the industry in which they operate. That is the approach advocated for in this thesis as discussed in chapter 6 below.

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CHAPTER 6

RELATED ISSUES EMERGING FROM CONTEMPORARY STUDIES

6.1 Introduction

In an attempt to identify the drivers that maximize performance, a large amount of research has been directed at quantitative studies which aim to identify the relationship between organization characteristics and business performance. It is these research activities that have resulted in a number of strategy frameworks and analysis tools like SWOT, PEST, etc, (see chapter 5) whose application could be used to explain organization success. Chapter 5 discusses a variety of these intellectual frameworks and models that have been devised for the formulation and evaluation of strategies that enterprises use in order to gain and maintain competitiveness and hence effectively achieve their objectives.

Arising from the discussions in chapter 4 and chapter 5 above, this thesis adopts, as a guide, a conceptual framework that integrates the Industrial Output (I/O) and the Resource Based View (RBV) models of strategy frameworks. This leads to the formation of an integrative strategy-framework discussed in chapter 7. However, before the proposed strategy framework is discussed in great detail, it will be helpful to examine some pertinent issues that have emerged from contemporary studies. Examination of these issues will go a long way in re-enforcing the need for integrative strategy-frameworks.

6.2 Strategy Frameworks and Dynamic Environments

Many Writers (David, 2005; Hitt *et al*, 2003; Feurer and Chaharbaghi; 1997; Parnell, 2006) agree that the predominant strategy frameworks have evolved from a view that industry factors were most instrumental in determining an organization's performance (I/O model) to one that heavily emphasizes organizational factors (RBV model). As already pointed out above, the proponents of the I/O model argue that the environment has a strong deterministic influence on the strategy-making processes in organizations.

On the other hand, proponents of the resource-based view maintain that it is not the environment but the resources of the organization which form the foundation of its strategy. Despite the differences, all these frameworks have one thing in common which is that they all aim at maximizing the performance of an organization by improving its position in relation to other organizations operating in the same competitive environment (David, 2005; Hitt *et al*, 2003; Feurer and Chaharbaghi; 1997; Parnell, 2006). This, however, becomes more and more difficult as the level of competition in different competitive environments continues to intensify.

Miles and Snow (1978) point to a growing cognizance of the fact that in highly dynamic environments, traditional approaches to strategy development often do not lead to the intended results, and that organizations must move towards a more dynamic concept as the underlying conditions change before formulated strategies can be fully implemented. They note with dismay that the way in which a dynamic approach to strategy development can be achieved is still not very clear.

6.3 Recipes and Generic Strategies

Another major body of research work in the field of strategy has concentrated on identifying universal rules and concepts. For example, Porter (1980b) has presented three generic strategies for improving the competitive position of an organization as including cost leadership, differentiation and focus. He argues that an organization will have to make a choice between these generic strategies if it is to achieve competitiveness. This is to say that an organization will either have to keep its costs lower than its competitors or differentiate its offerings so that they are perceived as providing higher value when compared with offerings of competitors.

The focus strategy means that the organization should concentrate on a certain customer segment, product range or geographic market (Porter, 1980b; Hitt *et al*, 2003; Miles and Snow, 1978). Although recent research disputes the mutual exclusiveness of these strategies, the classification of generic strategies has formed the basis for a whole body of research directed towards the development of more generic strategies (Feurer and Chaharbaghi, 1997). By introducing the concept of industry analysis, Porter (1998) further provided insight into structures within different competitive environments. This concept assumes five competitive forces which determine the attractiveness of a given industry. These are:

- (1) Barriers of entry into the industry.
- (2) Threat of substitute products.
- (3) Bargaining power of buyers.
- (4) Bargaining power of suppliers.
- (5) Rivalry among existing competitors in the industry.

Other research activities have concentrated on analyzing organization structures and values in order to identify reasons for superior performance. It has been shown (Schoemaker & Amit, 1997; Wright *et al*, 1998; Feurer and Chaharbaghi, 1997) that the structure of organizations has a direct impact on the way in which strategies are formulated and implemented. Researchers and industrialists have, however, realized that superior performance could not be explained through generic strategies or organization characteristics alone. There are no recipes and generic strategies for corporate success because if there were then their general adoption would eliminate any competitiveness which may be derived (Schoemaker & Amit, 1997; Wright *et al*, 1998; Feurer and Chaharbaghi, 1997).

The focus of research should therefore shift towards the identification of sources of competitiveness. Competitiveness is a factor or a combination of factors which makes an organization more successful than other organizations in a competitive environment and cannot be easily emulated by its competitors. Organization strategy researchers (Schoemaker & Amit, 1997; Wright *et al*, 1998; Feurer and Chaharbaghi, 1997; Parnell, 2006) have identified a number of sources for competitiveness to include organization resources and capabilities, excellence in strategy implementation, quality, and innovation and creativity.

As mentioned above, proponents of the resource-based theory to strategy formulation regard resources and capabilities as the main source of competitiveness. They argue that strategies should be based on what the organization is best at rather than focusing on the external environment.

Feurer and Chaharbaghi (1997) argue that new sources of competitiveness have been identified following the increasing level of competition in many competitive environments. He lists them as including a strong focus on quality, speed and fast cycle-time, capabilities and a high degree of innovation and creativity. Other researchers (Schoemaker & Amit, 1997; Wright *et al*, 1998; Kaplan and Norton, 2004) also argue that the most important source of sustainable competitiveness lies in the ability of an organization to learn. They uphold the growing cognizance that no single strategy process or single strategic capability will lead to sustainable competitiveness.

Organizations increasingly have to adjust dynamically their characteristics to the requirements of the environment by constantly changing their strategies and strategic capabilities. Recent research (Kaplan and Norton, 2004; David, 2005; Hitt *et al*, 2003; Schoemaker & Amit, 1997; Wright *et al*, 1998) shows that organizations achieve superior results if they can select from a wide range of strategic capabilities rather than concentrating on a single capability or process. It shows also that superior performance is not guaranteed to result from strategies which have been successful in the past.

Worker co-operatives would be competitive if they focus on new concepts, creativity and strategy innovation. Such an approach requires the involvement of all the members, strategic knowledge generation, and the application of an integrative approach to strategy development. Successful organizations distribute the ownership of strategy formulation and implementation throughout the organization (Kaplan and Norton, 2004; Feuerer and Chaharbaghi, 1997; David,

2005). This requires the consideration of a wider value system. Organizations can no longer aim at maximizing the values of customers and shareholders alone. The values of other stakeholders such as employees and society will become equally important (David, 2005; Bennett, 1996; Feurer and Chaharbaghi, 1997).

Those worker co-operatives that will take a proactive approach to shape future value systems (maximizing value for their customers, workers and the community) are more likely to succeed in the long run. The quality of a formulated strategy therefore depends on the quality of knowledge used. This in turn hinges on how effectively the process of knowledge gaining is managed within the organization (Kaplan and Norton, 2004; David, 2005; Hitt *et al*, 2003).

6.4 Common Reference Points

The different ways in which the various strategy frameworks have been operationalized have led to some ambiguity (Kald, Nilsson, and Rapp, 2000). The most obvious problem is still the absence of a common point of reference for classifying strategy. Since different frameworks have been used, it is difficult to form an opinion on how strategy has influenced performance in organizations (Kald *et al*, 2000). Simons (1987), for example, used a strategy framework by Miles and Snow (1978) to show how innovative companies in fast-growing industries (called prospectors) closely monitored financial results. By contrast, Govindarajan (1988), who followed Porter's (1980) differentiation strategy framework, demonstrated that financial results were less closely monitored at innovative companies.

In order to interpret these inconsistent findings, we must find a way to relate these different strategy frameworks. For example, an attempt can be made to integrate the framework by Miles and Snow (1978) to the one by Porter (1980). The framework by Miles and Snow (1978) represents a complex theory, which has served as a stimulus for a large body of empirical research (Kald *et al*, 2000). From their research, Miles and Snow (1978) identify a number of issues constantly confronting management. These may be summarized as three fundamental problems that include: the entrepreneurial problem, the technological problem and the administrative problem (Miles and Snow, 1978). The entrepreneurial problem concerns, for example, which products and markets should be developed, whereas the technological problem is about the production resources required in the form of technology and staff. The administrative problem is one of how to organize and control the business.

According to Miles and Snow (1978), in an attempt to find solutions to the entrepreneurial, technological and administrative problems, four different types of organizations emerge. These are: defenders, prospectors, analyzers and reactors. Defenders focus mainly on reducing production and distribution costs while maintaining or improving quality. This strategic pattern is due to the dependence of the organization's competitiveness on the price and quality of its products and on its customer service.

A prospector is continually under development, with an incessant search for new market opportunities, so that product life cycles are short. Thus, there is no way to build up the same stable structure and technology that is found with a defender. Consequently, the organization is dependent on human initiative rather than on routine mechanized technology. The marketing and development departments fulfill essential functions, since it is vital to be first in introducing new products (Miles

and Snow, 1978). A reactor is one that lacks coherent strategy and whose structure is inappropriate to purpose. It misses opportunities and is mostly unsuccessful. Analyzers are hybrid in nature. They have a core of traditional products and they enter new markets after establishing viability (Miles and Snow, 1978).

Porter (1980), on the other hand, contends that an organization's strategy must be based on either differentiation, cost leadership, or focusing. Focusing, as already stated in section 6.3 above, means that the organization, on the basis of either differentiation or cost-effectiveness, can choose to serve a narrower segment of the market. Porter's (1980) generic strategy framework has already been discussed in the previous sections.

According to Kald *et al*, (2000), no attempts have been made to integrate the strategic variables on which the different frameworks by Porter (1980) and by Miles and Snow (1978) are based. For example, a defender and a prospector may follow either a cost leadership or differentiation strategy. Also, since changes in strategic positions depend on the length of a product life cycle, a defender may change its strategic position less often than a prospector (Kald *et al*, 2000).

6.5 Value Proposition and Market Control

Parnell (2006) considers value as one of the key dimensions of competitive strategy and that it is keenly associated with the products and services produced by an organization. The ideal value proposition is one whereby buyers perceive an organization's products or services to be of higher quality and lower prices. Whereas lower prices are often linked to a lower cost position which is also associated with modest or low quality, some organizations are able to accomplish the ideal value

proposition through such means as excellence in innovation or strong economies of scale (Parnell, 2006; Wright *et al*, 1998; Hitt *et al*, 2003; David, 2005). Hence, value can be delivered through perceived quality, lower prices, or optimally, both.

Within this context, the key to a successful competitive strategy is not low costs, differentiation, or focus per se, but how various strategic components are integrated into an effective overall value proposition (Parnell, 2006). As such, the concept of value subsumes the notions of low cost, differentiation, and focus, and there is no mutual exclusivity involved. Organizations with more attractive value propositions are more likely to be successful than those with less attractive value propositions (Parnell, 2006; Wright *et al*, 1998; Hitt *et al*, 2003).

According to Parnell (2006), a business with a strategy emphasizing value proposition seeks to offer a high degree of value relative to that which is offered by competitors. Also the organizations possessing rare, valuable, and inimitable resources possess a greater ability to execute a strong value proposition than those without such resources (Bennett, 1996; Wright *et al*, 1998; Hitt *et al*, 2003). For example, emphasis on delivering a value proposition to a particular market niche that cannot be easily mimicked by rivals can result from the ability to negotiate rock-bottom prices from suppliers (Parnell, 2006).

A second dimension of competitive strategy, market control, refers to the application of organizational resources to configure the market space in terms most favorable to the firm (Parnell, 2006). Organizations can exhibit three types of market control:

1. control over market access available to prospective competitors (i.e. entry barriers);
2. control over suppliers; and

3. control over customer access to competitors (i.e. switching costs).

Control is to some extent a deterministic variable because issues like buyer power, supplier power, and entry barriers are component parts of the industry structure (Porter, 1980). As such, it is often presumed that the typical firm has little choice other than to adapt to prevailing industry realities.

This presumption is not always the case. A business emphasizing market control strategy does not offer a relatively strong value proposition but is able to exert considerable control over its market by restricting the entry of new competitors and/or preventing customers from easily switching to existing competitors (Parnell, 2006; David, 2005; Hitt *et al*, 2003). Parnell (2006) argues that market control is conceptually based on the Industrial Output (I/O) logic.

Although firm resources are utilized to exert control, the ability to do so is inherently linked to factors in the environment (Parnell, 2006; David, 2005; Hitt *et al*, 2003). For example, stores may open up in rural locations that are less attractive to large chain stores. The key barrier to entry is the small market size, and the primary switching costs are time and convenience, as many customers would have to travel a considerable distance to shop at another grocery store (Parnell, 2006; David, 2005; Hitt *et al*, 2003). A business can therefore simply offer modest value in an environment where barriers and switching costs already exist. This can be done by choosing, for example, to emphasize “hometowns” and /or rural areas (Parnell, 2006).

Although strong market or value orientations might represent viable options, seeking a balance between the two might be more realistic, especially early in an organization’s existence. Specifically, a new enterprise can seek to occupy an industry segment with pre-existing control characteristics. In this instance, the fledgling organization can survive with only a modest value proposition by

functioning in a space with limited competitors and/or alternatives for customers, at least for a while. This approach gives the organization time to develop and strengthen while operating relatively unchallenged for a period of time. However, seeking a balance between market control and value is not necessarily an optimal strategic approach. Businesses that do so are vulnerable on multiple fronts to competitors able to scale the modest entry barriers or those that offer superior or even modest value (Parnell, 2006; David, 2005; Hitt *et al*, 2003).

Parnell (2006) therefore argues that an effective value and market control strategy is characterized by high levels of market control and value. A business implementing this strategy is dominant within its organizational space. A high value proposition is offered, while the business is also able to restrict access of new competitors and/or prevent customers from easily switching to existing competitors (Parnell, 2006).

An organization's ability to erect barriers to entry, institute switching costs, and exert control over supplier relationships are viewed as a proactive part of the business strategy (Parnell, 2006; David, 2005; Hitt *et al*, 2003). Regardless of strategic position, it should be recognized that the two key dimensions of strategy – value and market control – are not mutually exclusive. Although emphasis on a single orientation can be effective, organizations should constantly seek to enhance both market control and value orientations.

In order to avoid the inconsistencies and the confusion resulting from the use of different strategy frameworks, this thesis advocates for the utilization of an integrative strategy framework discussed in the next chapter. This will eliminate the need for common points of reference and will allow

worker co-operatives to select from a wide range of strategic capabilities rather than concentrating on a single capability or process drawn from the generic strategy frameworks.

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CHAPTER 7

CONCEPTUAL FRAMEWORK

7.1 Introduction

The strategy-formulation frameworks described in chapter 5 can be grouped into two distinct areas of the Industrial Output (I/O) model and the Resource Based View (RBV) model. The I/O model considers the external environment as having a stronger influence on the performance of an enterprise than its internal resources and capabilities (David, 2005). It is deterministic by assuming that the ‘fate’ of an enterprise is determined mainly by the industry or sector in which it operates (Brooks and Weatherston, 2000).

On the other hand, the RBV model considers an enterprise as a unique collection of resources and capabilities that ultimately determine the competitiveness of the enterprise (Schoemaker & Amit, 1997). The basic premise of the RBV model is that the mix, type, amount and nature of an enterprise’s internal resources should be considered first and foremost in devising strategies that can lead to sustainable competitiveness (David, 2005). Managing strategically, according to RBV, involves developing and exploiting an enterprise’s unique resources and capabilities.

It has been stated in chapter 6 that this thesis adopts a strategy-framework that integrates the I/O and RBV frameworks as a basis for its conceptual framework. The desire for an integrative strategy-framework that is based on a contingency theory recognizes the fact that the I/O and the RBV frameworks merely examine “two parts of one competitive picture” (Schoemaker & Amit, 1997, p.371). Among the pioneers to use the integrative strategy-formulation framework in 1952 was

Professor Richard Beckhard of the Massachusetts Institute of Technology (MIT) who was a founder of the field of Organization and Development (OD). According to Cummings and Worley (2001), Professor Beckhard believed that “the difference between what the environment demanded and how the organization responded could be reduced and performance improved” (p.12).

Strategic integration of the key variables in a worker co-operative’s environment may help in the search for solutions to some of their problems relating to entrepreneurship, technology, and management. As noted in chapter 6, Miles and Snow (1978) identified the entrepreneurial problems to be concerned with, for example, which products and markets should be developed, whereas the technological problem is about the production resources required in the form of technology and staff. The management problem is one of how to organize and control the business.

7.2 The Integrative Strategy Framework

An integrative strategy framework for a worker co-operative is shown in figure 5 below. It represents a structured process that includes the following:

1. Definition of the co-operative’s vision and mission
2. Evaluation of the external, internal and co-operative environments
3. Definition of goals and objectives
4. Application of strategic knowledge to formulate integrative strategy frameworks.
5. Gaining commitment by transferring strategy ownership to the members.
6. Performance measures aligned with the co-operative’s principles and core values.

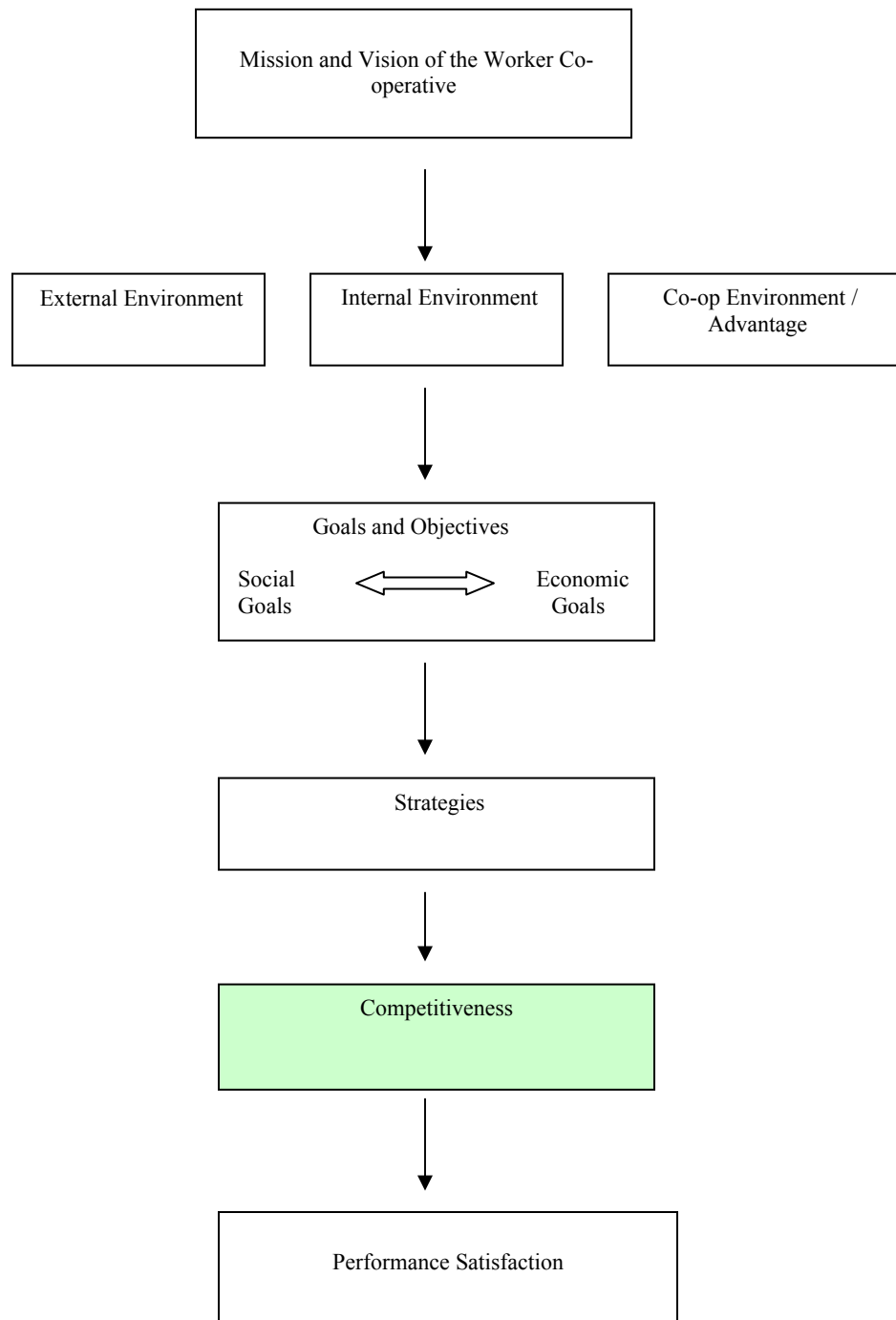
The process requires the close co-operation of the members / workers and a communication structure which is open and flexible. It also requires a structure and culture which:

- is supportive and enabling;
- provides a large degree of freedom for the members in the decision-making process;
- delegates and demands responsibility for any action taken;
- builds up commitment and leadership;

The first part of the integrative strategy framework shown in figure 5 includes the mission and vision of a worker co-operative. Sometimes called a statement of philosophy, a statement of beliefs, a statement of business principles, a mission statement will reveal what a worker co-operative wants to be and whom it wants to serve (Hitt *et al*, 2003; David, 2005). Since every worker co-operative has a unique purpose and reason for being, this uniqueness should be reflected in vision and mission statements. For worker co-operatives, when all members are involved in the shaping and fashioning of the vision and mission of their co-operative then the result would reflect the personal visions of the members. This will create a commonality of interest that will put the members into a new world of opportunities and challenges (David, 2005; Hitt *et al*, 2003). Many writers (David, 2005; Hitt *et al*, 2003; Bennett, 1996; Parnell, 2006) argue that enterprises with formalized mission statements perform better than those without. The reasons being that formalized mission statements help to:

- Ensure unanimity of purpose within the organization
- Provide a basis or standard for allocating organizational resources
- Establish a general tone or organizational climate
- Serve as a focal point for individuals to identify with the organization's purpose and direction.

Figure 5: Integrative Strategy Framework



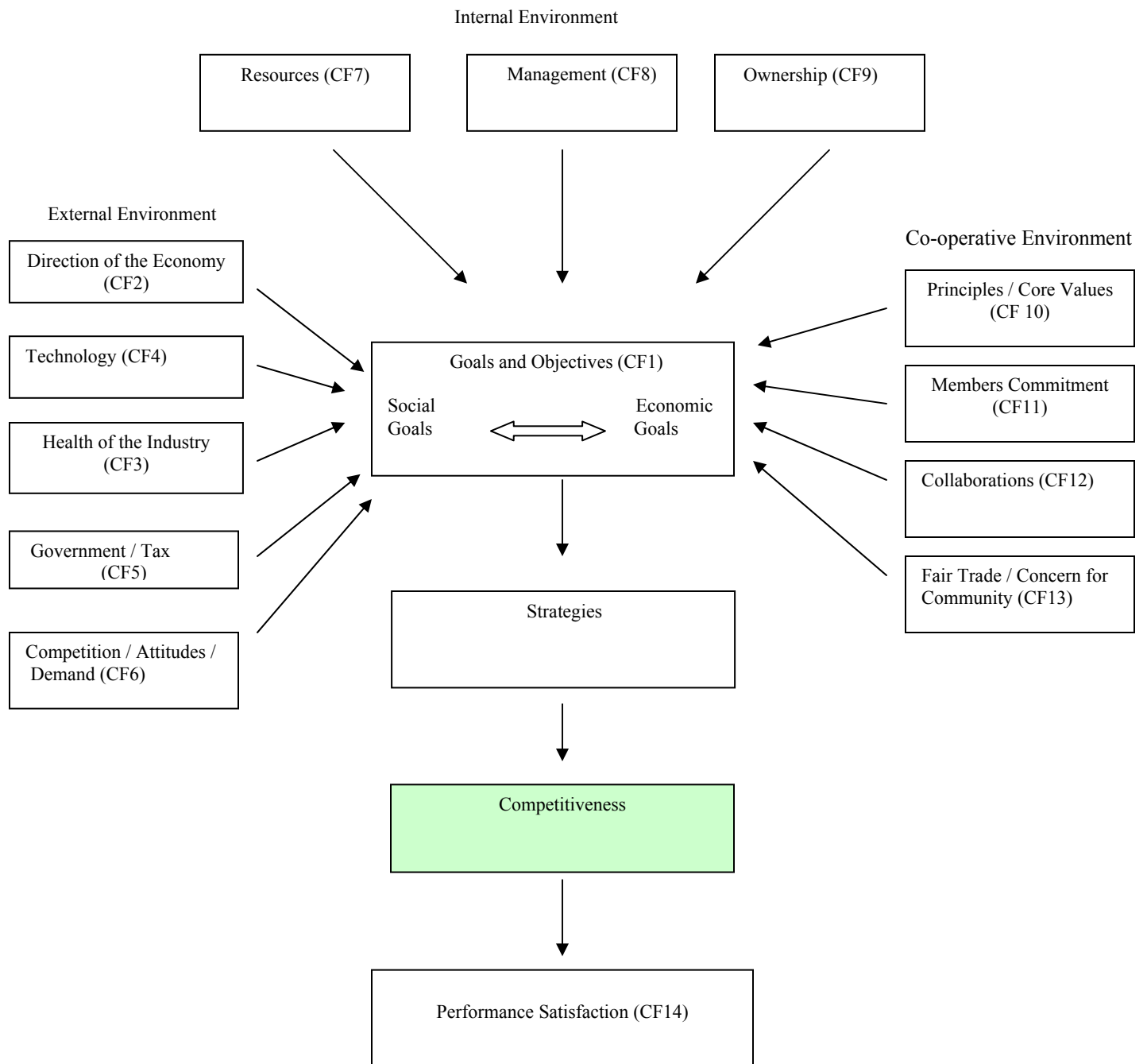
Source: Own Presentation Based on David (2005).

7.3 The Conceptual Framework

This thesis utilizes the integrative strategy-framework typology shown in figure 5 above as a basis for its conceptual framework shown in figure 6 below. The conceptual framework acts like a map in giving coherence to different parts of this thesis. It defines pathways between the key external and internal environmental forces, the worker co-operatives' long-term objectives and the effective achievement of those objectives. The conceptual framework also aids in the identification of the fundamental variables (external and internal) that are critical to the competitiveness of worker co-operatives in Britain. It is further used to assist in the evaluation of the strategic variables identified as being critical in the effective achievement of worker co-operatives' objectives.

With a worker co-operative's vision and mission well defined, the next action is to evaluate the co-operative's external environment for opportunities and threats. Although most writers (David, 2005; Hitt *et al*, 2003; Bennett, 1996; Parnell, 2006) agree that systematic methodologies for performing strength-weakness assessment are not well developed in the strategic-management literature, an audit of a worker co-operative's internal environment for strengths and weaknesses must be carried out. Similarly the co-operative environment has also to be evaluated for the nature and strength of relationships between the members and their co-operative and between the members themselves. The aim of this evaluation is to identify the key variables that offer actionable responses (David, 2005; Bennett, 1996; Parnell, 2006). Worker co-operatives should respond offensively or defensively to these variables by formulating strategies that will take advantage of opportunities and minimize the impact of threats. The key strategic variables in a worker co-operative's environment that were evaluated in this study are shown in figure 6 below.

Figure 6: Conceptual Framework



Source: Own presentation using Industrial Output and Resource Based models

All worker co-operatives, regardless of size or type, should perform an audit on their external and internal environments for them not to miss opportunities and to anticipate emerging threats. The process may, however, remain less formal in very small worker co-operatives.

7.4 Worker Co-operatives' Environmental Forces

Guided by the conceptual framework, the study examined the extent to which the strategic variables shown in figure 6 above have influenced the achievement of objectives for the worker co-operatives. As will be seen in chapter 8 on research design and methodology, a total of 131 worker co-operatives participated in the evaluation of their external and internal environmental forces that influence the achievement of their objectives. The key external environmental forces evaluated include:

- Direction of the economy
- Health of the industry
- Technological changes
- Government policies
- Tax laws
- Competition from non co-operatives
- General attitude towards co-operatives
- Customer demand

The co-operative and internal environmental forces that were evaluated include:

- Common ownership
- Members' participation and commitment

- Members' education
- Alliances with other co-operatives
- Managerial resources
- Financial resources
- Goals and objectives

7.5 Worker Co-operatives' Long-term Objectives

The success of a worker co-operative depends on how effectively its objectives are being met. It has been noted in chapters 2 and 3 that worker co-operatives have not only economic but also social and cultural objectives. The extent to which worker co-operatives are satisfied with their past performance has been used in this thesis as an indicator for effective achievement of objectives.

Many writers (David, 2005; Cummings and Worley, 2001; Hitt *et al*, 2003; Bennett, 1996) agree that the following advantages accrue to organizations with clearly stated objectives:

- They provide direction among the members
- They allow for synergy and team efforts
- They aid in evaluation of performance by members
- They aid in establishing priorities and in reaching consensus by the members
- They reduce uncertainties
- They minimize conflicts among the members
- They aid in both the allocation of resources and in job design

The nature of worker co-operatives' goals and objectives and the effectiveness with which they have been achieved as indicated by the level of satisfaction are issues that have been examined and discussed in the following chapters.

7.6 Worker Co-operatives' Strategies

Strategy is the 'primary means' of reaching a worker co-operative's objective. The focal objective could be economic, social or cultural in nature. It is the search for this 'primary means' of reaching a worker co-operative's objective that forms the basis for all the discussions and examples in the following chapters. Strictly speaking, it is literally meaningless to talk about strategy without having an objective in mind. Strategy is the direction and scope of a worker co-operative over the long term. It ideally matches its resources to its changing environment and in particular its members, markets, customers or clients so as to meet its objectives (Bennett, 1996; Parnell, 2006; Feurer and Chaharbaghi, 1997).

Matching external and internal critical success factors is the key to effectively generating feasible strategies. Strategy is therefore sometimes defined as the match an enterprise makes between the opportunities and threats in its external environment and its resources and capabilities (David, 2005). The definition offered by Chandler (1962) takes a more holistic approach to strategy and captures its meaning better than those which take an isolated view. It describes strategy as the determination of the basic goals and the objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. Strategy can, therefore, be regarded as finding a match between organization capabilities and opportunities within the competitive environment (David, 2005; Chandler, 1962).

7.7 Performance Satisfaction

Many worker co-operatives, especially the ‘alternativist’ collectives (chapter 3), are formed to achieve objectives which are not necessarily economic in nature. Some of these objectives include democratization of the work place; integration of the marginalized members of the society; fair trade and environment conservation. It is for this reason that the Co-operative-UK (2004) observed that the future success of the co-operatives depends more on their ‘co-operative and social performance’ than on their economic performance.

The Co-operative-UK (2004) accordingly suggested ten ‘co-operative and social performance’ indicators to be used in assessing the performance of co-operatives. These indicators include:

- Member economic involvement
- Member democratic participation
- Participation of employees and members in training and education
- Staff injury and absentee rates
- Staff profile – gender and ethnicity
- Customer satisfaction
- Consideration of ethical issues in procurement and investment decisions
- Investment in community and co-operative initiatives
- Net carbon dioxide emissions arising from operations
- Proportion of waste recycled/reused

Many worker co-operatives currently employ the use of the above indicators in the evaluation of their performance. As will be seen in chapters 10 and 11, this thesis uses the 'level of satisfaction' with the worker co-operatives' performance (co-operative and social performance) as an acceptable measure for objective achievement. Thomas (1982) and Jones and Svejnar (1982) agree that to measure the success or failure of worker co-operatives is very difficult and controversial due to the nature of their objectives and the unusual patterns of ownership and control. Due to these difficulties, Cornforth (1983) settles for survival or non-survival of the co-operative as good criteria for measuring success. As stated above, this thesis uses the 'level of satisfaction' with the co-operatives' performance (co-operative and social performance) as an acceptable measure for objective achievement. Therefore, the last item on the conceptual framework (figure 6) is performance satisfaction.

From the preceding discussion it is obvious therefore that the development and analysis of a worker co-operative's strategy framework, based on the strategic variables in its external and internal environments, provides a richer picture of its competitiveness. It is the relationships and the interactions between the strategic variables within the external, internal and the co-operative environments that will determine the effectiveness with which worker co-operatives achieve their objectives. The variety of so many conceptual frame-works and tools in the area of strategy development should not, therefore, be regarded as mutually exclusive but must be seen as mutually supportive. Serious attempts have not been made by previous studies to integrate the different strategic variables in worker co-operatives' internal and external environments that influence competitiveness. The utilization of a strategy framework that integrates both the internal and the external variables to investigate the challenge of competitiveness in worker co-operatives in Britain therefore marks the point of departure for this study.

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CHAPTER 8

RESEARCH DESIGN AND METHODOLOGY

8.1 Introduction

Researchers (Bryman, 1994; Punch, 2002; Robson, 2002; Clarke & Clegg, 1998) agree that there is little consensus on how to design research processes that will help organizations facing highly dynamic and uncertain environments to formulate and implement successful strategies. Some call for a more scientific approach which encompasses quantitative modeling and testing while others advocate action research and more descriptive approaches using case studies. The main problem is that there is no common perspective, vocabulary and conceptual base between different studies. Issues are viewed differently, emphasizing isolated elements, and different approaches are taken to study the problems. As a result, the outcome represents isolated insights which do not provide organizations with an integrated understanding of formulating and implementing strategies.

Adopting a particular perspective framework (philosophical position) in a research study obviously affects its design and operationalization. For example, certain assumptions have to be made to guide the choice of methods used and the choice of respondents. According to Punch (2002), a perspective frameworks or paradigm refers to:

A set of assumptions about the social world, and about what constitute proper techniques and topics for inquiring into that world. Put simply, it is a way of looking at the world. It means a view of how science should be done, and it is a broad term encompassing elements of epistemology, theory and philosophy, along with methods (p.35).

Fierce debates, sometimes called “paradigm wars”, have characterized research in social sciences as researchers argue their cases for and against quantitative and qualitative research approaches. According to Robson (2002), “the solution to the so-called paradigm wars...between positivists (empiricist, quantitative researchers) and constructionists (phenomenologists, qualitative researchers) calls for a radical reappraisal of warriors on both sides” (p. 43). According to Clarke and Clegg (1998):

A paradigm can be a set of unwritten regulations or practices that establishes or defines boundaries and tells you how to behave inside the boundaries. Being locked into a paradigm can, at its worst, become a form of conceptual imprisonment (p.11).

As already stated in the introduction to this thesis, this study had to “proceed from the more ‘pragmatic’ approach of questions that need answers or problems that need solutions” (Punch, 2000: p.36). The study, hence, used quantitative and qualitative approaches side by side. Bryman (1994) concedes that the quantitative approach has clearly been influenced by the natural sciences model of research and its positivist form whereas the qualitative approach has been influenced by an epistemological position that rejects the appropriateness of a natural science approach to the study of humans. He however, concludes that “each has its own strengths and weaknesses.... it is these strengths and weaknesses that lie behind the rationale for integrating them” (p.59).

In designing the research framework for this thesis, the recommendations by Feurer & Chaharbaghi (1995a) were taken into consideration. These include the following:

- That the research should focus on those elements of strategy formulation and implementation that yield high performance.

- That the research should analyse strategy formulation and implementation in a holistic way to include strategic as well as operational issues.
- That the framework developed should be able to incorporate current strategic knowledge.
- That the research findings should be relevant to organizations operating in uncertain and dynamic environments (like worker co-operatives).
- That the research should represent a continuous learning process to accommodate emerging issues

8.2 Key Research Questions

As already stated in section 1.3 in chapter 1, this study seeks to establish whether an integrative strategy framework offers a more effective analysis of the challenge of competitiveness in worker co-operatives in Britain. This is done by seeking answers to the following research questions:

1. Are worker co-operatives in Britain satisfied with their performance?
2. Is the co-operative model, with its non-hierarchical management structure based on the principles of democratic control, working for the worker co-operatives?
3. What factors influence the competitiveness of worker co-operatives in Britain?
4. Can worker co-operatives succeed within Britain in a bureaucratic and traditionally-structured-capitalist economy where the society and institutional frameworks are mostly geared towards the growth and survival of conventional (capitalist) enterprises?

As illustrated in figure 6 (the conceptual framework), the key issues pervading the entire breadth of this thesis can be grouped into four broad areas:

1. The level of satisfaction with worker co-operatives' performance as an indicator for effective achievement of objectives
2. Evaluation of worker co-operatives' goals and objectives
3. Evaluation of worker co-operatives' external environment including:
 - Direction of the economy
 - Health of the industry
 - Technology
 - Government / Tax frameworks
 - Socio-cultural / demographic (attitudes, product demand)
4. Evaluation of worker co-operatives' internal and co-operative environments including:
 - a. Resources
 - b. Capabilities
 - c. Entrepreneurship (innovations)
 - d. Co-operative principles
 - e. Social capital (membership / relationships)
 - f. Strategic alliances (collaborations)

Worker co-operatives were asked several questions in order to gather information on the four key areas listed above (see research methodology and survey questionnaire). All the questions were, however, aimed at finding answers to the above-listed key research questions.

8.3 Descriptive Statistical Approach

This thesis has utilized information gathered through survey questionnaires and follow-up interviews as discussed in the following sections. It has also been stated in the introduction to this chapter, that the research method adopted for this thesis integrates the quantitative modeling and testing methods with the qualitative and, hence, more descriptive approaches. Hence, apart from the outcomes of various tests of hypothesis formulated in section 8.4, this thesis also examines the outcomes of descriptive statistical methods including frequency distributions and other data classification approaches. These descriptive statistical approaches were applied to the information gathered through both survey questionnaires and follow-up interviews discussed below. Descriptive statistical analysis of the information is discussed in both chapters 9 and 10.

In order to answer the three key research questions above, the thesis therefore makes use of the statistical methods of hypotheses testing and descriptive analyses as discussed in details below.

8.4 Research Hypotheses

Bases on the literature reviewed in chapters 3, 4, 5 and 6 and on the conceptual framework above, the need to find answers to the questions raised above led to the formulation of the following hypotheses:

Hypothesis 1 (H1): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the direction of the economy.

Hypothesis 2 (H2): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on technological changes.

Hypothesis 3 (H3): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the health of their relevant industries

Hypothesis 4 (H4): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of government policies.

Hypothesis 5 (H5): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of various tax laws.

Hypothesis 6 (H6): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of competition from non co-operatives.

Hypothesis 7 (H7): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives.

Hypothesis 8 (H8): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the demand for their products and services from customers.

Hypothesis 9 (H9): There is a positive association between the extent to which worker co-operatives pursue the promotion of co-operative principles and core values as a goal and the level of their members commitment.

Hypothesis 10 (H10): There is a positive association between the extent to which worker co-operatives pursue the employment of members as a goal and the level of their members' commitment.

Hypothesis 11 (H11): There is a positive association between the extent to which worker co-operatives pursue stability of their enterprises as a goal and the level of their members' commitment.

Hypothesis 12 (H12): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the level of the members commitment.

Hypothesis 13 (H13): There is no positive association between the extent to which worker co-operatives pursue profitability as a goal and the level of their members' commitment.

Hypothesis 14 (H14): There is a positive association between the extent to which worker co-operatives pursue community well-being as a goal and the level of their members' commitment.

Hypothesis 15 (H15): There is a positive association between the extent to which worker co-operatives pursue fair trade as a goal and the level of their members' commitment.

Hypothesis 16 (H16): There is a negative association between the extent to which worker co-operatives have a desire for better management and the level of their members' commitment.

8.5 Research Methodology

The research study utilized mainly the quantitative data collection and analysis methods. However, reasonable use of qualitative techniques has also been made in data collection to supplement the quantitative methods. According to Feurer & Chaharbaghi (1995a), in highly dynamic and uncertain environments there is no single generic method with which to conduct research. They add that while quantitative methods are necessary to test the validity and general applicability of research findings, the potential of in-depth quantitative studies diminishes rapidly as the underlying conditions change in dynamic environments.

Qualitative research, on the other hand, can be lacking in rigour, although it is advantageous in those circumstances in which the research has to delve into complexity and processes and in research on informal and unstructured linkages and processes in organizations (Bryman, 1994; Punch, 2002; Robson, 2002; Clarke & Clegg, 1998). Researching strategy formulation and implementation therefore requires the right balance between quantitative and qualitative methods.

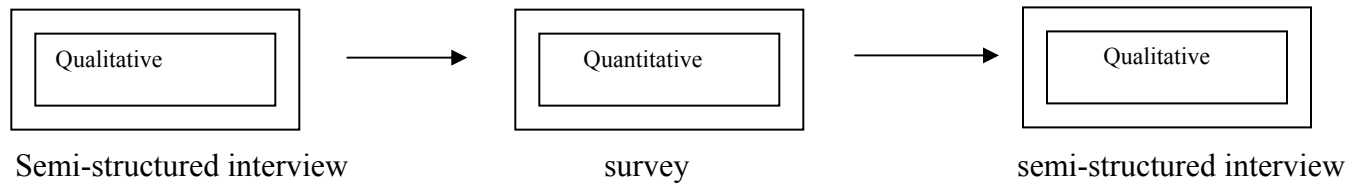
The use of multiple research methods for this thesis has also been necessary because of the complex nature of the phenomenon that is being investigated and the existence of a large number of variables

involved. The investigation has therefore used methodological triangulation. In particular it has used the “between-methods triangulation” technique since one method complements and / or supplements the other. According to Bryman (2004) between-methods triangulation combines the use of both quantitative and qualitative research methods to determine how far the two methods arrive at convergent findings. For example, in constructing questions to be included in the survey questionnaires, the research avoided overlooking pertinent information and also avoided “elite bias” by including those questions which were not only significant to the investigator but also significant to the respondents concerned. Triangulation, in many cases, produces more valid and reliable results than the use of single methods. Reinharz (1992) confirms that triangulation increases “the likelihood of obtaining scientific credibility and research utility” (p. 197). Using two methods allowed the researcher to obtain a variety of information on the same issue. The strength of one method was used to overcome the deficiencies of the other. For example, probing, prompting and clarification of questions which were not possible in mail questionnaires were done during follow-up interviews.

The investigation therefore began by first conducting informal, open-ended interviews with relevant worker co-operative stakeholders in order to collect data which was not only useful to the researcher but also significant to the respondents for inclusion in the survey questionnaires. Although survey questionnaires were the main instrument for primary data collection, semi-structured follow-up interviews were also conducted to supplement the method.

The research design therefore included three phases of data collection and analysis as shown in figure 7 below. Phase one was a qualitative method of informal, semi-structured interviews while phase two was a quantitative survey, the findings of which were used to construct further semi-structured follow-up interviews with worker co-operative stakeholders.

Figure 7: Between-Methods Triangulation



Source: Own presentation using Bryman's (2004) model

As stated above, the data collection process began by first carrying out informal, open-ended interviews with officials of co-operative and job ownership organizations that are involved in promotion work and in research and development projects concerning worker co-operatives and other job ownership enterprises. The organizations selected for the informal interviews included the Co-operative-UK, the umbrella body for worker co-operatives, the Job Ownership Limited, the Industrial Common Ownership Movement, the Industrial Common Ownership Finance (Cambridge office) and the Co-operative College. The officials interviewed included a chief executive, a national strategy coordinator, and project managers.

The objective of this phase was to collect relevant background information regarding the past, present and future opportunities and threats as well as strengths and weaknesses influencing the performance of worker co-operatives in Britain. Both personal (face-to-face) and telephone interviewing methods were employed in this phase. Notes were taken during the interviews and the information gathered formed a good background material for the construction of survey questionnaires in phase two. Available literature and case studies on worker co-operatives including the failed co-operative enterprises were also reviewed for relevant material for the survey questionnaires.

The statistical software, SPSS for Windows Version 12.0, has been utilized in this study to organize, classify and analyze the data collected by the survey questionnaires. Interpretation and discussion of the analysis are presented in chapters 9, 10 and 12 below.

8.6 Survey Questionnaires

Phase two of data collection and analysis included the administration of survey questionnaires by mail following the development of relevant questions based on the informal interviews carried out in phase one. The questionnaire was developed in a systematic manner. First the researcher searched for a relevant questionnaire, that may have been developed by previous investigators, for adoption but found none. A new questionnaire was therefore developed. The researcher then formulated a number of questions and tested them for relevance, clarity and whether they complied with the basic rules of questionnaire construction regarding layout and contents. The draft questionnaire was then discussed by a panel of experts that included research supervisors and scholars. The suggestions and comments from the experts were used to develop the pilot-study questionnaire that was sent out to twelve randomly selected worker co-operatives and three co-operative development agencies after it had been reviewed and accepted by the experts.

The feedback from the pilot-survey responses led to some changes in the original questionnaire including the addition of question B8 (see appendix 3). This gave rise to the inclusion of nine (9) additional variables on the characteristics of employee-ownership form of enterprises. There were also changes regarding additional spaces for responses to some questions. The final survey questionnaire was consequently developed, reviewed and sent to the printers for enough copies to

cover all the worker co-operatives in Britain as maintained in the directory of their umbrella organization, the Co-operative –UK.

According to Co-operatives-UK, it is estimated that there are approximately 390^{*1} worker owned and controlled co-operatives in Britain, 92 of which having been established since January 2003. The details shown in figure 8 below have been taken from the statistical review published by Co-operatives-UK from sources that include annual returns submitted by Co-operatives-UK members, full accounts submitted to Companies House and annual returns submitted to the Financial Services Authority^{*2}

Figure 8: Worker Co-operatives Statistical Review

	Number of Co-operatives	Turnover - £'s	Profit -£'s Turnover	Profit %	Shareholders funds - £'s	Members	Employees *4
Turnover over £5 million	5	52 291 672	873 780	1.7	4 743 266	889	501
Turnover £1 million - £5 million	13	30 639 294	1 102 796	3.6	8 032 765	401	264
Turnover £500 000 - £1 million	8	5 824 777	203 290	3.5	970 013	46	112
Turnover £250 000 - £500 000	13	4 624 323	160 309	3.5	676 806	56	81
Turnover £100 000 - £250 000	20	3 219 567	218 032	6.8	332 536	65	79
Turnover £25 000 - £100 000	15	836 203	170 260	20.4	225 785	56	42
Turnover below £25 000	11	137 834	2 030	1.5	21 947	7	8
No turnover identified *5	23	-	80 736	-	1 724 654	-	97
New Starts	49	483 736	89 060	-	13 941	6	76
Total Members of Co-operatives ^{UK}	157	98 057 406	2 900 293	2.8†	16 741 712	1 526	1 258
Turnover over £5 million	-	-	-	-	-	-	-
Turnover £1 million - £5 million	2	2 315 269	59 897	2.6	719 877	-	-
Turnover £500 000 - £1 million	4	2 808 573	279 383	9.9	460 447	15	-
Turnover £250 000 - £500 000	3	1 167 642	10 240	0.9	225 911	-	-
Turnover £100 000 - £250 000	14	2 079 909	28 840	1.4	507 707	-	8
Turnover £25 000 - £100 000	32	1 605 648	-50 670	-3.2	513 181	7	7
Turnover below £25 000	30	314 743	42 740	13.6	126 928	-	3
No turnover identified *5	105	-	198 221	-	1 642 693	-	6
New Starts	43	76 056	8 300	-	13 300	-	7
Total Non Members	233	10 367 840	576 951	3.6†	4 210 045	22	29
Total Worker Co-operatives	390	108 425 246	3 477 244	2.9†	20 951 757	1 548	1 287
Co-operatives ^{UK} Members as a % of Total	40.3%	90.4%					

Source: Co-operatives-UK's Statistical Review 2004 – 2nd Revision (Dec 2005).

† Profit % Turnover excludes those organisations where no turnover is available and new starts as data is incomplete

*1 The data held by Co-operatives ^{UK} on worker co-operatives is sourced primarily from the registration records transferred to Co-operatives ^{UK} from the Industrial Common Ownership Movement. Co-operatives ^{UK} may be unaware of worker co-operatives registered via other agencies. As a consequence this figure may be an underestimate. The figure given does not include employee trust owned businesses.

*2 A co-operative incorporated as an Industrial and Provident Society must make an annual return to the Financial Services Authority.

*4 The number of employees is shown as a full time equivalent calculated from the number of part time and full time employees. A person is regarded as being employed full time if they are contracted to work for over 30 hours per week. If they are contracted to work for 30 hours or less then they are regarded as part time. Two part time employees are regarded as one full time equivalent.

*5 The financial accounts submitted to Companies House consist of a balance sheet only, therefore no turnover is available. Profit before tax has been estimated based on the year on year change in the value of Profit and Loss Account Reserve

In October 2005, mail-survey questionnaires were therefore sent out to the entire population of worker co-operatives in Britain as maintained in the directory of their umbrella organization, the Co-operative –UK. In total, the entire 390 worker co-operatives in Britain were surveyed on various issues relating to the research hypothesis. Survey questions are discussed in more detail in section 8.8 below.

Ninety three (93) responses were received after the first deadline of December 15, 2005. In January 2006, questionnaires were again sent out the second time to those worker co-operatives that had not responded with a reminder that their participation was very important to us. Forty nine (49) additional responses were consequently received. A total of 142 responses were therefore eventually obtained from the 390 worker co-operatives surveyed. Eleven (11) of the responses were not very useful since the respondents were either dormant, under liquidation or had converted to non-co-operative enterprises. The overall result was therefore a sample of 131 active worker co-operatives out of a population of 379 active worker co-operatives. This is a response rate of 35%. The responses were from a wide spectrum of worker co-operatives in terms of the economic and social sectors represented. These sectors included consultancy and professional services, wholefoods, arts and the media, printing and publishing, care and support services, crafts and woodwork, leisure, and other retail services as shown in table 11 in the next chapter.

8.7 Non-response Bias

The usefulness of mail surveys can, at times, be compromised by non-response bias that occurs when the observed value deviates from the population parameter due to differences between respondents and non-respondents. Non-response bias refers to the mistake one expects to make in estimating a population characteristic based on a sample of survey data in which certain types of

survey respondents are under-represented due to non-response. If persons who respond differ substantially from those who do not, the results do not directly allow one to say how the entire sample would have responded. If one believes that non-responders are different from responders in ways critical to the focus of one's research, then a non-response bias needs to be tested for before the sample is generalized to the population. According to Armstrong and Overton (1977), the most commonly recommended protection against non-response bias is the reduction of non-response itself.

In an effort to reduce non-response, the entire population of worker co-operatives in Britain, as maintained in the directory of their umbrella organization, the Co-operative –UK, was surveyed. A cover letter that explains clearly the purpose, rationale, nature and usefulness of the research was attached to all the questionnaires. The cover letter also promised anonymity and confidentiality to the respondents. The questionnaire (see appendix 3) was also designed to be as user-friendly as possible in terms of the layout and format, size, non-use of unfamiliar terms, sensitivity of the questions, and the time and effort needed for its completion. Instructions on how to complete the questionnaires were also included.

Additionally, in order to motivate the respondents, it was emphasized that the findings of the research study would be shared with those worker co-operatives that participated in the survey and would therefore contribute towards the development of worker co-operative enterprises. Finally, self-addressed and pre-stamped envelopes were enclosed to facilitate the return of the completed questionnaires. According to Berg (2002), instead of trying to completely “fix” the problems created by non-response, it is often acceptable simply to be sensitive to them and to state to one's readers the likely effect of non-response on the key estimates of interest.

8.8 Testing for Non-response Bias

As discussed above, non-response bias can affect the generalization of research results to the whole population. It is therefore important to test for it. Since collecting additional data from a sample of non-respondents is not attainable easily, some writers (Berg, 2002; Armstrong and Overton, 1977; Moser and Kalton, 1989) recommend comparing the characteristics of early and late respondents. This comparison assumes that the respondents who return their questionnaires late have more similarities to non responders when compared to the early responders. One way of doing this is to compare those respondents that did not require reminders to submit their questionnaires with those that submitted their questionnaires only after the reminder. That is the method that was adopted in this study.

A sample comprising the first forty seven respondents was compared to the one of 47 respondents who submitted their questionnaires after the reminder. The two groups were compared on the following variables:

1. Type of business activity
2. Number of members
3. Main reason for formation
4. Product / service innovations within the last two years
5. Level of performance satisfaction

Chi-square tests (χ^2) were used for the non-response bias. It is the contention of many writers (Bryman and Cramer, 2005; Kinnear and Gray, 2004; Field, 2005; Sarantakos, 2003; Berg) that chi-square tests are the most popular and most frequently used tests of significance in the social

sciences. Normally there are two types of chi-square tests, being the goodness-of-fit test and the test of independence. Tests of independence were used in this study for the non-response bias. The results of the tests in relation to the five variables listed above are given in Tables 2 – 6 below:

Table 2: Chi-square Test for the Type of Business Activity

Table 2 -1: BusType * Group Crosstabulation

Count

		Group		
		EarlyRes	LateRes	Total
BusType	Consult	9	9	18
	Prnting	9	9	18
	HlthFood	8	3	11
	Arts	4	6	10
	HlthLeisr	5	2	7
	CareSppt	1	4	5
	MiscRtl	5	2	7
	Others	6	12	18
Total		47	47	94

Table 2 – 2: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.044(a)	7	.250
Likelihood Ratio	9.384	7	.226
Linear-by-Linear Association	.841	1	.359
N of Valid Cases	94		

Table 3: Chi-square Test for the Number of Members

Table 3 - 1: NumMbrs * Group Crosstabulation

Count

		Group		
		EarlyRes	LateRes	Total
NumMbrs	0 - 7	9	5	14
	7 -10	20	29	49
	Over 10	18	13	31
Total		47	47	94

Table 3 – 2: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.203(b)	1	.273	.380	.190
Continuity Correction(a)	.770	1	.380		
Likelihood Ratio	1.207	1	.272		
Fisher's Exact Test					
Linear-by-Linear Association	1.190	1	.275		
N of Valid Cases	94				

Table 4: Chi-square Test for the Main Reason for Formation

Table 4 – 1: OrigGoal * Group Crosstabulation

Count

		Group		
		EarlyRes	LateRes	Total
OrigGoal	Rescue	1	2	3
	AltEmp	37	41	78
	Endow	5	2	7
	Other	4	2	6
Total		47	47	94

Table 4 – 2: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.491(a)	3	.477
Likelihood Ratio	2.553	3	.466
Linear-by-Linear Association	2.024	1	.155
N of Valid Cases	94		

Table 5: Chi-square Test for Product / Service Innovations within the Last Two Years

Table 5 – 1: Innovatn * Group Crosstabulation

Count

		Group		Total
		EarlyRes	LateRes	
Innovatn	Yes	36	34	70
	No	11	13	24
Total		47	47	94

Table 5 – 2: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.224(b)	1	.636	.813	.407
Continuity Correction(a)	.056	1	.813		
Likelihood Ratio	.224	1	.636		
Fisher's Exact Test					
Linear-by-Linear Association	.221	1	.638		
N of Valid Cases	94				

Table 6: Chi-square Test for the Level of Performance Satisfaction

Table 6 – 1: Satisfd * Group Crosstabulation

Count

		Group		Total
		EarlyRes	LateRes	
Satisfd	satisfd	22	17	39
	Somewhat	17	18	35
	Not	8	12	20
Total		47	47	94

Table 6 – 2: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.470(a)	2	.480
Likelihood Ratio	1.477	2	.478
Linear-by-Linear Association	1.453	1	.228
N of Valid Cases	94		

All the results in tables 2 – 6 show that the value of the chi-square is not significant ($p > .05$).

Therefore there are no significant differences between the early and the late responses as regards the five variables listed above. It is therefore reasonable to assert that the characteristics of those who responded before the reminder and those who responded after the reminder are not different.

8.9 Reliability of the Questionnaire

Reliability of a questionnaire refers to its consistency (Bryman and Cramer, 2005: p. 76). It means that a questionnaire scale should consistently reflect the construct it is measuring. In other words, individual items in the questionnaire should produce results consistent with the overall questionnaire (Field, 2005. p 666). *Cronbach's alpha* is the most commonly used measure of questionnaire reliability (Field, 2005; Moser and Kalton, 1989; Bryman and Cramer, 2005).

Since external environmental factors did not have multiple-item questions, only the variables relating to the co-operative environment and the internal environment were tested for their internal reliability. The results are shown in table 7 and table 8 below.

Table 7: Reliability Analysis of the Co-operative Environment Variables

Table 7 – 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.846	.846	7

Table 7 – 2: Inter-Item Correlation Matrix

	Princpls	MbCommit	Commnity	FairTrad	Communy	Prncples	FairTrde
Princpls	1.000	.389	.481	.504	.404	.527	.438
MbCommit	.389	1.000	.306	.369	.216	.479	.330
Commnity	.481	.306	1.000	.539	.537	.458	.553
FairTrad	.504	.369	.539	1.000	.694	.491	.467
Communy	.404	.216	.537	.694	1.000	.390	.358
Prncples	.527	.479	.458	.491	.390	1.000	.314
FairTrde	.438	.330	.553	.467	.358	.314	1.000

The covariance matrix is calculated and used in the analysis.

Table 7 – 3: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Princpls	10.08	12.062	.629	.412	.820
MbCommit	10.15	12.992	.463	.289	.845
Commnity	9.99	12.069	.665	.487	.815
FairTrad	10.17	11.895	.715	.594	.808
Communy	10.05	12.306	.589	.527	.826
Prncples	9.96	12.299	.607	.429	.824
FairTrde	10.08	12.431	.556	.381	.831

Table 8: Reliability Analysis of the Internal Environment Variables

Table 8 – 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.822	.823	7

Table 8 – 2: Inter-Item Correlation Matrix

	Financial	Physical	Skills	Mgt	Training	DecsnMkg	CoopMgt
Financial	1.000	.794	.551	.112	.418	.125	.099
Physical	.794	1.000	.576	.051	.404	.105	.077
Skills	.551	.576	1.000	.222	.727	.310	.256
Mgt	.112	.051	.222	1.000	.437	.744	.661
Training	.418	.404	.727	.437	1.000	.437	.423
DecsnMkg	.125	.105	.310	.744	.437	1.000	.864
CoopMgt	.099	.077	.256	.661	.423	.864	1.000

The covariance matrix is calculated and used in the analysis.

Table 8 – 3: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Financial	12.18	11.858	.484	.648	.813
Physical	12.00	12.138	.466	.664	.815
Skills	12.05	11.374	.631	.643	.788
Mgt	11.62	11.653	.517	.591	.807
Training	11.86	11.073	.687	.620	.778
DecsnMkg	11.77	11.378	.616	.807	.790
CoopMgt	11.69	11.724	.563	.753	.799

The *Cronbach's* alpha for both the co-operative environment variables and the internal environment variables is greater than .8. Since the values of Cronbach's alpha between .7 and .8 indicate good reliability ((Field, 2005; Moser and Kalton, 1989; Bryman and Cramer, 2005), it is reasonable to assert that the questionnaire used in this study is reliable.

8.10 Survey Questions

As indicated in section 8.2 above, the specific questions included in the survey questionnaires can be grouped into four broad areas:

1. The level of satisfaction with worker co-operatives' performance as an indicator for effective achievement of objectives
2. Evaluation of worker co-operatives' goals and objectives
3. Evaluation of worker co-operatives' external environment
4. Evaluation of worker co-operatives' internal and co-operative environments

The survey questionnaires included questions on specific variables responsible for the strengths or weaknesses of worker co-operatives as outlined in the conceptual framework discussed earlier.

Similarly, questions on specific variables that create opportunities and threats (see conceptual framework) were also included.

The first part of section A and questions A1 – A5 (Appendix 3) asked for the basic statistics regarding the worker co-operatives including:

- Name and address of the worker co-operative
- Type of registration held
- Nature of product / service offered
- Number of members / workers
- Gross revenue from sales, fees or other income
- Reasons for formation

Sections A6 – A9 (see Appendix 3) asked about product / process innovations and worker co-operatives' problems and successes. These particular questions were designed to help in the

identification of those worker co-operatives which were suitable for the post-questionnaire follow-up interviews discussed in section 8.10 below. Similarly, questions B2, B4, B6 & B7 (see appendix 3) on the nature of resources and capabilities employed by worker co-operatives were designed to help in the selection of interview candidates in section 8.10. The remaining questions were formulated to gather information relevant to both the research hypotheses described in section 8.4 and the descriptive statistical analysis discussed in chapter 9. Table 9 below shows the relationships between the questionnaire items, descriptive statistics and the research hypothesis. Their link to the conceptual framework (CF1 – CF14) is also shown in table 9.

Table 9: Cross reference – Questionnaire, Descriptive Statistics and Research Hypotheses

Conceptual Framework	Questionnaire	Descriptive Statistics	Research Hypothesis
-	A1 – A5 ¹	Basic statistics	Basic statistics
-	A6 – A9	Interviewee selection	Interviewee selection
-	B2, B4, B6 & B7	Interviewee selection	Interviewee selection
CF14	A10	10.1.0 – 10.2.8, ²	H1 – H8, H12 ³
CF2 – CF6	B1	10.2.0 – 10.2.8	H1 – H8
CF7	B2	10.3.3	-
CF9 – CF13	B3	10.3.0, 10.3.1, 10.3.4,	H9, H12, H14, H15
CF1, CF10, CF11, CF13	B5	10.4.0, 10.5.0	H6, H10, H11, H13, H14, H15
CF7 – CF8	B6	10.3.2,	H16
CF7 – CF9, CF1	B7	10.3.2, 10.3.3, 10.4	H16,
	B8	10.3.0, 10.3.1	-

¹ Individual questions in the questionnaire

² Section number in chapter 10

³ Individual hypothesis

8.11 Post Questionnaire Interviews

Following the initial interview (described in section 8.4 above) and the analysis of data from the survey questionnaires, semi-structured interviews were carried out involving officials from 21 worker co-operatives. The interviews centered on the experiences and current practices of these worker co-operatives regarding specific issues and the challenges facing the worker co-operatives in Britain. In selecting these worker co-operatives, consideration was given to the following factors: membership, turnover, age, history, location, nature of business, economic success, and other information gathered from both the first interview and the survey questionnaires.

The interviews were mainly carried out by telephone due to the geographical dispersion of the worker co-operatives involved, the number of respondents and the cost implications. The interview responses were hand-recorded, transcribed and thematically analyzed. Only two of the 23 co-operatives selected for interview declined our request. One preferred written questions while the other was training a new employee and could not get time for an interview. Twenty one interviews were, hence, successfully carried out. Those interviewed included chief executives, project managers, personnel officers, company secretaries and those who preferred only the title of owner/member. The details of the co-operatives selected for the semi-structured interviews are given in table 10 below.

8.12 Interview Questions

All the interviewees were asked the following four questions:

1. Why is the co-operative model the most suitable vehicle for the achievement of your members' objectives?
2. What are the strengths and weaknesses of your worker co-operative?

3. How do you ensure that all members / workers are committed to the achievement of the goals and objectives of your worker co-operative?
4. In what areas has your worker co-operative collaborated with others and how has your co-operative benefited from such collaboration?

Other follow-up questions were asked in order to gain clarity and clear understanding of the responses to the four main questions. The responses from these interviews are discussed together with the responses from the survey-questionnaires in chapters 8 and 10 under relevant headings.

Table 10: Post Survey-Questionnaire Interviewees

Name	Person Interviewed	Product / Service Offered	Annual Turnover	Location
			£	
St Luke's Communications Ltd	Chief Operating Officer	Marketing Services	7,000,000	London
Calverts	Sales Director	Printing & Publishing	1,200,000	London
Dulas Ltd	Company Sec	Renewable Energy	5,400,000	Machynlleth, Wales
Tower Colliery Ltd	Chairman (Director)	Coal Mine	26,000,000	Aberdare, Wales
The Foster Care Co-op Ltd	Executive Director	Foster Care Placements	2,500,000	Malvern, England
Micro-Robotics Ltd	Dir Fin & Admin	Industrial Embedded Control	971,000	Cambridge
Castle Project Print Finishers	Director / Member	Print Finishing	-	Cambridge
4 Seasons	Project Manager	Horticultural Products	25,000	Hull
Carers Direct (SW) Ltd	Manager	Home Care	1,500,000	Kingsbridge, Devon
Daily Bread Co-op(Cambridge)	Manager	Whole-food Retailer	1,000,000	Cambridge
Toucan Europe	Director	Mgt of EU Funded Projects	1,100,000	Manchester
Welwyn Hatfield Leisure	Sales & Mkting Mgr	Leisure Centre Mgt	3,500,000	Welwyn Garden City
Account 3 Women	Member	Training & Consultancy	600,000	London
Co-op Assistance Network	Company Sec	Training & Consultancy	-	Southampton
SUMA	Personnel Officer	Whole-foods Distribution	21,000,000	Elland, West Yorks
Unicorn Grocery Ltd	Member	Whole-food Retailer	3,250,000	Manchester
Savant Enterprises Limited	MD	Software Dev / IT Consultancy	3,000,000	Carnforth, Lancashire
Disabled Workers Co-op	Project Manager	Online Data Services	50,000	Llandovery, Wales
The Graphics Company Ltd	Director	Graphics Design	393,000	Edinburgh
Greencity Wholefoods	Member	Manufacturer & Distributor	4,100,000	Glasgow
Bishopston Trading Company	Company Sec	Clothing Importer / Retailer	863,000	Bristol

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CHAPTER 9

EXPLORATORY STATISTICAL INFORMATION

9.1.0 Introduction

The nature and design of the survey questionnaires used in the study have been discussed in detail in section 8.6 of the previous chapter. The questions included in the questionnaires and their links to both the conceptual framework and the research hypothesis have also been examined in section 8.10. This chapter logically organizes and tabulates all the responses received pertaining to each question on the survey questionnaire. Detailed analysis of these responses together with the supplementary responses from the follow-up interviews are the subject matters for chapter 10, descriptive statistical analysis and chapter 12, research findings and discussions. Questions A8 and A9 on the co-operatives' significant problems and successes attracted several different responses. These responses helped in the selection of candidates for the post questionnaire follow-up interviews. Question A10 asked the respondents to indicate the extent to which they were satisfied with their worker co-operatives' performance within the last two years. The discussions on the responses to question A10 have been deferred to section 10.2 in the next chapter.

The first part of section A and questions A1 – A5 of the survey questionnaire asked for the basic statistics regarding the worker co-operatives. The basic statistics requested included:

- Name and address of the worker co-operative
- Type of registration held
- Nature of product / service offered
- Number of members / workers

- Gross revenue from sales, fees or other income
- Reasons for formation

The responses to question A1 indicate that about 72% of the 131 worker co-operatives surveyed are registered under the Industrial and Provident Societies Act.

9.2.0 Nature of Products / Services (A2)

It has been noted from the literature review in chapter 3 that worker co-operatives are now represented in almost all the sectors of the British economy including mining. This testifies to the fact that the concept of worker participation and ownership is applicable to all the sectors of the British economy. Question A2 requested information on the products or services offered by the 131 worker co-operatives surveyed in order to determine the sectors that they represent. The responses have been categorized as shown in table 11 below.

Table 11: Worker Co-operatives by Business Type

	Frequency	Percent
Consultancy & Professional Services	25	19.1
Printing & Publishing	20	15.3
Health Foods	12	9.2
Arts & Media	13	9.9
Leisure	8	6.1
Care & Support	15	11.5
Miscellaneous Retail	12	9.2
Others	26	19.8
Total	131	100.0

Table 11 confirms that worker co-operatives are now found in almost all of the sectors of the British economy.

9.3.0 Membership (A3)

From the discussion in section 3.9, it was noted that most of the worker co-operatives are in the micro-enterprises category with fewer than ten employees (Bibby, 2004). Question A3 therefore intended to gather information on the co-operatives' membership. The responses are summarized in table 12 below.

Table 12: Membership

	Frequency	Percent
0 - 7 Members	19	14.5
7 – 10 Members	91	69.5
Over 10 Members	21	16
Total	131	100

Although there was an error caused by an overlap in the questionnaire intervals for question A3, it is still evident from table 12 below that about 84% of the worker co-operatives have 10 or less members.

9.4.0 Gross Revenue (A4)

Question A4 sought to verify further the assertion that most worker co-operatives in Britain are in the micro-enterprise sector. The question requested information on the worker co-operatives' gross

revenues from sales, fees or other income for the most recent financial year. The responses have been summarized in Table 13 below.

Table 13: Gross Revenue

£	Frequency	Percent
0 – 500,000	93	71.0
501,000 – 1,000,000	13	9.9
Over 1,000,000	25	19.1
Total	131	100

The table confirms that most of the worker co-operatives (81%) are small (micro) enterprises with a gross turnover of less than £1 million a year.

9.5.0 Reasons for Formation (A5)

It was stated in section 3.9 that based on the motivation for formation, the worker co-operatives in Britain can be grouped into three broad areas of endowed co-operatives, rescue co-operatives and the alternative co-operatives. The response to question A5 on the motivation for forming the 131 worker co-operatives surveyed is summarized in table 14 below.

Table 14: Reasons for Formation

	Frequency	Percent
Rescue Co-operatives	13	9.9
Alternative co-operatives	114	87.0
Endowed Co-operatives	4	3.1
Total	131	100

It can be seen from table 14 that most of the worker co-operatives in Britain (87%) belong to the alternative category which has been referred to by some writers as ‘alternativist’ collectives.

9.6.0 Innovations (A6 & A7)

It was the contention in section 4.5 that worker co-operatives must identify opportunities and develop innovations that can differentiate their goods and services from competitors in ways that create additional or new value for their customers. The United Nations (1996) has recognized the co-operative movement’s capacity for innovation and entrepreneurship. Questions A6 and A7 therefore sought to establish the worker co-operatives recent (past two years) innovations by way of new or improved products and services. The responses are summarized in table 15 below.

Table 15: Innovations in Previous Two Years

	Frequency	Percent
Yes	89	67.9
No	42	32.1
Total	131	100

Table 15 shows that 67% of the worker co-operatives had new or improved products and services in the previous two years. This signifies a good level of entrepreneurship within the worker co-operative organizations.

9.7.0 External Environment (B1)

From the literature review in chapter 4 section 4.2, it was noted that the objectives of worker co-operatives can only be effectively met by systematically analyzing the external environment within which they operate in order to identify opportunities and threats. Question B1 in the survey questionnaire therefore sought to collect information on the worker co-operatives' external environmental factors. The respondents were asked to rate the extent to which the identified external environmental factors favour the performance of their worker co-operatives. Their responses are summarized in table 16 below.

Table 16: External Environmental Factors

	Favourable - (%)	Somewhat Favourable (%)	Not Favourable (%)	Total - (%)
Direction of Economy	3.1	26.0	71.0	100
Health of Industry	13.0	49.6	37.4	100
Technological Change	11.5	33.6	55.0	100
Government Policies	9.9	29.8	60.3	100
Tax Laws	10.7	20.6	68.7	100
Consumer Demand	38.2	42.0	19.8	100
Competition	11.5	19.1	69.5	100
Attitudes	23.7	28.2	48.1	100

Further discussions on each of the environmental factors listed in table 16 above found in sections 10.3.1 – 10.3.8 of the next chapter.

9.8.0 Resources – Sources of Funds (B2)

It was noted from the literature review in chapter 3 section 3.9 that worker co-operatives in Britain often have inadequate access to the financial, physical and entrepreneurial resources. This, it has been asserted, has caused their orientation towards the production of marginal goods. Question B2 therefore asked the worker co-operatives to rate different sources of funds used to finance their assets and operations. The responses are summarized in table 17 below.

Table 17: Resources – Sources of Funds

	Major Source (%)	Minor Source (%)	Not Source (%)	Total - (%)
Share Contribution	6.9	11.5	81.7	100
Retained Surplus	76.3	14.5	9.2	100
ICOF	13.0	3.1	84.0	100
Banks	13.7	24.4	61.8	100
Grants	25.2	18.3	56.5	100

Further discussion on the worker co-operatives' sources of finance is in section 10.4.3 of the next chapter.

9.9.0 Co-operative Environment (B3)

A worker co-operative's main objective is to serve the interest of their members through their direct participation in both the benefits and the governance of their enterprise. It was noted in chapter 4 section 4.4 that worker co-operatives are social capital based organizations that draw their strengths from the multi-dimensional relationships that they have with their members who are not only employees but also the owners. In question B3, the worker co-operatives were therefore asked to rate the extent to which co-operative environmental factors have helped in the achievement of their objectives. The responses have been summarized in table 18 below.

Table 18: Co-operative Environmental Factors

	Major Strength (%)	Minor Strength (%)	Not Strength (%)	Total (%)
Common Ownership	28.2	41.2	30.5	100
Co-op Principles	57.3	23.7	19.1	100
Members Commitment	61.1	22.1	16.8	100
Members Participation	57.3	25.2	17.6	100
Members Education	23.7	45.8	30.5	100
Collaboration with Other Co-ops	14.5	26.0	59.5	100
Alliances with Non-Co-ops	8.4	25.2	66.4	100
Concern for Community	45.8	32.8	21.4	100
Concern for Fair Trade	55.7	22.1	22.1	100

Further discussion on the co-operative environment is in section 10.4 of the next chapter.

9.10 Mission, Goals and Objectives (B4)

It has been pointed out in chapter 4 that an organization's mission, goals and objectives describe its unique purpose and give direction to its operations. They provide general description of the products and services to be offered and the markets to be served (Bennett, 1996; Wright *et al*, 1998; Hitt *et al*, 2003; David, 2005; Cummings and Worley, 2001). Question B4 therefore sought to find out whether the respondents have mission statements, goals and objectives and other organizational plans. The responses have been summarized in table 19 below.

Table 19: Mission, Goals and Objectives

	Yes (%)	No (%)	Don't Know (%)	Total (%)
Mission Statement	69.5	26.0	4.6	100
Goals and Objectives	96.9	3.1	0.0	100
Annual Budget	91.6	6.9	1.5	100
Long-term Financial Plan	34.4	65.6	0.0	100
Human Resource Plan	40.5	57.3	2.3	100
Marketing Plan	62.6	34.4	3.1	100

Almost all the worker co-operatives surveyed (96.9%) have goals and objectives. About 92% have annual budgets and more than 62% have marketing plans.

9.11 Worker Co-operatives Major Objectives (B5)

It was pointed out in chapter 3 that most worker co-operatives in Britain have as their objective the achievement of the economic and social well-being of their members. It was noted that in order to realize these objectives, the worker co-operatives have responded effectively to the social challenges of their communities by trying to solve the problems of unemployment and social exclusion. It was also argued in chapter 4 that in most of the sectors in which worker co-operatives operate, sustainability and competitiveness can only be realized if profitability becomes an integral part of their main objectives. Question B5 therefore asked the respondents to rate the importance of various objectives to their worker co-operatives. The responses have been summarized in Table 20 below.

Table 20: Worker Co-operatives' Major Objectives

	Major Goal (%)	Minor Goal (%)	Not Goal (%)	Total (%)
Profitability	42.7	34.4	22.9	100
Growth	24.4	48.1	27.5	100
Stability	63.4	29.8	6.9	100
Employment	70.2	22.1	7.6	100
Community Service	51.9	26.0	22.1	100
Promotion of Fair Trade	59.5	22.9	17.6	100
Promotion of Co-op Principles	44.3	32.8	22.9	100

Table 20 shows that profitability is considered as a major objective by only 43% of the respondents. Employment of members and stability of the worker co-operative are rated as being the major objective for most worker co-operatives. Detailed discussion on the co-operatives major objectives is in section 10.5 of the next chapter.

9.12 External Assistance Required (B6)

It was indicated in chapter 4 that although worker co-operatives are run by members for the benefit of members, they, like other organizations, require good management, financial probity, well trained and motivated employees, access to capital and the capacity to innovate (Co-operative Council, 1994). It was also the argument of Potter (1891, republished 1930) that worker co-operatives were not a viable form of organization because they often lacked capital; could only

afford inferior plant and machinery; lacked commercial expertise and lacked administrative discipline. Question B6 therefore asked respondents to state the extent to which external assistance was required in various areas of their worker co-operative. The responses are summarized in table 21 below.

Table 21: External Assistance Required

	Major Require- (%)	Minor Require- (%)	Not Require- (%)	Total (%)
Financial Support	74.0	13.7	12.2	100
Business development	57.3	19.1	23.7	100
Contracts Procurement	53.4	15.3	31.3	100
Business Opportunities	68.7	26.7	4.6	100
Market Information	74.8	23.7	1.5	100
Training Programmes	64.1	24.4	11.5	100
Better Management	26.0	23.7	50.4	100

Table 21 shows that worker co-operatives certainly need assistance in several areas including finance, business opportunities, and market information. Contrary to the contention of some writers (e.g. Potter, 1891), most worker co-operatives do not consider themselves as lacking good management. Further discussions on this topic are carried out in chapters 10 and 13.

9.13 Resources and Capabilities (B7)

Literature reviewed in chapter 4 argued for the leveraging of the worker co-operatives' resources and capabilities in order to take advantage of the opportunities in their external environment. It was argued that the workers / members must possess the necessary skills to manufacture the

products or deliver the services required. In addition, the worker co-operative must have a competent management to lead it. It must also have sufficient capital to finance its development costs, start-up costs and its growth. Question B7 therefore sought to establish the difficulties faced by the worker co-operatives regarding various resources and capabilities. The responses are summarized in table 22 below.

Table 22: Resources and Capabilities

	Great Difficulty (%)	Moderate Difficulty (%)	No Difficulty (%)	Total (%)
Access to Financial resources	63.4	22.9	13.7	100
Availability of Physical Resources	60.3	27.5	12.2	100
Access to Technology	13.7	22.9	63.4	100
Skilled Manpower	58.0	26.0	16.0	100
Better Management	30.5	20.6	48.9	100
Co-op Organization Structure	22.9	36.6	40.5	100
Co-op Reputation	13.0	31.3	55.7	100

It is noted from table 22 that most worker co-operatives have difficulties in acquiring financial and physical resources. They also require assistance in getting relevant skills. Most worker co-operatives do not see any problems with either their organization structure or their reputation in the market place.

9.14 Employee Ownership and Effective Performance (B8)

In chapter 3 section 3.4, it was argued (Postlethwaite *et al*, 2005; Michie *et al*, 2002) that employee owned organizations have the ability to harness the true commitment and creativity of their employees. Employees' involvement and participation do increase commitment and motivation whereas the increased commitment and motivation in turn result in increased productivity. Question B8 requested the respondents to state the extent to which the employee-ownership form of business has been helpful in relation to the various factors that influence the effective achievement of their worker co-operatives' objectives. The responses have been summarized in table 23 below.

Table 23: Employee Ownership and Effective Performance

	Very Helpful (%)	Somewhat Helpful (%)	Not Helpful (%)	Total - (%)
Employee Productivity	66.4	22.9	10.7	100
Employee Commitment	79.4	12.2	8.4	100
Work Satisfaction	71.0	19.1	9.9	100
Employee Relationship	66.4	26.0	7.6	100
Information Sharing	57.3	27.5	15.3	100
Decision Making Process	27.5	35.9	36.6	100
Employee Discipline	70.2	22.1	7.6	100
Recruitment of Qualified Staff	23.7	18.3	58.0	100
Securing External Funds	28.2	29.0	42.7	100

Table 23 shows that most worker co-operatives owe their effective performance to the employee-ownership type of business organization. That is the basis of the discipline and commitment of their members / workers. Employee-ownership is also helpful to their employee productivity and

work satisfaction. It is, however, not very helpful when it comes to decision making and to the recruitment of qualified staff.

9.15 Exploring Association between Variables

This section seeks to explore any associations that may exist between the variables in this study. Exploratory crosstabulation / chi-square tests have been carried out to establish such associations. Significant relationships may exist between the variables described in this chapter. To aid detailed investigations and discussions on these relationships, appropriate association test have been formulated in section 8.4 of chapter 8. Details on the outcome of these tests of hypothesis together with the relevant association statistics are discussed in chapter 11 where relevant contingency tables and Chi-square tests (χ^2) have been used.

There are 65 variables in this study. Since there are several association possibilities between these variables and since several SPSS tables are required to report the resultant association statistics, only variable associations relevant to the research hypothesis have been selected in this section. Relevant *Crosstab* tables have been included in the Appendix under crosstabs heading and only the *chi-square tests* and *the symmetric measures* tables are included in this section.

Since the selection of an appropriate association test depends on whether the distribution is parametric or non-parametric and whether the data is interval, ordinal or nominal (see chapter 11 for details), only the following association statistics will be relevant in this section (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003) :

- Chi-square
- Contingency coefficient

- Cramer's V
- Phi coefficient

9.15.1 Registration Law and the External Environment

It is noted in section 9.1.0 that the responses to question A1 indicate that about 72% of the 131 worker co-operatives surveyed are registered under the Industrial and Provident Societies Act (IPSAAct). This section seeks to establish whether the external environmental variables have any influence (association) on the kind of registration option selected by the worker co-operatives. To explore the existence of this association, SPSS crosstabulation and chi-square tests were carried out. The outcome regarding the direction of the economy is shown in appendix 4 – 1. The outcomes for the other variables are included in appendices 4 – 2 to 4 – 8 under the heading of 'exploring variable relationships'.

From appendices 4 - 1 to 4 – 8, it can be seen that the *p-values* for all the association statistics are more than the accepted significance limit of .05 (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003). For example, the following statistics relate to the *direction of the economy*: Chi-square = 1.052, *p-value* = .591; Cramer's V = .090, *p-value* = .591; Phi coefficient = .090, *p-value* = .591 and Contingency coefficient = .089, *p-value* = .591. It is reasonable therefore to assert that there is no positive association between the legislation under which worker co-operatives are registered and the external environmental factors of the direction of the economy, health of the industry, technological changes etc. Possible associations between the following variables have similarly been explored in chapter 11:

- Level of satisfaction and the direction of the economy
- Level of satisfaction and technological changes

- Level of satisfaction and health of the industry
- Level of satisfaction and government policies
- Level of satisfaction and tax laws
- Level of satisfaction and competition from non co-operatives
- Level of performance satisfaction and the general attitude towards co-operatives
- Level of performance satisfaction and the demand for goods and services
- Members commitment and the promotion of co-operatives principles
- Members commitment and employment as a goal
- Members commitment and stability as a goal
- Members commitment and performance satisfaction
- Members commitment and profitability as a goal.
- Members commitment and community service as a goal
- Members commitment and fair trade as a goal
- Members commitment and better management

Detailed discussions on these possible associations and relationships between the variables listed above are therefore found in chapter 11.

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CHAPTER 10

DESCRIPTIVE STATISTICAL ANALYSIS

10.1 Introduction

This chapter employs descriptive statistical approaches to analyse the information that was gathered through the survey questionnaires and the subsequent follow-up interviews. In section 8.10 of chapter 8, different parts of the survey questionnaire used for gathering the information were presented. Chapter 9 has described and tabulated all the information gathered from the survey questionnaires in their logical order. The follow-up interview questions are listed in section 8.12 of chapter 8. Since the follow-up interviews were only intended to supplement the information gathered by the survey questionnaires (see Research Design and Methodology) their responses are discussed in this chapter concurrently with those gathered from the survey questionnaires.

10.2 Performance and Level of Satisfaction

This thesis uses the ‘level of satisfaction’ with the worker co-operatives’ performance (co-operative and social performance) as an acceptable measure for objective achievement. This has been discussed in details in section 7.7 within the conceptual framework chapter. Question A10 in the survey questionnaire asked for information on the performance of each worker co-operative in the last two years under the categories of satisfactory, somewhat satisfactory and not satisfactory. Thirty nine percent of the respondents rated the performance of their worker co-operatives in the past two years as satisfactory. Seventy nine percent had either a satisfactory or a somewhat satisfactory rating. Only 21% were not satisfied (Table 24 below).

Table 24: Level of Satisfaction

	Frequency	Percent	Cumulative Percent
Satisfied	51	38.9	38.9
Somewhat Satisfied	53	40.5	79.4
Not Satisfied	27	20.6	100.0
Total	131	100.0	

One of the worker co-operatives that was satisfied with its performance is the Tower Colliery¹ of South Wales. A follow-up interview established that this co-operative was formed by the workers who opted for an employee buyout of the Tower colliery¹ after it was closed by the British Coal in April 1994. Tower Employment Buyout team (TEBO), a group selected by the workers successfully negotiated for the purchase of the mine which re-opened in 1995 as a worker co-operative. By 2005, the worker co-operative had nearly doubled its output that rose from 380,000 tonnes to about 650,000 tonnes. The turnover had also risen to about £26 million. The number of employees also increased from about 237 to 400 workers. “The co-operative model of business, with its participative and democratic governance practices is credited for this success”, said an official of the worker co-operative.

A leader of another worker co-operative with satisfactory performance was also interviewed. SUMA wholefoods, in West Yorkshire, is a wholesaler and distributor of fair trade, organic and

¹ Information received at the time of this thesis submission is that Tower Colliery has closed down due to the depletion of coal deposits in their mines.

vegetarian foods whose turnover is about £21million. It has 120 employees. SUMA was started by one man in 1974 in Leeds and was converted and registered as a worker co-operative in 1977. A SUMA official (insisted to be referred to simply as worker) interviewed for this study believes that SUMA has “grown consistently for thirty years in a fiercely competitive market by providing better service to the customers and better jobs to the workers”.

According to the official interviewed, there is no “boss” at SUMA because management decisions are taken as far as possible by democratic consensus. The General Meeting of all the members is held six times in a year and decides on business strategies, plans, and major policy decisions. A Management Committee of six people (with two places reserved for women) is elected by the General Meeting to implement its policies and decisions. The Management Committee then appoints the co-operative’s executive officers who attend the management committee meetings on advisory capacity. “The power therefore rests with the elected representatives (directors) and not with the executives” concluded the official (worker).

10.3 External Environmental Variables

Worker co-operatives in Britain operate in a highly turbulent and competitive environment. Their success or failure depends on their response to consumer demands, government policies and tax laws, direction of the economy, health of the industry, technology and socio-cultural factors.

The responses to questions on how the various variables in the external environment favour or hinder the effective performance of worker co-operatives in Britain which were presented in section 9.7 of the previous chapter are discussed further below.

10.3.1 Direction of the Economy

As shown in table 25 below, only 3% of the respondents state that the direction of the economy is favourable to the performance of their worker co-operatives. Only 29% of the respondents believe that the direction of the economy is either favourable or somewhat favourable.

Table 25: Direction of the Economy

	Frequency	Percent	Cumulative Percent
Favourable	4	3.1	3.1
Somewhat Favourable	34	26.0	29.0
Not Favourable	93	71.0	100.0
Total	131	100.0	

The direction of the economy influences the level of unemployment, the level of consumer demand, financing options, pricing options and the general changes in the level of disposable income. Since the direction of the economy influences the growth, stability and the profitability of the worker co-operatives, it is very significant therefore when 71% of the respondents consider it as being unfavourable to their performance. The failure of most of the worker co-operatives including the three Tony Benn co-operatives mentioned in the previous chapters has been directly attributed to unfavourable economic climate (Linehan & Tucker, 1983).

10.3.2 Technological Changes

Technological advancements revolutionize products, processes and communications. Although technological changes have become a major source of competitiveness in many industrial sectors, 55% of the respondents in this study consider them as being unfavourable to the performance of

their worker co-operatives in their various industries (see table 26 below).

Table 26: Technological Changes

	Frequency	Percent	Cumulative Percent
Favourable	15	11.5	11.5
Somewhat Favourable	44	33.6	45.0
Not Favourable	72	55.0	100.0
Total	131	100.0	

It has, however, been noted from the post-questionnaire follow-up interviews that some worker co-operatives have effectively used technology as a major source of their competitiveness. Dulas Ltd is a worker co-operative established in 1982 in Wales to deal with all aspects of renewable energy including initial consultancy, design, procurement and installation. It has a turnover of £5.4 million. Dulas has carried out lots of innovative work regarding energy systems and emissions reduction. It has invested in research and development of new technologies and applications and it has its own research and development capability.

Dulas has won many awards in recognition of their expertise and innovative work. These include the Queen's Award for Enterprise won for the work on solar-powered vaccine refrigerators for developing countries. Other awards include the WDA Innovative Award won in 2002. Dulas operates a respected research facility which has received funding from the European Union, the UK Department of Overseas Development and the Energy Technology Support Unit (ETSU) of the DTI. Dulas presently operates in Europe, Asia, Africa and South America providing power-based solutions on a wide range of renewable energy options.

Post-questionnaire follow-up interviews have also established that Micro-Robotics, a Cambridge-based worker co-operative has similarly used advances in technology as a major source of its competitiveness. Registered in 1984, Micro-Robotics now commands a reasonable share of the market in embedded computer control systems. The co-operative's membership includes very qualified software and electronics engineers. Half of the worker co-operative's business is in the design and supply of embedded control systems to meet individual customer specifications. Micro-Robotics has received an Academy Award for pioneering animatronic technology.

10.3.3 Health of the Industry

Worker co-operatives can now be found in all the industrial sectors of the economy including mining. The concentration of worker co-operatives in some industries including whole foods, printing and publishing and care and support services has, however, been illustrated in section 9.1.0 (table 11). Understanding the health of their industry gives the worker co-operatives a feel for how successful particular business strategies may be. Only 13% of the respondents in this study consider the health of their industry as being favourable to the performance of their worker co-operatives (see table 27 below).

Table 27: Health of Industry

	Frequency	Percent	Cumulative Percent
Favourable	17	13.0	13.0
Somewhat Favourable	65	49.6	62.6
Not Favourable	49	37.4	100.0
Total	131	100.0	

Thomas (1988) observes that worker co-operatives in the clothing sub-sector have registered more cases of failure than the industry average because they are confined almost entirely to the least profitable area of cut, make and trim (CMT). Bishopston Trading Company in Bristol is one of the few successful worker co-operatives in the clothing sub-sector. According to an official, the co-operative's success is attributed to the innovative nature of their products and business practices.

Established in 1989, the co-operative's main product is clothing for women and children. New colour schemes and fresh designs are developed for each season every year. As a Fairtrade worker co-operative, Bishopston uses Fairtrade certified organic cotton for its entire handloom clothing products. It also uses azo-free dyes and non-chlorine bleach. Bishopston is in partnership with K.V. Kuppam Tailoring Societies of India where the beautiful Madras cotton is hand-loomed into the clothing products used by Bishopston. It can be concluded from the experience of Bishopston that understanding the health of the industry and then formulating appropriate strategies can still lead to successful performance in the clothing sub-sector.

The rate of failure among the printing and publishing worker co-operatives is about the industry average due to the nature of the industry where small firms can be technologically advanced and can find a more independent, though competitive position in the market (Thomas, 1988). Calverts, a worker co-operative in the printing and publishing sub-sector has succeeded in acquiring and retaining loyal customers due to its concern for the environment and fair trade. Formed in London in 1977 as a publications design and printing co-operative, Calverts pioneered the use of recycled paper. It has achieved the Forest Stewardship council (FSC) accreditation. It can now verify through the FSC chain that its printing papers come from well-managed forests, from accredited paper mills and from 100% FSC recycled fibre. Calverts is also working with Scottish and

Southern Energy to ensure that 100% of its electricity is supplied from renewable generating capacity including wind and small scale hydro. Customers who care about the environment and fair trade have therefore found an able ally in Calverts.

Wholefood worker co-operatives, on the other hand, have done reasonably very well. They have been consistently using retained profits to build up collectively-owned assets and to help finance growth, as well as paying increased wages. SUMA wholefoods in West Yorkshire, Unicorn Grocery in Manchester and Greencity Wholefoods in Glasgow are some of the most successful worker co-operatives in Britain as discussed later in this paper.

There are also many worker co-operatives in the service industry including areas of social / public services delivery. These range from those in partnerships with local authorities to offer services for fees to those that provide free services to the disadvantaged groups of people. Along the continuum lie different shades of care and support worker co-operatives. Welwyn Hatfield Leisure in Hertfordshire, Accounts 3 Women's Consultancy in London, Foster Care Worker co-operative in Worcestershire, The Disabled Workers Co-operative in Wales, Carers Direct Worker Co-operative in Devon, and Castle Project Print Finishers in Cambridge are some of the worker co-operatives that consider the health of their service industry as being favourable.

10.3.4 Government policies

Table 28 below shows the questionnaire responses by worker co-operatives on government policies. About 40% of the respondents consider government policies to be either favourable or somewhat favourable. This position has been supported by the information gathered from the post-questionnaire follow-up interviews discussed in this section.

Table 28: Government Policies

	Frequency	Percent	Cumulative Percent
Favourable	13	9.9	9.9
Somewhat Favourable	39	29.8	39.7
Not Favourable	79	60.3	100.0
Total	131	100.0	

Government policies have major effects on the formation and the performance of worker co-operatives. Government establishes the rules governing the registration of worker co-operatives and the conduct of their businesses. Government policies regulate competition, accounting and reporting procedures, health and safety of employees, product safety, and taxation of income.

These policies can take many forms including:

- Regulatory frameworks within which worker co-operatives operate
- Industrial policies, investment allowances, cash subsidies, and regional development incentives
- Methods and procedures for setting technical standards
- Taxation and the legal environment of business

One of the worker co-operatives that has benefited greatly from its partnership with the local governments is the Co-operative assistance Network (CAN). The success of CAN is attributed to the contracts and collaboration from local authorities aimed at the development of worker co-operatives in various counties. Co-operative Assistance Network is a worker co-operative formed

in 1989 to assist in the development of co-operatives. According to a company official, CAN has helped in the formation of about 100 co-operative enterprises. Some of the local authorities that have assisted CAN include Essex, Suffolk, Croydon Borough Council, Hertfordshire, Avon, Greenwich and Southampton. CAN has provided services to worker co-operatives in the areas of training and skill development, women entrepreneurship, feasibility study, business planning, media liaison and business expansion programs.

Another worker co-operative that has benefited from government grants and contracts is the Accounts 3 Women's Consultancy in London. This worker co-operative, whose members are all women, was established in 1991. An interview with an official of the co-operative noted that apart from the promotion of women entrepreneurship, this worker co-operative strives to:

- Relieve poverty and enhance women's employment opportunities through the provision of information, support and advice
- Advance education and skills development through training
- Promote self-help through the provision of information, guidance and hands-on support.

Welwyn Hatfield Leisure in Hertfordshire is another worker co-operative that has benefited much from its partnership with a local government. According to one official interviewed for this study, Welwyn Hatfield Council has contracted out four of its leisure and sports facilities to the worker co-operative which was formed in 2004. Through a management agreement, the worker co-operative has agreed to provide quality sports, leisure and cultural facilities and activities that are affordable and accessible. With a turnover of about £3.5 million, the worker co-operative owes much of its success to the effective partnership with the local council.

Effective partnership between worker co-operatives and local authorities can similarly be credited for the success of the Foster Care Worker co-operative in Worcestershire. Registered in 1999, Foster Care works with about 40 local authorities in England and Wales to offer foster-care placements for the local authorities and give children the chance of enjoying a family life. According to the person interviewed for this study, the worker co-operative, which has a turnover of about £2.5 million, has employed a strong and competent group of social workers with good experience and background in children and family placements. It is therefore very popular with the local authorities across Britain.

10.3.5 Tax Laws

Taxes that are relevant to worker co-operatives include corporation tax, capital gains tax, capital transfer tax, value added tax and applicable local authority taxes. Only 11% of the respondents in this study consider tax laws as being favourable to the performance of their worker co-operatives. Thirty one percent of them consider tax laws to be either favourable or somewhat favourable (see table 29 below).

Table 29: Tax Laws

	Frequency	Percent	Cumulative Percent
Favourable	14	10.7	10.7
Somewhat Favourable	27	20.6	31.3
Not Favourable	90	68.7	100.0
Total	131	100.0	

Persons interviewed for this study points out that although, as a general rule, companies are allowed tax deductions when shares are awarded direct to employees, the finance Act 2003,

overrides case law and prevents a company from getting a deduction for contributions to an employee benefit trust (EBT). Contributions to an EBT are used to buy shares which are held indefinitely in trust for the employees and less money would be needed from external funders if a company's own contributions to its EBT are tax deductible. Other areas of concern include Capital Gains Taxes (CGT) levied on sales to an employee trust and the tax penalties on loans from close companies to employee trusts. Other proposals on possible tax incentive measures are discussed in section 13.6 of chapter 13.

10.3.6 Competition from Non Co-operatives

Competition from non-co-operatives appears to be one of the most commonly perceived threat that worker co-operatives in Britain face. Only 11.5% of the respondents in this study consider competition from non co-operatives to be in favour of their worker co-operatives. About 70% of the respondents consider competition from non co-operatives to be unfavourable (see table 30 below).

Table 30: Competition from Non Co-operatives

	Frequency	Percent	Cumulative Percent
Favourable	15	11.5	11.5
Somewhat Favourable	25	19.1	30.5
Not Favourable	91	69.5	100.0
Total	131	100.0	

Due to the size of most worker co-operatives, it seems difficult for them to compete successfully in those industries dominated by big business enterprises. They are however doing well in those

industries which are highly fragmented with no dominant players like care and support, wholefoods, and printing and publishing.

10.3.7 General Attitude towards Co-operatives

About 50% of the respondents in this study consider the general public attitude towards co-operatives as being unfavourable. Similarly about 50% consider the public attitude as being either favourable or somewhat favourable (see table 31 below). Stott (1986) contends that perceptions of co-operatives still tend to be negative mainly because they are seen as lacking the capacity to meet their contractual obligations and as being inflexible. Oakeshott (1978) also adds that one of the factors that explains the poor record associated with the worker co-operatives in Britain is the hostile or dismissive attitude that comes from both the Right and the Left.

Table 31: Attitude towards Co-operatives

	Frequency	Percent	Cumulative Percent
Favourable	31	23.7	23.7
Somewhat Favourable	37	28.2	51.9
Not Favourable	63	48.1	100.0
Total	131	100.0	

It is not surprising therefore that many enterprises operating on co-operative principles do not want to be associated with the term “co-operative” which they find commercially unhelpful. They instead prefer to operate under various job-ownership tags.

10.3.8 Customer Demand

Worker co-operatives use their resources and capabilities to produce goods and services that can satisfy their customers' needs. Since customers are the foundations of successful business strategies, worker co-operatives must understand well the factors that drive their customers purchasing decisions. These factors may include price, quality, service, availability and reputation.

It is encouraging therefore to note that about 80% of the questionnaire respondents in this study consider consumer demand as being either favourable or somewhat favourable (see table 32 below).

Table 32: Customer Demand

	Frequency	Percent	Cumulative Percent
Favourable	50	38.2	38.2
Somewhat Favourable	55	42.0	80.2
Not Favourable	26	19.8	100.0
Total	131	100.0	

Worker co-operatives employ different business strategies including cost leadership and product differentiation in order to retain customers. Product differentiation has been successfully used by whole foods worker co-operatives including Unicorn Grocery Ltd. The post-questionnaire interviews established that Unicorn Grocery Ltd, a worker co-operative in Manchester, has been very successful due to the unparalleled high demand for its products from the customers.

Registered in 1996, Unicorn is a rapidly expanding whole-food grocery that deals in the packaging

and retailing of dried foodstuffs and fresh organic produce. It has an annual turnover of more than £3million and aims at trading in “wholesome foodstuffs that have undergone minimum processing”. Apart from the nature and quality of their products, competitive pricing has also contributed greatly to the high demand for Unicorn’s products. Unicorn’s prices are based on the cost of the products and not the market forces of supply and demand. To ensure low prices for their products, Unicorn buys their produce directly from local producers or imports them directly from Holland and France.

10.4 C-operative and Internal Environments

One of the main strengths of worker co-operatives in Britain is their members’ loyalty and commitment. When asked to rate the extent to which different factors have helped in the achievement of objectives, 61% of the respondents identified the commitment of their members as their major strength (Table 33 below).

Table 33: Members Commitment

	Frequency	Percent	Cumulative Percent
Major Strength	80	61.1	61.1
Minor Strength	29	22.1	83.2
Not Strength	22	16.8	100.0
Total	131	100.0	

Members’ loyalty and commitment has also been given by a co-operative official as the main strength behind the success of Savant Enterprises Worker Co-operative. Savant was formed in

2001 in Carnforth, Lancashire to deal in software development and information technology consultancy. It has 32 members with a turnover of £3 million. “Software development requires a great deal of team work and is a people-based business. Employee ownership fosters the team culture and ensures that employees get recognition for their efforts”, concludes the official. As a result of members’ loyalty and commitment, staff turnover at Savant is very low. This results in a strong software development team whose skills and experience are continually growing.

According to the co-operative official, the current structure and ownership at Savant is a two-way street. The co-operative gains commitment from the staff and encourage their involvement, while at the same time, the staff gain satisfaction and reward for their efforts. Savant counts excellent communication, employee empowerment and unparalleled commitment as the secret behind their success.

It has also been observed that those worker co-operatives that boast strength from their members’ commitment also utilize co-operative principles and core values as their strategic resource (see table 34 below).

Table 34: Promotion of Co-op Principles and Members Commitment
Cross-tabulation

		Members’ Commitment			Total
		Major Strength	Minor Strength	Not Strength	
Promotion of co-op principles	Major Goal	45	8	5	58
	Minor Goal	29	9	5	43
	Not Goal	5	9	16	30
Total		79	26	26	131

Co-operative principles and core values are “unique management resources that can, when properly applied, provide competitiveness in the co-operatives positioning in the market place and in its utilization of human resources” (Davies 1996: p. 2).

10.4.1 Common Ownership

One area recommended for further research study is the impact of common ownership principles on the effectiveness of worker co-operatives. Common ownership principles as espoused by the Industrial Common Ownership Movement and as provided for under the Industrial Common Ownership Act (1976) demands that the assets of worker co-operatives should be held indivisibly for posterity thereby discouraging equity participation by the members. When asked the extent to which common ownership counts as a source of strength, the worker co-operatives gave disappointing responses. Only 28% consider common ownership of the assets of their worker co-operatives as a major strength (see table 35 below).

Table 35: Common Ownership

	Frequency	Percent	Cumulative Percent
Major strength	37	28.2	28.2
Minor strength	54	41.2	69.5
Not a strength	40	30.5	100.0
Total	131	100.0	

10.4.2 Managerial and Financial Resources

Worker co-operatives can only take advantage of the opportunities in their external environment if they have adequate resources. Responses from the worker co-operatives indicate that the major challenges faced by them include the lack of adequate financial and managerial resources as shown in table 36 below. These are resources that are, indeed, very critical to the competitiveness of any enterprise.

Table 36: Managerial and Financial Resources

	% Major Requirement	% Minor Requirement	% Not Requirement	Cumulative %
Financial Resources	74.0	13.7	12.2	100.0
Better Management	26.0	23.7	50.4	100.0

Davies (1996) points out that the myth of lay leadership and the reality of an urgent need for professional leadership for the co-operatives in the context of modern business challenges must be addressed. He argues that it is not a question of replacing lay members of the management team with experts but one of adopting of a co-operative culture that encourages the involvement of professional managers in co-operative enterprises. With the support from these professionals worker co-operative leaders should have the ability to analyse their business environment for opportunities and threats in order to formulate relevant strategies and policies.

It is evident from both table 36 above and table 37 below that about 50% of the respondents in this study were, however, satisfied with the management of their worker co-operatives.

Table 37: Need for Better Management

	Frequency	Percent	Cumulative Percent
Major Requirement	34	26	26
Minor Requirement	31	23.7	49.6
Not Requirement	66	50.4	100.0
Total	131	100.0	

10.4.3 Sources of Finance

Raising financial resources from alternative sources has become a major challenge to the worker co-operatives in Britain. Table 36 shows that about 74% of the worker co-operatives surveyed consider inadequate financial resources as a major difficulty. From table 38 below, it is noted that retained profits are considered by 76% of the worker co-operatives as their main sources of finance. Only 13.7% of the respondents rate commercial banks as their main source of capital. It is 7% for members' share contribution and 25% for grants. Although both the Industrial Common Ownership Finance (ICOF) and the Scottish Co-operative Development Committee (SCDC) have also revolving funds at the disposal of needy worker co-operatives, only 13% of the respondents rate ICOF as being their major source of finance.

Table 38: Sources of Finance

	% Major Source	% Minor Source	% Not Source	Cumulative %
Members	6.9	11.5	81.7	100.0
Banks	13.7	24.4	61.8	100.0
Retained Earnings	76.3	14.5	9.2	100.0
Grants	25.2	18.3	56.5	100.0
ICOF	13.0	3.1	84.0	100.0

10.4.4 Members' Education and Collaboration with Other Co-operatives

Table 39 below shows the responses on how helpful members' education and collaboration with other co-operatives have been to the achievement of worker co-operatives' objectives. Only eight percent (8%) of the respondents consider collaboration with other co-operatives as being helpful. Similarly only 24% consider members education as being helpful.

Table 39: Members' Education and Collaboration with Other Co-operatives

	% Major Strength	% Minor Strength	% Not Strength	Cumulative %
Members Education	23.7	45.8	30.5	100.0
Collaboration with Other Co-operatives	7.6	26.0	66.4	100.0

The Co-operative-UK's recommendation concerning the co-operative and social performance indicator number 3 on the participation of employees and members in training and education states as follows:

Training and education is a key way of helping staff to work more effectively both internally and with external stakeholders (e.g. customers), as well as providing them with the technical and specialist skills needed to carry out their job. It is also important in terms of ensuring the health, safety and well-being of employees. Training and education represent a major investment (in time and money) in an employee, and can make staff feel valued, improve job satisfaction and contribute to a motivated and loyal workforce. Competitiveness comes from the development of an organisation's human capital, and effective employee training and development can contribute to improved productivity and profits (Co-operatives-UK, 2004, p 7).

Co-operatives are jointly owned enterprises formed to meet the common needs of their members. They are owned and democratically controlled by their members. Member participation is vital for the effective operation of a co-operative, and member training and education plays an important role in enabling members to participate fully in their co-operative.

Further research studies are also recommended on the apparent failure by worker co-operatives to network and collaborate effectively amongst themselves and on why education for members has not been perceived as being very helpful to the worker co-operatives. It is through collaboration and strategic alliances in the areas of trade, provision of services, advocacy, education and research that worker co-operatives can leverage their core competencies.

10.5 Goals and Objectives

Worker co-operatives must rationally align their strengths and weaknesses with the environmental opportunities and threats in order to formulate objectives and design strategies for achieving the objectives. The objectives will signal the parts of the environment which are important to different worker co-operatives since they dictate the manner in which resources are allocated to various environmental relationships. The survey questionnaire used in this study asked respondents to rate the importance of various objectives to their worker co-operatives and the responses have been summarized in table 20 in chapter 9.

Though table 20 shows that profitability is considered as a major objective by only 43% of the respondents, worker co-operatives must, at least, break even in order to survive. It has been noted from the interviews carried out for this study that in most of the sectors in which worker co-operatives operate, sustainability and competitiveness can only be realized if profitability becomes an integral part of these enterprises' main objectives. Profitability may not be the ultimate goal for most worker co-operatives. However, it is a significant means of achieving their objective of economic and social well-being of the members.

It has similarly been noted that apart from the achievement of the economic and social well-being of members, worker co-operatives have also responded effectively to the social challenges of their communities by trying to solve the problems of unemployment and social exclusion. They have promoted the fullest possible participation in the economic and social development of groups of people who have hitherto encountered economic difficulties within the existing economic infrastructure that is not able to provide them with opportunities.

An example of a worker co-operative that is successfully dealing with the challenges of social exclusion is the 4 Seasons Worker Co-operative in East Yorkshire. It was registered in 1998 as a horticultural worker co-operative to give employment to people with learning disabilities. The co-operative is supported by a horticultural project manager and three trustees who provide valuable support and advice according to their individual areas of expertise. According to the official interviewed for this study, 4 Seasons gives the members an understanding of horticultural skills, the work ethic, and the development and running of a co-operative. Also by providing a service to the community, the members integrate with the local business and the public.

Another worker co-operative that promotes social integration of the members is the Castle Project Print Finishers. The worker co-operative, which was established in 1989 in Cambridge, draws its membership from people with mental health disabilities. The members earn their income purely from their business and the contracts are secured through competitive bidding. The co-operative also owns rental flats from which additional income is realized. According to an official from the co-operative, the members effectively participate in the management of their co-operative by way of regular meetings.

Disabled Workers Co-operative in Wales also aims at raising the independence of disabled people by enabling them to take an active role in the economy and to achieve a greater sense of self-worth and also to raise awareness of the contribution that disabled people can make to society. The co-operative was formed in 2002. It has created and maintained a national searchable database that will match the needs of individual customers wanting a product or service with a local disabled person who is able to provide that product or service. Disabled individuals are encouraged to register their details, locations and skills. The Directory is also available to organizations that employ disabled people. “The co-operative aims at developing and improving the earning potential of disabled individuals who can offer a product or service”, a co-operative official noted.

Toucan Europe is another worker co-operative whose main objective is the eradication of social exclusion. It provides innovative actions and developments that offer opportunities for economic and social integration. Toucan Europe was established in Manchester in 1994 and has a turnover of about £1.1 million. It conducts research and development and provides technical assistance, management and training for organizations within the UK, the European Union and the developing countries. Toucan works in partnerships with the government agencies in fields of education, social and healthcare services. It gets funding and projects from both the UK government and the European Union. “The projects are mainly those aimed at promoting the participation and integration of socially excluded people within society” an official said.

The emergence of many social care worker co-operatives also confirms the ability and resolve of worker co-operatives to deal with the issue of social protection in Britain. Carers Direct Worker Co-operative in Devon was registered in 2003 to provide home care. It has a turnover of about £1.5 million and is “committed to providing a flexible and reliable service for people of all ages to enable them to remain independent and in their own homes”, an official said. The services provided by Carers Direct include: personal care, shopping, companionship, light housework and cooking and outings or appointments.

Post-questionnaire interviews carried out for this study also established that most worker co-operatives are critical of the ecologically destructive tendencies of most conventional businesses. Environmental sustainability has therefore become one of the main objectives of most worker co-operatives. St Luke’s Communications, an advertising and marketing worker co-operative in London was registered in 1995. It has a turnover of about £7 million. St Luke’s Communications takes its environmental responsibilities very seriously by promoting recycling, powering their building with renewable electricity and by being a carbon neutral company. They measure their

carbon dioxide emissions every year and take necessary corrective measures. St Luke's was voted the second best small company to work for in the UK by the Sunday Times in 2004.

An interview with an official of the Graphics Company in Edinburgh established that the worker co-operative is at the forefront of those enterprises insisting on the use of environmentally-friendly materials. The worker co-operative was formed in 1989 and it specializes in communication design for charities and public sector organizations in Scotland. The Graphic Company's environmental responsibility does not end with the use of recycled paper. It is extended to cups, pens, pencils, bags, pencil cases, paper fixings and vegetable inks. They even take the trouble of inspecting the mills where their papers are made to ensure that they too are environmentally-friendly. As pointed out in section 9.3.3 above, Calverts is another worker co-operative with an environmental bottom-line.

Table 20 in chapter 9 shows that 52% of the survey questionnaire responses consider community service as one of the main objectives for their worker co-operative. About 60% of those responses consider the promotion of fair trade as one of their co-operative's main goals. During a post-questionnaire interview, an official from Greencity Wholefoods confirmed their belief that, in the long term, it is to the advantage of their co-operative that the community in which it is based flourishes. They are therefore actively involved in the promotion of awareness of both wholefoods and the principles of cooperation in their community. They would like to see the general principles of co-operation and non-violence applied to the society at large.

Greencity Wholefoods is a worker co-operative established in 1978 in Glasgow. It is a manufacturer and distributor of wholefoods with a turnover of about £4 million. The aim of the co-operative is to create a non-exploitative workplace which takes into consideration the interests of the workers, the community and the environment as a whole. "Greencity Wholefoods promotes

local producers by buying from them whenever possible” said the co-operative official. They supply retailers and restaurants throughout Scotland with over 4000 different products, all of which are vegetarian and GM-free. They promote Vegan, Fair-Trade, Gluten Free and Organic products. Their most popular product is muesli. “Greencity Wholefoods support peaceful action against the exploitation of animals and do not sell any products tested on animals” the official added.

Concern for community and fair trade are similarly among the main objectives of the Daily Bread worker co-operative in Cambridge. Registered in 1992, Daily Bread is a wholefood retailer with a turnover of about £1 million. The person interviewed for this study contended that at Daily Bread, people come before profit. Although they seek to make surplus in order to cover business costs and to create more jobs, wealth is not pursued for its own sake. The co-operative official added that the co-operative’s main aim is to be a responsible steward of the earth, the environment and the community.

In order to be responsible to the community, Daily Bread is involved in local projects aimed at improving people’s health and livelihoods. They also, as far as possible, source their goods from local producers and pay fair prices. All products are sourced as ethically as possible and attempts are made to stock goods that carry the Fair Trade mark. Suppliers have to give guarantees that they are not involved in the exploitation of workers or natural resources nor irresponsible marketing practices. The interview also established that Daily Bread gives some of its income to support projects that empower people who have suffered from unfair trading practices.

It also follows from table 20 in chapter 9 above that stability of the enterprise and the provision of decent employment to members are the main objectives of most worker co-operatives in Britain. It is disappointing however to note that more than 50% of worker co-operatives do not regard the

promotion of co-operative principles and core values as one of their major objectives. These principles and core values are the ones that set aside the co-operatives and give them their unique capabilities that build their comparative advantages. Further research work is recommended to establish the reasons behind the apparent lack of enthusiasm regarding the promotion of co-operative principles and core values by some worker co-operatives.

Further discussions on this descriptive statistical analysis and the necessary conclusions have been carried out in chapters 11 and 12.

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CHAPTER 11

TESTS OF RESEARCH HYPOTHESIS

11.1 Introduction

Chapter 10 deals with the descriptive statistical analysis of the research data including frequency measurements of most of the variables in this study. It has however been noted (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003) that most social research studies are also interested in the relationships between the variables. This research is no exception. The tests of research hypotheses formulated for this study (section 8.4) are carried out in this chapter. Various chi-square tests have been formulated to test these hypotheses and hence investigate the relationships between the study variables.

The selection of an appropriate association test depends on different factors including the nature of the distribution and the level of the measurement. That is whether the distribution is parametric or non-parametric and whether the data is interval, ordinal or nominal. Since the data pertaining to this study are either ordinal or nominal, only the following association statistics will be utilized:

- Spearman's rank correlation
- Chi-square
- Contingency coefficient
- Cramer's V
- Phi coefficient

The use of Spearman's rank correlation statistic is appropriate when the research data is measured at the ordinal level and hence non-parametric. When the data is interval (continuous), then the

Pearson's correlation coefficient would be the one appropriate. The Pearson's chi-square statistic measures the relationship between two categorical variables by comparing frequencies observed to those expected. Cramer's V and the Phi coefficient statistics measure the strength of associations between two categorical variables. Phi coefficient is, however, more accurate for 2 x 2 contingency tables. For tables with greater than two dimensions, the value of Phi coefficient may not lie between 0 and 1 (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003).

11.2 Level of Satisfaction and the Direction of the Economy

In the descriptive statistical analysis of chapter 10, we found out that although only 3% of the respondents consider the direction of the economy as being favourable to the performance of their co-operatives, 79% of them were either satisfied or somewhat satisfied with the performance. Other factors may have therefore contributed to the level of their performance satisfaction. To investigate the relationship between the level of performance satisfaction and the direction of the economy, the following hypothesis was formulated:

Hypothesis 1 (H1): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the direction of the economy.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the direction of the economy. Table 40 - 1 below shows the outcome.

Table 40 - 1: Level of Satisfaction and the Direction of the Economy

Table 40 - 1a: Satisfd * Economy Crosstabulation

Count

		Economy			Total
		Fav	Somewht	NotFav	
Satisfd	satisfd	2	14	35	51
	Somewhat	1	17	35	53
	Not	1	3	23	27
Total		4	34	93	131

Table 40 - 1b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.490(a)	4	.344	.329		
Likelihood Ratio	5.052	4	.282	.361		
Fisher's Exact Test	4.950			.259		
Linear-by-Linear Association	1.361(b)	1	.243	.273	.146	.045
N of Valid Cases	131					

Table 40 - 1c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.185			.344	.329
	Cramer's V	.131			.344	.329
	Contingency Coefficient	.182			.344	.329
Interval by Interval	Pearson's R	.102	.085	1.168	.245(c)	.273
Ordinal by Ordinal	Spearman Correlation	.102	.083	1.162	.248(c)	.243
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the direction of the economy (Spearman's $\rho = .102$, $p > .05$; Chi-square = 4.490, $p > .05$; Cramer's $V = .131$, $p > .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .185, $p > .05$ and Contingency coefficient = .182, $p > .05$).

11.3 Level of Satisfaction and Technological Changes

It has also been noted from the descriptive statistical analysis of chapter 10 that 55% of the respondents consider technological changes as being unfavourable to the performance of their co-operatives. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on technological changes, the following hypothesis was formulated:

Hypothesis 2 (H2): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on technological changes. Spearman's rank correlation, Chi-square and Cramer's V measures were similarly used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on technological changes. Table 40 - 2 below shows the outcome.

Table 40 - 2: Level of Satisfaction and Technological Changes

Table 40 - 2a: Satisfd * Technlgy Crosstabulation

Count		Technlgy			Total
		Fav	Somewht	NotFav	
Satisfd	satisfd	8	14	29	51
	Somewhat	6	21	26	53
	Not	1	9	17	27
Total		15	44	72	131

Table 40 - 2b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.046(a)	4	.400	.406		
Likelihood Ratio	4.478	4	.345	.364		
Fisher's Exact Test	3.908			.418		
Linear-by-Linear Association	.841(b)	1	.359	.401	.203	.045
N of Valid Cases	131					

Table 40 - 2c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.176			.400	.406
	Cramer's V	.124			.400	.406
	Contingency Coefficient	.173			.400	.406
Interval by Interval	Pearson's R	.080	.083	.917	.361(c)	.401
Ordinal by Ordinal	Spearman Correlation	.051	.086	.576	.566(c)	.566
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

Again, it can similarly be concluded from the outcome above, that there is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on technological changes (Spearman's $\rho = .051$, $p > .05$; Chi-square = 4.046, $p > .05$; Cramer's $V = .124$, $p > .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .176, $p > .05$ and Contingency coefficient = .173, $p > .05$).

11.4 Level of Satisfaction and Health of the Industry

Worker co-operatives are found in almost all the industrial sectors of the British economy. It has been noted from the descriptive statistical analysis of chapter 10 that about 63% of the respondents consider the health of their various industries as being either favourable or somewhat favourable to the performance of their worker co-operatives. In order to determine the type of relationship that exists between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the health of their relevant industries, the following hypothesis was formulated:

Hypothesis 3 (H3): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the health of their relevant industries. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the health of their relevant industries. Table 40 - 3 below shows the outcome.

Table 40 - 3: Level of Performance Satisfaction and the Health of Industries

Table 40 - 3a: Satisfd * Industry Crosstabulation

Count

		Industry			
		Fav	Somewht	NotFav	Total
Satisfd	satisfd	12	28	11	51
	Somewhat	5	26	22	53
	Not	0	11	16	27
Total		17	65	49	131

Table 40 - 3b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	16.218(a)	4	.003	.002		
Likelihood Ratio	19.024	4	.001	.001		
Fisher's Exact Test	16.196			.002		
Linear-by-Linear Association	15.867(b)	1	.000	.000	.000	.000
N of Valid Cases	131					

Table 40 - 3c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.352			.003	.002
	Cramer's V	.249			.003	.002
	Contingency Coefficient	.332			.003	.002
Interval by Interval	Pearson's R	.349	.071	4.235	.000(c)	.000
Ordinal by Ordinal	Spearman Correlation	.345	.075	4.178	.000(c)	.000
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to conclude that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the health of their relevant industries (Spearman's $\rho = .345$, $p < .05$; Chi-square = 16.218, $p < .05$; Cramer's $V = .249$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .352, $p < .05$ and Contingency coefficient = .332, $p < .05$).

11.5 Level of Satisfaction and Government Policies

It has been pointed out in section 10.3.4 that about 40% of the questionnaire respondents considers government policies to be either favourable or somewhat favourable. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of government policies the following hypothesis was formulated:

Hypothesis 4 (H4): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of government policies.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of government policies. Table 40 - 4 below shows the outcome.

Table 40 - 4: Level of Satisfaction and Government Policies

Table 40 - 4a: Satisfd * GovPolicy Crosstabulation

Count

		GovPolicy			
		Fav	Somewht	NotFav	Total
Satisfd	satisfd	8	20	23	51
	Somewhat	4	15	34	53
	Not	1	4	22	27
Total		13	39	79	131

Table 40 - 4b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	10.750(a)	4	.030	.028		
Likelihood Ratio	11.164	4	.025	.031		
Fisher's Exact Test	10.236			.031		
Linear-by-Linear Association	9.840(b)	1	.002	.002	.001	.000
N of Valid Cases	131					

Table 40 - 4c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.286			.030	.028
	Cramer's V	.203			.030	.028
	Contingency Coefficient	.275			.030	.028
Interval by Interval	Pearson's R	.275	.078	3.250	.001(c)	.002
Ordinal by Ordinal	Spearman Correlation	.284	.080	3.367	.001(c)	.001
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of government policies. (Spearman's $\rho = .284$, $p < .05$; Chi-square = 10.750, $p < .05$; Cramer's $V = .286$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .286, $p < .05$ and Contingency coefficient = .275, $p < .05$).

11.6 Level of Satisfaction and Tax Laws

Table 29 in chapter 10 shows that only 11% of the respondents rated tax laws as being favourable to the performance of their worker co-operatives. About 69% of the respondents consider the tax laws as being unfavourable to their performance. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of various tax laws the following hypothesis was formulated:

Hypothesis 5 (H5): There is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of various tax laws. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of tax laws. Table 40 - 5 below shows the outcome.

Table 40 - 5: Level of Satisfaction and Tax Laws

Table 40 - 5a: Satisfd * TaxLaws Crosstabulation

		TaxLaws			
		Fav	Somewht	NotFav	Total
Satisfd	satisfd	6	10	35	51
	Somewhat	5	9	39	53
	Not	3	8	16	27
Total		14	27	90	131

Table 40 - 5b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2.101(a)	4	.717	.734		
Likelihood Ratio	2.010	4	.734	.752		
Fisher's Exact Test	2.220			.710		
Linear-by-Linear Association	.127(b)	1	.721	.733	.392	.064
N of Valid Cases	131					

Table 40 - 5c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.127			.717	.734
	Cramer's V	.090			.717	.734
	Contingency Coefficient	.126			.717	.734
Interval by Interval	Pearson's R	-.031	.089	-.355	.723(c)	.733
Ordinal by Ordinal	Spearman Correlation	-.038	.090	-.428	.669(c)	.671
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to conclude that there is no positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of tax laws (Spearman's $\rho = -.038$, $p > .05$; Chi-square = 2.101, $p > .05$; Cramer's $V = .090$, $p > .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .127, $p > .05$ and Contingency coefficient = .126, $p > .05$).

11.7 Level of Satisfaction and Competition from Non Co-operatives

Descriptive statistical analysis of data in chapter 10 shows that 12% of the respondents consider their worker co-operatives to be competing favourably with non-co-operatives (table 30). About 31% of the respondents consider competition from non co-operatives as being either favourable or somewhat favourable. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of competition from non co-operatives, the following hypothesis was formulated:

Hypothesis 6 (H6): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of competition from non co-operatives. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of competition from non co-operatives. Table 40 - 6 below shows the outcome.

Table 40 - 6: Level of Performance Satisfaction and Competition from Non Co-operatives

Table 40 - 6a: Satisfd * Cmpetitn Crosstabulation

		Cmpetitn			Total
		Fav	Somewht	NotFav	
Satisfd	satisfd	12	12	27	51
	Somewhat	3	11	39	53
	Not	0	2	25	27
Total		15	25	91	131

Table 40 - 6b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	17.890(a)	4	.001	.001		
Likelihood Ratio	20.338	4	.000	.001		
Fisher's Exact Test	16.974			.001		
Linear-by-Linear Association	16.329(b)	1	.000	.000	.000	.000
N of Valid Cases	131					

Table 40 - 6c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.370			.001	.001
	Cramer's V	.261			.001	.001
	Contingency Coefficient	.347			.001	.001
Interval by Interval	Pearson's R	.354	.064	4.305	.000(c)	.000
Ordinal by Ordinal	Spearman Correlation	.345	.073	4.180	.000(c)	.000
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the impact of competition from non co-operatives (Spearman's $\rho = .345$, $p < .05$; Chi-square = 17.890, $p < .05$; Cramer's $V = .261$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .370, $p < .05$ and Contingency coefficient = .347, $p < .05$).

11.8 Level of Satisfaction and the General Attitude towards Co-operatives

Section 10.3.7 in the chapter 10 indicates that 50% of the worker co-operatives surveyed rated the general attitude towards co-operatives as being unfavourable. About 50% of them scored a rating of either favourable or somewhat favourable. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives, the following hypothesis was formulated:

Hypothesis 7 (H7): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives. Table 40 - 7 below shows the outcome.

Table 40 - 7: Level of Performance Satisfaction and the General Attitude towards Co-operatives

Table 40 - 7a: Satisfd * Attitude Crosstabulation

		Attitude			
		Fav	Somewht	NotFav	Total
Satisfd	satisfd	21	9	21	51
	Somewhat	5	21	27	53
	Not	5	7	15	27
Total		31	37	63	131

Table 40 - 7b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	16.865(a)	4	.002	.002		
Likelihood Ratio	17.087	4	.002	.002		
Fisher's Exact Test	16.432			.002		
Linear-by-Linear Association	5.157(b)	1	.023	.026	.013	.004
N of Valid Cases	131					

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.39.

b The standardized statistic is 2.271.

Table 40 - 7c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.359			.002	.002
	Cramer's V	.254			.002	.002
	Contingency Coefficient	.338			.002	.002
Interval by Interval	Pearson's R	.199	.089	2.308	.023(c)	.026
Ordinal by Ordinal	Spearman Correlation	.192	.090	2.219	.028(c)	.028
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is again reasonable to conclude that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives (Spearman's $\rho = .192$, $p < .05$; Chi-square = 16.865, $p < .05$; Cramer's $V = .254$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .359, $p < .05$ and Contingency coefficient = .338, $p < .05$).

11.9 Level of Satisfaction and the Demand for Goods and Services

One of the most significant issues arising from the exploratory analysis of data in chapter ten is the fact that consumer demand is rated very favourably by the worker co-operatives. About 80% of the respondents consider the demand for their co-operatives' products and services as being either favourable or somewhat favourable. To investigate the relationship between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the demand for their products and services from customers, the following hypothesis was formulated:

Hypothesis 8 (H8): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the demand for their products and services from customers.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the demand for their products and services from customers. Table 40 - 8 below shows the outcome.

Table 40 - 8: Level of Performance Satisfaction and the Demand for Products and Services

Table 40 - 8a: Satisfd * Demand Crosstabulation

		Demand			Total
		Fav	Somewht	NotFav	
Satisfd	satisfd	29	18	4	51
	Somewhat	17	25	11	53
	Not	4	12	11	27
Total		50	55	26	131

Table 40 - 8b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	19.629(a)	4	.001	.001		
Likelihood Ratio	19.955	4	.001	.001		
Fisher's Exact Test	19.203			.001		
Linear-by-Linear Association	18.794(b)	1	.000	.000	.000	.000
N of Valid Cases	131					

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.36.

b The standardized statistic is 4.335.

Table 40 - 8c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.387			.001	.001
	Cramer's V	.274			.001	.001
	Contingency Coefficient	.361			.001	.001
Interval by Interval	Pearson's R	.380	.077	4.669	.000(c)	.000
Ordinal by Ordinal	Spearman Correlation	.379	.077	4.646	.000(c)	.000
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and their ratings on the general attitude towards co-operatives (Spearman's $\rho = .379$, $p < .05$; Chi-square = 19.629, $p < .05$; Cramer's $V = .274$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .387, $p < .05$ and Contingency coefficient = .361, $p < .05$).

11.10 Members Commitment and the Promotion of Co-operative Principles

A reasonable conclusion can be made from the discussion in chapter 10 that one of the main strengths of worker co-operatives in Britain is the commitment from their members. About 60% of the respondents identify members' commitment as being their co-operative's major strength. Since the main distinguishing feature for worker co-operatives is their adherence to the co-operative principles and core values, this study set out to investigate the association between the extent to which worker co-operatives pursue the promotion of co-operative principles and core values as a goal and the level of their members' commitment. The following hypothesis was formulated for this purpose:

Hypothesis 9 (H9): There is a positive association between the extent to which worker co-operatives pursue the promotion of co-operative principles and core values as a goal and the level of their members commitment. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue the promotion of co-operative principles and core values as a goal and the level of their members' commitment. Table 40 - 9 below shows the outcome.

Table 40 - 9: Co-operatives Principles and Core Values and the Level of Members Commitment

Table 40 - 9a: MbCommit * Pncples Crosstabulation

Count

		Pncples			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	45	29	5	79
	MnrStrth	8	9	9	26
	NotStrth	5	5	16	26
Total		58	43	30	131

Table 40 - 9b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	37.459(a)	4	.000	.000		
Likelihood Ratio	36.820	4	.000	.000		
Fisher's Exact Test	35.772			.000		
Linear-by-Linear Association	29.856(b)	1	.000	.000	.000	.000
N of Valid Cases	131					

Table 40 - 9c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.535			.000	.000
	Cramer's V	.378			.000	.000
	Contingency Coefficient	.472			.000	.000
Interval by Interval	Pearson's R	.479	.077	6.201	.000(c)	.000
Ordinal by Ordinal	Spearman Correlation	.457	.078	5.842	.000(c)	.000
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it can be reasonably concluded that there is a positive association between the extent to which worker co-operatives pursue the promotion of co-operative principles and core values as a goal and the level of their members commitment (Spearman's $\rho = .457$, $p < .05$;

Chi-square = 37.459, $p < .05$; Cramer's $V = .378$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .535, $p < .05$ and Contingency coefficient = .472, $p < .05$).

11.11 Members Commitment and Employment as a Goal

Table 20 in chapter 9 shows that 70% of the respondents consider employment of members as the main objective of their worker co-operatives. As already stated in chapter 3, the main objective of most worker co-operatives is to create and maintain sustainable jobs for their members. It was also stated in chapter one that it is the goal of these worker co-operatives to offer their members decent work that encompasses conditions of freedom, equity and human dignity and adequate social protection. Thomas (1988) confirms also that worker co-operatives have tended to concentrate locally in areas of high unemployment in Britain. To investigate the relationship between the extent to which worker co-operatives pursue the employment of members as a goal and the level of their members' commitment, the following hypothesis was formulated:

Hypothesis 10 (H10): There is a positive association between the extent to which worker co-operatives pursue the employment of members as a goal and the level of their members' commitment. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue the employment of members as a goal and the level of their members' commitment. Table 40 - 10 below shows the outcome.

Table 40 - 10: Employment as a Goal and the Level of Members Commitment

Table 40 - 10a: MbCommit * Emplymnt Crosstabulation

Count

		Emplymnt			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	64	11	4	79
	MnrStrth	8	14	4	26
	NotStrth	20	4	2	26
Total		92	29	10	131

Table 40 - 10b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	24.720(a)	4	.000	.000		
Likelihood Ratio	22.851	4	.000	.000		
Fisher's Exact Test	22.848			.000		
Linear-by-Linear Association	2.391(b)	1	.122	.136	.075	.021
N of Valid Cases	131					

Table 40 - 10c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.434			.000	.000
	Cramer's V	.307			.000	.000
	Contingency Coefficient	.398			.000	.000
Interval by Interval	Pearson's R	.136	.084	1.555	.122(c)	.136
Ordinal by Ordinal	Spearman Correlation	.201	.086	2.331	.021(c)	.021
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is a positive association between the extent to which worker co-operatives pursue the employment of members as a goal and the level of their members commitment (Spearman's $\rho = .201$, $p < .05$; Chi-square = 24.720, $p < .05$; Cramer's $V = .307$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .434, $p < .05$ and Contingency coefficient = .398, $p < .05$).

11.12 Members Commitment and Stability as a Goal

It has also been noted from table 20 in chapter 9 that 63% of the respondents consider the stability of their worker co-operative as being a major goal for their co-operatives. In this section, the study seeks to determine the type of relationship between the extent to which worker co-operatives pursue stability of their enterprises as a goal and the level of their members' commitment. The following hypothesis was therefore formulated for testing:

Hypothesis 11 (H11): There is a positive association between the extent to which worker co-operatives pursue stability of their enterprises as a goal and the level of their members' commitment. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue stability of their enterprises as a goal and the level of their members' commitment. Table 40 - 11 below shows the outcome.

Table 40 - 11: Stability as a Goal and the Level of Members Commitment

Table 40 - 11a: MbCommit * Stability Crosstabulation

Count

		Stability			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	59	16	4	79
	MnrStrth	6	16	4	26
	NotStrth	18	7	1	26
Total		83	39	9	131

Table 40 - 11b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	23.152(a)	4	.000	.000		
Likelihood Ratio	22.825	4	.000	.000		
Fisher's Exact Test	22.520			.000		
Linear-by-Linear Association	2.014(b)	1	.156	.160	.094	.025
N of Valid Cases	131					

Table 40 - 11c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.420			.000	.000
	Cramer's V	.297			.000	.000
	Contingency Coefficient	.388			.000	.000
Interval by Interval	Pearson's R	.124	.082	1.425	.157(c)	.160
Ordinal by Ordinal	Spearman Correlation	.198	.087	2.297	.023(c)	.023
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it can be reasonably concluded that there is a positive association between the extent to which worker co-operatives pursue stability of their enterprises as a goal and the level of their members commitment (Spearman's $\rho = .198$, $p < .05$; Chi-square = 23.152, $p < .05$; Cramer's $V = .297$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .420, $p < .05$ and Contingency coefficient = .388, $p < .05$).

11.13 Members Commitment and Performance Satisfaction

The study by Michie *et al* (2002) described in section 3.13 concluded that employee involvement and participation does increase employee commitment and motivation. When asked to rate the extent to which different factors have helped in the achievement of objectives, 60% of the worker co-operatives identified commitment of their members as their major strength (Table 33). A test was therefore formulated to assess the association between the worker co-operatives' level of satisfaction with the previous two years performance and the level of the members' commitment as follows:

Hypothesis 12 (H12): There is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the level of the members commitment.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the worker co-operatives' level of satisfaction with the previous two years performance and the level of the members commitment. Table 40 - 12 below shows the outcome.

Table 40 - 12: Members Commitment and Performance Satisfaction

Table 40 - 12a: MbCommit * Satisfd Crosstabulation

Count

		Satisfd			Total
		satisfd	Somewhat	Not	
MbCommit	MjrStrth	30	41	8	79
	MnrStrth	12	9	5	26
	NotStrth	9	3	14	26
Total		51	53	27	131

Table 40 - 12b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	26.813(a)	4	.000	.000		
Likelihood Ratio	25.388	4	.000	.000		
Fisher's Exact Test	24.590			.000		
Linear-by-Linear Association	6.319(b)	1	.012	.013	.007	.003
N of Valid Cases	131					

Table 40 - 12c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.452			.000	.000
	Cramer's V	.320			.000	.000
	Contingency Coefficient	.412			.000	.000
Interval by Interval	Pearson's R	.220	.095	2.567	.011(c)	.013
Ordinal by Ordinal	Spearman Correlation	.169	.097	1.952	.053(c)	.053
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

Although Spearman's rho has an exact significance of .053 which is greater than the .05 level, the other four measures (Chi-square, Cramer's V, Phi, and Contingency coefficient) have a significance level of less than .05. It is therefore reasonable to conclude that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the level of the members commitment (Spearman's rho = .169, $p = .053$; Chi-square = 26.813, $p < .05$; Cramer's V = .320, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .452, $p < .05$ and Contingency coefficient = .412, $p < .05$).

11.14 Members Commitment and Profitability as a Goal

Although 57% of the respondents do not consider profitability as a major objective for their worker co-operatives (table 20), sustainability and competitiveness can only be realized if profitability becomes an integral part of the co-operatives' main objectives. Although profitability may not be the ultimate goal for most worker co-operatives, it can be a means of achieving their economic and social objectives. In order to determine the nature of the relationship between the extent to which worker co-operatives pursue profitability as a goal and the level of their members' commitment, the following hypothesis was formulated.

Hypothesis 13 (H13): There is no positive association between the extent to which worker co-operatives pursue profitability as a goal and the level of their members' commitment.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue profitability as a goal and the level of their members' commitment. Table 40 - 13 below shows the outcome.

Table 40 - 13: Members Commitment and Profitability as a Goal

Table 40 - 13a: MbCommit * Profit Crosstabulation

Count

		Profit			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	33	28	18	79
	MnrStrth	15	7	4	26
	NotStrth	8	10	8	26
Total		56	45	30	131

Table 40 - 13b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.166(a)	4	.384	.390		
Likelihood Ratio	4.171	4	.383	.397		
Fisher's Exact Test	4.041			.406		
Linear-by-Linear Association	.386(b)	1	.534	.580	.290	.045
N of Valid Cases	131					

Table 40 - 13c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.178			.384	.390
	Cramer's V	.126			.384	.390
	Contingency Coefficient	.176			.384	.390
Interval by Interval	Pearson's R	.055	.088	.620	.536(c)	.580
Ordinal by Ordinal	Spearman Correlation	.028	.088	.314	.754(c)	.758
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it is reasonable to assert that there is no positive association between the extent to which worker co-operatives pursue profitability as a goal and the level of their members' commitment (Spearman's $\rho = .028$, $p > .05$; Chi-square = 4.166, $p > .05$; Cramer's $V = .126$, $p > .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .178, $p > .05$ and Contingency coefficient = .176, $p > .05$).

11.15 Members Commitment and Community Service as a Goal

Many worker co-operatives are formed in response to the social challenges of various communities including the problems of unemployment and social exclusion. From table 20 in chapter 10, it was noted that 52% of the respondents consider service to the community as a major objective for their worker co-operative. In order to determine the nature of the relationship between the extent to which worker co-operatives pursue community well-being as a goal and the level of their members' commitment, the following hypothesis was formulated.

Hypothesis 14 (H14): There is a positive association between the extent to which worker co-operatives pursue community well-being as a goal and the level of their members' commitment. Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue community well-being as a goal and the level of their members' commitment. Table 40 - 14 below shows the outcome.

Table 40 - 14: Members Commitment and Community Well Being as a Goal

Table 40 - 14a: MbCommit * Community Crosstabulation

Count		Community			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	42	27	10	79
	MnrStrth	15	5	6	26
	NotStrth	11	2	13	26
Total		68	34	29	131

Table 40 - 14b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	18.840(a)	4	.001	.001		
Likelihood Ratio	18.181	4	.001	.002		
Fisher's Exact Test	17.346			.001		
Linear-by-Linear Association	6.049(b)	1	.014	.015	.009	.003
N of Valid Cases	131					

Table 40 - 14c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.379			.001	.001
	Cramer's V	.268			.001	.001
	Contingency Coefficient	.355			.001	.001
Interval by Interval	Pearson's R	.216	.093	2.509	.013(c)	.015
Ordinal by Ordinal	Spearman Correlation	.162	.094	1.870	.064(c)	.064
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

Although Spearman's rho has an exact significance of .064 which is greater than the .05 level, the other four measures (Chi-square, Cramer's V, Phi, and Contingency coefficient) confirm that there is a relationship. It is therefore reasonable to conclude that there is a positive association between the extent to which worker co-operatives pursue community well-being as a goal and the level of their members' commitment (Spearman's rho = .162, $p > .05$; Chi-square = 18.840, $p < .05$; Cramer's V = .268, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .379, $p < .05$ and Contingency coefficient = .355, $p < .05$).

11.16 Members Commitment and Fair Trade as a Goal

According to most people interviewed for this study, many worker co-operatives, especially those in the whole-foods sector, strive to create a non-exploitative workplace which takes into consideration the interests of the workers, the community and the environment as a whole. This category of worker co-operatives supports action against the exploitation of animals and do not sell any products tested on animals. They source their products as ethically as possible and attempts are made to stock goods that carry the Fair Trade mark. Their suppliers are also to give guarantees that they are not involved in the exploitation of workers or natural resources nor irresponsible marketing practices.

As shown in table 20 of chapter 9, fair and ethical trading is considered by 60% of the respondents as being a major objective for their worker co-operative. In order to test the relationship between the extent to which worker co-operatives pursue fair trade as a goal and the level of their members' commitment, the following hypothesis was formulated:

Hypothesis 15 (H15): There is a positive association between the extent to which worker co-operatives pursue fair trade as a goal and the level of their members' commitment.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives pursue fair trade as a goal and the level of their members' commitment. Table 40 - 15 below shows the outcome.

Table 40 - 15: Members Commitment and Fair Trade as a Goal

Table 40 - 15a: MbCommit * FairTrad Crosstabulation

		FairTrad			Total
		MjrGoal	MnrGoal	NotGoal	
MbCommit	MjrStrth	56	14	9	79
	MnrStrth	15	9	2	26
	NotStrth	7	7	12	26
Total		78	30	23	131

Table 40 - 15b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	24.297(a)	4	.000	.000		
Likelihood Ratio	22.106	4	.000	.000		
Fisher's Exact Test	21.661			.000		
Linear-by-Linear Association	17.672(b)	1	.000	.000	.000	.000
N of Valid Cases	131					

Table 40 - 15c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.431			.000	.000
	Cramer's V	.305			.000	.000
	Contingency Coefficient	.396			.000	.000
	Pearson's R	.369	.089	4.505	.000(c)	.000
Ordinal by Ordinal	Spearman Correlation	.342	.087	4.133	.000(c)	.000
N of Valid Cases		131				

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

From the outcome above, it can be concluded that there is a positive association between the extent to which worker co-operatives pursue fair trade as a goal and the level of their members' commitment (Spearman's $\rho = .342$, $p < .05$; Chi-square = 24.297, $p < .05$; Cramer's $V = .305$, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .431, $p < .05$ and Contingency coefficient = .396, $p < .05$).

11.17 Members Commitment and Better Management

Members' commitment eliminates opportunistic behaviour within a worker co-operative.

Committed members internalize the goals of their worker co-operative and consciously pursue those goals with the belief that the achievement of their own individual goals is directly linked to the achievement of the co-operative goals. With committed and hence motivated members / workers, the usual difficulties associated with the management of worker co-operatives should be more easily overcome. In order to test the relationship between the extent to which worker co-operatives lack better management and the level of their members' commitment the following hypothesis was formulated.

Hypothesis 16 (H16): There is a negative association between the extent to which worker co-operatives lack better management and the level of their members' commitment.

Spearman's rank correlation, Chi-square and Cramer's V measures were used to test the association between the extent to which worker co-operatives have a desire for better management and the level of their members' commitment. Table 40 - 16 below shows the outcome.

Table 40 - 16: The Need for Better Management and the Level of Members' Commitment

Table 40 - 16a: MbCommit * Mgt Crosstabulation

		Mgt			Total
		MjrRqmt	MnrRqmt	NotRqmt	
MbCommit	MjrStrth	15	22	42	79
	MnrStrth	3	6	17	26
	NotStrth	16	3	7	26
Total		34	31	66	131

Table 40 - 16b: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	22.571(a)	4	.000	.000		
Likelihood Ratio	20.544	4	.000	.001		
Fisher's Exact Test	19.570			.000		
Linear-by-Linear Association	8.970(b)	1	.003	.003	.002	.001
N of Valid Cases	131					

Table 40 - 16c: Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.415			.000	.000
	Cramer's V	.294			.000	.000
	Contingency Coefficient	.383			.000	.000
Interval by Interval	Pearson's R	-.263	.090	-3.092	.002(c)	.003
Ordinal by Ordinal	Spearman Correlation	-.203	.092	-2.354	.020(c)	.021
N of Valid Cases		131				

Since Spearman's rho is negative, it is reasonable to assert that there is a negative association between the extent to which worker co-operatives have a desire for better management and the level of their members' commitment (Spearman's rho = -.203, $p < .05$; Chi-square = 22.571, $p < .05$; Cramer's V = .294, $p < .05$). Phi coefficient and Contingency coefficient measures also support this conclusion (Phi = .415, $p < .05$ and Contingency coefficient = .383, $p < .05$).

Further discussions on the outcome of these tests are carried out in the next chapter.

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CHAPTER 12

REGRESSION ANALYSIS

12.1 Introduction

Chapter 11 discussed various tests of hypothesis which had been formulated to investigate the relationships between the study variables. A relationship between variables can also be used to predict one variable (called dependent variable) from another (called the independent variable). A regression analysis seeks to find a predictive model that be used to predict values of a dependent or outcome variable from one or more independent or predictor variables (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990).

In a simple linear regression, the outcome variable is predicted using the equation of a straight line model. For example:

$$\text{Satisfaction} = b_0 + b_1 \text{Direction of the Economy}$$

In the predictor (regression) model above, b_0 represents a constant whereas b_1 represents the coefficient of the predictor. Multiple regression model is a logical extension of a simple linear regression model to situations in which there are several predictors (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990). For example:

$$\text{Satisfaction} = b_0 + b_1 \text{Direction of the Economy} + b_2 \text{Health of the Industry}$$

Most variables in this study have been defined in terms of the categories to which they belong. For example, some variables constitute the external environment while others form the internal and the co-operative environments of the worker co-operatives. Due to this collaborative nature of the variables in this study it is the multiple regression analysis that has been utilized in this thesis.

Additionally, since both ordinal and nominal data have been utilized in this study, regression analysis will only be applied to the ordinal data for the results to be meaningful (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990). Since question B4 on the availability of missions, goals and other plans solicited nominal data from the worker co-operatives, no regression analysis has been carried out utilizing the B4 response data.

12.2 External Environmental Factors (B1)

This section seeks to establish whether the external environmental factors correlate maximally with the level of performance satisfaction in the worker co-operatives. That is, to establish whether external environmental factors could be used to predict well the level of performance satisfaction in the worker co-operatives, a multiple regression model has been used in which all the external environmental factors are utilized as predictors.

Researchers (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990), recommend that decisions on which predictors to use and on the order of variable entry into the model should be based on their order of importance as established by experience or by past research. Since all the external environmental factors are significant to our study, they have all been included in the analysis. Forced entry method, which is the default method in SPSS has been used to force the predictors into the model simultaneously since no predictor is considered more important than others. With all the external environmental factors entered into the multiple regression model an SPSS regression analysis has been carried out and the outcome is shown in Table 41 - 1 below.

Table 41 - 1: Regression Analysis – External Environmental Factors

Table 41 – 1a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.493(a)	.243	.193	.676	.243	4.889	8	122	.000

a Predictors: (Constant), Attitude, TaxLaws, Technlgy, Economy, Cmpetitn, GovPolcy, Industry, Demand

Table 41 – 1b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.867	8	2.233	4.889	.000(a)
	Residual	55.736	122	.457		
	Total	73.603	130			

a Predictors: (Constant), Attitude, TaxLaws, Technlgy, Economy, Cmpetitn, GovPolcy, Industry, Demand

b Dependent Variable: Satisfd

Table 41 – 1c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.029	.503		.057	.955					
	Economy	.080	.124	.057	.650	.517	.102	.059	.051	.819	1.220
	Industry	.150	.110	.134	1.366	.175	.349	.123	.108	.649	1.540
	Technlgy	.042	.089	.038	.470	.639	.080	.043	.037	.928	1.077
	GovPolcy	.221	.099	.197	2.221	.028	.275	.197	.175	.787	1.271
	TaxLaws	-.082	.092	-.074	-.900	.370	-.031	-.081	-.071	.910	1.099
	Demand	.212	.102	.209	2.076	.040	.380	.185	.164	.615	1.627
	Cmpetitn	.155	.105	.142	1.469	.144	.354	.132	.116	.664	1.505
	Attitude	.004	.081	.005	.055	.956	.199	.005	.004	.800	1.249

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 1a), R, which is the multiple correlation coefficient between the predictors and the outcome is .493 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .243. This means that external

environmental factors account for 24.3% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 1a and Table 41 – 1b give the value of *F-ratio* as 4.889. *F-ratio* is a measure of how much the model has improved the prediction of the outcome compared to the level of inaccuracy of the model. According to many researchers (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990), a good model should have a large *F-ratio* which should be, at least, greater than 1. The last columns in Table 41 – 1a and Table 41 – 1b indicate the value of *Sig. F Change* to be .000. This means that *p-value* = .000. As a general rule, if *p-value* < .05, then the predictor makes a significant contribution to predicting the outcome (Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003; Myers, 1990; Bowerman and O'Connell, 1990). Since *p-value* < .05, the *F-ratio* of 4.889 is significant and is unlikely to have occurred by chance. Therefore external environmental factors make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes external environmental factors can predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 1c gives additional information on the regression model. The information includes the *B* coefficients and the collinearity statistics. The *B* coefficients show the relationship between performance satisfaction and each predictor. They represent the change in the level of performance satisfaction that results from a unit change in the environmental factors individually. For example, it can be noted that a unit change in demand for product / service results in greater change in the level of worker co-operatives' performance satisfaction.

Table 41 – 1c also shows the collinearity statistics. Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model (Bryman and Cramer, 2005;

Field, 2005; Sarantakos, 2003). High levels of collinearity increases the probability that a good predictor of the outcome will be found non significant from the model (a Type II error). The collinearity statistics shown in Table 41 – 1c include the variance inflation factor (VIF) and the tolerance statistic. VIF indicates whether a predictor has a strong linear relationship with the other predictors. Tolerance statistics is VIF's reciprocal ($1/VIF$).

Some guidelines have been provided by researches (Myers, 1990; Bowerman and O'Connell, 1990; Bryman and Cramer, 2005; Field, 2005; Sarantakos, 2003) for the use of VIF and tolerance statistics. These are:

- If the largest VIF is greater than 10, then there is cause for concern
- If the average VIF is substantially greater than 1, then the regression may be biased
- Tolerance below .1 indicates a serious problem
- Tolerance below .2 indicates a potential problem.

From Table 41 – 1c, it is noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used.

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 5.

12.3 Sources of Funds (B2)

To establish whether the different sources of funds available could be used to predict well the level of performance satisfaction in the worker co-operatives, a multiple regression model has been used

in which all the sources of funds available to the worker co-operatives are utilized as predictors. This section therefore seeks to establish whether the sources of funds available to the worker co-operatives correlate maximally with the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which all the sources of funds available to the worker co-operatives are used as predictors (independent variables). The outcome is shown in Table 41 - 2 below.

Table 41 - 2: Regression Analysis – Sources of Funds

Table 41 – 2a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.285(a)	.081	.044	.736	.081	2.207	5	125	.058

a Predictors: (Constant), Grants, ICOF, Shares, Banks, RE

Table 41 – 2b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.969	5	1.194	2.207	.058(a)
	Residual	67.634	125	.541		
	Total	73.603	130			

a Predictors: (Constant), Grants, ICOF, Shares, Banks, RE

b Dependent Variable: Satisfd

Table 41 – 2c: Coefficients(a)

Model		Unstandardize d Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Zero- order	Partial	Part	Tolerance	VIF
1	Constant	1.226	.552		2.220	.028					
	Shares	.088	.117	.067	.754	.452	.071	.067	.065	.933	1.072
	RE	.151	.107	.128	1.411	.161	.110	.125	.121	.890	1.124
	ICOF	-.176	.098	-.160	1.795	.075	-.119	-.158	-.154	.925	1.081
	Banks	.238	.092	.230	2.582	.011	.190	.225	.221	.929	1.076
	Grants	.015	.079	.017	.190	.849	-.030	.017	.016	.922	1.085

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 2a), R , which is the multiple correlation coefficient between the predictors and the outcome is .285 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .081. This means that sources of funds available account for only 8.1% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 2a and Table 41 – 2b give the value of F -ratio as 2.207. They also indicate the value of $Sig. F Change$ to be .058. This means that p -value = .058. Although the F -ratio is greater than 1, the p -value > 0.5. Therefore the predictors do not make a significant contribution to predicting the outcome (details on F -ratio and p -value are given in section 12.2 above). Since p -value > .05, the F -ratio of 2.207 is not significant and is likely to have occurred by chance. Therefore the sources of funds available do not make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes sources of funds available cannot predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 2c gives information on the *B* coefficients and the collinearity statistics. The *B* coefficients show the relationship between performance satisfaction and each predictor. It is also noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded therefore that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used (details on VIF and collinearity statistics are given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 6.

12.4 Co-operative Environment (B3)

To establish whether the co-operative environmental factors could be used to predict the level of performance satisfaction in the worker co-operatives, a multiple regression model has been used in which all the co-operative environmental factors are utilized as predictors. This section therefore seeks to establish whether the co-operative environmental factors correlate maximally with the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which all the co-operative environmental factors are used as predictors (independent variables). The outcome is shown in Table 41 - 3 below.

Table 41 - 3: Regression Analysis – Co-operative Environmental Factors

Table 41 – 3a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.598(a)	.358	.310	.625	.358	7.500	9	121	.000

a Predictors: (Constant), Alliance, Collbrtn, MbEductn, ComOwner, Commnity, MbCommit, Princpls, FairTrde, MbPtcptn

Table 41 – 3b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.357	9	2.929	7.500	.000(a)
	Residual	47.246	121	.390		
	Total	73.603	130			

a Predictors: (Constant), Alliance, Collbrtn, MbEductn, ComOwner, Commnity, MbCommit, Princpls, FairTrde, MbPtcptn

b Dependent Variable: Satisfd

Table 41 – 3c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	Constant	.667	.372		1.795	.075					
	ComOwne r Princpls	.017	.078	.017	.220	.826	.074	.020	.016	.843	1.186
	MbCommit	-.201	.156	-.205	-1.288	.200	.178	-.116	-.094	.210	4.755
	MbPtcptn	.209	.159	.215	1.314	.191	.258	.119	.096	.199	5.022
	MbEductn	-.095	.080	-.093	-1.196	.234	.051	-.108	-.087	.874	1.145
	Commnity	.295	.090	.308	3.273	.001	.483	.285	.238	.601	1.665
	FairTrde	.105	.086	.115	1.229	.222	.386	.111	.089	.608	1.646
	Collbrtn	-.030	.079	-.029	-.375	.708	.122	-.034	-.027	.892	1.122
	Alliance	.069	.092	.059	.752	.453	-.049	.068	.055	.858	1.165

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 3a), R , which is the multiple correlation coefficient between the predictors and the outcome is .598 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .358. This means that co-operative environmental factors account for 35.8% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 3a and Table 41 – 3b give the value of *F-ratio* as 7.500. They also indicate the value of *Sig. F Change* to be .000. This means that *p-value* = .000. Since the *F-ratio* is greater than 1 and the *p-value* < .05, the predictors make a significant contribution to predicting the outcome (details on *F-ratio* and *p-value* are given in section 12.2 above). Since *p-value* < .05, the *F-ratio* of 7.500 is significant and is not likely to have occurred by chance. Therefore the co-operative environmental factors do make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes co-operative environmental factors can predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 3c gives information on the *B* coefficients and the collinearity statistics. The *B* coefficients show the relationship between performance satisfaction and each predictor. Most of the VIF values are below 10 and most of the tolerance statistics values are above .2. However, the VIF values for *members' commitment* and for *members' participation* are significantly high. The collinearity statistics for *members' commitment* and for *members' participation* are, on the other hand, significantly low. This suggests that there could be collinearity within the data used and that there could be strong correlation between *members' commitment* and *members' participation* in the regression model used (details on VIF and collinearity statistics given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 7.

12.5 Worker Co-operatives Major Objectives (B5)

The importance of goals and objectives has been discussed in the previous chapters. It is the effective achievement of worker co-operatives' economic and social goals that determines their success. The aim of this section is to establish whether the nature of worker co-operatives' goals and objectives could be used to predict the level of performance satisfaction in the worker co-operatives. A multiple regression model has been used in which worker co-operatives' major objectives are utilized as predictors.

This section therefore seeks to establish whether these objectives correlate maximally with the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which the major objectives for worker co-operatives are used as predictors (independent variables). The outcome is shown in Table 41 - 4 below.

Table 41 - 4: Regression Analysis – Worker Co-operatives' Major Objectives

Table 41 – 4a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.527(a)	.278	.236	.658	.278	6.749	7	123	.000

a Predictors: (Constant), Pncples, Stabilty, Profit, Growth, Communtty, Emplymnt, FairTrad

Table 41 – 4b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.425	7	2.918	6.749	.000(a)
	Residual	53.178	123	.432		
	Total	73.603	130			

a Predictors: (Constant), Prncples, Stabily, Profit, Growth, Communt, Emplymnt, FairTrad

b Dependent Variable: Satisfd

Table 41 – 4c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.703	.290		2.425	.017					
	Profit	.101	.077	.106	1.306	.194	.107	.117	.100	.894	1.118
	Growth	.025	.087	.024	.284	.777	.138	.026	.022	.846	1.182
	Stabily	.097	.122	.080	.794	.428	.024	.071	.061	.580	1.724
	Emplymnt	-.141	.124	-.117	-1.133	.259	-.082	-.102	-.087	.553	1.809
	Communt	.115	.102	.124	1.130	.261	.414	.101	.087	.487	2.055
	FairTrad	.295	.111	.303	2.656	.009	.474	.233	.204	.451	2.220
	Prncples	.154	.086	.162	1.796	.075	.346	.160	.138	.720	1.389

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 4a), R , which is the multiple correlation coefficient between the predictors and the outcome is .527 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .278. This means that worker co-operatives' major objectives account for 27.8% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 4a and Table 41 – 4b give the value of F -ratio as 6.749. They also indicate the value of $Sig. F$ Change to be .000. This means that p -value = .000. Since the F -ratio is greater than 1 and

the $p\text{-value} < .05$, the predictors make a significant contribution to predicting the outcome (details on $F\text{-ratio}$ and $p\text{-value}$ are given in section 12.2 above). Since $p\text{-value} < .05$, the $F\text{-ratio}$ of 6.749 is significant and is not likely to have occurred by chance. Therefore major objectives do make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes major objectives can predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 4c gives information on the B coefficients and the collinearity statistics. The B coefficients show the relationship between performance satisfaction and each predictor. It is also noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded therefore that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used (details on VIF and collinearity statistics are given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 8.

12.6 External Assistance Required (B6)

Some of the worker co-operatives' requirements were discussed in section 9.12. These included good management, financial probity, well trained and motivated employees, access to capital and the capacity to innovate (Co-operative Council, 1994). In response to question B6 worker co-operatives stated the extent to which external assistance was required in those areas of need.

The aim of this section is to establish whether the types of external assistance required could be used to predict the level of performance satisfaction in the worker co-operatives. A multiple

regression model has been used in which the types of external assistance required are utilized as predictors. This section therefore seeks to establish whether the types of external assistance required correlate maximally with the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which the types of external assistance required are used as predictors (independent variables). The outcome is shown in Table 41 - 5 below.

Table 41 - 5: Regression Analysis – External Assistance Required

Table 41 – 5a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.397(a)	.158	.110	.710	.158	3.294	7	123	.003

a Predictors: (Constant), BettrMgt, FinRescs, Training, BusDev, MktInfo, BusInfo, CntrProc

Table 41 – 5b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.620	7	1.660	3.294	.003(a)
	Residual	61.983	123	.504		
	Total	73.603	130			

a Predictors: (Constant), BettrMgt, FinRescs, Training, BusDev, MktInfo, BusInfo, CntrProc

b Dependent Variable: Satisfd

Table 41 – 5c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	Constant	2.130	.333		6.397	.000					
	FinRescs	-.071	.095	-.066	-.744	.458	-.027	-.067	-.062	.881	1.135
	BusDev	.181	.076	.202	2.385	.019	.182	.210	.197	.958	1.044
	CntrProc	-.005	.074	-.005	-.062	.950	-.015	-.006	-.005	.881	1.135
	BusInfo	.092	.113	.070	.816	.416	.029	.073	.067	.932	1.073
	MktInfo	-.055	.134	-.035	-.414	.680	-.055	-.037	-.034	.945	1.058
	Training	.083	.096	.076	.864	.389	.035	.078	.072	.875	1.143
	BetrMgt	-.306	.075	-.342	-4.085	.000	-.329	-.346	-.338	.977	1.023

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 5a), R , which is the multiple correlation coefficient between the predictors and the outcome is .397 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .158. This means that the types of external assistance required account for 15.8% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 5a and Table 41 – 5b give the value of F -ratio as 3.294. They also indicate the value of $Sig. F$ Change to be .003. This means that p -value = .003. Since the F -ratio is greater than 1 and the p -value < .05, the predictors make a significant contribution to predicting the outcome (details on F -ratio and p -value are given in section 12.2 above). Since p -value < .05, the F -ratio of 3.294 is significant and is not likely to have occurred by chance. Therefore the types of external assistance required do make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes the types of

external assistance required can predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 5c gives information on the *B* coefficients and the collinearity statistics. The *B* coefficients show the relationship between performance satisfaction and each predictor. It is also noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded therefore that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used (details on VIF and collinearity statistics are given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 9.

12.7 Resources and Capabilities (B7)

The role played by adequate resources and capabilities in the achievement of worker co-operative goals and objectives has been discussed in great detail in the previous chapters. Resources include physical capital, financial capital, and human capital. They also include social capital and organizational structure. Worker co-operatives' capabilities refer to their capacity to deploy resources to effectively achieve their goals and objectives. In response to question B7, the worker co-operatives rated the level of difficulties faced in acquiring various resources and capabilities.

This section seeks to establish whether resources and capabilities acquired could be used to predict the level of performance satisfaction in the worker co-operatives. A multiple regression model has been used in which the resources and capabilities acquired are utilized as predictors. This section therefore seeks to establish whether resources and capabilities acquired correlate maximally with

the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which the resources and capabilities acquired are used as predictors (independent variables). The outcome is shown in Table 41 - 6 below.

Table 41 - 6: Regression Analysis – Resources and Capabilities

Table 41 – 6a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.353(a)	.125	.075	.724	.125	2.501	7	123	.019

a Predictors: (Constant), Reputatn, Fnancial, Physcal, Tchnlgcl, Skills, OrgStrct, Mgt

Table 41 – 6b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.170	7	1.310	2.501	.019(a)
	Residual	64.433	123	.524		
	Total	73.603	130			

a Predictors: (Constant), Reputatn, Fnancial, Physcal, Tchnlgcl, Skills, OrgStrct, Mgt

b Dependent Variable: Satisfd

Table 41 – 6c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	Constant	2.420	.325		7.459	.000					
	Fnancial	.079	.103	.076	.768	.444	.072	.069	.065	.724	1.381
	Physcal	.004	.097	.004	.043	.966	.007	.004	.004	.857	1.167
	Tchnlgcl	-.023	.098	-.022	-.237	.813	-.072	-.021	-.020	.797	1.255
	Skills	.042	.095	.042	.439	.661	.040	.040	.037	.783	1.278
	Mgt	-.112	.133	-.131	-.844	.400	-.276	-.076	-.071	.297	3.369
	OrgStrct	.101	.106	.105	.954	.342	-.102	.086	.081	.593	1.687
	Reputatn	-.293	.141	-.277	-2.073	.040	-.326	-.184	-.175	.397	2.516

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 6a), R , which is the multiple correlation coefficient between the predictors and the outcome is .353 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .125. This means that resources and capabilities acquired account for 12.5% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 6a and Table 41 – 6b give the value of *F-ratio* as 2.501. They also indicate the value of *Sig. F Change* to be .019. This means that *p-value* = .019. Since the *F-ratio* is greater than 1 and the *p-value* < .05, the predictors make a significant contribution to predicting the outcome (details on *F-ratio* and *p-value* are given in section 12.2 above). Since *p-value* < .05, the *F-ratio* of 2.501 is significant and is not likely to have occurred by chance. Therefore the resources and capabilities acquired do make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes the resources and capabilities acquired can predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 6c gives information on the *B* coefficients and the collinearity statistics. The *B* coefficients show the relationship between performance satisfaction and each predictor. It is also noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded therefore that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used (details on VIF and collinearity statistics are given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 10.

12.8 Employee Ownership and Effective Performance (B8)

From the literature review in chapter 3, it was argued that employee owned organizations have the ability to harness the true commitment and creativity of their employees (Postlethwaite *et al*, 2005; Michie *et al*, 2002). It was further argued that employees' involvement and participation do increase commitment which in turn results in increased productivity. In response to question B8, the worker co-operatives stated the extent to which the employee-ownership form of business has been helpful in relation to the various factors that influence the effective achievement of their worker co-operatives' objectives.

The aim of this section is to establish whether the factors related to employee-ownership could be used to predict the level of performance satisfaction in the worker co-operatives. A multiple regression model has been used in which the factors related to employee-ownership are utilized as predictors. This section therefore seeks to establish whether the factors related to employee-ownership correlate maximally with the level of performance satisfaction in the worker co-operatives. An SPSS regression analysis has been carried out in which the factors related to employee-ownership are used as predictors (independent variables). The outcome is shown in Table 41 - 7 below.

Table 41 - 7: Regression Analysis – Factors Related to Employee Ownership

Table 41 – 7a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.352(a)	.124	.059	.730	.124	1.905	9	121	.057

a Predictors: (Constant), ExtnFund, WorkSati, EmpDiscp, EmplRela, DecsnMkg, InfoShar, StaffRec, EmplComt, EmplProd

Table 41 – 7b: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.133	9	1.015	1.905	.057(a)
	Residual	64.470	121	.533		
	Total	73.603	130			

a Predictors: (Constant), ExtnFund, WorkSati, EmpDiscp, EmplRela, DecsnMkg, InfoShar, StaffRec, EmplComt, EmplProd

b Dependent Variable: Satisfd

Table 41 – 7c: Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	Constant	2.407	.362		6.641	.000					
	EmplProd	-.073	.138	-.066	-.526	.600	.054	-.048	-.045	.463	2.159
	EmplComt	-.121	.144	-.099	-.842	.401	.049	-.076	-.072	.528	1.893
	WorkSati	.331	.131	.291	2.534	.013	.221	.224	.216	.547	1.827
	EmplRela	-.135	.104	-.113	-1.297	.197	-.115	-.117	-.110	.957	1.045
	InfoShar	-.148	.094	-.147	-1.582	.116	-.207	-.142	-.135	.843	1.186
	DecsnMkg	-.073	.084	-.077	-.867	.388	-.164	-.079	-.074	.909	1.100
	EmpDiscp	-.043	.107	-.036	-.404	.687	-.082	-.037	-.034	.913	1.096
	StaffRec	-.002	.086	-.002	-.026	.979	-.070	-.002	-.002	.787	1.271
	ExtnFund	-.069	.086	-.076	-.801	.425	-.117	-.073	-.068	.801	1.249

a Dependent Variable: Satisfd

In the model summary table (Table 41 – 7a), R , which is the multiple correlation coefficient between the predictors and the outcome is .352 while R^2 , which is the measure of how much of the variability in the outcome is accounted for by the predictors is .124. This means that the factors related to employee-ownership account for 12.4% of the variation in the worker co-operatives' performance satisfaction.

Table 41 – 7a and Table 41 – 7b give the value of F -ratio as 1.905. They also indicate the value of $\text{Sig. } F \text{ Change}$ to be .057. This means that $p\text{-value} = .057$. The F -ratio is greater than 1, and the $p\text{-value} > .05$. The predictors therefore do not make a significant contribution to predicting the outcome (details on F -ratio and p -value are given in section 12.2 above). Since $p\text{-value} > .05$, the F -ratio of 1.905 is not significant and is likely to have occurred by chance. Therefore the factors related to employee-ownership do not make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. That is, the regression model that utilizes the factors related to employee-ownership cannot predict worker co-operatives' performance satisfaction significantly well.

Table 41 – 7c gives information on the B coefficients and the collinearity statistics. The B coefficients show the relationship between performance satisfaction and each predictor. It is also noted that the VIF values are all below 10 and the tolerance statistics values are all above .2. It can be concluded therefore that there is no collinearity within the data used and therefore there is no strong correlation between two or more predictors in the regression model used (details on VIF and collinearity statistics are given in section 12.2 above).

The descriptive statistics and the correlation matrix produced by this regression analysis are shown in Appendix 11.

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CHAPTER 13

RESEARCH FINDINGS

13.1 Introduction

Chapter 9 presents the information gathered by the survey questionnaires and by the follow-up interviews. The chapter logically organizes and tabulates all the responses and describes the nature and the significance of the various environmental factors that bear on the competitiveness of worker co-operatives in Britain. Detailed analysis of the responses is carried out in chapter 10 which employs descriptive statistical approaches to analyse the information. The tests of hypothesis in chapter 11 seek to establish the type and direction of any relationships between the worker co-operatives' environmental factors. Chapter 12 on regression analysis aims at finding predictive models that be used to predict values of a dependent or outcome variable from one or more independent or predictor variables. This chapter will examine the findings in these previous chapters and will discuss their significance to the competitiveness of worker co-operatives in Britain.

13.2 Direction of the Economy

The analysis given in section 10.3.1 of chapter 10 shows that the direction taken by the British economy has not favoured the competitiveness of worker co-operatives. This conclusion has been supported by an independent professional analysis by PricewaterhouseCoopers which was released in 2006.

PricewaterhouseCoopers (2006) stated that the UK's GDP growth rate was about 1.8% for the year 2005. This was down from 3.2% in 2004 and reflected slower consumer spending growth in particular. They added that apart from consumer spending growth, business investment also weakened between the two years and the performance of the manufacturing sector and the retail sales also remained weak. UK's GDP growth is being driven by the business and financial services sector. The distribution sector, which includes wholesale and retail trade has suffered from the slowdown in consumer spending growth.

PricewaterhouseCoopers (2006) explained further that the public sector has remained the positive engine of the UK's GDP growth in the short term though it is expected to slow down over the next few years as public spending growth decelerates. Consumer spending growth is expected to slow for several years, reflecting the end of the positive influence from the housing market and higher interest rates (PricewaterhouseCoopers, 2006). They maintained that the low growth, in which unemployment continues to rise, house prices fall back markedly and levels of household debt rises, has served to cool consumer spending significantly.

According to the analysis (PricewaterhouseCoopers, 2006), the industrial trends survey in January 2006, reported a continued drop in domestic and export orders, weak employment trends, subdued investment expectations and a squeeze on profit margins. Strong foreign competition and rising energy and raw materials costs have greatly helped in the erosion of profitability.

Resulting from this unfavourable direction taken by the British economy, it is reasonable to expect a negative impact on the growth, stability and profitabilities of the worker co-operatives. This is due to the expected difficulties associated with production and operational costs, consumer demand, financing options and the pricing of products / services. From the test of hypothesis 1 in chapter 11, however, it was established that there is no correlation between the direction that the

economy has taken and the level of satisfaction given to the performance of the worker co-operatives in the last two years. Other factors must have undoubtedly compensated for the expected adverse effects originating from the direction of the economy.

13.3 Technological Changes

Table 26 in chapter 10 shows that 55% of the respondents consider technological changes as being unfavourable to the performance of their worker co-operatives. From the literature review in section 4.2, it was pointed out (Cummings and Worley, 2001; Hitt *et al*, 2003; Bennett, 1996) that technological changes can affect the competitiveness of an enterprise in many ways including:

- The ability to keep abreast with the changes of technology and the speed at which new technology becomes available
- The ability to effectively and efficiently access and use information made available through the use of personal computers, cellular phones, artificial intelligence, virtual reality, and massive databases
- The ability to capture business intelligence and to transform it into usable knowledge since knowledge is a critical organizational resource being the source of technology and its application.

It has, however, been noted from the tests of hypothesis in chapter 10 above that there is no positive association between the ratings given to the effects of technological changes and the level of satisfaction with the performance within the last two years. This may be due to the presence of other compensating environmental factors in favour of performance just as in section 13.2 above. The other explanations may include the fact that many worker co-operatives are in the services sub-sectors and in those areas in which technological changes may not be very critical to

performance. Examples include child-care, foster-care, retail, leisure, whole-foods and restaurants among others.

Regardless of the sectors in which worker co-operatives operate, ignoring technological forces can result in their being perceived as being backward or inferior to their competitors, the investor-owned enterprises. The Internet and wireless forms of communications are examples of important technological developments that can be exploited for competitiveness by any type of worker co-operative. The Internet is a good source of data and information that worker co-operatives can use to understand their external environment. The Internet can also be used for transactions between worker co-operatives and their members. It can also be used for e-commerce activities.

13.4 Health of the Industry

Table 27 in chapter 10 shows that only 13% of the respondents in this study consider the health of their industry as being favourable to the performance of their worker co-operatives. About 63% of the respondents consider the health of their various industries as being either favourable or somewhat favourable to the performance of their worker co-operatives. In chapter 11, a test of hypothesis was carried out to determine the type of relationship that exists between the health of the industry and the worker co-operatives' level of satisfaction with the previous two years performance. It was concluded from the outcome that it is reasonable to conclude that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the ratings on the health of the relevant industries (Spearman's $\rho = .345$, $p < .05$; Chi-square = 16.218, $p < .05$; Cramer's $V = .249$, $p < .05$).

Health of an industry is a function of the threat posed by the five forces of competition which includes: new entrants, power of suppliers, power of buyers, threat of product substitutes, and the

intensity of rivalry in the competition. In general, when the competition in an industry is very strong, the profit potential for a worker co-operative will be low.

As discussed in the literature review of chapter 3, worker co-operatives can now be found in almost all the industrial sectors of the British economy including mining. They, however, tend to concentrate in the crisis-prone sectors of construction, clothing, footwear and furnishings, printing and publishing. They are also found in the food sector especially in wholefoods (table 11).

Thomas (1988) notes that about 6% of the worker co-operatives are rescues and attempts to rescue failing businesses often go against financial and other economic difficulties. He adds that the past history of worker co-operatives in Britain reveals that those formed among members of ethnic minorities, long-term unemployed, young people or women's groups are more likely to fail in a hostile business climate, were it not for the very intensive support offered by local CDAs (Thomas, 1988).

The great majority of worker co-operatives are, however, started from scratch as part of the alternative movement. These include most of the whole-food worker co-operatives which are longer established and are very innovative in their product offerings. The business climate in the whole-food sector has enabled many worker co-operatives to create a market niche for themselves in which they enjoy a certain degree of customer loyalty, based on the fit between ideas on healthy and simple eating and the image of an alternative lifestyle in which co-operative working has an important place. This has given the whole-food worker co-operatives, particularly the wholesalers a high degree of independence.

The whole-food market is now becoming much more competitive, particularly for retailers, with the entry of several large supermarket chains. Currently, however, whole-food co-operatives like

SUMA wholefoods in West Yorkshire, Unicorn Grocery in Manchester and Greencity

Wholefoods in Glasgow are some of the most successful worker co-operatives in Britain.

It is noted from section 10.3.3 in chapter 10 that worker co-operatives in the clothing sector have registered more cases of failure. Some of the reasons for these failures include the fact that market entry is cheap and that worker co-operatives in this sector tend to be dependent on large retailers or manufacturers. Bishopston worker co-operative described in section 10.3.3 has, nonetheless, illustrated that by formulating appropriate strategies worker co-operatives can still perform very successfully in the clothing industry. It is also noted from chapter 10 that the worker co-operatives in the printing and publishing industry, like Calverts, have performed reasonably well due to the nature of the industry where small firms can be technologically advanced and can find a more independent, though competitive position in the market. Calverts and other similar co-operatives have succeeded further in acquiring and retaining loyal customers due to their concern for the environment and fair trade.

Most of the ‘alternativist’ worker co-operatives, formed mainly for co-operative and social objectives, have indicated a high degree of satisfaction with their performance. As discussed in section 7.7, some of the objectives for these ‘alternativist’ worker co-operatives include democratization of the work place; integration of the marginalized members of the society; fair trade and environment conservation. It is not surprising therefore that 79% of the worker co-operatives surveyed had either a satisfactory or a somewhat satisfactory rating. Only 21% were not satisfied (Table 24). The worker co-operatives in this category include:

- Welwyn Hatfield Leisure in Hertfordshire,
- Accounts 3 Women’s Consultancy in London,
- Foster Care Worker co-operative in Worcestershire,

- The Disabled Workers Co-operative in Wales,
- Carers Direct Worker Co-operative in Devon and
- Castle Project Print Finishers in Cambridge

13.5 Government Policies

Changes in political philosophy and the enactment or amendment of laws and legislative guidelines relating to taxes, subsidies, grants, government contracts and financial reporting procedures influence the competitiveness of worker co-operatives. The establishment, by the government, of institutions and agencies like CDA to promote and oversee the development of co-operatives is equally very important. However, more significant to the success of worker co-operatives in Britain is the partnership that has been forged between the local governments and the worker co-operatives.

Although table 28 in chapter 10 shows that only 40% of the respondents consider government policies as being either favourable or somewhat favourable to the performance of their co-operatives, interviews with co-operative officials pointed out that government partnership has been very critical to the success of many worker co-operatives. Many examples of such worker co-operatives have been given in section 10.3.4 of chapter 10. It can be concluded from these examples that government's policies have, to a reasonable extent, supported the development of many worker co-operatives in Britain.

A test of hypothesis was carried out in chapter 11 to determine the type of relationship that exists between the impact of government policies and the worker co-operatives' level of satisfaction with the previous two years performance. It was concluded from the outcome that it is reasonable to

assert that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the ratings on the impact of government policies (Spearman's $\rho = .284$, $p < .05$; Chi-square = 10.750, $p < .05$; Cramer's $V = .286$, $p < .05$).

The U.K. central government has been credited for assisting worker co-operatives in some areas. For example, the national Co-operative Development Agency was established to offer necessary promotional support to worker co-operatives. Funds have also been made available to worker co-operatives through the Industrial Common Ownership Finance as discussed in the previous chapters of this thesis. The Department of Trade and Industry, by accepting a bid of £10 million from workers, helped in the formation of Tower Colliery worker co-operative through a worker buyout.

The main supportive environment for the development of worker co-operatives has, however, been provided mostly by the local authorities. Local councils have either provided finance or forged partnerships with local co-operative development agencies in order to promote the principles and values of cooperation through public information and education. Most local authorities have also introduced support measures in the form of grants, contracts and special procurement provisions to those worker co-operatives that meet specific social and public policy outcomes like employment promotion and the development of activities benefiting disadvantaged groups. The examples discussed in chapter 10 include the Co-operative Assistance Network, Accounts 3 Women Consultancy, Welwyn Hatfield Leisure and the Foster Care worker co-operative.

13.6 Tax Laws

It was reported in section 10.3.5 of chapter 10 that only 11% of the respondents in this study consider the tax laws and policies to be favourable to worker co-operatives. Greater efforts by co-

operative institutions, relevant government departments and professionals should be directed towards critically examining the taxation matters that are deemed detrimental to the development of worker co-operatives in Britain. This should, no doubt, be done in consultation with the leadership of the worker co-operatives.

The central government and the local authorities can provide a supportive environment for the development of worker co-operatives by providing tax incentives including a meaningfully lower corporation tax rates. According to the European Confederation of Workers' Co-operatives, social Co-operatives and Participative Enterprises (CECOP) the current legislations in most European countries (including U.K.) do not favour worker co-operatives in the matters pertaining to flexibility, direct or indirect taxation, the revenue structure, and the subscription to capital. Cockerton *et al* (1980) suggest a corporation tax rate for worker co-operatives equivalent to the rate paid by individuals.

Worker co-operative officials interviewed for this study suggests that tax penalties on loans to employee trusts by close companies should be abolished. Other measures suggested include the granting of Capital Gains Tax (CGT) exemption (instead of 10% CGT) on sales to employees' trusts intending to hold shares in the long term. Also corporation tax deductions for payment to employee trusts where the trusts retain shares for general employee benefit should be allowed. In the United States, for example, the laws exempt from corporate income tax co-operatives that do a majority of their business with members. Similarly, the Capper-Volstead Act exempts co-operatives from monopoly legislation (United Nations, 2001).

In China, local governments provide a favourable policy environment to the co-operatives through preferential tax and credit terms whereas the government of Mongolia provides tax exemptions to those co-operatives that have created employment as new businesses (United Nations, 2003). Ideas

may be borrowed from these countries in terms of the relevant areas of tax incentives that may support the development of worker co-operatives in Britain. There may also be need to consider the abolition of Capital Gains taxes and the Capital Transfer taxes on private enterprises converting to worker co-operatives since the assets are basically being turned into indivisible reserves. Cockerton *et al* (1980) also recommend that a preferential rate of Value Added Tax could be introduced for worker co-operatives as has been done in Spain in order to encourage their development. Giving workers the first right of refusal to set up a worker co-operative when private or public enterprises are closing down or relocating can be an integral part of a good tax policy.

13.7 General Attitude towards Co-operatives

It is reported in chapter 10 (section 10.3.7) that 50% of the respondents in this study consider the general public attitude towards co-operatives as being unfavourable. It was also noted that the perceptions of co-operatives tend to be negative mainly because they are seen as lacking the capacity to meet their contractual obligations and as being inflexible. This has led to the hostile or dismissive attitude that has been directed towards many worker co-operatives.

A test of hypothesis was carried out in section 11.8 of chapter 11 to determine the type of relationship that exists between the ratings on the general attitude towards co-operatives and the worker co-operatives' level of satisfaction with the previous two years performance. It was concluded from the outcome that it is reasonable to assert that there is a positive association between the worker co-operatives' level of satisfaction with the previous two years performance and the ratings on the general attitude towards co-operatives (Spearman's $\rho = .192$, $p < .05$; Chi-square = 16.865, $p < .05$; Cramer's $V = .254$, $p < .05$).

A political goodwill and a serious government commitment to the support of worker co-operatives will foster a climate of public support and a positive image for the worker co-operatives. There is therefore need for interventions and policies that will assure worker co-operatives real equality with other types of associations and enterprises. This requires that the special values and principles of worker co-operatives receive full recognition as being desirable and beneficial to society and that appropriate measures are taken to ensure that their special qualities and practices are not the cause of discrimination and disadvantage of any kind.

Positive image for the worker co-operatives will further depend on the effectiveness with which they go about meeting their social and economic goals. Successful economic undertakings, pursuit of fair trade practices, concern for local communities and the promotion of the principles of co-operation are the right steps towards this goal.

13.8 Customer Demand

It was reported in section 10.3.8 (table 32) that about 80% of the questionnaire respondents in this study consider consumer demand as being either favourable or somewhat favourable to them.

When considering customer demand, worker co-operatives should first understand who their target customers are. The needs of these customers should be fully identified before the worker co-operatives seek to satisfy them. The Co-operative-UK (2004)'s indicator number 6 for social and co-operative performance states that "meeting customer needs is also a key component of the co-operative virtuous circle which links social goals to commercial success" (p 16).

In order to find, keep and grow customers, worker co-operatives must employ strategies that will lead to customer satisfaction. Customers have a number of expectations of organisations. These range from expectations regarding price, quality, service, availability and reputation. They also

include issues of health and safety. Customers are also concerned with wider issues concerning fair trade and the way an organization carries out its business activities.

As indicated in section 10.3.8, cost leadership and product differentiation strategies have been successfully used by whole-foods worker co-operatives like Unicorn Grocery Ltd to find, keep and grow customers. Unicorn Grocery Ltd, a worker co-operative in Manchester, has been very successful due to the unparalleled high demand for its products. Apart from the nature and quality of their products, competitive pricing has also contributed greatly to the high demand for Unicorn's products. It was noted in chapter 10 that Unicorn's prices are based on the cost of the products and not the market forces of supply and demand. To ensure low prices for their products, Unicorn buys their produce directly from local producers or imports them directly from Holland and France.

There is therefore a direct correlation between customer retention and customer satisfaction. Satisfied customers are likely to return and be frequent customers and may also recommend the organization to others, thus increasing the customer base.

13.9 Financial Resources

It was noted from table 22 that access to financial resources is one of the great difficulties faced by about 65% of the respondents. Since worker co-operatives must have sufficient capital to finance their development and operating costs, reliable sources of adequate financial resources must be obtained in order to be competitive. It is imperative therefore that adequate funds are made available to the Industrial Common Ownership Finance (ICOF) and the relevant local government institutions to be advanced, under favourable conditions, to those worker co-operatives that cannot secure finance from the typical commercial banks.

. Even though local revolving loan funds for worker co-operatives are now commonplace in Britain, generally set up with local authority funds, there is still a need for the formation of a co-operative investment bank that will focus mainly on the financial needs of the co-operative sector.

One area of important current initiatives is that of new financial structures and tapping new sources of finance for worker co-operatives in Britain. Relying on too much external loan may result in an unfavourable financial gearing position for the worker co-operatives. Thomas (1988) notes that suggestions have been made to the effect that the common ownership model “by restricting outside finance to the form of loans and not allowing external equity (or internal shares beyond the nominal)” contributes to the financial difficulties experienced by the worker co-operatives (p 25).

The worker co-operative model encouraging the individual ownership of the co-operative assets through equity participation has, however, been proved successful by the Mondragon group of worker co-operatives. The United Nations (1999) report on co-operatives also confirms that in Iceland, co-operatives which experience financial difficulties or need more capital for other reasons have an option of increasing their capital by issuing shares similar to those issued by limited companies. Such shares do not, however, carry voting rights. The Canadian government, in recognition of the changing economic environment, also introduced a new Co-operative Associations Act in 1997 that allows co-operatives access to alternative means of financing, including raising capital from non-members while maintaining co-operative principles such as democratic control by members (United Nations, 1999).

13.10 Management Structure

Table 21 in chapter 9 shows that about 50% of the respondents do not consider better management as one of the major requirements for worker co-operatives. About 26% of the respondents consider better management as a major requirement. In table 22, it was noted that 49% of the respondents face no difficulties regarding better management. Although 26% of the respondents consider better management as a major requirement, the successful performance by many worker co-operatives has also proved that a non-hierarchical management structure works. In line with the co-operative principle of democratic control most worker co-operatives in Britain adopt a non-hierarchical management structure.

The success of a worker co-operative however, depends on the ability of its management to provide the vision and the direction needed for effective achievement of objectives. Although a board of directors / management committee is elected and mandated to formulate policies and to execute strategies for the achievement of objectives, members involvement and participation through ordinary meetings must be encouraged. It is important that all members of a worker co-operative play an active part in the decision-making process including the formulation of policies and management decisions.

It was noted in section 10.2 in chapter 10 that Suma Wholefoods in West Yorkshire is one of the most successful worker co-operatives in Britain. It was also emphasized that there is no “boss” at SUMA because management decisions are taken as far as possible by democratic consensus. The General Meeting of all the members meets six times in a year and decides on business strategies, plans, and major policy decisions. In a non-hierarchical management structure, the workers decide on the division of tasks and the organization hierarchy and assess the effects of those decisions on themselves. They also decide on the goods and services to be produced. In the successful worker

co-operatives like SUMA therefore, workers integrate their individual talents and work styles into the overall work process and structure by directly influencing the nature of that process and structure through democratic participation (Jackall & Levin, 1984).

Better management is not a major requirement by more than 50% of the respondents because of the loyalty and commitment of members to their worker co-operatives. Greater participation and empowerment of worker co-operative members have resulted into greater loyalty and commitment. Worker empowerment has often been studied as a micro construct focusing on the ability of empowerment to motivate individual workers. A worker co-operative, however, provides empowerment at a macro level. It offers an empowering climate of structures, policies and practices. Seibert, Silver and Randolph (2004) confirm that an empowerment climate is necessary for an individual's psychological empowerment that normally leads to intrinsic motivation and job satisfaction.

It was noted in section 10.2 that the co-operative model of business, with its participative and democratic governance practices has been credited for the extraordinary success of Tower Colliery¹, the only mining co-operative in the U.K. Tower Colliery has mobilized social capital by promoting social cohesion through participation, solidarity, fellowship, and empowerment of the member-workers.

Successful worker co-operatives emphasize relationships, values and commitment as being the significant factors in explaining their successful performance. It is the relationship with members that creates the co-operative difference which is a source of comparative advantage. The relationship has implications for both governance and operations in the form of ownership, democratic control, product or service development and delivery and employee loyalty. Member

¹ It has since closed due to the depletion of coal deposits.

relationship is the one that ties together the social and the economic sides of co-operative enterprises (Fairbairn, 2003).

The better the personal relationship that the members develop with each other, the more flexible and smooth will be the processes of communication, coordination, and collective decision making in a worker co-operative. The planning of future business activities and adaptation to unforeseen contingencies all depend on the degree of mutual understanding, trust, and personal sympathy existing between the members. Any worker co-operative that creates trust among its members performs more effectively and efficiently. Trust is the one essential lubricant to all the worker co-operative activities that allow members to work together without generating wasteful conflicts.

13.11 Members Commitment

It was pointed out in chapter 10 that successful worker co-operatives list members' loyalty and members' commitment as the main secrets behind their satisfactory performance. Savant Enterprises in Lancashire, a software development worker co-operative, is very competitive in a technology-intensive sector due to the loyalty and commitment of its 32 member-workers. An official of the worker co-operative attributed their success to excellent communication, employee empowerment and unparalleled commitment from their members. Table 33 in chapter 10 indicated that about 60% of the respondents identified commitment from their members as the main strength behind their success.

Successful worker co-operatives emphasize commitment and greater participation from all the member-workers. They involve their member-workers at all the levels of risk-taking, management, operations and added-value distribution. Members will keep their commitments and reliably perform their duties if the worker co-operatives are made transparent by good communications

and by structures and operations that members can see as designed around their own needs.

Transparency in worker co-operatives would also require members to understand not only their worker co-operatives but also the industry or sector in which their co-operatives operate. Cohen and Prusak (2001) point out that transparency breeds trust and trust lowers contract, monitoring, and agency costs, effectively reducing the barriers between a worker co-operative and its members.

Stiglitz (2002) has pointed out that participation leads to commitment and commitment, in turn, leads to greater effort from workers. Worker co-operatives like Savant Enterprises have performed well because of the existence of both personal and collective incentive for greater effort. Since the workers own their own enterprise, they share directly in the success and the failure of the firm. This produces a strong personal incentive to be productive. It also leads to peer pressures on colleagues to do their part. The result is low labour turnover, low absenteeism and reduction in the need for supervision when compared to investor-owned firms. De-Miguel, Pindado and De-La-Torre (2004) concurs that the value of an enterprise actually increases with insider ownership due to the convergence of interest between control and ownership.

Members of worker co-operatives are brought together by common interests, experiences, goals, or tasks that imply regular communication and bonds characterized by some degree of trust and altruism. They share norms or values that promote collaboration and which are beyond those necessary for ordinary market transactions. Internal competition that limits cooperation becomes less evident.

The level of loyalty and commitment from the members will depend on the level of transparency that exists within the worker co-operative. Successful worker co-operatives in Britain, like Suma, Savant, and Tower colliery, have achieved meaningful transparency by educating and regularly

informing their members about their co-operative's business, products and services, and financial results. Members understand the industry or sector in which their co-operative exist and they see through their co-operative to the markets, customers and competitors. They are kept informed and they understand the current and anticipated social and economic forces and trends relevant to their business.

Valentinov (2004) points out that the advantage of social capital-based co-operative organization lies in eliminating the opportunistic behaviour itself within the co-operative group. This possibility is created by internalization of group goals, in the sense that every participating member consciously pursues the goals of the group understanding that the achievement of his own individual's goals is directly proportional to the achievement of goals of his group. The internalization of group goals is evidently an essential attribute of a loyal and committed membership. A worker co-operative is a kind of combination, representation, or projection of the individual economies and interests of its members. A worker co-operative must be an efficient agent for what its members want and need; if it is not, it will, in the long run, be unable to earn members' trust and support and hence their loyalty and commitment.

13.12 Collaboration among Worker Co-operatives

Table 39 in chapter 10 indicates that only 8% of the respondents consider collaboration with other co-operatives as being helpful. This is contrary to one of the co-operative principles that require co-operatives to co-operate with others. Valentinov (2004) states that since all co-operatives are supposed to share a set of common values, they have a basis for developing a certain social capital between themselves, and it would be rational for them to do that.

Lessons learnt from Mondragon worker co-operatives, the most successful worker co-operatives in the world today, indicate that worker co-operatives' financial needs and other banking and investment services can be provided through collaborations and strategic alliances among the co-operatives. Co-operative federations and associations and secondary co-operatives can be formed and jointly owned to provide services to worker co-operatives in the areas of finance, banking, investment, management consultancy, consultancy on technology and innovation, research and development and marketing and market research. Additional areas of collaboration include legal and taxation services, accountancy and audit services, human resource development programmes, and management information services.

Co-operative federations and associations can also be formed in order to combine resources, to share problems and to offer practical and economic assistance to one another. Other services that can be accessed through collaborations and networks include information on legislation, training methods and techniques, technology and product standards. Worker co-operatives can use a wide array of creative mechanisms and structures which complement core business and can put them on a more competitive footing without necessarily sacrificing their unique mission and structures.

Cockerton *et al* (1980) report that a number of informal links and loose trade associations exist among the worker co-operatives in Britain operating in the areas of wholefoods, bookselling and printing. He notes that the collaboration ranges from the simple exchange of information to the development of collective production, import, wholesale and distribution networks. It was noted that Suma wholefoods, which is a distributor and wholesaler of wholefoods collaborates very closely with Beano wholefoods in Leeds, with Daily Bread co-operatives in both Cambridge and Northampton and with the Eighth Day co-operative in Manchester. There is a vertical distribution alliance between Suma and these worker co-operatives.

Oakeshott (1978) emphasizes the fact that worker co-operatives, “by themselves are extraordinarily vulnerable’ (p13). He adds that they “can probably only succeed in substantial numbers and for long periods of time if they come together in groups” (p 13). The development of technical, commercial and financial linkages among the worker co-operatives will therefore facilitate their exchange of experiences and their sharing of risks and benefits.

Collaborations and strategic alliances between worker co-operatives are therefore of significant competitiveness in terms of providing access to valuable information, finance and the opportunity to develop joint products. They can also allow worker co-operatives to build on the back of an existing network of expertise, such as links to a university or research organization. One recent study looking at Denmark, Ireland and UK found that government programmes to promote collaboration and networking among small and medium enterprises (SMEs) were associated with enhanced business, knowledge and innovation performance (Cooke and Wills, 1999).

If a worker co-operative has quick access to timely information, diverse ideas, and critical economic, political, and emotional resources because of its links with others, it is more likely to come up with creative decisions and to have the necessary leverage to implement the decisions. Worker co-operatives with diverse connections are therefore more effective and often have better performance results.

13.13 Education and Training to Members

For members to be loyal and committed to their worker co-operative, they need to be knowledgeable about the principles and values of co-operation. They also need to be educated on the co-operative model of business and they must understand their environment including the industry or sector within which they operate. Education and training for the members will foster

capacity building, guarantee professional knowledge, stimulate innovation and promote good management since education is the source of power.

In chapter 10 (section 10.4.4), it was noted that only 24% of the respondents consider the education of their members as very helpful. This position contradicts the recommendation from Co-operatives-UK (2004) that training and education represent a major investment (in time and money) in an employee, and can make staff feel valued, improve job satisfaction and can contribute to a motivated and loyal workforce.

13.14 Effective Achievement of Objectives

Whatever its social, environmental or economic objectives, a worker co-operative must first be a successful business in order to be competitive. Just like any other business it must serve a viable market. There must be a clear demand for the goods or services it produces and the worker co-operative must be able to deliver those goods and services at a reasonable cost. The workforce must possess the necessary skills to manufacture the products or deliver the service. It was noted in chapter 10 that wholefood worker co-operatives including Suma in West Yorkshire, Unicorn in Manchester and Greencity in Glasgow have largely succeeded and out-performed their competitors due to sound business strategies. They are very innovative in their product offerings resulting into unparalleled demand for their products.

It has been emphasized by some writers (e.g. Fairbairn, 2003) that co-operatives are organizations formed by people when they see a need to employ a different economic tool to accomplish what they want and that an organization whose main focus is not economic activity would not be a co-operative. "Economic" must, of course, be broadly defined to include all types of services, organized in competitive environments and dealing with issues of scarce resources. For example, a

co-operative health centre or a child-care co-operative is an economic undertaking even if the environment in which it operates is not what we would usually call a market. All types of co-operatives have to cover costs with revenues raised in a competitive context (Fairbairn, 2003).

It was mentioned in section 10.5 of chapter 10 that even though only 43% of the respondents consider profitability as a major objective for their co-operative, it must be made an integral part of their objectives in order to survive. Profitability will be an important means of achieving economic, social and / or environmental goals of any worker co-operative in Britain. All worker co-operatives need therefore to create and develop income-generating activities in order to achieve a sustainable decent employment and to improve the social and economic well-being of their members.

13.15 Correlation between the Research Variables

Chapter 11 dealt with the possible relationships between the variables in this research study. Association tests were carried out and the outcomes were adequately reported and described. Chapter 12 discussed possible predictive models that could use the relationships between the research variables to predict values of a dependent or outcome variable from one or more independent or predictor variables. In section 12.2 of chapter 12, multiple regression models were used to investigate whether external environmental factors could be used to predict well the level of performance satisfaction in the worker co-operatives.

It was established that the external environmental factors account for 24.3% of the variation in the worker co-operatives' performance satisfaction and also that they make a significant contribution to predicting the level of performance satisfaction in worker co-operatives. It can be concluded that although it was established in sections 11.2 – 11.9 that most of the factors in the worker co-operatives external environment do not correlate maximally with the level of their performance satisfaction, variables like government policies and the demand for products / services do correlate.

It was noted in section 12.4 of chapter 12 that the co-operative environmental factors account for 35.8% of the variation in the worker co-operatives' performance satisfaction and that the regression model that utilizes co-operative environmental factors can predict worker co-operatives' performance satisfaction significantly well. This is in agreement with the findings in chapter 11 in which the commitment of worker co-operative members is noted to be the distinct variable that links and lubricates most of the research variables in this study (sections 11.10 – 11.17). Detailed discussion on the commitment of worker co-operative members has been carried out in section 13.11 above.

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CHAPTER 14

DISCUSSIONS AND CONCLUSIONS

14.1 Discussions

This thesis set out to look for answers to the key research questions listed in section 8.2 of chapter eight. The key research questions sought to find out the reasons for the marginalization of worker co-operatives in Britain and whether they can achieve sustained competitiveness and effectively meet their objectives? It has been noted from the literature review in chapter 3 that worker co-operative have been formed in Britain mainly to create and maintain sustainable jobs and to generate wealth in order to improve the quality of life of their worker-members. They have also been formed to dignify human work, to allow workers democratic self-management and to promote community and local development. People have also formed worker co-operatives to ensure that their work place upholds certain values, such as fair trade or labour standards.

Literature review in chapters 4, 5 and 6 underscored the need for strategies for monitoring worker co-operatives' contextual environment for opportunities to be exploited and threats to be avoided. Equally emphasized were strategies for analyzing their internal resources and capabilities in order to assess what strengths and weaknesses they have which might facilitate the exploitation of environmental opportunities and the avoidance of environmental threats. The literature review in the three chapters pointed out that relevant strategy frameworks will help worker co-operatives to adapt to their external environments and actively manage their environmental relationships in order to achieve greater competitiveness.

As discussed in chapter 5, some writers argue that the environment has a strong deterministic influence on the strategy-making processes while others maintain that it is not the environment but the resources of an organization which form the foundation of its strategy. It was, however, emphasized in chapter 7 that in order to realize competitiveness over other enterprises, worker co-operatives need to employ, as drivers of competitiveness, integrated strategy frameworks described in section 7.2 of this thesis.

The conceptual framework in chapter 7, focuses the analysis of worker co-operatives' competitiveness on the interplay of the variables in their environments. It uses an integrative strategy framework perspective to analyse the influence and roles of and the relationships and interactions between the variables within the external, internal and the co-operative environments of worker co-operatives to provide a richer picture of their competitiveness.

It was reported in chapter 9 that the 131 worker co-operatives surveyed were asked if they have mission statements, goals and objectives and other organizational plans. Their responses indicated that 69.5% of the worker co-operatives have mission statements, (96.9%) have goals and objectives and about 92% have annual budgets (table 19). Since every worker co-operative has a unique purpose and reason for being, this uniqueness should be reflected in vision and mission statements.

A worker co-operative's mission will describe its long-term purpose, including the products and services to be offered and the markets to be served. Members of the 30% of worker co-operatives without mission statements should be involved in the shaping and fashioning of their co-operatives' visions and mission statements that reflect the personal visions of the members. This will create a commonality of interest that will put the members into a new world of opportunities and challenges.

According to David (2005), enterprises with formalized mission statements perform better than those without. The reasons being that formalized mission statements help to:

- Ensure unanimity of purpose within the organization
- Provide a basis or standard for allocating organizational resources
- Establish a general tone or organizational climate
- Serve as a focal point for individuals to identify with the organization's purpose and direction
- Specify organizational purpose and then to translate these purposes into objectives

It is encouraging to note that 96% of the worker co-operatives have goals and objectives. A worker co-operative's common responses to the environment should include the development of objectives, policies and budgets and the creation of scanning units like market research for continuous monitoring of the environment. The objectives, policies and budgets will signal the parts of the environment which are important to the worker co-operative since they allocate and direct resources to particular environmental relationships. It was additionally noted in chapter 9 that 62.6% of worker co-operatives have marketing plans and that only 34.4% have long-term financial plans (table 19). This is not good enough since without these plans worker co-operatives cannot have the capacity to monitor and make sense of their environments if they are to respond appropriately in defining their goals and objectives.

It was pointed out in section 9.11 of chapter 9 that profitability is considered as a major objective by only 43% of the worker co-operatives. Employment of members (70.2%) and stability of the worker co-operative (63.4%) are rated as being the major objective for most worker co-operatives. The respondents also consider fair trade (59.5%) and service to community (51.9%) as major

objectives for their worker co-operatives. Although profitability may not be the ultimate goal for most worker co-operatives, it is a significant means for achieving their objective of economic and social well-being of the members. Therefore, sustainability and competitiveness can only be realized if profitability becomes an integral part of the worker co-operatives' main goals and objectives. For those worker co-operatives whose goals and objectives are entirely social or cultural in nature (and there are very many of them), an asset-based approach is recommended.

Asset-based initiatives discussed in sections 3.6 and 3.7 have been successfully employed by many worker co-operatives whose main objectives include social care, social integration, fair trade and concern for the environment. This requires that products and services be developed and delivered, not as a traditional social program, but as a range of market -driven services and products by utilizing the resources that are embedded in the local communities and their residents. Several examples have been discussed in section 10.5 of chapter 10. They include the 4 Seasons Worker Co-operative in East Yorkshire; the Castle Project Print Finishers of Cambridge; Disabled Workers Co-operative in Wales and Carers Direct Worker Co-operative in Devon.

The asset-based approach employed by these not-for-profit worker co-operatives is capacity-focused and is a better option since it recognizes the skills, talents and gifts of local community members. The approach is fundamentally bottom-up, beginning with what is present in the neighborhood, and inside-out, relying heavily on the efforts of internal agents, such as members/workers, federations and institutions. It reduces costs, improves product and service delivery and marketability and strengthens individual and community commitment since the services and products developed are the result of cooperation between members and are based on the capacity of each member to add value to the service or product.

Only 62.6% of the worker co-operatives surveyed had marketing plans (table 19). About 75% of them indicated that they require relevant market information (table 21). Regardless of the nature and type of goals and objectives that a worker co-operative may have, they must identify and attend to those environmental factors and features that are highly related to goal achievement and performance. They must also have the internal capacity to develop effective responses. Also, regardless of size or type, worker co-operatives should perform an audit on their external and internal environments for them not to miss opportunities and to anticipate emerging threats. Some kind of market research will provide information about customer tastes and preferences which guide choices about product and service development, pricing and advertising. The process may, however, remain less formal in very small worker co-operatives.

It was noted in chapter 9 (table 21) that about 69% of the respondents lack business opportunities. More than 57% of them need assistance regarding business development while 53.4% require help with contract procurement. For worker co-operatives to compete effectively, these shortcomings must be remedied. Whatever its social goals, a worker co-operative must first be a successful business and must strive to serve a viable market. There must be a clear demand for the goods or services produced and the co-operative must be able to deliver them at a reasonable cost. It was pointed out in section 9.12 of chapter 9 that worker co-operatives, like other organizations, require good management, financial probity, well trained and motivated employees, access to capital and the capacity to innovate (Co-operative Council, 1994).

Most worker co-operatives have been very successful in meeting the needs of their customers. Table 32 in chapter 10 showed that about 80% of the questionnaire respondents consider consumer demand as being either favourable or somewhat favourable. It was noted that Unicorn Grocery Ltd, a worker co-operative in Manchester, has unparalleled high demand for its products due to its cost leadership and product differentiation strategies. Another example is SUMA

wholefoods, in West Yorkshire discussed in section 10.2 of chapter 10. SUMA, a wholesaler and distributor of fair trade, organic and vegetarian foods products, has grown consistently for thirty years in a fiercely competitive market by providing better service to its customers.

Products or services, no matter well they are conceived and developed, will only be successful if they meet customer needs. Shifts in consumer tastes and preferences must therefore be constantly monitored by worker co-operatives. It is the favourable demand for whole-food products that has resulted into whole-food worker co-operatives like SUMA wholefoods in West Yorkshire, Unicorn Grocery in Manchester and Greencity Wholefoods in Glasgow becoming some of the most successful worker co-operatives in Britain.

Due to the size of most worker co-operatives, competition from non-co-operatives appears to be one of the most commonly perceived threat. Only 11.5% of the respondents in this study consider competition from non co-operatives to be in favour of their worker co-operatives (table 30). About 70% of the respondents consider competition from non co-operatives to be unfavourable. To compete successfully in those industries dominated by big business enterprises, worker co-operatives must monitor and understand the shifts in the demographic and social makeup of their target markets in terms of gender, age, income, occupation and lifestyles. For example the trend towards an aging population offers the worker co-operatives opportunities in the care and support services.

Worker co-operatives can also exploit new opportunities for creative businesses that offer services aimed at the needs of working women and single-parent households that have arisen from the current social trends. It was pointed out in section 4.2 of chapter 4, that one of the recent social changes that have greatly influenced the food and dining industry is health consciousness. It was further pointed out that whole-food worker co-operatives have successfully exploited this

opportunity to maintain their lead in the fast-growing market segment.

Whatever its social goals, a worker co-operative's members / workers must possess the necessary skills to manufacture the products or deliver the service. Table 22 in chapter 9 shows that 58% of the worker co-operatives surveyed have great difficulties in acquiring skilled manpower. Table 21 of the same chapter shows that the need for training programmes is a major requirement for 64.1% of the respondents. It is also shown in table 18 of chapter 9 that only 23.7% of the respondents consider their members' education as a point of strength for their worker co-operative. In order to improve the level of productivity and competitiveness of worker co-operatives in Britain and to improve the quality of goods and services they produce, there is need for policies that will promote education and training.

According to the Co-operative-UK, training and education is a key way of helping worker co-operative members / workers to work more effectively both internally and with external stakeholders (e.g. customers), as well as providing them with the technical and specialist skills needed to carry out their jobs. Competitiveness comes from the development of an organization's human capital, and effective employee training and development can contribute to improved productivity and profits (Co-operatives-UK, 2004). Co-operative education needs to be seen as more than an activity undertaken to satisfy co-operative principles, and also more than upgrading of employee skills.

Education on the co-operative model, on the co-operative principles and practices, on the history of the particular co-operative and on its present-day mission and activities, is important, but equally important is the knowledge of the business, industry and the sectoral environment in which a worker co-operative operates. There is therefore an urgent need for worker co-operatives to promote education and training activities aimed at equipping their members / workers with the

much needed skills and knowledge in the areas listed above. Also important is the need for training in leadership skills and attitudes, entrepreneurial and managerial skills, and the general economic and social policy skills.

This thesis underscores the importance of sound management and maintains that whatever it's social goals, a worker co-operative must have a competent management to lead it. As discussed in section 13.10 of chapter 13, the success of a worker co-operative however, depends on the ability of its management to provide the vision and the direction needed for effective achievement of objectives. Although table 21 in chapter 9 shows that about 26% of the respondents consider better management as a major requirement for their worker co-operatives, the successful performance by many worker co-operatives has also proved that a non-hierarchical management structure works.

It is, however, important to realize that new class of managers and the future managers for the worker co-operatives can only be developed by educating and training young people, men and women, in managerial skills. This can be done by setting up training networks and integrating the experiences of successful worker co-operative managers. Educational institutions may consider the inclusion within their curricula the study of the history, principles and core values of co-operatives. The contribution and potential contribution of co-operatives to the well being of the society should also be studied. Best practices on worker co-operative governance should be identified and promoted among other worker co-operatives. There is also need for specialized studies in co-operatives at the tertiary level of education and for more universities and colleges to offer co-operative studies as specialized modules in their business studies departments.

A worker co-operative must also have sufficient capital to finance its development costs, start-up costs and growth whatever its social goals. Table 36 in chapter 10 shows that about 74% of the worker co-operatives surveyed consider inadequate financial resources as a major difficulty. From

table 38 in the same chapter, it is noted that retained profits are considered by 76% of the worker co-operatives as their main sources of finance. From the regression analysis in chapter 12, it was established that the sources of funds available to worker co-operatives account for only 8.1% of the variation in the worker co-operatives' performance satisfaction. It was also noted in section 12.3 that the sources of funds available do not make a significant contribution to predicting the level of performance satisfaction in worker co-operatives.

However, worker co-operatives can only take advantage of the opportunities in their external environment if they have adequate financial resources. Section 13.9 in chapter 13 has discussed in great detail the need for an innovative capital structure since relying on retained surpluses alone as the main source of capital may not favour formation of worker co-operatives within the capital intensive industries. This will obviously lead to their continued marginalization. It is reiterated in this section that even though local revolving loan funds for worker co-operatives are now commonplace in Britain, there is still a need for the formation of a co-operative investment bank that will focus mainly on the financial needs of the co-operative sector. There is also need for innovative co-operative financing through the utilization of financial instruments like preferred shares and other non-voting shares with "investor members".

The different tests of hypothesis carried out in chapter 11 confirm that there are significant associations between members' commitment and many of the other performance variables (sections 11.10 – 11.17). Similarly, the regression analysis carried out in chapter 12 confirms that the co-operative environmental factors (including members' commitment and participation) account for 35.8% of the variation in the worker co-operatives' performance satisfaction and that the co-operative environmental factors do make a significant contribution to predicting the level of performance satisfaction in worker co-operatives (section 12.4).

Finally, it can be concluded from the discussions above and from the findings in the previous chapters that most worker co-operatives in Britain suffer from lack of adequate finance, from doing business in unattractive sectors of the economy and from poor networks and alliances with other co-operatives. Taxation laws, people's perceptions and the general attitude towards co-operatives have not been very helpful either. There is therefore need for interventions and policies that will assure worker co-operatives real equality with other types of organizations and enterprises. This requires that the special values and principles of worker co-operatives receive full recognition as being desirable and beneficial to society and that appropriate measures are taken to ensure that their special qualities and practices are not the cause of discrimination and disadvantage of any kind.

14.2 Summary of Key Findings

The main objective of this study was to establish whether an integrative strategy framework offers a more effective analysis of the challenge of competitiveness in worker co-operatives in Britain by seeking answers to the research questions listed in section 8.2. Arising from the research findings and discussions in chapter 13, it can be concluded that many worker co-operatives (79%) still perform very well and are satisfied with their performance (table 24) despite all their internal deficiencies and the unfavourable forces in their external environment. The secret behind the good performance by these worker co-operatives is their favourable 'co-operative environment' which includes the loyalty and the unparalleled commitment from the members.

Table 16 in chapter 9 shows clearly that most (if not all) of the external environmental forces like direction of the economy, health of the industry and others do not favour the performance of worker co-operatives. For example, the direction of the economy is deemed favourable by only 13% of the respondents. It is 9.9% for government policies, 10.7% for tax laws and 11.5% for

technological changes. It has also been observed that worker co-operatives do not have adequate financial and other necessary resources since Table 36 shows that about 74% of the worker co-operatives consider inadequate financial resources as a major difficulty. However, despite all these unfavourable factors, 79% of the respondents are still satisfied with their performance.

An example is given in section 13.11 of chapter 13 that Savant Enterprises in Lancashire, a software development worker co-operative, is very successful in a technology-intensive sector due to the loyalty and commitment of its 32 member-workers. An official of the worker co-operative attributed their success to excellent communication, employee empowerment and unparalleled commitment from the members. Since the members / workers own their own enterprise, they share directly in its success or failure and this produces a strong personal incentive to be committed.

Table 18 in chapter 9 indicates that 61.1% of the respondents consider members' commitment as being the main strength behind their good performance. All successful worker co-operatives whose officials were interviewed (SUMA, Tower Colliery, Unicorn, Savant, etc) emphasize loyalty and greater participation from members as being the main force behind their successful performance. Stiglitz (2002) agrees with this position when he states that participation leads to commitment and commitment, in turn, leads to greater productivity. A research study by Michie, *et al* (2002) which surveyed 53 employees of worker co-operatives also concluded that employee involvement and participation does increase employee commitment and motivation. Also that increased commitment and motivation results in increased productivity.

Another key finding in this study is the notion that a non-hierarchical management structure works for the worker co-operatives. The success of SUMA and the success of the other worker co-operatives described in section 10.2 (Tower Colliery, Unicorn, Savant, etc) confirm strongly that a non-hierarchical management structure based on the principles of democratic control actually

works. It was stated in section 10.2 that there is no “boss” at SUMA because management decisions are taken as far as possible by democratic consensus. At SUMA, the General Meeting of all the members is held six times in a year and decides on business strategies, plans, and major policy decisions.

Since the members collectively develop the policies that determine their worker co-operative's daily and long-term operation, trust, better communication and co-operation become an integral part of the worker co-operative. These virtues are vital to the success of any worker co-operative.

It is true, however, that lack of business experience among the co-operative members sometimes hinder effective decision making and has a direct bearing on most worker co-operatives' poor performance. Many worker co-operative members lack business management skills in the areas of decision-making, internal grievance procedures, marketing techniques and many other managerial techniques. The board of directors / management committees may therefore be allowed the authority and responsibility for the day-to-day operations and decision making. However, in order to cultivate the members' trust, commitment, creativity and innovation, members must be encouraged to proactively express their views on how the business ought to be run for their own benefit and they must also be kept informed about what is happening within their business. Members should feel that their participation is welcome and that their views are respected. This is a major factor that keeps the successful worker co-operatives a part from the rest.

The third key finding in this study is the fact that the main supportive environment for the development of worker co-operatives in Britain has been provided mostly by the local authorities. Local councils have either provided finance or forged partnerships with local co-operative development agencies in order to promote the principles and values of cooperation through public information and education. Most local authorities have also introduced support measures in the

form of grants, contracts and special procurement provisions to those worker co-operatives that meet specific social and public policy outcomes like employment promotion and the development of activities benefiting disadvantaged groups. A number of examples have been discussed in chapter 13 including the Co-operative Assistance Network, Accounts 3 Women Consultancy, Welwyn Hatfield Leisure and the Foster Care worker co-operative.

The central government and the local authorities can also provide a supportive environment for the development of worker co-operatives by providing tax incentives including a meaningfully lower corporation tax rates. It was noted in section 10.3.5 of chapter 10 that only 11% of the respondents in this study consider the tax laws and policies to be favourable to worker co-operatives. Various options for tax incentives and examples from different countries have been adequately discussed in section 13.6 of chapter 13.

Other areas of effective partnership include the support for relevant research studies, the publication and diffusion of the findings of such studies, tax benefits, loans, and access to public works programmes. Worker co-operatives should be recognized as being proponents of one of the most advanced, fair and dignifying modalities of labour relations, generation and distribution of wealth, and democratization of ownership and of the economy. Above all, worker co-operatives should be recognized for their role in achieving the United Nation's Millennium Development Goals (MDG) of reducing poverty, promoting gender equality, providing health care services and ensuring environmental sustainability.

The fourth key finding in this study is that most (74%) worker co-operatives in Britain have financial difficulties and may not do well within the capital intensive industries due to their unfavourable financial structure. Since worker co-operatives are owned and controlled by worker-members, outside shareholding with voting rights is not allowed. It is shown in table 17 of

chapter 9 that retained surpluses is the main source of finance for about 76% of the worker co-operatives while commercial banks is considered as the main source of finance for only 13%. It has also been noted from table 21 that financial support is regarded as a major requirement by 74% of the worker co-operatives surveyed. It is thus reasonable to conclude that the financing options currently available to the worker co-operatives in Britain, including the ones provided by the local governments as described above in this section, are not sufficient.

In order to complement this study's analysis and findings on the factors influencing the competitiveness of worker co-operatives in Britain, it is recommended therefore that further research study be carried out in this area concerning the types and the feasibility of innovative financial structures that would solve the current financial difficulties experienced by worker co-operatives in Britain.

The final key finding in this study is the fact that an integrative strategy framework provides a richer picture of the challenge of competitiveness in worker co-operatives in Britain and would therefore form a more effective basis for the formulation of a worker co-operative's strategies. With well-defined objectives, a worker co-operative can determine its strategic direction and effectively achieve the objectives by utilizing an integrative strategy framework. Rather than be biased towards the Industrial Output (I/O) model or the Resource Based View (RBV) model of strategy frameworks discussed in chapters 5 and 6, worker co-operatives should go for more effective strategies by integrating the two sets of frameworks. This will lead to the shifting of focus to the relationships, interactions and strategic alignments between the variables within the external, internal and the co-operative environments.

This study concludes that even if strategies are informal or unstructured, they will, however, be more effective if they are consciously developed and coordinated and do not merely evolve out of

day-to-day operating decisions. It is observed further that an integrative strategy-formulation process will empower members and will have many other benefits since it will represent a logical, systematic and objective approach to analyzing the critical variables in a worker co-operative's external, internal and co-operative environments and in determining a worker co-operative's future direction. Without effective strategy frameworks, worker co-operatives may not know where they want to go and may therefore end up in the margins and fringes of the economy or in some place they do not want to be.

14.3 Recommendation for Further Research

Following the discussion in section 14.2 above, further research study is recommended in the area concerning the types and the feasibility of innovative financial structures that would solve the current financial difficulties experienced by most worker co-operatives in Britain. There is a strong case for an innovative capital structure because relying on retained surpluses alone as the main source of capital may not favour formation of worker co-operatives within the capital intensive industries. One option would involve co-operatives themselves issuing shares beyond the nominal to their members and others or some form of equity participation with an employee trust arrangement. Another option would be the utilization of financial instruments like preferred shares and other non-voting shares. A leaf may be borrowed from the practice in Italy where new legal regulations provide for the issuance of preferred non-voting shares with "investor members" (outside financial partners) and for the floatation of co-operative investment certificates.

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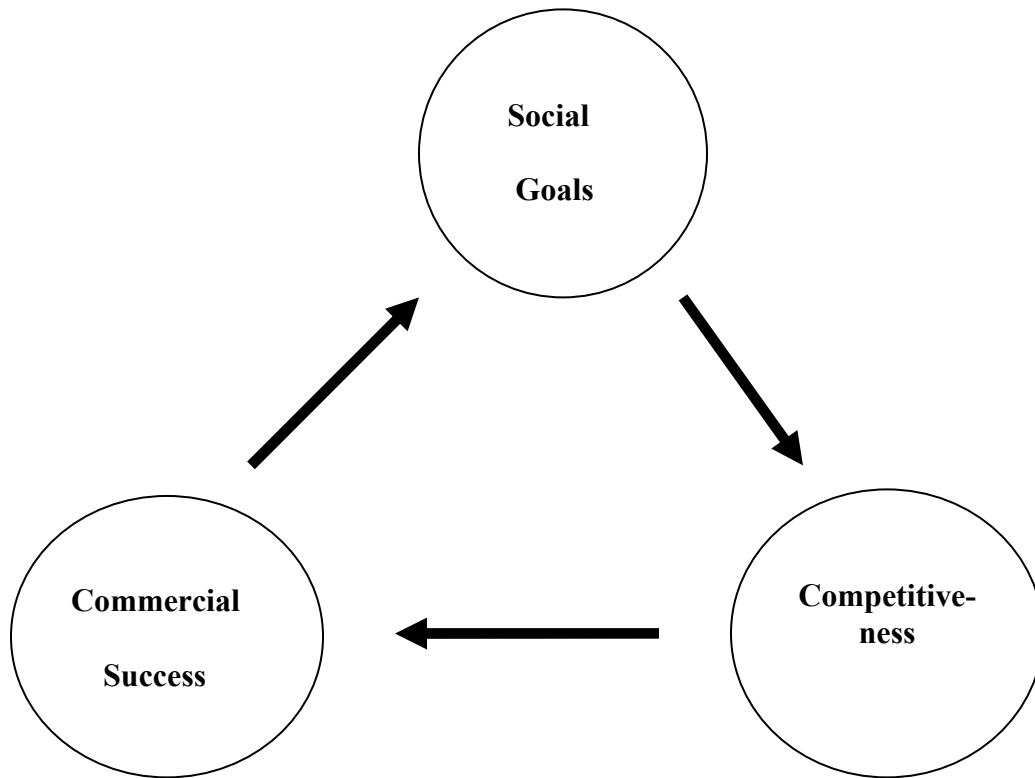
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Appendix 1: The Co-operative Advantage



Appendix 2: Letter Forwarding survey Questionnaire



The Centre for Enterprise, Ethics & Environment (CEEE),
Huddersfield University Business School
Queensgate, Huddersfield
HD1 3DH

November 4, 2005

The Chairman / Chief Executive Officer
«Field1»
«Field2»
«Field6»
«Field7»

Dear Co-operator,

Research Studies on Worker Co-operatives

The Centre for Enterprise, Ethics & Environment (CEEE) of Huddersfield University in West Yorkshire is carrying out a research study on the challenge of competitiveness in worker co-operatives in the UK. It is hoped that this research study will contribute positively towards the future performance and competitiveness of worker co-operatives.

We would like to ask for your co-operation in taking some time to complete the enclosed questionnaire on the factors that will enable us to analyze the challenge of competitiveness in your co-operative. We promise complete confidentiality on the information given to us and you can also chose to keep your identity anonymous. Our research findings will be shared with those co-operatives that participate in the research study.

We will be very glad to get back the completed questionnaire in the accompanying self-addressed envelope before **December 20, 2005**.

Yours Truly,
Joshua Wanjare
Researcher
Phone: 01484473197
E-mail: j.wanjare@hud.ac.uk

Appendix 3: Survey Questionnaire



Worker Co-operatives Survey Questionnaire

The Purpose of this survey

This survey is part of a research study by the Centre for Enterprise, Ethics & Environment (CEEE), of the Huddersfield University Business School in West Yorkshire. The research seeks to investigate the challenge of competitiveness in worker co-operatives in the U.K.

Your participation is important

Your participation in this survey is very important since it will help in the collection of information that will contribute positively towards the future performance of worker co-operatives. The findings of this research will also be shared with those participants who elect to receive copies by answering “yes” to the relevant question at the end of this section.

The information you give is confidential

We promise complete confidentiality on the information given to us and you can also chose to keep your identity anonymous.

Would you like to receive a copy of the findings of this research study? (✓ the appropriate box)

Yes ☐

No ☐

Section A

Name of Worker Co-operative _____

Address _____

Phone _____ E-mail _____

Year established _____

Position of person completing form _____

A1. Is your co-operative registered under the Industrial & Provident Societies Act? _____

A2. Describe product or service offered _____

A3. Give total number of members (✓ the appropriate box).

1. 0 – 7 ☐

2. 7 – 10 ☐

3. Over 10 ☐

A4. Give gross revenue from sales, fees or other income for the most recent financial year:

£ _____

A5. Why was your co-operative formed? (Please ✓ the appropriate selection(s)).

1. To rescue a failing previous business _____

2. To solve unemployment problem in the community _____

3. To provide an alternative (satisfying) work environment _____

4. To take over business given to employees by the original owner(s) _____

5. Other (specify) _____

A6. Has your co-operative introduced any new or improved products or processes within the last two years?

(✓ the appropriate box)

Yes ☐

No ☐

A7. If your answer to question A6 is “Yes”, please give brief description of the new or improved products or processes _____

A8. What do you consider your co-operative’s most significant problems? _____

A9. What do you consider your co-operative’s most important successes? _____

A10. How satisfied are you with the performance of your co-operative within the last two years?

Satisfied	Somewhat Satisfied	Not Satisfied	(✓ the appropriate box)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Worker Co-operatives Survey Questionnaire

Section B

- B1 To what extent have the following factors been favourable to the performance of your co-operative?
(Please ✓ the appropriate box)

Factors	Favourable	Somewhat Favourable	Not Favourable
Direction of the economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health of your industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technological changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tax laws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consumer demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competition from non-co-operatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes towards co-operatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- B2 Please rate the following sources of funds as a means of financing your co-op's assets and operations (Please ✓ the appropriate box)

Objective	Major Source	Minor Source	Not Source
Members' share contributions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retained surplus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial Common Ownership Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-operative Bank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other banks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Civil society organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grants from various sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Worker Co-operatives Survey Questionnaire

B3 To what extent have the following factors helped your co-operative in the achievement of its objectives?
(Please ✓ the appropriate box)

Factors	Major Strength	Minor Strength	Not Strength
Common ownership rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-op principles and core values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of members' commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of members' participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Members' education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
collaboration with other co-operatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alliances with non co-operatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concern for local communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concern for fair trading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B4 Does your co-operative have any of the following? (Please ✓ the appropriate box)

Document	Yes	No	Don't Know
A mission statement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goals and objectives (Explicit/written/formal or whatever)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annual operating budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A financial plan longer than one year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A human resources plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A marketing plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Worker Co-operatives Survey Questionnaire

B5 Please rate the importance of each of the following objectives for your co-operative
(Please ✓ the appropriate box)

Objective	Major Goal	Minor Goal	Not Goal
Profitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment of members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promoting fair trade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promoting co-op principles/values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B6 To what extent is external assistance in the following areas important to your co-operative?
(Please ✓ the appropriate box)

Area	Major Requirement	Minor Requirement	Not Requirement
Financial Support / loans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contracts procurement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information on business opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Development of training programmes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Worker Co-operatives Survey Questionnaire

B7 Indicate the level of difficulties caused to your co-operative by the following factors.
(Please ✓ the appropriate box).

Factors	Great Difficulties	Moderate Difficulties	No Difficulties
Access to financial resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of physical resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to technological resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled manpower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-op's organization structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-op's reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Worker Co-operatives Survey Questionnaire

B8 To what extent is the employee-ownership form of business helpful when you consider the following issues in your co-operative? (Please ✓ the appropriate box)

Issues	Very Helpful	Somewhat Helpful	Not Helpful
Employee productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decision making process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recruitment of qualified staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Securing external funds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your participation

Joshua Wanjare

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Appendix 4: Exploring Variable Relationships

Appendix 4 – 1: IPSAct and Direction of the Economy

Appendix 4 – 1a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.052(a)	2	.591
Likelihood Ratio	.941	2	.625
Linear-by-Linear Association	.290	1	.590
N of Valid Cases	131		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.10.

Appendix 4 – 1b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.090	.591
Cramer's V	.090	.591
Contingency Coefficient	.089	.591
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 2: IPSAct and Health of the Industry

Appendix 4 – 2a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.007(a)	2	.604
Likelihood Ratio	1.025	2	.599
Linear-by-Linear Association	.668	1	.414
N of Valid Cases	131		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.67.

Appendix 4 – 2b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.088	.604
Cramer's V	.088	.604
Contingency Coefficient	.087	.604
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 3: IPSAct and Technological Changes

Appendix 4 – 3a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.596(a)	2	.166
Likelihood Ratio	3.583	2	.167
Linear-by-Linear Association	2.568	1	.109
N of Valid Cases	131		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.12.

Appendix 4 – 3 b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.166	.166
Cramer's V	.166	.166
Contingency Coefficient	.163	.166
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 4: IPSAct and Government Policies

Appendix 4 – 4a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.230(a)	2	.199
Likelihood Ratio	3.068	2	.216
Linear-by-Linear Association	.387	1	.534
N of Valid Cases	131		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.57.

Appendix 4 – 4 b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.157	.199
Cramer's V	.157	.199
Contingency Coefficient	.155	.199
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 5: IPSAct and Tax Laws

Appendix 4 – 5a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.662(a)	2	.436
Likelihood Ratio	1.605	2	.448
Linear-by-Linear Association	.065	1	.798
N of Valid Cases	131		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.85.

Appendix 4 – 5b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.113	.436
Cramer's V	.113	.436
Contingency Coefficient	.112	.436
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 6: IPSAct and Consumer Demand

Appendix 4 – 6a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.317(a)	2	.518
Likelihood Ratio	1.308	2	.520
Linear-by-Linear Association	.025	1	.875
N of Valid Cases	131		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.15.

Appendix 4 – 6b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal		
Phi	.100	.518
Cramer's V	.100	.518
Contingency Coefficient	.100	.518
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 7: IPSAct and Competition from Non Co-operatives

Appendix 4 – 7a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.792(a)	2	.673
Likelihood Ratio	.821	2	.663
Linear-by-Linear Association	.780	1	.377
N of Valid Cases	131		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.12.

Appendix 4 – 7 b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	.078	.673
Cramer's V	.078	.673
Contingency Coefficient	.078	.673
N of Valid Cases	131	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Appendix 4 – 8: IPSAct and Attitude towards Co-operatives

Appendix 4 – 8a: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.837(a)	2	.658
Likelihood Ratio	.837	2	.658
Linear-by-Linear Association	.084	1	.772
N of Valid Cases	131		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.52.

Appendix 4 – 8b: Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal		
Phi	.080	.658
Cramer's V	.080	.658
Contingency Coefficient	.080	.658
N of Valid Cases	131	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 5: External Environment (B1)

Appendix 5 - 1 : Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions								
				(Constant)	Economy	Industry	Technology	GovPolicy	TaxLaws	Demand	Competition	Attitude
1	1	8.497	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.146	7.624	.00	.01	.01	.07	.01	.06	.25	.01	.08
	3	.089	9.749	.00	.00	.07	.07	.01	.02	.14	.00	.61
	4	.077	10.513	.00	.05	.00	.23	.12	.24	.02	.01	.13
	5	.060	11.912	.00	.09	.22	.32	.06	.00	.22	.05	.01
	6	.050	13.019	.00	.02	.03	.01	.45	.36	.16	.08	.00
	7	.041	14.320	.01	.01	.50	.00	.03	.00	.00	.52	.08
	8	.028	17.422	.02	.36	.14	.24	.27	.14	.20	.26	.08
	9	.011	27.973	.96	.45	.03	.07	.06	.18	.01	.07	.00

a Dependent Variable: Satisfd

Appendix 5 - 2 : Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
Economy	2.68	.530	131
Industry	2.24	.669	131
Technology	2.44	.692	131
GovPolicy	2.50	.672	131
TaxLaws	2.58	.679	131
Demand	1.82	.742	131
Competition	2.58	.690	131
Attitude	2.24	.814	131

Appendix 5 - 3: Correlations

		Satisfd	Econom y	Industry	Technlgy	GovPolc y	TaxLaws	Deman d	Cmpetit n	Attitude
Pearson Correlati on	Satisfd	1.000	.102	.349	.080	.275	-.031	.380	.354	.199
	Economy	.102	1.000	.288	.153	-.126	-.099	.026	.092	.129
	Industry	.349	.288	1.000	.101	.220	.041	.463	.407	.200
	Technlgy	.080	.153	.101	1.000	.104	-.018	.037	-.066	-.054
	GovPolicy	.275	-.126	.220	.104	1.000	.265	.171	.244	.195
	TaxLaws	-.031	-.099	.041	-.018	.265	1.000	-.016	-.034	-.022
	Demand	.380	.026	.463	.037	.171	-.016	1.000	.495	.367
	Cmpetitn	.354	.092	.407	-.066	.244	-.034	.495	1.000	.321
	Attitude	.199	.129	.200	-.054	.195	-.022	.367	.321	1.000
Sig. (1- tailed)	Satisfd	.	.122	.000	.181	.001	.361	.000	.000	.011
	Economy	.122	.	.000	.041	.076	.130	.386	.148	.070
	Industry	.000	.000	.	.125	.006	.320	.000	.000	.011
	Technlgy	.181	.041	.125	.	.119	.421	.339	.228	.272
	GovPolicy	.001	.076	.006	.119	.	.001	.025	.002	.013
	TaxLaws	.361	.130	.320	.421	.001	.	.426	.348	.402
	Demand	.000	.386	.000	.339	.025	.426	.	.000	.000
	Cmpetitn	.000	.148	.000	.228	.002	.348	.000	.	.000
	Attitude	.011	.070	.011	.272	.013	.402	.000	.000	.
N	Satisfd	131	131	131	131	131	131	131	131	131
	Economy	131	131	131	131	131	131	131	131	131
	Industry	131	131	131	131	131	131	131	131	131
	Technlgy	131	131	131	131	131	131	131	131	131
	GovPolicy	131	131	131	131	131	131	131	131	131
	TaxLaws	131	131	131	131	131	131	131	131	131
	Demand	131	131	131	131	131	131	131	131	131
	Cmpetitn	131	131	131	131	131	131	131	131	131
	Attitude	131	131	131	131	131	131	131	131	131

Appendix 6: Sources of Funds (B2)

Appendix 6 -1: Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Shares	RE	ICOF	Banks	Grants
1	1	5.576	1.000	.00	.00	.00	.00	.00	.00
	2	.204	5.228	.00	.00	.60	.00	.00	.12
	3	.104	7.331	.00	.00	.15	.05	.23	.51
	4	.055	10.077	.00	.37	.00	.43	.00	.07
	5	.050	10.536	.01	.10	.02	.29	.72	.17
	6	.011	22.894	.99	.52	.23	.23	.05	.13

a Dependent Variable: Satisfd

Appendix 6 – 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
Shares	2.75	.573	131
RE	1.33	.638	131
ICOF	2.71	.685	131
Banks	2.48	.727	131
Grants	2.31	.851	131

Appendix 6 -3: Correlations

		Satisfd	Shares	RE	ICOF	Banks	Grants
Pearson Correlation	Satisfd	1.000	.071	.110	-.119	.190	-.030
	Shares	.071	1.000	-.214	-.109	.053	.084
	RE	.110	-.214	1.000	-.044	-.028	-.262
	ICOF	-.119	-.109	-.044	1.000	.236	-.001
	Banks	.190	.053	-.028	.236	1.000	-.084
	Grants	-.030	.084	-.262	-.001	-.084	1.000
Sig. (1-tailed)	Satisfd	.	.212	.105	.088	.015	.367
	Shares	.212	.	.007	.107	.274	.170
	RE	.105	.007	.	.307	.376	.001
	ICOF	.088	.107	.307	.	.003	.494
	Banks	.015	.274	.376	.003	.	.171
	Grants	.367	.170	.001	.494	.171	.
N	Satisfd	131	131	131	131	131	131
	Shares	131	131	131	131	131	131
	RE	131	131	131	131	131	131
	ICOF	131	131	131	131	131	131
	Banks	131	131	131	131	131	131
	Grants	131	131	131	131	131	131

Appendix 7: Co-operative Environment (B3)

Appendix 7 – 1: Collinearity Diagnostics(a)

Model	Dimension	Eigen value	Condition Index	Variance Proportions									
				Constant	ComOwner	Principals	MbCommit	MbPtcptn	MbEductn	Community	FairTrade	Collbrtn	Alliance
1	1	9.033	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.252	5.989	.01	.08	.00	.04	.04	.01	.00	.02	.02	.01
	3	.221	6.393	.00	.00	.06	.02	.01	.01	.10	.16	.00	.03
	4	.138	8.079	.00	.17	.36	.00	.00	.07	.07	.05	.00	.02
	5	.101	9.461	.00	.20	.32	.01	.00	.07	.10	.36	.01	.02
	6	.093	9.866	.00	.18	.01	.00	.00	.46	.01	.00	.17	.08
	7	.067	11.585	.00	.18	.15	.01	.00	.29	.64	.23	.02	.00
	8	.057	12.571	.01	.01	.05	.01	.00	.05	.04	.14	.69	.24
	9	.021	20.607	.06	.00	.03	.80	.86	.01	.00	.01	.00	.05
	10	.016	23.655	.91	.18	.02	.11	.08	.02	.04	.03	.07	.56

a Dependent Variable: Satisfd

Appendix 7 - 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
ComOwner	2.02	.769	131
Principals	1.62	.789	131
MbCommit	1.56	.766	131
MbPtcptn	1.60	.771	131
MbEductn	2.07	.736	131
Community	1.76	.785	131
FairTrade	1.66	.819	131
Collbrtn	2.45	.736	131
Alliance	2.58	.644	131

Appendix 7 – 3: Correlations

		Satisfd	ComOwner	Prncpls	MbCommit	MbPtcpn	MbEduc	Commnty	FairTrde	Collbrtn	Alliance
Pearson Correlation	Satisfd	1.000	.074	.490	.178	.258	.051	.483	.386	.122	-.049
	ComOwner	.074	1.000	.268	.070	.028	.092	-.016	.061	.185	-.151
	Prncpls	.490	.268	1.000	.304	.368	.152	.432	.383	.272	-.076
	MbCommit	.178	.070	.304	1.000	.885	.286	.266	.301	.111	.150
	MbPtcpn	.258	.028	.368	.885	1.000	.292	.296	.335	.101	.126
	MbEduc	.051	.092	.152	.286	.292	1.000	.229	.141	.042	.078
	Commnty	.483	-.016	.432	.266	.296	.229	1.000	.553	.139	-.144
	FairTrde	.386	.061	.383	.301	.335	.141	.553	1.000	.202	-.226
	Collbrtn	.122	.185	.272	.111	.101	.042	.139	.202	1.000	.013
	Alliance	-.049	-.151	-.076	.150	.126	.078	-.144	-.226	.013	1.000
Sig. (1- tailed)	Satisfd	.	.201	.000	.021	.001	.283	.000	.000	.082	.290
	ComOwner	.201	.	.001	.215	.374	.147	.427	.244	.017	.042
	Prncpls	.000	.001	.	.000	.000	.042	.000	.000	.001	.195
	MbCommit	.021	.215	.000	.	.000	.000	.001	.000	.104	.043
	MbPtcpn	.001	.374	.000	.000	.	.000	.000	.000	.127	.075
	MbEduc	.283	.147	.042	.000	.000	.	.004	.054	.318	.189
	Commnty	.000	.427	.000	.001	.000	.004	.	.000	.057	.051
	FairTrde	.000	.244	.000	.000	.000	.054	.000	.	.010	.005
	Collbrtn	.082	.017	.001	.104	.127	.318	.057	.010	.	.444
	Alliance	.290	.042	.195	.043	.075	.189	.051	.005	.444	.
N	Satisfd	131	131	131	131	131	131	131	131	131	131
	ComOwner	131	131	131	131	131	131	131	131	131	131
	Prncpls	131	131	131	131	131	131	131	131	131	131
	MbCommit	131	131	131	131	131	131	131	131	131	131
	MbPtcpn	131	131	131	131	131	131	131	131	131	131
	MbEduc	131	131	131	131	131	131	131	131	131	131
	Commnty	131	131	131	131	131	131	131	131	131	131
	FairTrde	131	131	131	131	131	131	131	131	131	131
	Collbrtn	131	131	131	131	131	131	131	131	131	131
	Alliance	131	131	131	131	131	131	131	131	131	131

Appendix 8: Worker Co-operatives Major Objectives (B5)

Appendix 8 -1 : Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions							
				Constant	Profit	Growth	Stability	Emplymnt	Communt y	FairTrad	Pncples
1	1	7.106	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.313	4.765	.00	.01	.00	.06	.08	.06	.06	.03
	3	.232	5.535	.00	.30	.07	.03	.06	.01	.02	.03
	4	.115	7.850	.00	.08	.11	.02	.00	.12	.07	.52
	5	.094	8.674	.00	.36	.36	.07	.04	.11	.04	.16
	6	.058	11.104	.03	.09	.13	.60	.44	.04	.11	.19
	7	.049	11.994	.02	.01	.09	.21	.11	.62	.69	.03
	8	.032	14.927	.94	.14	.24	.01	.26	.04	.00	.05

a Dependent Variable: Satisfd

Appendix 8 - 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
Profit	1.80	.789	131
Growth	2.03	.723	131
Stability	1.44	.621	131
Emplymnt	1.37	.624	131
Communt y	1.70	.810	131
FairTrad	1.58	.774	131
Pncples	1.79	.794	131

Appendix 8 – 3: Correlations

		Satisfd	Profit	Growth	Stabilty	Emplymnt	Communt	FairTrad	Pncples
Pearson Correlation	Satisfd	1.000	.107	.138	.024	-.082	.414	.474	.346
	Profit	.107	1.000	.267	-.011	-.098	-.009	.014	-.117
	Growth	.138	.267	1.000	.004	-.179	.173	.078	.119
	Stabilty	.024	-.011	.004	1.000	.628	.045	.015	.050
	Emplymnt	-.082	-.098	-.179	.628	1.000	-.082	-.007	.069
	Communt	.414	-.009	.173	.045	-.082	1.000	.694	.390
	FairTrad	.474	.014	.078	.015	-.007	.694	1.000	.491
	Pncples	.346	-.117	.119	.050	.069	.390	.491	1.000
Sig. (1-tailed)	Satisfd	.	.112	.058	.394	.175	.000	.000	.000
	Profit	.112	.	.001	.451	.133	.460	.438	.091
	Growth	.058	.001	.	.480	.020	.024	.188	.088
	Stabilty	.394	.451	.480	.	.000	.303	.433	.287
	Emplymnt	.175	.133	.020	.000	.	.175	.469	.215
	Communt	.000	.460	.024	.303	.175	.	.000	.000
	FairTrad	.000	.438	.188	.433	.469	.000	.	.000
	Pncples	.000	.091	.088	.287	.215	.000	.000	.
N	Satisfd	131	131	131	131	131	131	131	131
	Profit	131	131	131	131	131	131	131	131
	Growth	131	131	131	131	131	131	131	131
	Stabilty	131	131	131	131	131	131	131	131
	Emplymnt	131	131	131	131	131	131	131	131
	Communt	131	131	131	131	131	131	131	131
	FairTrad	131	131	131	131	131	131	131	131
	Pncples	131	131	131	131	131	131	131	131

Appendix 9: External Assistance Required (B6)

Appendix 9 - 1: Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions							
				Constant	FinRescs	BusDev	CntrProc	BusInfo	MktInfo	Training	BetrMgt
1	1	7.025	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.238	5.433	.00	.06	.37	.05	.04	.02	.19	.01
	3	.189	6.101	.00	.27	.07	.37	.06	.00	.02	.09
	4	.158	6.664	.00	.17	.34	.18	.13	.08	.14	.01
	5	.144	6.994	.00	.28	.04	.12	.11	.24	.12	.10
	6	.112	7.920	.00	.19	.04	.18	.55	.00	.23	.15
	7	.105	8.171	.00	.03	.00	.08	.00	.41	.23	.46
	8	.029	15.548	.99	.01	.14	.02	.11	.25	.08	.18

a Dependent Variable: Satisfd

Appendix 9 - 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
FinRescs	1.38	.696	131
BusDev	1.66	.838	131
CntrProc	1.78	.897	131
BusInfo	1.36	.569	131
MktInfo	1.27	.478	131
Training	1.47	.694	131
BetrMgt	2.24	.842	131

Appendix 9 - 3: Correlations

		Satisfd	FinRescs	BusDev	CntrProc	BusInfo	MktInfo	Training	BetrMgt
Pearson Correlation	Satisfd	1.000	-.027	.182	-.015	.029	-.055	.035	-.329
	FinRescs	-.027	1.000	.169	.235	.118	.177	.037	-.003
	BusDev	.182	.169	1.000	.003	-.068	.053	-.082	-.014
	CntrProc	-.015	.235	.003	1.000	.066	.103	.244	.042
	BusInfo	.029	.118	-.068	.066	1.000	-.016	.209	.105
	MktInfo	-.055	.177	.053	.103	-.016	1.000	-.106	.028
	Training	.035	.037	-.082	.244	.209	-.106	1.000	.117
	BetrMgt	-.329	-.003	-.014	.042	.105	.028	.117	1.000
Sig. (1-tailed)	Satisfd	.	.380	.019	.433	.371	.265	.347	.000
	FinRescs	.380	.	.027	.003	.090	.022	.337	.487
	BusDev	.019	.027	.	.488	.220	.274	.177	.439
	CntrProc	.433	.003	.488	.	.226	.120	.003	.319
	BusInfo	.371	.090	.220	.226	.	.429	.008	.117
	MktInfo	.265	.022	.274	.120	.429	.	.114	.377
	Training	.347	.337	.177	.003	.008	.114	.	.093
	BetrMgt	.000	.487	.439	.319	.117	.377	.093	.
N	Satisfd	131	131	131	131	131	131	131	131
	FinRescs	131	131	131	131	131	131	131	131
	BusDev	131	131	131	131	131	131	131	131
	CntrProc	131	131	131	131	131	131	131	131
	BusInfo	131	131	131	131	131	131	131	131
	MktInfo	131	131	131	131	131	131	131	131
	Training	131	131	131	131	131	131	131	131
	BetrMgt	131	131	131	131	131	131	131	131

Appendix 10: Resources and Capabilities (B7)

Appendix 10 - 1: Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions							
				Constant	Financial	Physical	Technol	Skills	Mgt	OrgStrct	Reputation
1	1	7.324	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.243	5.489	.00	.15	.06	.00	.10	.04	.04	.01
	3	.136	7.341	.00	.01	.75	.00	.32	.00	.00	.00
	4	.106	8.296	.00	.63	.12	.02	.52	.00	.00	.00
	5	.077	9.755	.09	.19	.01	.38	.03	.04	.12	.00
	6	.056	11.458	.05	.00	.02	.00	.02	.15	.64	.09
	7	.041	13.356	.35	.02	.03	.49	.00	.07	.04	.14
	8	.017	20.687	.51	.01	.00	.10	.01	.69	.15	.75

a Dependent Variable: Satisfd

Appendix 10 - 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
Financial	1.50	.727	131
Physical	1.52	.705	131
Technol	2.50	.727	131
Skills	1.58	.754	131
Mgt	2.18	.875	131
OrgStrct	2.18	.779	131
Reputatn	2.43	.713	131

Appendix 10 - 3: Correlations

		Satisfd	Fnancial	Physcal	Tchnlgcl	Skills	Mgt	OrgStrct	Reputatn
Pearson Correlation	Satisfd	1.000	.072	.007	-.072	.040	-.276	-.102	-.326
	Fnancial	.072	1.000	.341	.324	.417	.083	.060	.041
	Physcal	.007	.341	1.000	.169	.254	.106	.127	.106
	Tchnlgcl	-.072	.324	.169	1.000	.271	.303	.157	.226
	Skills	.040	.417	.254	.271	1.000	.094	.126	.107
	Mgt	-.276	.083	.106	.303	.094	1.000	.629	.773
	OrgStrct	-.102	.060	.127	.157	.126	.629	1.000	.473
	Reputatn	-.326	.041	.106	.226	.107	.773	.473	1.000
Sig. (1-tailed)	Satisfd	.	.208	.470	.208	.327	.001	.123	.000
	Fnancial	.208	.	.000	.000	.000	.172	.248	.320
	Physcal	.470	.000	.	.027	.002	.113	.075	.114
	Tchnlgcl	.208	.000	.027	.	.001	.000	.036	.005
	Skills	.327	.000	.002	.001	.	.142	.075	.111
	Mgt	.001	.172	.113	.000	.142	.	.000	.000
	OrgStrct	.123	.248	.075	.036	.075	.000	.	.000
	Reputatn	.000	.320	.114	.005	.111	.000	.000	.
N	Satisfd	131	131	131	131	131	131	131	131
	Fnancial	131	131	131	131	131	131	131	131
	Physcal	131	131	131	131	131	131	131	131
	Tchnlgcl	131	131	131	131	131	131	131	131
	Skills	131	131	131	131	131	131	131	131
	Mgt	131	131	131	131	131	131	131	131
	OrgStrct	131	131	131	131	131	131	131	131
	Reputatn	131	131	131	131	131	131	131	131

Appendix 11: Employee Ownership and Effective Performance (B8)

Appendix 11 - 1: Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions									
				(Constant)	EmplProd	EmplComt	WorkSati	EmplRela	InfoShar	DecsnMkg	EmpDiscp	StaffRec	ExtnFund
1	1	8.811	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.386	4.779	.00	.04	.05	.05	.00	.07	.02	.00	.01	.02
	3	.167	7.257	.00	.00	.02	.00	.67	.09	.02	.09	.00	.01
	4	.160	7.429	.00	.00	.00	.04	.09	.01	.03	.45	.11	.08
	5	.127	8.340	.00	.00	.03	.02	.01	.01	.40	.37	.01	.13
	6	.119	8.596	.00	.00	.00	.01	.06	.76	.18	.02	.02	.09
	7	.075	10.843	.00	.00	.50	.65	.01	.00	.12	.00	.02	.02
	8	.069	11.316	.00	.07	.00	.01	.02	.05	.02	.04	.62	.60
	9	.060	12.100	.01	.86	.32	.16	.00	.00	.00	.00	.10	.01
	10	.027	18.208	.98	.01	.07	.06	.12	.01	.21	.03	.11	.04

a Dependent Variable: Satisfd

Appendix 11 - 2: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfd	1.82	.752	131
EmplProd	1.44	.681	131
EmplComt	1.29	.614	131
WorkSati	1.39	.663	131
EmplRela	1.41	.631	131
InfoShar	1.58	.744	131
DecsnMkg	2.09	.799	131
EmpDiscp	1.37	.624	131
StaffRec	2.34	.839	131
ExtnFund	2.15	.833	131

Appendix 11 - 3: Correlations

		Satisfd	EmplPr od	EmplCo mt	WorkSa ti	EmplRe la	InfoSha r	DecsnM kg	EmpDis cp	StaffRe c	ExtnFund
Pearson Correlation	Satisfd	1.000	.054	.049	.221	-.115	-.207	-.164	-.082	-.070	-.117
	EmplProd	.054	1.000	.647	.620	.127	-.101	-.061	.186	-.053	-.060
	EmplComt	.049	.647	1.000	.552	.007	-.136	-.070	.136	-.075	-.128
	WorkSati	.221	.620	.552	1.000	.073	-.134	-.199	.091	-.007	-.019
	EmplRela	-.115	.127	.007	.073	1.000	.027	.001	.074	-.023	.105
	InfoShar	-.207	-.101	-.136	-.134	.027	1.000	.208	.159	.282	.211
	DecsnMkg	-.164	-.061	-.070	-.199	.001	.208	1.000	.116	.090	.061
	EmpDiscp	-.082	.186	.136	.091	.074	.159	.116	1.000	.002	.087
	StaffRec	-.070	-.053	-.075	-.007	-.023	.282	.090	.002	1.000	.401
	ExtnFund	-.117	-.060	-.128	-.019	.105	.211	.061	.087	.401	1.000
Sig. (1- tailed)	Satisfd	.	.269	.288	.006	.095	.009	.031	.175	.213	.092
	EmplProd	.269	.	.000	.000	.074	.126	.244	.017	.275	.249
	EmplComt	.288	.000	.	.000	.470	.061	.212	.060	.196	.073
	WorkSati	.006	.000	.000	.	.203	.064	.011	.149	.468	.413
	EmplRela	.095	.074	.470	.203	.	.378	.496	.200	.399	.117
	InfoShar	.009	.126	.061	.064	.378	.	.009	.035	.001	.008
	DecsnMkg	.031	.244	.212	.011	.496	.009	.	.094	.152	.245
	EmpDiscp	.175	.017	.060	.149	.200	.035	.094	.	.489	.161
	StaffRec	.213	.275	.196	.468	.399	.001	.152	.489	.	.000
	ExtnFund	.092	.249	.073	.413	.117	.008	.245	.161	.000	.
N	Satisfd	131	131	131	131	131	131	131	131	131	131
	EmplProd	131	131	131	131	131	131	131	131	131	131
	EmplComt	131	131	131	131	131	131	131	131	131	131
	WorkSati	131	131	131	131	131	131	131	131	131	131
	EmplRela	131	131	131	131	131	131	131	131	131	131
	InfoShar	131	131	131	131	131	131	131	131	131	131
	DecsnMkg	131	131	131	131	131	131	131	131	131	131
	EmpDiscp	131	131	131	131	131	131	131	131	131	131
	StaffRec	131	131	131	131	131	131	131	131	131	131
	ExtnFund	131	131	131	131	131	131	131	131	131	131

Appendix 12: Exploratory Crosstabs

Appendix 12 - 1: IPSAct and Direction of the Economy

Crosstab

			Economy			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	2	25	68	95
		Expected Count	2.9	24.7	67.4	95.0
		% within IPSAct	2.1%	26.3%	71.6%	100.0%
		% within Economy	50.0%	73.5%	73.1%	72.5%
		% of Total	1.5%	19.1%	51.9%	72.5%
	No	Count	2	9	25	36
		Expected Count	1.1	9.3	25.6	36.0
		% within IPSAct	5.6%	25.0%	69.4%	100.0%
		% within Economy	50.0%	26.5%	26.9%	27.5%
		% of Total	1.5%	6.9%	19.1%	27.5%
Total		Count	4	34	93	131
		Expected Count	4.0	34.0	93.0	131.0
		% within IPSAct	3.1%	26.0%	71.0%	100.0%
		% within Economy	100.0%	100.0%	100.0%	100.0%
		% of Total	3.1%	26.0%	71.0%	100.0%

Appendix 12 - 2: IPSAct and Health of the Industry

Crosstab

			Industry			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	12	45	38	95
		Expected Count	12.3	47.1	35.5	95.0
		% within IPSAct	12.6%	47.4%	40.0%	100.0%
		% within Industry	70.6%	69.2%	77.6%	72.5%
		% of Total	9.2%	34.4%	29.0%	72.5%
	No	Count	5	20	11	36
		Expected Count	4.7	17.9	13.5	36.0
		% within IPSAct	13.9%	55.6%	30.6%	100.0%
		% within Industry	29.4%	30.8%	22.4%	27.5%
		% of Total	3.8%	15.3%	8.4%	27.5%
Total		Count	17	65	49	131
		Expected Count	17.0	65.0	49.0	131.0
		% within IPSAct	13.0%	49.6%	37.4%	100.0%
		% within Industry	100.0%	100.0%	100.0%	100.0%
		% of Total	13.0%	49.6%	37.4%	100.0%

Appendix 12 - 3: IPSAct and Technological Changes

Crosstab

			Technlgy			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	10	28	57	95
		Expected Count	10.9	31.9	52.2	95.0
		% within IPSAct	10.5%	29.5%	60.0%	100.0%
		% within Technlgy	66.7%	63.6%	79.2%	72.5%
		% of Total	7.6%	21.4%	43.5%	72.5%
	No	Count	5	16	15	36
		Expected Count	4.1	12.1	19.8	36.0
		% within IPSAct	13.9%	44.4%	41.7%	100.0%
		% within Technlgy	33.3%	36.4%	20.8%	27.5%
		% of Total	3.8%	12.2%	11.5%	27.5%
Total	Count	15	44	72	131	
	Expected Count	15.0	44.0	72.0	131.0	
	% within IPSAct	11.5%	33.6%	55.0%	100.0%	
	% within Technlgy	100.0%	100.0%	100.0%	100.0%	
	% of Total	11.5%	33.6%	55.0%	100.0%	

Appendix 12 - 4: IPSAct and Government Policies

Crosstab

			GovPolicy			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	7	31	57	95
		Expected Count	9.4	28.3	57.3	95.0
		% within IPSAct	7.4%	32.6%	60.0%	100.0%
		% within GovPolicy	53.8%	79.5%	72.2%	72.5%
		% of Total	5.3%	23.7%	43.5%	72.5%
	No	Count	6	8	22	36
		Expected Count	3.6	10.7	21.7	36.0
		% within IPSAct	16.7%	22.2%	61.1%	100.0%
		% within GovPolicy	46.2%	20.5%	27.8%	27.5%
		% of Total	4.6%	6.1%	16.8%	27.5%
	Total	Count	13	39	79	131
		Expected Count	13.0	39.0	79.0	131.0
		% within IPSAct	9.9%	29.8%	60.3%	100.0%
		% within GovPolicy	100.0%	100.0%	100.0%	100.0%
		% of Total	9.9%	29.8%	60.3%	100.0%

Appendix 12 - 5: IPSAct and Tax Laws

Crosstab

			TaxLaws			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	11	17	67	95
		Expected Count	10.2	19.6	65.3	95.0
		% within IPSAct	11.6%	17.9%	70.5%	100.0%
		% within TaxLaws	78.6%	63.0%	74.4%	72.5%
		% of Total	8.4%	13.0%	51.1%	72.5%
	No	Count	3	10	23	36
		Expected Count	3.8	7.4	24.7	36.0
		% within IPSAct	8.3%	27.8%	63.9%	100.0%
		% within TaxLaws	21.4%	37.0%	25.6%	27.5%
		% of Total	2.3%	7.6%	17.6%	27.5%
Total	Count		14	27	90	131
	Expected Count		14.0	27.0	90.0	131.0
	% within IPSAct		10.7%	20.6%	68.7%	100.0%
	% within TaxLaws		100.0%	100.0%	100.0%	100.0%
	% of Total		10.7%	20.6%	68.7%	100.0%

Appendix 12 - 6: IPSAct and Consumer Demand

Crosstab

			Demand			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	38	37	20	95
		Expected Count	36.3	39.9	18.9	95.0
		% within IPSAct	40.0%	38.9%	21.1%	100.0%
		% within Demand	76.0%	67.3%	76.9%	72.5%
		% of Total	29.0%	28.2%	15.3%	72.5%
	No	Count	12	18	6	36
		Expected Count	13.7	15.1	7.1	36.0
		% within IPSAct	33.3%	50.0%	16.7%	100.0%
		% within Demand	24.0%	32.7%	23.1%	27.5%
		% of Total	9.2%	13.7%	4.6%	27.5%
Total	Count		50	55	26	131
	Expected Count		50.0	55.0	26.0	131.0
	% within IPSAct		38.2%	42.0%	19.8%	100.0%
	% within Demand		100.0%	100.0%	100.0%	100.0%
	% of Total		38.2%	42.0%	19.8%	100.0%

Appendix 12 - 7: IPSAct and Competition from Non Co-operatives

Crosstab

			Cmpetitn			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	12	19	64	95
		Expected Count	10.9	18.1	66.0	95.0
		% within IPSAct	12.6%	20.0%	67.4%	100.0%
		% within Cmpetitn	80.0%	76.0%	70.3%	72.5%
		% of Total	9.2%	14.5%	48.9%	72.5%
	No	Count	3	6	27	36
		Expected Count	4.1	6.9	25.0	36.0
		% within IPSAct	8.3%	16.7%	75.0%	100.0%
		% within Cmpetitn	20.0%	24.0%	29.7%	27.5%
		% of Total	2.3%	4.6%	20.6%	27.5%
Total		Count	15	25	91	131
		Expected Count	15.0	25.0	91.0	131.0
		% within IPSAct	11.5%	19.1%	69.5%	100.0%
		% within Cmpetitn	100.0%	100.0%	100.0%	100.0%
		% of Total	11.5%	19.1%	69.5%	100.0%

Appendix 12 - 8: IPSAct and Attitude towards Co-operatives

Crosstab

			Attitude			Total
			Fav	Somewht	NotFav	
IPSAct	Yes	Count	24	25	46	95
		Expected Count	22.5	26.8	45.7	95.0
		% within IPSAct	25.3%	26.3%	48.4%	100.0%
		% within Attitude	77.4%	67.6%	73.0%	72.5%
		% of Total	18.3%	19.1%	35.1%	72.5%
	No	Count	7	12	17	36
		Expected Count	8.5	10.2	17.3	36.0
		% within IPSAct	19.4%	33.3%	47.2%	100.0%
		% within Attitude	22.6%	32.4%	27.0%	27.5%
		% of Total	5.3%	9.2%	13.0%	27.5%
Total		Count	31	37	63	131
		Expected Count	31.0	37.0	63.0	131.0
		% within IPSAct	23.7%	28.2%	48.1%	100.0%
		% within Attitude	100.0%	100.0%	100.0%	100.0%
		% of Total	23.7%	28.2%	48.1%	100.0%