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**UNDERSTANDING ETHNIC ENTREPRENEURSHIP
IN AGRICULTURAL SETTINGS:
QUALITATIVE COMPARATIVE ANALYSIS OF
ETHNIC GROUPS IN NEW ZEALAND
AGRICULTURE**

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of the requirements for the Degree of

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Branka Krivokapic-Skoko

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Abstract

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**UNDERSTANDING ETHNIC ENTREPRENEURSHIP IN AGRICULTURAL
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This thesis examines ethnic solidarity and ethnic resource mobilisation within agricultural settings using Qualitative Comparative Analysis of ethnic groups in New Zealand agriculture. The thesis addresses ethnic solidarity through the application of the concept of ethnic entrepreneurship. Major theoretical perspectives on ethnic entrepreneurship have identified situational and cultural factors as responsible for the mobilisation of ethnic resources in economic activities. This thesis argues that these two groups of factors, when taken together, provide a comprehensive explanation for ethnic solidarity in business and the development of stable social structures for mobilisation of resources within ethnic groups involved in agriculture. Thus, the thesis derived a simple causal model which combines situational explanations with the key aspects of cultural approaches in considering the reasons for ethnic solidarity and development of ethnic networks in business. This composite model of ethnic entrepreneurship considered host hostility in conjunction with collectivistic cultural endowments as the principal causal configuration responsible for development of ethnic business networks. The model also pointed at the recursive effects of ethnic networks and ethnic solidarity in business, which could be associated with conflicts between ethnic entrepreneurs and competing groups from the host population.

Theoretical arguments derived from the model were empirically evaluated by using Qualitative Comparative Analysis (QCA), a method suitable to assess theoretical propositions derived from composite models, and used to provide causal explanation in social science. The thesis employed a multiple groups/one industry research design and provided a systematic, holistic comparison of eleven ethnic groups which consistently played an important role in the history of New Zealand agriculture during the nineteenth and twentieth centuries. These were: the Chinese, Indian and Italian market gardeners; the Lebanese, Dalmatian and French grape growers and wine makers; the Scandinavian and Bohemian dairy farmers; the German and Polish farmers and growers, and finally, the recent Dutch immigrants who became largely involved in the horticultural and dairy industries. These eleven comparative case studies were designed to provide a formal, coherent analysis of the empirical evidence which generated data on the key comparative components.

The empirical research showed that only Asian entrepreneurs developed informal, ethnically bounded business networks. These networks facilitated the mobilisation and distribution of ethnic resources, and provided support for Asian entrepreneurs in starting and carrying out their farming businesses. In terms of causal analysis the empirical research showed how both social and cultural factors were relevant for mobilisation of intra-group resources and the emergence of ethnic business networks within the Chinese and Indian farmers in New Zealand. Certain social factors, such as considerable host hostility and discrimination faced by Asian immigrants, enhanced ethnic solidarity and mutual co-operation in economic matters. The ethnic business networks developed were deeply rooted in the cultural tradition of collectivism, which encompassed certain cultural endowments capable of promoting the establishment of network-based economic mechanisms and which also impelled strong bonds of ethnic solidarity in business.

Generally, the thesis focused on the influence of non-economic factors in explaining economic activity of ethnic groups, and also pointed at ethnically-bounded business networks as structures for mobilisation of resources within ethnic communities in business. Some concepts used in the research, such as embeddedness of economic actions, networks, social and cultural capital, are also relevant for current ethnic business development in New Zealand. The thesis considered some policy implications and also indicated how these concepts could be applied to more policy-oriented research.

Key words: ethnicity; entrepreneurship; economic sociology; composite models; ethnic business networks; ethnic farming enterprises; host hostility; collectivistic cultural endowments; Qualitative Comparative Analysis.

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CHAPTER 1

INTRODUCTION

1.1 Ethnicity and Agriculture: Empirical Considerations

The topic of ethnicity in agriculture¹ in overseas literature has been an area of interest to different academic disciplines. Rural sociologists have focused on the social position of ethnic minorities in rural areas (Kuvlesky, 1989; Saenz, 1991; Naples, 1995) and on ethnic differences in the diffusion and adoption of the agricultural practices (Sommers and Napier, 1993; van den Ban, 1960; Duncan and Kreitlow, 1954; Pedersen, 1951). Anthropologists have analysed the ways in which ethnic differences influenced the farm management style of ethnic origin farm families (Salamon 1980, 1984, 1985, 1993; Flora and Stitz, 1985; Foster et al. 1987; Rogers, 1987). Relying on the tradition of economic anthropology, Wells (1991) showed how ethnic factors constrained farmer decision-making. Wells also examined how farmers' knowledge systems, as constructed through the operation of specific social networks, vary among ethnic groups. In the field of sociology, studies on ethnicity in agricultural settings have underlined the maintenance of group solidarity and ethnic identity (Driedger, 1995; Rees-Powell, 1966; Slocum, 1962). Agricultural economists have confirmed the influences of ethnicity on the agricultural performance of the immigrants entering agriculture (Sadan and Weintraub, 1980). Economic sociologists have discussed ethnicity in agriculture within the framework of ethnic entrepreneurship underlining the distinctive ethnic business strategy in primary production and in general ethnic solidarity in economic affairs (Light, 1972; Light et al. 1993; Aldrich and Waldinger, 1990; O' Brien and Fugita, 1982; Tsukashima, 1991; Bonacich and Modell, 1980).

Historically, there has been a longstanding awareness of issues surrounding ethnicity in rural areas, particularly in the case of US agriculture. Early research on ethnicity and agriculture emerged as a part of general social surveys of rural life. One of the earliest pieces of research on the topic dates from the 1910s. This was a social survey analysis done under the auspices of the Presbyterian Department of Church and Country Life and resulted in a voluminous report of community studies as reviewed in Buttell et al. (1990). The survey first mentioned the existence of immigrant communities in Californian agriculture, revealing that ethnic background was related to specific types of farming and land tenure. Thereafter, rural sociological research on the structure of agriculture documented that the farming practices of ethnic origin farmers were determined largely by their cultural background, such as specific religious orientation, values and beliefs (Hoffman, 1949; Deininger and Marchall, 1955; Marshall, 1948; Senter, 1945). After the intense research interest in this topic during the 1930s, 1940s and early 1950s, there

¹ US sources, which are dominant in the area of ethnicity in agriculture, use the word 'agriculture' to include both agriculture and horticulture. This thesis will use the same terminology.

was a gap of approximately thirty years before a resurgence of the topic is noticed in the literature.

While an earlier line of studies had dealt with historical accounts of ethnic groups in agricultural production (Iwata, 1962; Marshall, 1948; Binder-Johnson, 1941) and had been followed by studies on ethnic persistence in agriculture (Salamon and associates; Foster et al. 1987), the literature of the 1990s has focused on the socio-economic position of rural ethnic minorities (Payne, 1991; Dishongh and Worthein 1991; Kuvlesky, 1989; Saenz, 1991). Moreover, in the light of environmental degradation and the issue of environmental sustainability, there is increasing research interest in rural religious groups which are environmentally sensitive and which adopt conservative agricultural practices (Sommers and Napier, 1993; Paterson, 1989). Finally, the current literature on the interplay between ethnicity and economy has addressed the mobilisation of ethnic factors and distinctive ethnic business strategies developed by immigrant groups entering agricultural production.

Empirically, the impact of ethnic values on farm management issues has been discussed in studies focusing on ethnic influences on farming patterns and the structure of agriculture, particularly in the U.S. The ethnographic work of Salamon in the United States², for instance, revealed how ethnic difference continued to shape farming patterns amongst ethnic origin immigrants in the Midwest, U.S. Several other studies in the tradition of Salamon, found support for understanding differences in farm size, goals and strategy as a partial function of ethnicity. Topics examined were relationships between ethnic factors and other variables, such as farm size and farm persistence (Flora and Stitz, 1985), farmers' behaviour through agricultural crisis (Salamon and Davis-Brown, 1986), inheritance patterns (Rogers and Salamon, 1983), length of ownership, frequency of land transfer, and farm structure (Foster et al. 1987, 1987a), and farm diversification (Roger, 1987).

While a substantive body of empirical knowledge and literature has accumulated around ethnicity in the context of US agriculture, particularly Midwestern and Californian agriculture, there is little systematic research on various ethnic groups in agricultural settings worldwide³. In one of the few studies on ethnicity in European agriculture, Cole and Wolf (1974) carried out an

² Salamon's studies are based on more than fifteen years of research among Illinois ethnic rural communities. Salamon started an anthropological study in 1975 by analysing a German community (Salamon and O'Reilly, 1979) and afterwards extended the field work by including four farming communities (Salamon, 1984) and most recently seven farming communities dominated by German and Yankee ethnic groups (Salamon, 1993). Salamon focused on ethnic factors as a potential source of explanation for differences in farming patterns, such as goals and strategies, and farming organisation. Salamon also explained how cultural factors shaped the intergenerational land transfer process leading to ethnically distinctive patterns of land tenure, size of farm, persistence in farming, and farm fragmentation. ³Table A1.1 in Appendix gives an overview of problem foci, ethnic groups and localities of the analyses as noted in the literature on ethnicity in agriculture.

anthropological inquiry within two ethnic communities in an Alpine valley, Italy. Colfer et al. (1989) analysed the ethnic differences amongst the farmers who took part in the Indonesian transmigration programme. Examples from other localities include research on the Japanese and German immigrants in rural Brazil (Willems, 1941) and Dutch and Italian immigrants who became farmers in Canada (Rees-Powel, 1966) and Australia (Hempel, 1960; Burnley, 1972). In addition, some recent Australian sources such as Gray et al. (1991) and Babacan (1998) explored key elements of the settlement process for immigrants in rural areas, while Lancashire (2000) and Frost (2000) focus on the history of Chinese farming communities in Australia.

van Roon (1971) and Lee (1974) represent New Zealand sources which have ethnicity in agriculture as a primary focus of analysis. van Roon's (1971) study on the human geography of the Dutch in New Zealand agriculture has provided evidence of the impact of cultural traits and value orientations on farming practice and farm management styles. Lee (1974) has outlined the ethnically derived inheritance patterns and the way in which ethnic factors have influenced the family agricultural enterprises amongst the Chinese market gardeners in the Auckland region. Some other sources have also noted the persistence of ethnicity in agricultural settings while analysing historical aspects (Ng, 1959; Ip, 1995; Leckie, 1995; Sedgwick, 1982) or geographical aspects (van Dungen, 1992; Thornton, 1968; Taher, 1965) of settlements of certain ethnic groups in New Zealand.

The foregoing cross-disciplinary review on the persistence of ethnicity in agricultural settings poses the following questions. If researchers agree that ethnic groups are a reality in both overseas and New Zealand agriculture, and even underline how impressive the ethnic determinants of farming patterns are (Salamon, 1980, p.305), what reasons can be given for the emergence and persistence of ethnicity in agricultural settings? How has the concept of ethnicity been explained in the literature reviewed above? Do these mainstream academic approaches help to understand ethnicity in the rural context and can they provide adequate explanations for the persistence of ethnic identity among farming groups in some regions? What are the causal forces behind ethnic solidarity in agricultural settings? To answer these questions the following section deals with the theoretical considerations and causal analyses as found in the literature on the topic. Before turning to this discussion it is necessary to explain the concept of ethnicity as it has been developed in the larger circle of theoretical work. Afterwards, this chapter looks at how, and if, the overall theoretical perspectives of ethnicity have been applied to agricultural settings.

1.2 Ethnicity and Agriculture: Theoretical Considerations

In general, the social science literature defines ethnicity as a form of social affiliation which is

based on the cultural differentiation of individuals, a sense of common historical origins, religion and language (Yinger, 1985; McAll, 1990; O'Sullivan-See and Wilson, 1988; Aldrich and Waldinger, 1990; Weber, 1961). While a relatively stable definition of ethnicity is available, debate over the reasons for the emergence of ethnicity has revolved for the last twenty to thirty years, around the primordial approach (Geertz, 1963)⁴ and the circumstantial approach (Barth, 1969)⁵

Scholars from the primordial approach argue that ethnicity is deeply rooted, given at birth and, in fact, ascribed. The key to ethnicity is thus not so much social as biological. Since ethnicity is an expression of biological factors, it exists because of natural genetic propensity of individuals to interact with their co-ethnic fellows or, as van der Berghe (1989) noted, as a natural preference for members of the same ethnic groups to be together. Accepting ethnicity as primordial leads to a certain logic of inquiry. Essentially, the primordialists see ethnicity and ethnic identity as an independent variable which does not require explanation in itself.

The above view is essentially opposed to the circumstantial view, which takes ethnicity as a phenomenon arising out of a particular situation. According to the circumstantial approach, ethnicity is manifested in the conscious and intentional preference for members of the same ethnic group to be together. The proponents of this view emphasise that ethnicity is merely a 'thing' subjected to manipulation. Therefore, ethnicity becomes situationally sensitive as it emerges and takes shape in view of the opportunity structures in the wider society. Accordingly, ethnicity is subject to changes and redefinition according to specific situations, and in that sense, ethnicity can vary with time and circumstances.

Within the circumstantial approach ethnicity is considered as a dependent variable, which in turn requires causal explanations. It is a crucial departure from the primordial view, which holds that ethnicity is an ascribed constant, and thus not a variable. The primordial view regards ethnicity as emerging out of natural factors irrespective of the nature of the external social environment. Opposing that, the circumstantial approach considers ethnicity as dependent upon broad economic, social, historical and political circumstances in a given society. Consequently, ethnicity is viewed as contextual as its manifestations will vary with circumstances and also as deeply interactive since it is closely interrelated with external factors.

As numerous sources show (Yinger; 1985; Ragin and Hein, 1993; Hechter, 1989; Nagel, 1994) circumstantially oriented scholars tend to hold the dominant line in debates on the nature of ethnicity. It has been observed that researchers in general moved away from the primordial

⁴ As reviewed in Bun and Kiong (1993), McAll (1990), van den Berghe (1989)

⁵ As reviewed in McAll (1990), Waters (1995), Hetcher (1989), Yancey et al. (1976), Cohen (1974).

concept of ethnicity towards the idea of ‘construction of ethnicity’ (Granovetter, 1995; Nagel, 1994). Many current studies consider ethnicity as a social construct and in fact an emergent phenomenon resulting from certain social circumstances under which the members of ethnic groups exist. Ethnicity is mainly explained in largely instrumental terms, as a resource to be mobilised in appropriate situations, and, in fact, as a means of attaining political (Cohen, 1969, 1974) or economic goals. While Cohen discusses political ethnicity, some other authors, mainly economic sociologists⁶, hold that ethnicity and ethnic solidarity are fluid and pragmatic, often constructed by ethnic entrepreneurs for the purposes of economic goals. Basically, they suggest that ethnicity is articulated in a particular way for the purpose of economic activity, and may be a powerful resource for minority group members in establishing and keeping ethnic business.

Returning to the topic of ethnicity in agriculture, the question remains of how ethnicity has been explained in literature reviewed in the preceding section. Reviewing the literature through a prism of theoretical work on ethnicity in general, one remark stands - this is the dominance of the primordialists. Consequently, there is the dominance of descriptive accounts of the persistence of ethnic factors in agriculture and a concomitant lack of causal explanations for the emergence of ethnicity. While the focus of research on ethnicity in general has shifted away from studies of specific groups to the broad process of construction of ethnicity and situational concepts, studies of ethnicity in agriculture did not follow the mainstream of theoretical development. This means that the focus of the literature on ethnicity in agriculture has been on specific ethnic groups in rural areas and on studying ethnic or religious rural enclaves in particular. In recent years, however, there is some evidence of moving the focus of analysis from isolated ethnic groups towards studying ethnic groups as embedded within a broader social structure. There is evidence of the fast growing literature on the interplay between ethnicity and entrepreneurship which employs the circumstantial approach in explaining the mobilisation of ethnic resources in an overall economic activity as well as in agriculture.

The primordial orientation was notable in numerous studies on the persistence of ethnic traits among farmers, mainly in the Midwest area of the US. Ethnicity was merely regarded as a natural bond among farmers who lived within close and clustered settlements and spoke the same language, were of the same religious affiliation and possessed similar goals and values regarding farming. In such a concept of ethnicity, farmers manifested an emotional need to express their subjective sense of belonging and continuity with a past, heritage and tradition. Thus, the primordially oriented literature has focused, for instance, on rural religious enclaves (Sommers and Napier, 1993; Driedger, 1995; Paterson, 1989) or the semi-isolated Illinois communities, as analysed in Salamon’s work. In both cases ethnicity was seen as timeless,

⁶ Refers to the authors included in the edited books by Waldinger et al. (1990), Ward and Jenkins (1984), Portes (1995), Light et al. (1993).

constant and expressive in character. Such an expressive utility of ethnicity materialised in ethnically derived farm family goals, which consequently were mirrored in farming patterns, family organisations and community development. Evidently, ethnicity as understood within the primordial concept required no explanation in itself, and the authors concentrated on its consequences, particularly on describing ethnic farming patterns.

While many authors stressed the continuity of ethnicity in agriculture, one body of research on the topic, although a minor one, recognised flexibility of ethnicity and its situational nature. Thus, some authors underline that ethnic groups were no longer passive, but active in maintaining their ethnic identities, and that such activity is generated by the pursuit of interest. Hence, they hold an instrumentalist's approach saying that ethnicity is fluid, pragmatic and opportunistic. It seems that Hoffman (1949) first illustrated such an instrumental approach to ethnicity in agriculture. Hoffman recognised that ethnic values in farming can provide ethnic origin farmers with the means, such as ethnic ingrained knowledge and ethnically-derived goals and values, to compete efficiently with other farming groups. Later on, some authors from economic sociology regarded ethnicity as a means of mobilisation that enhances competitiveness through ethnic business strategy. In fact, early work by Bonacich in 1973 and Light in 1972 on ethnicity and economics laid the foundation for increasing discussion of mobilisation of ethnic factors and ethnic solidarity in different economic activities, both in the primary (O'Brien and Fugita, 1982; Aldrich and Waldinger, 1990; Waldinger et al. 1990; Bonacich and Modell, 1980; Tsukashima, 1991) and the secondary and tertiary sectors (Cobas, 1985; Model, 1992; Yoon, 1993).

Such an academic debate about interplay between economy and ethnicity within the economic sociology framework evolved around the concept of ethnic entrepreneurship. By using an analytic frame of ethnic entrepreneurship, some authors have shown how ethnicity was articulated in a particular way for the purpose of economic activity, and that the growth and competitiveness of enterprises were largely attributable to ethnic resources, in particular ethnic social networks (Granovetter, 1995; Waldinger et al. 1990; Ward and Jenkins, 1984). More importantly, economic sociologists featured in debating the origin of ethnicity and in explaining reliance on ethnic factors within immigrant business communities. Denying that ethnicity is primordial, authors turned to the circumstantial approach and considered how social factors caused the emergence of ethnicity and mobilisation of ethnic resources within various immigrant communities involved in agriculture.

In summary, causal analysis is a neglected issue in the literature on ethnicity in agriculture. This is understandable given the dominance of primordially oriented researchers within the literature on the topic. In the majority of empirical studies referred to, ethnicity was considered as

constant and expressive. Few studies have been designed specifically to explain the origin of ethnicity and ethnic solidarity. Among these, studies on ethnic entrepreneurship, as developed within the economic sociology literature, have been salient in explaining the reasons for the mobilisation of ethnic factors in overall economic activity as well as in agriculture.

The concept of ethnic entrepreneurship is presented below in more detail.

1.3 The Concept of Ethnic Entrepreneurship (EE): Economic Sociology Approach

Interplay between ethnicity and entrepreneurship has a relatively long intellectual history in economic sociology. Classical authors such as Schumpeter and Sombart stressed social deviance and ethnic marginality in conceptualising entrepreneurship, while Weber focused on cultural variables in comparing religious ethics and economic actions. Post-classical literature⁷ continued to stress the role of social marginality in promoting entrepreneurship within certain ethnic groups (Simmel, 1950; Hagen, 1962; Hoselitz, 1951)⁸. Re-emerging interest in ethnic enterprises (Light, 1972; Bonacich, 1973) connected those early theoretical ideas of social marginality and cultural context with the experience of different immigrant groups particularly in the United States. In general, the literature of the 1970s addressed the questions of why some ethnic groups tended to specialise in few economic niches, maintain ethnic solidarity in economic affairs, and how cultural endowments contributed to the development of ethnic business communities. Research on ethnicity and entrepreneurship was further enriched in the mid 1980s by introducing the embeddedness perspectives as developed within a framework of economic sociology (Granovetter, 1985). Accordingly, authors emphasised the importance of social networks in understanding the economic behaviour of ethnic groups. Yet relying on the tradition of economic sociology, current ethnic entrepreneurship (EE) literature focuses on the influence of, and the mutual interplay of non-economic factors in explaining the emergence of ethnically bounded social networks within ethnic communities in business (Portes, 1995; Portes and Sensenbrenner, 1993; Light and Bhachu, 1993; Aldrich and Waldinger, 1990).

Ethnic social structures that promote resource mobilisation are the core consideration within current EE literature. These social structures consist of the social networks around which ethnic communities are arranged. Social networks are seen as one of the most important structures in which economic transactions are embedded. Using the embeddedness perspective, the literature examines the way social factors affect the mobilisation of ethnic resources and generate economic collectivistic mechanisms within ethnic business communities. Accordingly, ethnically based social networks, as modes of intra-group mobilisation, become the principal

⁷ Also referred to as the mid-century economic sociology literature (Granovetter, 1992)

⁸ As reviewed in Wilken (1979) and Swedberg (1998)

element in conceptualising EE.

The studies of EE represent a special area within the broader field of research on entrepreneurship, underlining that ethnic entrepreneurs bring distinctive resources and strategies to the solution of common business problems (Aldrich and Waldinger, 1990). Basically, the social structure within which the resources are mobilised distinguishes ethnic entrepreneurs from the mainstream ones. Although some authors apply the notion of ethnic entrepreneurship to any business operated/owned by members of an ethnic group and accordingly try to explain a high rate of self-employment within certain ethnic groups (Ward and Jenkins, 1984; Butler and Cedric, 1991), it may be argued that such an application is too extensive and does not cover the substance of the concept of EE as seen within new economic sociology. Most influential authors (Swedberg, 1998; Aldrich and Waldinger, 1990) narrow the definition of ethnic entrepreneurship to an existence of ethnic based networks within an ethnic community in business.

Analytically, there are three elements which are important for understanding ethnic entrepreneurship in a particular industry: (1) the ethnic resources, (2) structure, and (3) causal forces for the mobilisation of these resources.

First, quite apart from class resources⁹ ethnic entrepreneurs also use their group characteristics which scholars called ethnic resources. According to Light and Rosenstein (1995, p.171) ethnic resources are “sociocultural features of the whole group which co-ethnic entrepreneurs actively utilise in business”. Yoon (1991, p. 317) referred to ethnic resources as “resources and forms of aid available from members of one’s own ethnic group or derived from the ethnic groups heritage”. Thus, the notion of ethnic resources encompasses an amorphous collection of values, orientation, skill, and ethnically ingrained knowledge. Following such obviously broad definitions, the current EE literature considers ethnic resources as a variety of things that can be associated with ethnic origin, including cultural values, attitudes, religious belief, ingrained ethnic knowledge, ethnic business associations, rotating credit institutions, ethnic media and publications.

Second, social networks defined as webs of interpersonal interaction, gained through social and economic activities, are the structures through which some resources, such as capital and information, are mobilised. Thus, social networks are seen as the modes of resource mobilisation, and in fact are a representation of ethnic entrepreneurship (Light et al. 1993; Light and Rosenstein, 1995; Portes, 1995).

⁹ Class resources are “private property in the means of production and distribution, human capital, and money to invest” (Light, 1984, p. 201)

Third, there is no agreement amongst researchers concerning the reasons for mobilisation of ethnic resources. To date, the literature has stressed the situational explanation as originally proposed in the middleman minority model (Bonacich, 1973) and the cultural explanation as suggested by (Light, 1972; Light et al. 1993).

1.4 Research Problem

The following points emanate from reviewing the broad literature on ethnicity in agriculture.

First, causal explanations of ethnicity in agricultural settings are relatively ignored in the literature. Constrained by the primordial approach the majority of authors produced descriptive analyses of the ethnic determinants of farming patterns. Accordingly, they have been limited in their ability to discuss the causal force behind the emergence and persistence of ethnicity in the context of agriculture.

Second, the ethnic entrepreneurship literature, as developed within the framework of economic sociology, was one of few attempts to use causal analysis. Drawing on the circumstantial approach to ethnicity, the literature generated debates on ethnic solidarity and, in particular, the mobilisation of ethnic resources in economic activities. So far, debates over the reasons for ethnic resource mobilisation have revolved around situational and cultural explanations. Recently, some authors identified the opportunity for a combined approach, arguing that social and cultural factors taken together would be useful in getting a comprehensive explanation for ethnic solidarity in business, and the formation of ethnic networks. However, few attempts have been made to synthesise situational and cultural explanations of ethnic collective actions in business.

Third, a systematic review of the EE literature, and in the general literature on ethnicity in agriculture, reveals a striking imbalance: while the concept of EE has been extensively studied in the United States (Light, 1972; Tsukashima, 1991; O'Brien and Fugita, 1982), and recently in Europe (Waldinger et al. 1990), other localities, despite their importance, remain a largely neglected area of study. Little research has yet been attempted to apply these theoretical concepts to other regions worldwide.

Emanating from the above points, this thesis focuses on causal analysis of the emergence of ethnicity in agricultural settings. Using the concept of ethnic entrepreneurship, as developed within the framework of economic sociology, the thesis synthesises some of the theoretical explanations and derives a composite model to account for the emergence of EE in New Zealand agriculture. In terms of method, the thesis identifies weaknesses in the previous testing

of the models of EE and attempts to overcome these weaknesses by employing a comparative research design.

Extending the EE literature to the New Zealand domain will be useful for at least two reasons. First, to date, no studies have been conducted especially on entrepreneurial activity amongst ethnic groups involved in New Zealand agriculture. Currently the New Zealand literature offers different pieces of work on ethnic communities in agriculture, all without comprehensive analysis of why and how ethnic mobilisation occurs, and what are its distinctive features in New Zealand agriculture. Second, the renewed interest in ethnicity which has taken place in the New Zealand literature since the early 1990s is lacking a distinctive rural emphasis. Bearing in mind ethnic movements which occurred in the history of New Zealand (Pearson, 1990; Spoonley et al. 1996), rural areas represent an important setting for discussing the topic of ethnicity. Studying the manifestation of ethnicity in a particular rural context could make a valuable contribution to the research on ethnicity in New Zealand society in general.

1.5 Research Objectives

The main aim of this thesis is to explain ethnic resource mobilisation in agricultural settings by using the concept of ethnic entrepreneurship. To lay the basis for such an inquiry this thesis employs the concept of ethnic entrepreneurship as developed within economic sociology. Proceeding from this, the general objectives of this research are:

- (1) To review and to clarify the main theoretical perspectives in the ethnic entrepreneurship literature and their applications to agricultural settings,
- (2) To develop a composite model of ethnic entrepreneurship as based on a theoretical synthesis of situational and cultural explanations for the emergence of ethnic networks within ethnic groups in agriculture,
- (3) To empirically assess the composite model of ethnic entrepreneurship in the particular research setting of New Zealand agriculture.

Based on the theoretical postulates of the composite model this thesis explores the causes of the emergence of ethnic social networks in agricultural settings. Theoretical expectations derived from the composite model will be assessed in a historical-comparative study using Qualitative Comparative Analysis (QCA). The thesis employs a multiple groups/one industry research design, and discusses a moderate number of ethnic groups involved in New Zealand agriculture. Hence the specific aims of this thesis are threefold:

- (1) To review the development of ethnic communities in New Zealand agriculture,
- (2) To determine the causal forces responsible for the emergence of ethnically-exclusive business networks in New Zealand agriculture,
- (3) To introduce Qualitative Comparative Analysis as a relatively new method for providing causal analysis in social science and to apply it to a study on ethnic entrepreneurship in the particular empirical setting of rural New Zealand.

1.6 Outline of the Thesis

This thesis is organised into eight chapters.

Chapter 2 outlines the major theoretical models of EE and their applications to agricultural settings. The main point is that the models, as they have been discussed and have evolved since the original versions, provide the basis for doing a theoretical synthesis. This theoretical synthesis of the two major theoretical perspectives is presented in the second half of Chapter 2, together with the interpretation of the proposed composite model of EE.

The succeeding two chapters are in some respect a bridge between theoretical and empirical considerations in this thesis. Chapter 3, a method chapter, introduces Qualitative Comparative Analysis (QCA) and its formal instrument-Boolean logic. QCA will be later used to empirically assess derived theoretical arguments within a comparative research design. Explaining why and how to evaluate the theoretical explanations by using QCA is the objective of Chapter 4, together with performing general preparation necessary in doing QCA. This chapter also clarifies all causal and outcome variables, which will become the core of the remaining chapters.

Following the logic of the method, the results of QCA for ethnic groups in New Zealand agriculture will be presented at two levels. The first level, as performed in Chapter 5, is a structured, relatively unified analysis of comparative case studies. A presentation of each case study begins by a description of an ethnic community and continues by the analysis of empirical evidence related to the key variables as derived from the composite model. Results of empirical research are presented in a data-matrix and further transformed in the Boolean logical equations as presented in Chapter 6. In general, Chapter 6 deals with a formal analysis of the empirical evidence using the logic and principles of QCA.

Chapter 7 is a discussion of two primary issues. One is an interpretation of the QCA results as

they were presented in Chapter 6, with reference to the existing literature on ethnicity and entrepreneurship. The other is an elaboration of the limitations of the proposed composite model and generally research limitations as encountered in this thesis. Chapter 8 summarises the thesis, and outlines policy implications and an agenda for future research.

CHAPTER 2

THEORETICAL PERSPECTIVES ON ETHNIC ENTREPRENEURSHIP IN AGRICULTURAL SETTINGS

2.1 Introduction

The first part of this chapter lays out in some detail major theoretical perspectives on ethnic entrepreneurship and their applications to agricultural settings. The intention is to outline the main concepts and causal relations proposed as important for explaining the reasons for mobilisation of ethnic resources and the formation of ethnic social networks. At this point the thesis identifies an evolution and a convergence between two theories of ethnic entrepreneurship, that leads towards a theoretical synthesis and building a composite model of ethnic entrepreneurship. This synthesis and an interpretation of the composite model of EE are presented in the second half of this chapter.

However, before starting with a review of theoretical perspectives on EE, it is considered necessary to outline some major definition of ethnic groups, ethnic solidarity, and ethnic mobilisation which are often referred to.

2.2 Definitions of Ethnic Groups, Ethnic Solidarity, and Ethnic Mobilisation

According to Schermerhorn an ethnic group is “a collectivity within a larger society having real or putative common ancestry, memories of a shared historical past, and a cultural focus on one or more symbolic elements defined as the epitome of their peoplehood. Examples of such symbolic elements are: kinship patterns, psychical contiguity, religious affiliation, language or dialect forms, tribal affiliation, nationality, phenotypical features, or any combination of these. A necessary accompaniment is some consciousness of kind among members of the group ” (Schermerhorn 1970, p. 12). Similarly, Yinger (1985, p. 159) defined an ethnic group as a “segment of larger society whose members are thought by themselves and/or others, to have a common origin and to share part of segments of a common culture and who in addition participate in shared activities in which the common origins and culture are significant ingredients”. Smith (1986) dropped Schermerhorn’s and Yinger’s insistence that ethnic groups are only a part of a larger society and argued that the members of an ethnic group demonstrated six main features: a common name, a myth of common ancestry, shared historical memories, one or more elements of common culture, a link with a homeland, and a sense of solidarity. The term ‘ethnic group’ is generally understood in the anthropological literature to designate a population which is “a largely biologically self-perpetuating, shares fundamental cultural

values, makes up a field of communication and interaction, has a membership which identifies itself, and is identified by others, as constituting category distinguishable from other categories of the same order” (Barth, 1969, p. 10). Obviously, these definitions encompass some commonalities and it can be accepted, as Spoonley (1989) suggests, that an ethnic group is one that shares cultural traditions, beliefs and behaviours, and whose members express a sense of belonging.

As noted in the introductory chapter some authors argue that there is a primordial basis to the ethnic attachments (Geertz, 1963) while others explain the apparent persistence of ethnicity in a largely instrumental terms, as a resource to be mobilised in appropriate situations (Hechter, 1989; Cohen, 1969). One of the central ideas of instrumentalists is the socially constructed nature of ethnicity. Cohen (1969) for instance advocates that ethnicity is essentially a political phenomenon and stresses the ways in which ethnic ties and associations are useful and effective for the attainment of individual and collective goals. Hechter’s rational choice theory uses a cost-benefit approach to account for ethnic preferences and to explain the dynamics of ethnic group formation¹⁰. Parkin (1979)¹¹ regards ethnicity as being attached to situations of competition or conflict, and actually defines it as the articulation of cultural distinctiveness in situation of political conflicts or competition. Generally, it may be said that theoretical discussion about ethnicity moved away from primordial arguments, and the circumstantial approach to ethnicity is one that has predominated in the last decades (Hutchinson and Smith, 1996; Ragin and Hein, 1993).

Thus, the pursuit of economic and political advantages underlines the emergence of ethnic solidarity. Nielsen (1985) considers ethnic solidarity as a particular form of collective action, while Olzak (1983, p. 356) provides a more detailed definition of ethnic solidarity as “the conscious identification with a given ethnic population and includes the maintenance of strong ethnic interaction networks and institutions that socialise new members and reinforce social ties”. Olzak (1983) also reviews contemporary literature on ethnic mobilisation outlining that market economy and rational market systems can raise the utility of ethnic organizations over other forms of social organization. She defines ethnic mobilisation as “the process by which groups organise around some feature of ethnic identify in pursuit of ethnic needs” (*Ibidem*, p. 355). Ethnic mobilisation theories largely treat ethnicity as a resource mobilised for political and economic ends, and to cite Spoonley (1989, p. 98) ethnicity became “a way of mobilising a group’s resources and making claims in terms of the resource allocation in the wider society”.

¹⁰ See Hetchner and Kanzawa (1997) for a more detailed overview of rational choice theory and its application to the research on ethnicity and ethnic relations.

¹¹ Cited in Spoonely (1989, p. 98) .

While the above conceptual definitions deal with the notion of ethnic groups, ethnic solidarity, and ethnic mobilisation at a higher level of abstraction, the central focus of the following theories on EE is on the conditions under which ethnicity becomes a resource and mobilising principle in the economic life of some ethnic groups. Major theoretical perspectives on EE and their applications to agricultural settings are reviewed below.

2.3 Major Theoretical Perspectives on EE in Agricultural Settings: Literature Review and Discussion

2.3.1 Introduction

Three theories offer systematic guidance for the study of ethnic entrepreneurship. The middleman minority theory (Bonacich, 1973) and the cultural theory (Light, 1972) generally have been regarded as two dominant theoretical perspectives on ethnic entrepreneurship in agricultural settings since the early 1970s. While the middleman minority literature initially emphasised the sojourning orientation of the particular immigrant groups as instrumental to ethnic solidarity in economic affairs, the cultural theory focused on the cultural endowment of the ethnic groups as conducive to ethnic solidarity in business. As a variant of this cultural thesis there is a recently developed interactive model (Waldinger et al. 1990) that focuses on the development of ethnic enterprises and considers them as the product of groups' characteristics and the opportunity structure of the host society.

The following section reviews these three theoretical perspectives on EE.

2.3.2 The Middleman Minority Theory

In her influential article on middleman minorities, Edna Bonacich in 1973 proposed a sojourner theory to explain the solidarity and economic activity of the particular ethnic groups – middleman minorities. Bonacich defined middleman minorities as groups that were concentrated in a limited range of business activities, and usually acted as economic intermediaries in the movement of goods and services. Although primarily focusing on the development and persistence of the middleman minorities in the context of the economic role occupied by certain ethnic group, Bonacich's theory offers some substantial insights into causes of mobilisation of ethnic resources.

A sojourning orientation to their host country is one of the traits characterising middleman minorities. Sojourning assumes that middleman minorities do not plan to settle permanently in the country, and as Bonacich (1973) suggests they consider themselves as a group apart from

the host society. This position makes the members of middleman minorities behave in a certain way. As presumed sojourners, they will tend to enter occupations which do not tie them to the territory for long periods of time. Middleman minorities also show a tendency towards the establishment of small-scale, labour intensive enterprises.

Apart from affecting an economic position of particular ethnic groups, sojourning, according to Bonacich, results in retaining ethnic ties¹² and their interjection into economic activity. Sojourning, therefore, promotes a high degree of ethnic solidarity in business, the formation of collective economic mechanisms, as for example rotating credit associations. Middleman minority groups also integrate vertically and horizontally in order to achieve efficient distribution of resources within the ethnic communities and to control intra-ethnic competition. Also, the middleman minority enterprise is able to cut labour cost drastically through ethnically based paternalism as well as by thrift¹³, so they can compete effectively with other enterprises in the same line.

Such advantages of ethnic solidarity in economic matters can draw out a hostile reaction from the host society (Bonacich, 1973, pp.588-593). Besides economic matters, the conflicts between middleman minorities and the host society arise over the solidarity of the middleman community. Middleman minorities tend to form highly organised communities and show the propensity to maintain distinctive cultural norms, for example, regarding their obligation towards their kin and other ethnic-group members. As middleman minorities show a tendency to form separate communities which resist assimilation, they are often labelled as being different, clannish and unassimilable. The charge of unassimilability can be, according to Bonacich explained by the accusation that middleman minorities are disloyal to the countries in which they reside and that their sojourning position makes them drain the host country of its resources.

What can be said about the global development and application of the model to the entrepreneurial activity of certain ethnic groups elsewhere? The view that Chinese and Japanese ethnic groups constitute middleman minority groups has not diminished over time, since the theory's formal debut in the early 1970s (Wong, 1985; O'Brien and Fugita, 1982; Model, 1992; Pongsapich, 1994). These groups continue to be the examples around which the structural

¹² As Bonacich (1973, p.586) argued "Since they plan to return, sojourners have little reason to develop lasting relationships with members of the surrounding host society. But they have every reason to keep deeply alive the regional and broader ethnic ties, for these relationships will persist in the future towards which the sojourner points".

¹³ Bonacich pointed at the middleman minority's characteristics such as thrift, delayed gratification, hard work and long working hours, and how these distinctive cultural traits promoted competitiveness of ethnic business. For instance, in describing the ethnic strategy of Japanese in American agriculture Bonacich stated: "The working and living conditions of Japanese farmers and farm labour make successful competition by American farmers almost impossible" (State Board of Control of California, 1922, cited in Bonacich, 1973, p. 590).

framework of the theory is built. The middleman minority model has been further applied to Jews (Cherry, 1989); Cubans (Cobas, 1985; Model, 1992) and recently to Indian immigrants in U.S. (Sandres and Nee, 1996). The authors have recognised that the pattern of economic behaviour of self-employment of these ethnic groups often approximates to conditions described by Bonacich, such as reliance on thrift and intra-group ethnic solidarity (Bonacich, 1973, pp. 590-591). It might be said that there is a trend to accept these ethnic groups as middleman minorities because of the economic and cultural characteristics which the ethnic groups possess, more than because of their social function as a middle subject between majority and minority groups in the host society.

What can be said about sojourning as the reason for mobilisation of ethnic resources? In fact, sojourning was the key factor around which the middleman minority model has been built up and which has attracted most criticism. Literature sources offer three grounds for criticising sojourning as a postulate of the model. The first one is that sojourning as a proposition of the model is not valid for the current world's immigration flows and that in general, the model is archaic. Secondly, it seems that sojourning did not effect the status and behaviour of the groups which were assumed to be middleman minorities (Pongsapich, 1994). The third ground for criticism is the way in which sojourning leads to the occupational choices of ethnic groups. That is, the middleman minority group seeks out those occupations which involve a minimal amount of fixed investment and a maximum amount of liquidity, but this is a matter for discussion. The critics (Wong, 1985; Cherry, 1989) strongly imply that this proposition only makes sense if sojourners had the funds and the legal rights for such a choice. Wong (1985) and Cherry (1989) have indicated that there have been other constraints to the immigrants' occupation niche which were forcing them towards self-employment and mobilisation of intra-group ethnic resources. These two authors have asserted, discussing the Chinese and the Japanese Americans as middleman minorities, that the most important matter in critically analysing middleman minority theory was "the undeniable" fact that anti-Asian discrimination caused the occupation choice and reliance on intra-group resource (Wong, 1985, p. 70). Hence, the empirical evidence would not necessarily demonstrate that the sojourner explanation for ethnic entrepreneurship is correct. It may be argued that there is ground for making the point that other factors, rather than sojourning, largely determine the occupational direction of ethnic groups.

To sum up, researchers posit that the sojourning element of the middleman minority model is not applicable but they do not diminish the overall value of the model. In general, the literature shows that the ethnic groups assumed to be middleman minorities retain all the elements of cultural and economic traits associated with the model. The model continues to be used to explain the economic success of ethnic groups emphasising the patterns of intra-group solidarity, the channels of acquiring the ethnic resources and the forms of their utilisation. It

seems that the explanatory value of the model in understanding ethnic entrepreneurship is more in the area of how groups mobilise ethnic resources more than to explain why the mobilisation of ethnic resources has occurred.

Bearing in mind the general application of the model, what can be said about its application to agricultural settings? Although the author of the middleman minority model posits that certain ethnic groups involved in farming¹⁴ behave as middleman minorities, the model has been seldom applied to agricultural settings. Only a few studies on this topic have emerged. These are a study on Chinese entrepreneurship in rice production in Thailand (Pongsapich, 1994), and the work done by O'Brien and Fugita (1982) and Bonacich and Modell (1980) on the Japanese in California agriculture. These are now examined in detail.

Pongsapich (1994) reviewed the history of Chinese entrepreneurship in rice and rubber production in Thailand over six decades. The author posited that the situation of the Chinese in Thailand may fit the middleman minority model during the early immigration period, but the utility of the model has decreased for the succeeding generations. The author suggested that sojourning, as a key variable of the model is not longer applicable in the particular case of the Chinese in Thailand. The sojourning of the Chinese immigrants has been abandoned after the socialist revolution in China which forced the Chinese temporarily staying abroad to remain as permanent settlers. However, historical evidence has shown that the termination of sojourning did not change their position and economic role in the host country.

What were the other important elements of the history of Chinese entrepreneurs that defined their economic role and utilisation of ethnic resources? The key factor was the possibility for the Chinese as rice and rubber entrepreneurs to work with the host institutions and to support national economic policy. Although they were at the beginning formally, politically and culturally exclusive (in the contrast with the Thai majority population), later on these elements disappeared as the government included them in development programmes. Chinese cultural values were rather compatible with the capitalistic orientation of transforming the national government in the 1950s and the 1960s. The Chinese accepted the new policy, responding readily to the cultivation of cash crops, development of the fishing industry and small rural enterprises. The Thai government recognised this and used Chinese economic middlemen for the purposes of national economic policy.

According to Pongsapich (1994) there were other factors, also important in the using of ethnic resources amongst the Chinese. They were able to make a rational choice regarding their

¹⁴ The Chinese in New Zealand, the Chinese in the Mississippi delta, and the Japanese in Californian agriculture, Bonacich (1973, p.586).

ethnicity, identifying themselves as Chinese when involved in multi-national enterprises and identifying as Thai when working in Thailand. Such a multiple ethnic identification suggests an instrumental view of ethnicity where ethnicity is used as a means for achieving economic benefits.

While Pongsapich (1994) posited that sojourning was not an important element in creating the behaviour of middleman entrepreneur, O'Brien and Fugita (1982) focused on the middle rank position of the assumed middleman minority. These two authors discussed the middleman minority concept in the case of Japanese in California agriculture. They discussed the history of the movement of Japanese immigrants into U.S. society and their subsequent occupational niche. In doing this the authors underlined that the hostility of the majority of the population forced the Japanese ethnic group towards a particular occupational niche (agriculture), where they have been able to use extensively their ethnic knowledge and cultural values. Besides, there were factors within the Japanese community that gave its members certain adaptive advantages in pursuing an entrepreneurial strategy, for instance, ethnic economic associations and a vertically integrated, highly interdependent ethnic economy. The authors concluded that structural constraints did force the Japanese immigrants to implement a particular entrepreneurial strategy which has been strongly influenced by the ethnic resources available within the ethnic community.

To what extent did the matters described above place the Japanese farmers in a middleman minority position? The assumption of the authors was that the Japanese as the middleman minority were likely to be intermediaries in the transfer of goods and services between majority and minority populations. Therefore, if the Japanese farmers employed a hired labour force they would be in a 'buffer' position approximating to the classic sense of the middleman minority. But, O'Brien and Fugita (1982) also presented evidence that the Japanese growers were able to use kin and co-ethnic cheap labour instead of the hired farm labour. Furthermore, the authors supported the above by documenting the conflicts between Mexican and Filipino farm labour and Japanese origin growers when the latter reduced the demand for hired labour. Hence, the authors assert that the majority of the Japanese farmers were not middleman in an economic sense as they were not included in the transfer of goods and services between minority and majority populations. Nevertheless, this case of the Japanese farmers may fit the middleman minority model with respect to its cultural/social and economic characteristics.

Those economic traits were even more emphasised by Bonacich and Modell (1980) in a study on the Japanese immigrants involved in market gardening in California. The authors examined the experience of the Japanese from a middleman-minority perspective and concluded that economic forms of Issei, the first generation of the Japanese immigrants corresponded, more or

less, to the typical traits of middleman minorities. Their situation as a sojourning immigrant group gave them an incentive for retaining ties and intra-group orientation in business. Thus, the Issei developed small business activities that depended on co-ethnic labour, trust and loyalty in business transactions and different forms of informal and formal ethnic business associations. The authors provided a great deal of evidence on how these associations enhanced the entrepreneurial potential of the Japanese business community through access to various kinds of collective aid and a coordination of economic activities within the community. It was also documented how the above characteristics of Japanese enterprises in market gardening put them in conflict with certain segments of the surrounding society, such as competing businesses and labour unions.

Although sojourning was seen as a factor in explaining a tendency towards community solidarity within Japanese immigrants, Bonacich and Modell (1980) also discussed host hostility and discriminatory policy towards the Japanese as responsible for development of ethnic solidarity. The authors noted that sojourning might explain some of the early motives of the members of immigrant groups to move towards ethnic solidarity and formation of collectivistic economic mechanisms, but admitted that such an approach “tends to minimize the important part played by hostility from surrounding society” (*Ibidem*, p. 63).

Therefore, what emerges from the discussion of the middleman minority model in agricultural settings? The evidence from the literature provides limited support with respect to sojourning and the middle-rank positions in the stratification system as characteristics of the middleman minorities. But, the ethnic groups analysed display many other features of what Bonacich called ‘middleman minorities’. They tend to maintain distinct cultural traits (language, values, religious beliefs). The Chinese and Japanese ethnic groups also maintained a high degree of internal solidarity through extended kinship ties. This means that they possessed a set of economic traits associated with middleman minorities as they tend to cluster in small entrepreneurial roles relying on ethnic self-help institutions.

If experience of these groups was consistent with the second and third postulates of the middleman minority theory but not with the first one, i.e. the concept of sojourning, how can it help us in understanding the concept of ethnic entrepreneurship in particular agricultural settings? The authors mentioned above tested the model in a particular setting and posited that the following matters, which are not postulates of the model, may account for the reliance on ethnicity in entrepreneurial activity in agricultural settings: a free choice persuaded by economic interests (Pongsapich, 1994), an ethnic group’s response to discrimination of the surrounding society (O’Brien and Fugita, 1982; Bonacich and Modell, 1980), or a combination of cultural and situational factors that promote a concentration in small business and ethnic solidarity in

economic matters, as noted in Bonacich and Modell (1980).

The work done by O'Brien and Fugita (1982) and in particular by Bonacich and Modell (1980) leads towards a rather neglected and seldom discussed aspect of the original version of the middleman minority theory (Bonacich, 1973). This is the matter of host hostility that middleman minorities face, in the way it was originally conceptualised in Bonacich (1973, pp. 589-592) and later developed in Turner and Bonacich (1980, pp.151-152) and in Bonacich and Modell, 1980, pp.14-22). In Bonacich (1973) the point was made that hostility arose after an ethnic group entered a particular entrepreneurial role in the receiving society and hence this did not account for the emergence of middleman minorities. Turner and Bonacich (1980) considered the host hostility as a part of the following triangle: hostility among the population in the receiving society towards immigrants - intra-group organization of immigrants - economic concentration in middle rank economic roles. In fact the authors posit that once a middleman minority has emerged, its further persistence is not so much the result of "the inertia generated by conditions of the model (sojourning) but of the interaction among hostility, economic characteristics and intra-group organization" (*Ibidem*, p. 152). Bonacich and Modell (1980) also focused on reciprocal causal relations between small-business concentration, ethnic solidarity and societal hostility and explained how these three sets of characteristics of middleman minorities were interrelated. Though Bonacich and Modell (1980) did not state the causal ordering of these characteristics, they stated that societal hostility promoted ethnic solidarity "both as a defensive reaction in the face of a precarious situation and because the hostility is often expressed in legislation that builds walls around the ethnic community, keeping it separate" (*Ibidem*, p. 21). Moreover, as societal hostility decreased it was more likely that the second and third generations of immigrants were not forced to concentrate into ethnic small business, which in turn has reduced the points of conflict between an ethnic community in business and the surrounding society.

In summary, the middleman minority theory as applied to agricultural settings, has evolved from tentatively using sojourning perspectives to the recent emphasis on societal hostility as responsible for the ethnic solidarity in business. Furthermore, as it focuses on the positive and negative effects of the ethnic solidarity in business, the theory entails some overlapping properties with the cultural theory of EE, that is presented below.

2.3.3 The Cultural Theory

The cultural theory (Light, 1972) attributes ethnic solidarity in economic matters to the activation of the original cultural tradition ethnic groups may retain. Basically, this theory holds that certain cultural endowments may facilitate intra-group attachment and mutual cooperation

in business. Such ethnic solidarity fosters the growth and competitiveness of the business which in turn may cause conflicts with local business interests. Similar to the middleman minority model, Light's cultural theory has evolved from initial focusing on transplanted cultural resources towards introducing a distinction between an orthodox and reactive cultural context. This evolution is presented below.

The cultural theory of EE, as initially developed by Ivan Light in 1972 focused on the cultural endowments of certain ethnic groups in order to explain their noticeable economic success compared with the non-ethnic business population. In addition, Light's theory attempted to account for the clustering of some ethnic groups within the business population. Empirically grounded, the theory emphasises the trust and mutuality among certain immigrant groups and their capacity to pool intra-group resources and to co-ordinate social and economic activities. For instance, Light (1972) pointed out how Japanese immigrants in U.S. agriculture were able to mobilise intra-group resources in starting up businesses. Cultural heritage brought over by the immigrants became institutionalised in a number of ethnic economic associations. Rotating credit associations, partnerships and co-operatives, as derived from the cultural traditions of the home country, were found in many Japanese farming communities at the beginning of this century.

In a further redefining of the cultural theory Light introduced a distinction between orthodox and reactive cultural context, which he also referred to as a "soft and hard version of the cultural theory" (1980, pp. 34-36; 1984, pp. 199-201). The orthodox component focuses upon transplanted cultural endowments of ethnic groups. Derived from the classical Weberian cultural approach in explaining entrepreneurship, the orthodox component of the theory describes the dynamic of ethnic business in terms of intact, unmodified cultural heritage. Clearly, an orthodox component assumes "a wide range of old-world cultural baggage that is transplanted whole and ready for use" (Tsukashima, 1991, p. 335). Unlike the orthodox version of cultural theory which attributes certain economic behaviour of ethnic groups to their original cultural tradition, the reactive version of cultural theory takes situational factors into consideration (Light, 1980)¹⁵. Thus, the reactive theory focused on certain facilitators that may provoke reactive solidarity among the ethnic groups. According to Light (1980), situational factors such as alien status of immigrants in the host country, societal marginalisation, and linguistic and regional heterogeneity of immigrants may enhance ethnic solidarity. Thus, the ethnic communities would develop nepotistic trade guilds with primary objectives of supplying members and regulating intra-group mobilisation and distribution of resources.

¹⁵ It may be said that this evolution of the cultural theory has gone largely unnoticed in the literature.

This conceptional distinction between the orthodox and reactive cultural resources may be illustrated by using a comparative analysis of three ethnic groups in U.S. (Light, 1972). This example also shows the co-existence of both resources in the same ethnic groups¹⁶. Light demonstrated that although all these groups analysed - Japanese, Chinese and Afro-Americans - faced considerable discrimination from the host society, only Japanese and Chinese attained ethnic solidarity in business and mobilised intra-group resources. The explanation, as proposed by Light, was in certain cultural traditions of *tanomoshi* and *kenjinkai* - rotating credit associations brought over by the Asian immigrants. Lacking these cultural traditions Afro-Americans were unable to form ethnic social networks in business. Therefore, within equally discriminated groups, collective economic organizations may or may not emerge depending on a group's internal organising capacity and cultural tradition conducive to these organizations. In this example of Asian entrepreneurship, both orthodox and reactive cultural resources were in place. For instance, rotating credit associations as brought in by the Japanese (the orthodox component), was a latent factor to be transformed into certain business associations, such as trade guilds formed to regulate co-ethnic business (the reactive component). Hence, the lack of the orthodox component can explain differences in Asian-African ethnic business in U. S. There is also another explanation for ethnic solidarity within Asian entrepreneurs which focuses only on the reactive version of the theory. Light argued that nepotistic trade guilds formed by language or regional heterogeneity of Asian immigrants could be considered as reactive cultural resources. The Chinese and Japanese immigrants speaking the same dialect and sharing the same kinship or ties of local origin formed nepotistic trade guilds. These trade guilds also facilitated the collective development of the business, through paternalistic attitudes towards co-fellows, and by regulating intra- and inter-group trade activities. What is important though is that these guilds as kinds of ethnic business associations developed because of certain external factors ethnic groups faced and were not entirely derived from traditional cultural endowments.

To summarise until this point, orthodox cultural theory explained the development of ethnic social networks exclusively by cultural factors. The focus was therefore on internal groups' characteristics and cultural factors. Ethnic groups remain attached to certain cultural traditions with these imported cultural endowments being injected into economic life and supporting ethnic economic associations. Accordingly, this version of cultural theory sees the ethnic networks as an imported asset. In the reactive interpretation of cultural theory an emphasis is on collective actions of members of certain ethnic groups as a response to different situational factors, such as social marginalisation and discrimination. Thus, these factors may cause the formation of different ethnic business associations, but these associations are not entirely based on intact cultural heritage.

¹⁶ Light allowed for the co-existence of both types in the same ethnic group and apparently this is the case of Asian ethnic groups in U.S. prior to the Second World War (Light, 1972).

What, then, can be said about empirical validity of both versions of the cultural theory? It is important to note here that empirical evaluations of Light's cultural theory have been done mainly within the orthodox cultural context. Hence, there is an apparent emphasis on the transplanted cultural resources (Butler and Cedric, 1991). Referring to Pakistani businesses in Great Britain, Werbner (1984) identified cultural resources as a key factor in achieving economic success, while Yang (1995) and Landa (1996) highlighted the relationships between culture and business management among the overseas Chinese in U.S. and Southeast Asia respectively. Other authors analysed the cultural endowments of certain ethnic groups in business from a historical perspective. For instance, Li (1993) explained how transplanted cultural endowments contributed to the success of the early Chinese entrepreneurs in Canada. Similarly, Yoon (1991) and Min (1993) described how ethnic resources were important at the initial stages of Korean immigrant business in U.S. The authors who discussed the dynamic component of ethnic business recognise the changing significance of cultural resources in explaining a long-term development of ethnic business. It was also noted that the theory is inadequate to explain ethnic business developed within recent immigrant flows, which are characterised by individualism and the availability of notable human and capital resources.

Thus, the authors concluded that other factors apart from those internal to the groups' cultural endowments should be taken into account in understanding ethnic business development. Although these weaknesses of the cultural theory are recognised, the theory remains rather popular within the recent literature on ethnicity and economy.

So far, an empirical assessment of both the orthodox and reactive dimensions of cultural actors has been done only in Tsukashima (1991). It is also one of few applications of Light's cultural theory to agricultural settings. Tsukashima presented empirical evidence on the history of the Japanese involvement in maintenance gardening in the southern California before the 1920s. By incorporating survey research, oral history data and records of ethnic trade associations, the author provided a description of the ethnic business, ethnic solidarity and trade guilds developed within the Japanese community. Apart from analysing the socio-economic niche of the Japanese immigrants Tsukashima offered a detailed insight into both orthodox and reactive components of cultural resources. On the side of orthodox resources the Japanese were endowed with *tanomoshi* - rotating credit associations, which emanated from the collectivist tradition of Japanese culture. The formation of nepotistic trade guilds and ethnic solidarity, attained because of the alien status of the Japanese were considered reactive cultural components. For instance, Tsukashima referred to Hiroshima and Kumamoto *kenjin* associations as examples of distinct ethnic structures in the immigrants business which did not exist as such or to the same extent in the country of origin-Japan. These associations were based on regional and kinship solidarity and depended upon ethnically generated trust. They provided the Japanese immigrants with

support, protection and facilitated the intra-group mobilisation and distribution of resources, such as capital, information and labour, and in general intervened in the business life of the community. These institutions also had informal practices which strongly encouraged ethnic homogeneity in Californian market gardening early this century. Following Light's explanation of the reactive cultural context Tsukashima examined the role of external factors in the developing of the ethnic collective actions in business. Consequently, Tsukashima pointed at Japanese business as an example of ethnic economic solidarity enhanced by minority status. The author also concluded that the persistence of both orthodox and reactive components of cultural endowments, compounded by situational characteristics imposed on the Japanese, may provide a satisfactory explanation of the growth and development of ethnic business. Such a combined influence of both cultural and situational factors will be discussed later in this chapter.

With reference to agricultural settings in evaluating cultural arguments, it is worthwhile mentioning an anthropological study of three ethnic groups of Californian strawberry producers done by Wells (1991). Although not primarily oriented to assess the cultural theory this study provided some insights into the role of cultural factors in forming network institutions that surrounded ethnic farming business. Wells demonstrated how certain cultural traditions influenced groups' specific patterns of involvement in production-information networks. These networks, segmented along ethnic lines, accounted for differences in management styles between the ethnic groups analysed. While focusing exclusively on transplanted cultural values Wells did not discuss the causes of the formation of the ethnic social networks.

Generally, authors discussing the empirical validity of Light's cultural theory have largely focused on the imported cultural tradition of ethnic groups, and neglected the reactive cultural context of ethnic businesses. Apart from Tsukashima this conceptual distinction has not been empirically assessed in agricultural settings. Studies focusing on the cultural heritage of Asian ethnic groups involved in agriculture have also noted social marginality and discrimination faced by these groups. However, to understand the full extent of the importance of social factors within cultural theory, more comparative research is needed. This being the case, a comparison of the different ways in which ethnic groups have responded to similar social circumstances could be valuable in shedding more light on cultural resources.

2.3.4 The Interactive Model

The interactive model of ethnic business development as proposed by Waldinger et al. (1990) and Aldrich and Waldinger (1990) may be accepted as a variation of Light's cultural theory. Within a framework of the interactive model ethnic social networks are conceptualised as an imported cultural asset of an ethnic group. As such, networks are again seen as an element of

cultural endowments that could enable the mobilisation of resources needed for starting and developing of businesses.

It should be mentioned that the model was primarily introduced by Waldinger and associates as a framework for explaining ethnic businesses in Western Europe and the United States. The point was to determine the factors that contribute to the development of ethnic communities with a successful small business, and accordingly to offer some policy recommendations for promoting ethnic enterprises. Obviously, the interactive model is partly relevant for causal explanation for ethnic solidarity and the emergence of ethnic networks. However, the model is included in reviewing theoretical perspectives on EE and briefly outlined below.

Analytically, the model consists of two interactive components: (1) opportunity structure and (2) group characteristics. These components are presented in Figure 2.1.

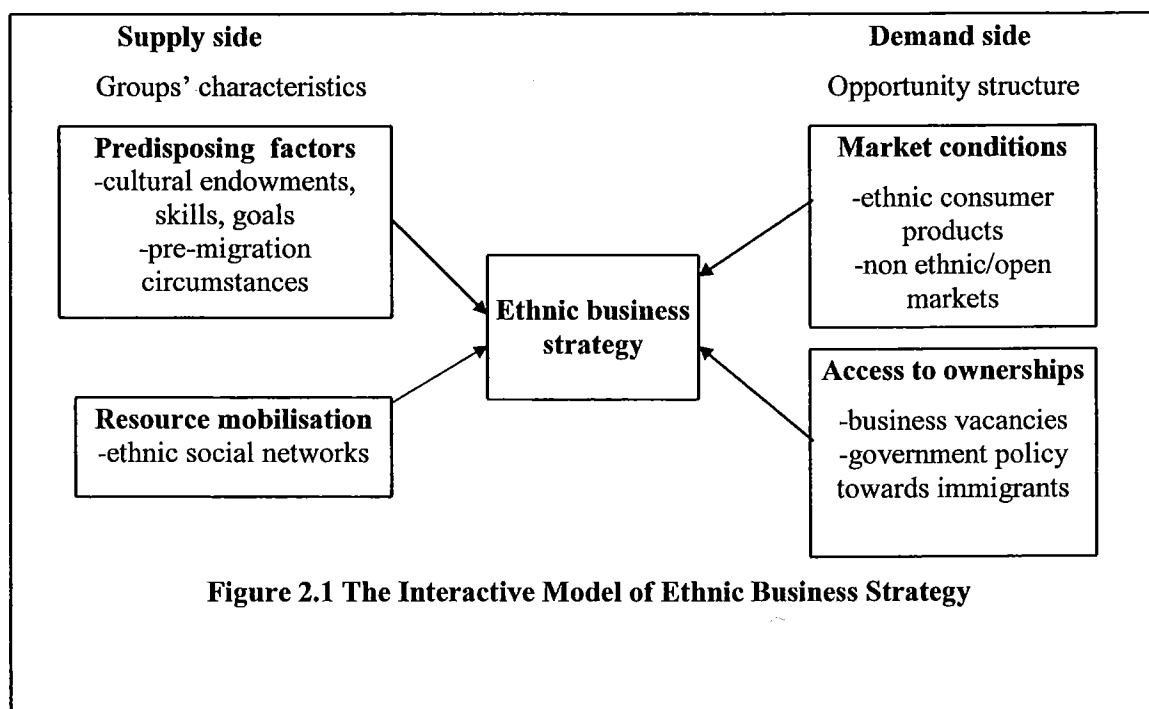


Figure 2.1 The Interactive Model of Ethnic Business Strategy

First, the opportunity structure generally provides the niches and routes of access for potential entrepreneurship. In detail, opportunity structures for ethnic groups in business include market conditions, which may favour ethnic markets, and also access to ownership, which is highly dependent on general business vacancies and state policies.

Second, group characteristics include predisposing factors such as the cultural resources and experience of ethnic groups which enables them to take advantage of the opportunities. The interactive model identifies two dimensions of group characteristics: predisposing factors and resource mobilisation (Aldrich and Waldinger, 1990, p.122). Predisposing skills refers to pre-

migration circumstances, cultural endowments, skills and goals which members of the group bring with them into the host country. Under resource mobilisation the authors assume the ethnic social networks, which can activate strong ties to kin and co-ethnic fellows, to be important in the formation and maintenance of ethnic business.

Ethnic business strategy emerges from the interaction between the first two sets of factors - the characteristics of ethnic groups and the opportunity structure, and may be thought of as the centre of a framework proposed by the model. Ethnic strategies in business, then, reflect both the opportunity structure within which ethnic groups operate and the specific characteristics of the whole ethnic groups.

How do these elements of the model interact? The interactive model is based on the neoclassical economic model of interaction between the demand side, i.e. opportunity, provided by the given economy, and the supply side, the characteristics of the particular ethnic groups. Accordingly, supply and demand must be present in a complete explanation of entrepreneurship. Entrepreneurial performance of the groups depends upon the fit between what they have to offer and what the market demands, or in another words, to cite Light and Rosenstein (1995, p. 69) in their attempt to explain this interaction, "the better the fit, the more entrepreneurs". However, Light and Rosenstein also argued that the concept of interaction and 'fitness' are rather hard to evaluate statistically. An open question remains of how to bring together supply and demand as two sides of the model, within the context of a single case study. Or, in other words, how to make the interaction between the opportunity structure and the group characteristics visible for an empirical analysis. Furthermore, since all ethnic groups can respond to the demand, a question arises of how to extract the separate influences of specific resources (ethnic resources which are responsible for emergence of entrepreneurs within ethnic groups) apart from general resources (that exist in any economy and produce entrepreneurship everywhere). This means that the model needs additional work on how to isolate the interaction of demand /supply side in emerging entrepreneurship amongst ethnic groups, and how to separate influences of ethnic resources apart from the general groups' resources.

It may be said that the model has been used mainly to provide a systematic and comparable description of the history of entrepreneurship among particular ethnic groups. Authors have shown how the opportunity structure created demand for certain economic activities and how some ethnic groups react accordingly. The examples include the work on Asian entrepreneurs in Great Britain and the Netherlands, and South European migrant groups in Germany (Blaschke et al. 1990). The interactive model had been rarely discussed within agricultural settings. Blaschke et al. (1990) described the entrepreneurial strategy of the Indian and Surinamese immigrants in the fruit and greengrocer sector in the Netherlands, and stressed how these ethnic enterprises

were developed on the basis of small family-run firms and networks linking family business to sources available within the ethnic community. Basically they have shown how the opportunity structure created demand for certain entrepreneurial activities and how some ethnic groups react accordingly.

In summary, the interactive model brings together common ideas in a logical manner and the model does make some contribution to the current EE literature. The model introduces the industrial structure of the host society as an intervening variable in explaining the experience of ethnic groups in business. The model considers the characteristics of a particular industry, such as the state of development and its openness to the new entrants, as an element of the opportunity structure for the ethnic business. However, the model does not offer much in terms of exploring the causes responsible for the formation of ethnic social networks. Ethnic networks are simply viewed as an element of groups' characteristics that in some, not fully explained way, interact with the opportunity structure and contribute to the emerging business strategies.

Accepting that, the following discussion focuses on the middleman minority theory and cultural theory, as two major perspectives within the current ethnic entrepreneurship literature, which discuss the reasons for the formation of ethnic networks in business.

2.3.5 Discussion

The theories reviewed offer a general framework for analysing different aspects of ethnicity and economy, such as the concentration of certain ethnic groups in small business, the orientation towards self-employment, and the emergence of ethnic-collective action in business. The above literature review focused on those segments of the theories, especially associated with an examination of ethnic collectivistic mechanisms in economic affairs. This section discusses two obvious issues which emerge from the literature review. Firstly, there is a conceptual convergence and the existence of common themes within two major theoretical perspectives. Secondly, there is a lack of comparative approach in an empirical evaluation of these perspectives.

In elaborating on common themes in the EE literature one aspect stands out – the theories reviewed above are not mutually exclusive. It may be argued that two major perspectives, the middleman minority theory and the cultural theory, entail some overlapping properties. Besides, an evolution of the theories has resulted in some areas of convergence between these two perspectives.

As the literature review indicates, both theories, as originally developed, entailed overlapping

properties. These are as follows:

(a) In both theories collectivism characterises ethnic business. Apparently, both theories pay far more attention to the collective aspects of ethnic business, characterised by clanship and group solidarity, than to the values and motivations of the individual members of the ethnic business communities. As a result, the ability to act collectively and to use intra-group resources collectively for the establishment and operation of business are seen as hallmarks of ethnic groups in business.

(b) Both models also accept that there were the positive and negative consequences of injecting ethnic solidarity into economic affairs. Thus, reliance on ethnic social networks in carrying out economic activities will help cutting costs and establishing and consolidating a comparative advantage. Bonacich (1973, pp.586-587) and Light (1972, pp.75-76) both noted that ethnic social networks enhance competitiveness of ethnic business in three main ways. Basically, the networks provide a low cost, loyal and trustworthy co-ethnic labour force, reliable information, and access to various kinds of collective aid. Moreover, ethnic social networks enable coordination of intra group resources, forming horizontal and vertical integration. Both authors also noted how reliance on intra-group resources and advantages of such ethnic solidarity in business would provide the ground for conflicts between ethnic entrepreneurs and host business groups.

The argument that there is convergence between these two theories is derived largely from:

- (c) recent evolution of the middleman minority theory,
- (d) inclusion of the reactive dimension within Light's cultural theory.

(c) The middleman minority literature has evolved over the past twenty five years from initially using the sojourner perspective to the recent emphasis on societal hostility, as responsible for ethnic solidarity in business. Some recent theoretical elaborations on the middleman minority concept presented by Bonacich (Turner and Bonacich, 1980; Bonacich and Modell, 1980) gave considerably less attention to the sojourner concept, and explicitly noted how social hostility and the discrimination which some ethnic groups faced would increase reliance on ethnic resources and cause ethnic-collectivistic actions.

(d) The reactive cultural theory (Light, 1980, 1984) has moved from focusing on transplanted cultural endowments towards introducing different situation factors as latent facilitators for causing ethnic solidarity. Acknowledging situational factors, the reactive version of cultural theory entails some overlapping properties with the middleman minority theory. Both theories

now hold that reactive ethnicity as arising out of situational external factors would cause ethnic solidarity in business. The reactive cultural theory further assumes that such a situationally caused solidarity would yield different collectivistic economic mechanisms which are not fully ingrained in traditional cultural endowments.

In a sense both the middleman minority theory and classical cultural theory can be thought of as situational and cultural explanations of EE. The situational approach stresses how certain circumstances shape the opportunities and constraints facing ethnic groups in business. The cultural approach focused on specific cultural endowments ethnic groups hold and their activation in forming certain collectivistic mechanisms. It may be argued that, in the way these theories have been applied and discussed in agricultural settings, they are not mutually exclusive. Recently there has been general acceptance that both external social factors and internal cultural endowments are relevant to the development of ethnic business (Bonacich and Modell, 1980; Tsukashima, 1991; Li, 1993). Even studies focusing explicitly on classical cultural theory concluded that external social factors should be taken into account in understanding ethnic business development. However, few have been made to operationalise such a combined approach in analysing ethnic entrepreneurship in agriculture.

In the literature reviewed, in terms of research methods, it should be noted that there is a dominance of single case analysis while comparative analyses are largely neglected. A three groups /one country research design, as carried out in Light (1972) and Wells (1991), were obviously exceptions from a dominant one group/one country analysis. Authors assessing the empirical validity of the theories typically analysed ethnic groups well known for their collectivism and strong cultural tradition, such as Asian ethnic groups in U.S. and Canada. What is missing is a comparative approach which includes "negative cases". In particular, this refers to the gap in testing Light's reactive cultural theory, as has been outlined in the above literature review. The need for more comparative research is noted by Bonacich and Modell (1980), Ward and Jenkins (1984), Li (1993), and as Aldrich and Waldinger (1990, p. 132) pointed out "We need more rigorous, detailed comparative data on multiple groups, studied over the same time, with comparative information collected on each group".

What can be achieved by including a multiple group comparative research design in assessing major theoretical perspectives on ethnic entrepreneurship? In the case of the middleman minority theory, obviously a situational approach, more comparative research may take into account specific endowments of each ethnic group in order to explain inter-group differences in ethnic business strategy. In the case of cultural theory comparative research would clarify external factors and situational pressures which differentiate behaviour of the ethnic groups possessing similar cultural endowments. In general, comparative research may also increase

awareness of the interrelatedness between social and cultural factors.

2.3.6 Conclusion

Major discussions within the current EE literature evolved around situational approaches as developed within the middleman minority theory (Bonacich, 1973) and the cultural theory as proposed by Light (1972). The third approach discussed, the interactive model of ethnic entrepreneurship as proposed by Aldrich and Waldinger (1990) and Waldinger et al. (1990), could be regarded as a general framework for understanding ethnic business development.

Two main theoretical perspectives, the middleman minority and the cultural theory, offer a particular, single cause explanation for the formation of social networks within ethnic communities in agriculture. However, as the literature review shows, these theories as originally proposed embrace some common elements. In addition, an evolution of these two theories led towards certain points of convergence. Some authors have recently noted the opportunity for a combined approach, arguing that social and cultural factors taken together would help in obtaining a comprehensive explanation for ethnic solidarity in business, and the formation of different networks. Accordingly, there is an intellectual challenge to construct a composite model that would clarify and synthesise the two major theoretical perspectives in order to explain the emergence of stable, organised ethnic structures in agriculture. Such a composite model would draw upon features of the existing models and would provide a mechanism for defining the causal structures in utilising ethnic resources in a particular setting. In that case the overlapping concepts of those two theories may become an axis along which a further theoretical synthesis takes place.

In accepting the above assertions this thesis moves towards a synthesis of the two theories of ethnic entrepreneurship and an interpretation of the composite model developed.

2.4 Composite Model of Ethnic Entrepreneurship

2.4.1 Introduction

In the following model-building stage of the research the intention is to develop a composite model of ethnic entrepreneurship. This section first outlines the nature of composite models in general. Afterwards, the section proceeds with a synthesis of two theoretical perspectives on EE and concludes with an interpretation of the proposed composite model.

2.4.2 Key Features of Composite Models

In social science literature, composite models¹⁷ are generally seen as an intellectually coherent reconciliation of different theoretical perspectives (Turner, 1986, 1987). In building composite models we selectively borrow variables and concepts from different theoretical streams, and then compile them into new theoretical formulations. What can be achieved by building composite models? By pulling together different, even competing, theoretical perspectives it may be feasible to provide more comprehensive theoretical explanations. In addition, by synthesising the areas of overlap and complementarity that may exist in the literature, we provide a condensed formulation of the concepts that researchers are agreed upon. As such, composite models may help us to avoid unnecessary theoretical discussions. The following paragraphs review some examples of composite models¹⁸.

Regarding the general entrepreneurship literature, we should mention the composite model of entrepreneurship developed by Wilken (1979). Wilken merged the theories of entrepreneurship and the theories of economic development into a new theoretical formulation about the emergence of entrepreneurship. Similarly, sociological literature on entrepreneurship has been enriched by composite models of entrepreneurial process (Baucus and Human, 1994) and entrepreneurial motivation (Naffziger et al. 1994). While Baucus and Human (1994) pulled together diverse explanations about entrepreneurial process, Naffziger et al. (1994) defined a new model relying on the overlapping concepts in the literature on motivation.

Furthermore, Strong and Meyer (1992) and Stead et al. (1990) developed composite models for understanding ethical decision-making in business organisations. By integrating different sets of explanatory variables, both composite models tried to overcome the split between the individual/collective and the economic/psychological distinction which had existed in the literature on ethical behaviour in the business environment. Considering the political science literature, it is worthwhile mentioning a composite model of social protest movements proposed by Amenta et al. (1992). They assigned selected aspects of social-movement models to the models of public spending policies, and accordingly offered a new theoretical formulation for the success of social protest movements. Similarly, Hicks et al. (1995) proposed a political institutional model that was combinatorial in nature. They combined theories of socio-economic development with political institutional factors in order to explain the emergence of the welfare state. In an attempt to explain the nature of racial group competition Bobo and Hutchings (1996) provided a synthesis of four models of inter-group hostility, using Blumer's theory of prejudice as a conceptual coverage. Relating to the same issue of ethnic/racial relations we should

¹⁷ Composite models can also be referred to as 'hybrid' models (Amenta et al. 1992), synthetic models (Scott, 1990), or combinatorial models (Ragin, 1994).

¹⁸ Turner (1986, 1987) provides a comprehensive list of composite models from social sciences.

mention the oppositional model of ethnic solidarity developed by Scott (1990). He tried to explain ethnic group solidarity by integrating two dominant theoretical perspectives on ethnicity into a single model.

The exemplars referred to give some support to the idea of building composite models. The authors provided new theoretical formulations based on the insights of different theoretical explanations. In general, such new theoretical formulations advanced understanding of the phenomena analysed. That is, by using composite models the authors were able to produce more comprehensive causal explanations. Moreover, they tried to resolve some of the chronic controversies in the literature, as for instance, to explain ethical issues in the business environment.

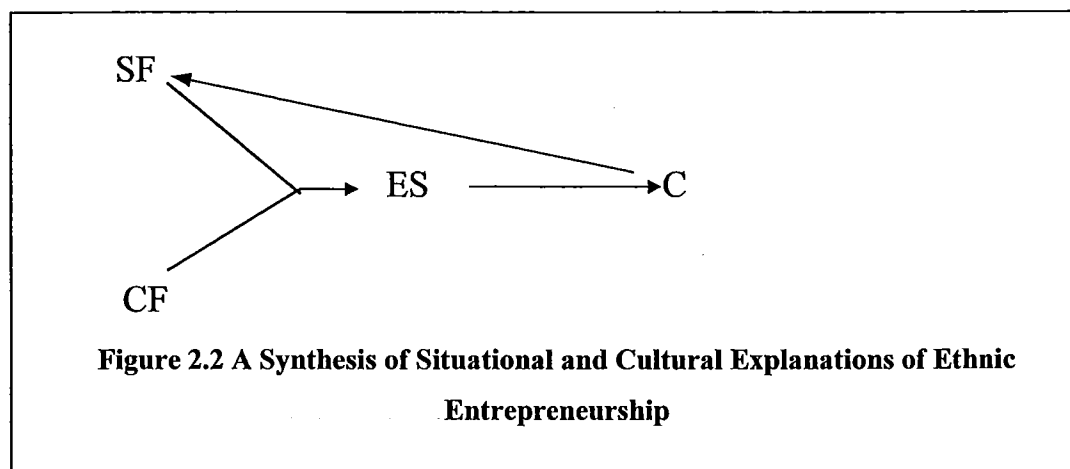
However, how do we justify the idea of building composite models? A plausible reason to decide on building composite models may be an inability of the existing models to provide inclusive theoretical explanations. Arguing that neither model alone offers a sufficient theoretical explanation and that theoretical insights of each model provide just a piece of 'the truth', we may turn towards a synthesis of the existing explanations. And so, the goal could be to pull together different concepts and to see if they can be fruitfully integrated. Moreover, reviewing separate theoretical explanations about a particular phenomenon may reveal complementarity that exists between them and result in a parsimonious theory.

2.4.3 A Synthesis of Two Models of Ethnic Entrepreneurship

This section develops a composite model of EE which incorporates some of major arguments of the literature review. In carrying out this model-building process, the thesis has relied on the literature concerning model building in social science (Abell, 1971; McClelland, 1975; Turner, 1986, 1987). First, those features of ethnic entrepreneurs which seem to be agreed upon in both models are isolated. The overlapping ideas selected are further reconciled and incorporated into a composite model. The model encompasses the influence of the two separate causal factors proposed by each major perspective on EE.

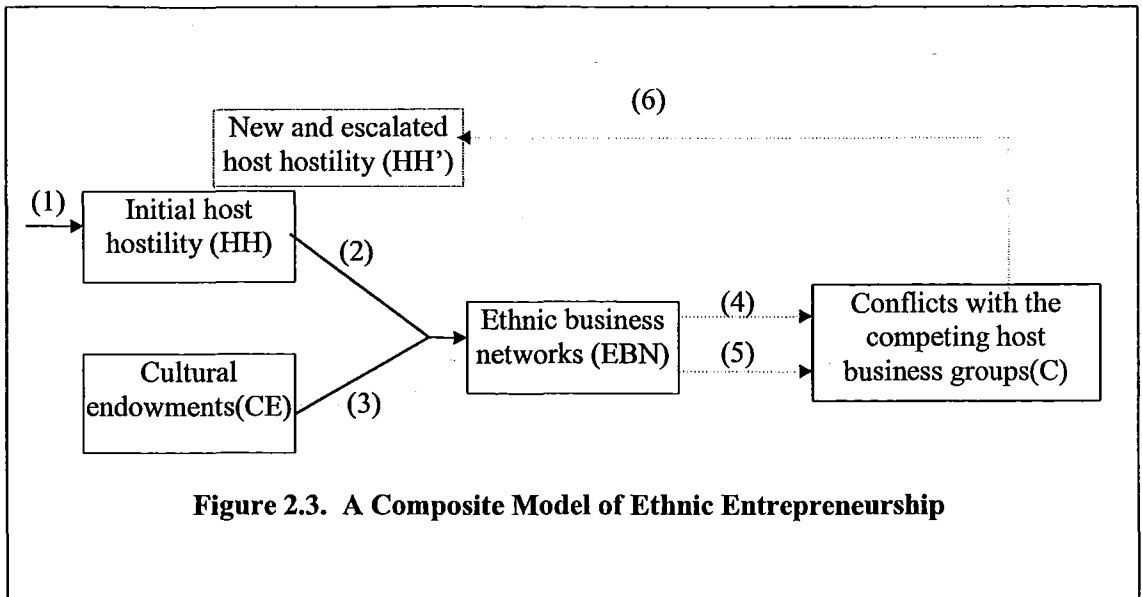
The key variables, which are seen to be common to both models, may be accepted as an axis along which a synthesis can take place. In fact, there are three lines for the synthesis of the models (Figure 2.2). The first is an axis of economic competitiveness represented by ES-C line (ethnic solidarity in business causing conflicts with the host business groups); the second is a reciprocal relation between these conflicts and the new and escalated host hostility ethnic groups face (C-SF). The third line for the synthesis is an attempt to include one of the major arguments identified in the literature review - the need to consider situational and cultural

factors in conjunction. Thus, the arguments that situational (SF) and cultural (CF) factors each constitute necessary conditions for the emergence of the ethnic collectivistic actions in economic matters is shown by the single arrow combining their effect upon ES (ethnic solidarity in business).



Hence, drawing on cultural theory and the recent evolution of the middleman minority model, a detailed composite model of ethnic entrepreneurship is developed, as shown in Figure 2.3. The following variables form the proposed composite model: the initial host hostility (HH), cultural endowments (CE), ethnic business networks (EBN), conflicts between ethnic entrepreneurs and the competing host population (C), and the escalated host hostility (HH').

This model accepts ethnic business networks (EBN) as a dependent variable and in fact, a representation of ethnic entrepreneurship (Light et al. 1993; Light and Rosenstein, 1995; Portes, 1995). It is now necessary to look for the causal forces able to explain the occurrence of ethnic social networks in the economic life of ethnic groups. Following an evolutionary version of the middleman minority theory (Turner and Bonacich, 1980) situational factors are discussed within the concept of host hostility. Therefore, the composite model holds that the existence of host hostility towards ethnic groups (HH) will lead towards an intra-group solidarity in economic activities, under conditions that ethnic groups encompass specific cultural endowments (CE) capable of promoting the groups' internal organising capacity. In that case, ethnicity provides an axis of differentiation along which members can build trust and establish an economic mechanism for starting ethnic enterprises. Once ethnic business networks have emerged their further existence may promote a contrast effect and cause conflicts with competing business populations from the host population (C). The model considers those conflicts to be also in the core of the model as the second dependent variable since they account for the further persistence of ethnic social networks in business, by its additional influence on the HH variable.



The causal forces denoted by arrows (1-3) account for the initial occurrence of ethnic entrepreneurship, while the causal forces (4-6) account for the persistence of ethnic entrepreneurship. The model firstly includes the factors likely to produce the initial host hostility among the receiving society (1). Secondly, the model proposes a joint effect of situational and cultural influences in promoting the development of ethnic social networks (2+3). The arrow (2) refers to the effects that host hostility has on ethnic solidarity and hence the mobilisation of intra-groups resources while the arrow (3) denotes the activation of the transplanted cultural endowments capable of producing certain economic collective mechanisms. Thirdly, the model emphasises the recursive effects of economic collectivistic mechanisms which result in the conflicts between ethnic entrepreneurs and the host population. It is proposed that conflicts arise over economic matters (4) and ethnic solidarity (5). Finally, the model stresses the consecutive effects (6), that once created conflicts have on the emergence of a new wave of host hostility (HH').

2.4.4 An Interpretation of the Proposed Composite Model

The composite model builds on situational theories on ethnic entrepreneurship. Hence, the model underlines the particular social status of ethnic groups as being a minority in the host society and subsequent host hostility as responsible for mobilisation of ethnic resources. Host hostility (HH) as an independent variable in the model is defined below.

Authors from the economic sociology literature define host hostility in the receiving society as an active opposition to the group's entry or permanence in the country (Portes, 1995, p.26). It is also accepted that such hostile behaviour is manifested in different forms of discrimination, with

institutional discrimination being seen as one of the most common forms. In general, institutional discrimination consists of the practices and actions of dominant ethnic groups that have negative impacts on subordinate ethnic groups (Feagin and Imani, 1994; Feagin and Eckberg, 1980). Although institutional discrimination might have some positive effects¹⁹, the main focus here is on the actions resulting in negative impacts, that is, different measures of exclusion imposed by the dominant ethnic groups.

From the conceptual point of view, the model accepts that the logic behind institutional discrimination is both irrational and rational. In that sense the model considers a two-level analysis of the host hostility (HH and HH'), as has been explained in the economic sociological literature (Yinger, 1985, 1989; Feagin and Imani, 1994; Sowell, 1983; Evans and Kelley, 1991). While the irrational concept of discrimination is based on cultural differences (1) which may create the initial host hostility towards ethnic groups (HH), the rational concept of discrimination is additionally shaped by economic factors (6). Such an economically derived discrimination towards ethnic groups would be embodied in the re-emerged host hostility (HH').

The proposed model holds that the initial host hostility (HH) reflects the concept of cultural desirability (1). In that sense, the model follows a number of authors who stress the significance of cultural desirability in creating the initial host hostility (Sowell, 1983; Baker, 1983, or earlier in Marshall, 1948²⁰). According to those authors, the dominant ethnic group will consider other groups as culturally desirable or not, from the standpoint of dominant cultural values.

As indicated by the causal arrow (2), the model expects ethnic groups to mobilise ethnic resources as a result of being a social minority, and hence facing the host hostility imposed by the majority social groups. Such a direct manifestation of host hostility impels group-oriented behaviour and a high level of ethnic solidarity in economic affairs, represented by the development of ethnic networks in business (EBN). This property of the composite model is in line with the middleman minority theory. However, this model takes the (HH) variable only within the context of the presence of certain cultural endowments (CE) ethnic groups may retain. Thus, as a reaction to host hostility ethnic groups may activate particular intra-group cultural endowments in order to cope with the constraints imposed from outside.

¹⁹ Economic sociology literature separates negative from positive forms of discrimination, when the latter ones refer to the preferable treatment of particular ethnic business without providing equivalent support across the all groups (Ward and Jenkins, 1984).

²⁰ In discussing ethnicity in the case of US agriculture, Marshall (1948) assumed that the cultural desirability of the ethnic groups, as perceived by the majority of society, may be a factor in accounting for the different acceptance of the ethnic groups by the receiving society.

Therefore, the model incorporates the second independent variable (CE), that is, intra-group cultural endowments capable of supporting the existence of ethnic social networks. The model assumes that a reaction to the cultural difference and the outside discrimination does not account fully for the emergence of bounded solidarity among ethnic groups. Situations where the ethnic groups are discriminated against will enforce and produce ethnic collectivistic mechanisms but only if the groups retain distinct cultural endowments. This property of the composite model is in line with the cultural theory, which argues that the possibility of ethnic groups coping adequately with such situational factors is linked to the groups' internal organising capacity. As Light (1972) suggested, cultural endowments associated with ethnic entrepreneurship possess the capability of producing collectivistic entities embedded in economic activity. Such collectivistic oriented values²¹ are ingrained in a strong intra-group orientation and hence, are rather compatible with the establishment of ethnic networks.

The model further assumes that ethnic collectivistic actions in economic matters may have recursive effects which cause conflicts between ethnic entrepreneurs and competing host business groups (C). Explicitly following the line of the middleman minority theory, the model assumes that these conflicts arise over economic matters (4) and ethnic solidarity (5). Thus, this model holds that ethnic business networks, through cutting the costs and internal distribution of resources, would increase the groups' competitive advantages. A related perception is that such cohesive and highly organised ethnic groups represent an economic threat to the competing business groups from the host population. Ethnic solidarity may also be perceived within a cultural context, and accordingly ethnic groups may face negative stereotypes about social 'clannishness', unassimilability and in general be considered by the majority population as culturally distinctive.

Thus, the model expects that competing business groups from the host population groups will stereotype ethnic business groups negatively, see them as an economic threat and misinterpret their group-oriented behaviour. An economic threat can often become an additional force escalating host hostility. The model assumes that the context of such *ad hoc*, escalated host hostility (HH') is also rational and hence will be an expression of the struggle for economic gains. Following the middleman minority literature that asserts that "one of the ironies of reactions to hostility is that they often escalate the initial level of hostility" (Turner and Bonacich, 1980, p. 155), the model accepts that such a new wave of hostility (HH') will reach a higher degree than the initial host hostility (HH).

In summary, the host hostility based on the concept of cultural desirability may initiate reliance

²¹ Accordingly, the variable of cultural factors could be denoted as CCE – collectivistic cultural endowments.

on intra-group resources in socio-economic adjustments of ethnic groups. Such behaviour of ethnic groups consequently provides the ground for further conflicts between members of ethnic groups and the host population. At the beginning, such host hostility may encompass the irrational component of group hostility. However, in the course of further socio-economic adjustment by the ethnic group such host hostility becomes additionally motivated by economic factors.

According to economic sociology literature it is clear that no single factor fully explains the emergence of entrepreneurship (Wilken, 1979). The proposed model follows this line, stating that social marginality cannot be considered as a sufficient condition for promoting entrepreneurship amongst ethnic groups. Hence, the model further introduces an additional causal factor - the existence of certain cultural endowments capable of activating collectivistic economic mechanisms.

2.4.5 Summary of the Composite Model

Drawing on both the middleman minority model and cultural theory this thesis proposes a composite model of ethnic entrepreneurship. The model derives the principal causes of ethnic business networks from the particular social position ethnic groups occupy in the majority society. Furthermore, drawing on cultural theory, the model introduces collectivistic cultural endowments as the second independent variable. Drawing especially on the middleman minority literature the proposed model incorporates the recursive effects of collective economic mechanisms and distinctive cultural traits.

From the model's points of view it is important if the host population perceives members of the minority ethnic groups through the concept of cultural desirability. Accordingly, the model holds that strengthening of ethnic solidarity and the mobilisation of ethnic resources are common features of those ethnic groups strongly differentiated by culture from the host society and subjected to the any form of institutional discrimination. By drawing on their internal solidarity, forced by particular external factors, minority ethnic groups will rely on their internal cultural endowments capable of providing intra-group organising capacity.

The model further emphasises the recursive effects of economic collectivistic mechanisms and distinctive cultural traits which result in conflicts between ethnic entrepreneurs and the host population. The model also accepts that as ethnic groups show obvious competitiveness in a particular economic activity they will be under attack by the competing business groups from the host population. Hence, from the model's point of view an important factor is the degree to which ethnic groups are perceived as an economic threat and whether or not the competing

business group would initiate new, *ad hoc* host hostility.

2.5 Conclusion

This chapter started by outlining some conceptual definitions of ethnic groups, ethnic solidarity and ethnic mobilisation. Afterwards, theoretical perspectives on ethnic entrepreneurship and their applications to agricultural settings have been reviewed in more detail. The focus has been on those concepts which specifically explained ethnic collectivistic mechanisms in economic affairs. As the literature review has indicated theoretical explanations of EE in agricultural settings tended to fall into two streams. The first one, developed within the framework of the middleman minority literature, focuses on situational factors as instrumental to ethnic solidarity in economic affairs. The second view, of cultural theory, focuses on the cultural endowment of ethnic groups as conducive to ethnic solidarity in business. In reviewing theoretical explanations this chapter has also addressed certain points of convergence and the existence of overlapping properties between these two major perspectives on EE. Moreover, it has been argued that neither theory alone offered a sufficient explanation for ethnic solidarity in business.

The arguments developed within this chapter have set up the rationale for building a composite model of ethnic entrepreneurship. Therefore, the second half of this chapter has turned towards building a simple composite model of EE which incorporates the two main streams in the existing EE literature. The proposed model holds that the external social factors and the cultural traits of ethnic groups are both relevant to ethnic business development. Accordingly, a joint effect of the host hostility and collectivistic cultural endowments is seen as the primary cause for the emergence of ethnic social networks. The model also proposes the recursive effects of ethnic social networks which cause conflicts between ethnic business groups and local business interests.

In reviewing empirical research within the current EE literature this chapter has also addressed method issues and noted a lack of comparative research design. Most studies reviewed adopt a single group/one country research design rather than the more demanding multiple groups research design. It was also noted how a more comparative approach might improve the way of testing the theories of ethnic entrepreneurship.

At this point, the thesis introduces Qualitative Comparative Analysis (QCA), a relatively new method for addressing causal explanations in social science. QCA is viewed as an appropriate method for an empirical assessment of the models which are composite in construction, and as a way of enriching comparative research in the existing EE literature. QCA is explained in more detail in the next chapter.

CHAPTER 3

QUALITATIVE COMPARATIVE ANALYSIS (QCA)

3.1 Introduction

This chapter outlines the basic features of the Qualitative Comparative Analysis (QCA) and its formal language - Boolean algebra. The purpose is to present the epistemological and technical features of the method. The chapter first introduces QCA as a middle road between typical qualitative and quantitative research methods in comparative social science. Next, this chapter presents the strategy of QCA, the procedure of its implementation and refers to some applications of the method to different research settings. The chapter concludes by outlining specific requirements and some problems which could arise in the course of the method's implementation.

3.2 The Strategy of QCA

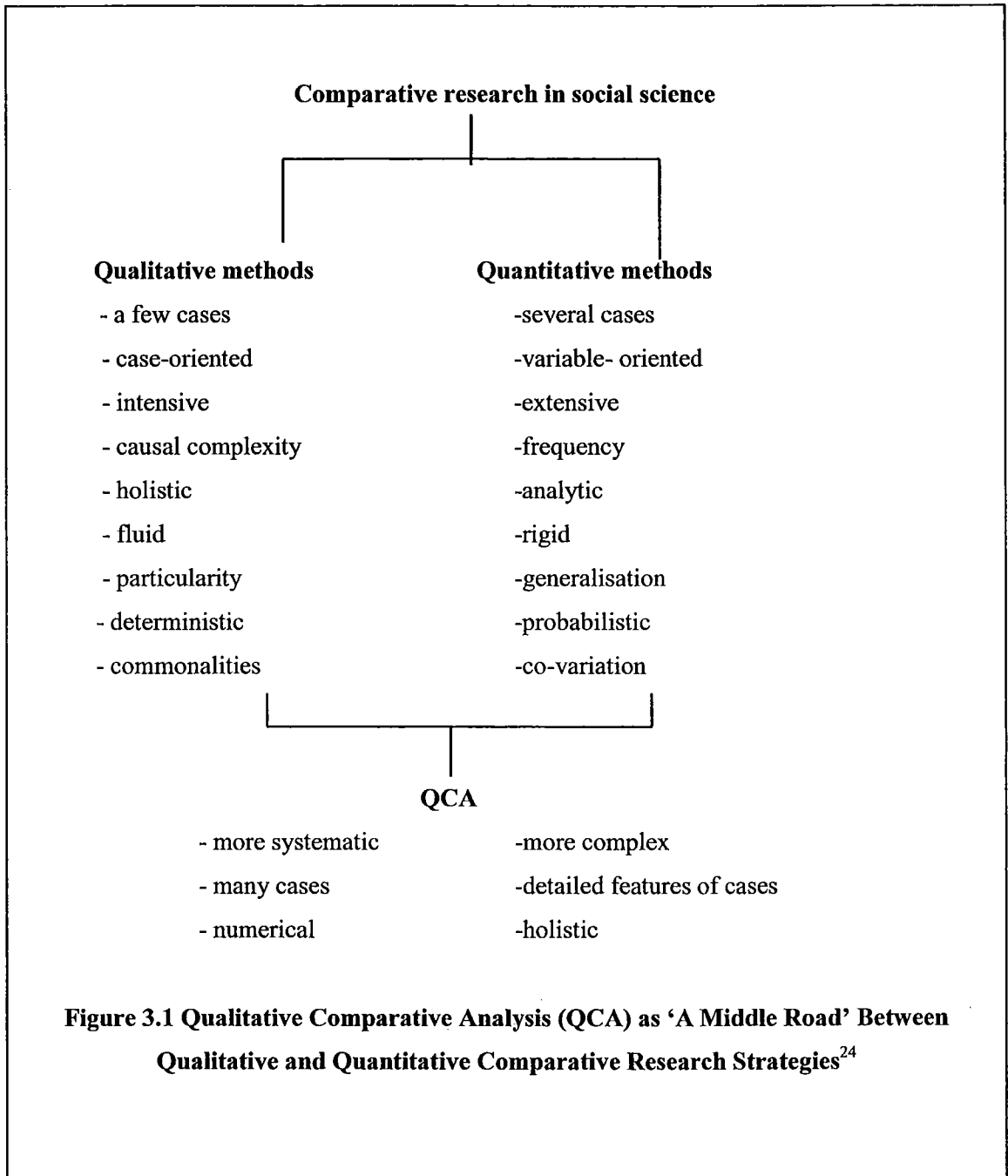
Qualitative Comparative Analysis (QCA) is a relatively new method for providing causal explanations in social science. QCA is essentially case-oriented comparative research that provides a systematic, holistic analysis of a moderate number of cases²². The method is designed to draw causal inferences from comparing configurations of the selected causal variables across cases included in an analysis. QCA holistically compares these configurations to discover necessary and sufficient conditions for the emergence of an outcome. In terms of technical procedure QCA systematises and transforms empirical evidence into algebraic forms, and then uses Boolean algebra to do comparisons. Moreover, QCA is based on epistemology that allows for evaluating theoretical propositions, particularly contextual, or combinatorial causal arguments.

QCA was introduced by Charles Ragin, in 1987 as a bridge between qualitative and quantitative research strategy in comparative research in social science²³. Typically, qualitative research methods discuss many features of a relatively small number of cases. Quantitative methods on the other hand analyse the variations of small numbers of features across many cases. While qualitative methods see cases as a complex configuration of elements and structures, quantitative methods examine relationships among variables and patterns of variation across

²² According to Ragin (1989) qualitative comparative analysis is appropriate for five to about thirty cases. Recently, Biggert (1997) suggested ten to fifty cases as a moderate number of cases. The QCA applications reviewed later in this chapter were mainly based on samples smaller than twenty cases.

²³ Ragin (1987) provides a comprehensive and clear review of QCA. Other reviews of QCA are presented in Ragin (1989, 1994a, 1994b), Ragin and Hein (1993), Griffin and Ragin (1994).

cases, rather than how different features fit together within a particular case. Ragin argued that features of both strategies could be combined in a complementary way. Introduced by Ragin as a synthetic strategy, QCA combined some of the features of the case-oriented modes of research that are typically intensive, holistic and deterministic, and some features of the variable-oriented, extensive and probabilistic research strategy in comparative social science (Figure 3.1).



²⁴ Figure 3.1 is constructed based on interpretations of QCA as a synthetic strategy (Ragin, 1987, 1989, 1994a; Hicks, 1994; Biggert, 1997; Coverdill et al. 1994). The term ‘middle road’ was used in Ragin (1987, p. 168).

In the view of Ragin (1987) and some other authors who applied QCA (Hicks, 1994; Biggert, 1997; Coverdill et al. 1994), this method complements qualitative and quantitative analyses by providing a more complex approach than most quantitative research methods and is more systematic than most qualitative research methods. QCA also brings some rigour and a variable concept of quantitative methods to qualitative ones, and also some of the causal complexity and in-depth analysis of qualitative to quantitative research methods (Figure 3.1).

The way that a case is approached is specific to QCA and this distinguishes the method from both qualitative and quantitative research strategies in comparative social science. Basically QCA implements the principles of the case oriented research strategy but with a more variable-centred approach. QCA approaches cases in a specific way and represents them as a configuration of selected causal combinations/independent variables and outcomes. Such transformed cases are then compared holistically in order to discover necessary and sufficient conditions for the emergence of an outcome. Thus, in applying QCA each case remains contextualised. This means that the impact of each causal variable/condition is not taken out of context, but instead depends upon the presence or absence of other causal variables.

QCA systematises empirical evidence usually gathered from intensive case studies. This systematisation is based on data reduction logic rooted in Boolean algebra, the algebra of logic and sets²⁵. Based on Boolean algebra, QCA measures and transforms both independent and dependent variables into dichotomous forms. QCA uses what social scientists would call presence-absence dichotomies. This means that causal conditions and outcomes are either present or absent in each case.

Configurations of selected causal conditions or independent variables are first presented as nominal data with a yes/no or presence/absent dichotomy, and then holistically compared by using Boolean procedures. Put simply, these procedures involve comparing groups of cases based on the presence or absence of an outcome and the presence or absence of theoretically or empirically derived causal factors. In comparing the cases, the point is to identify the similarities among the cases with the same outcome and differences between cases conforming to different outcomes.

QCA appears to be of a substantial utility in research sites with contextual and multiple causal relations. The method assumes that causal variables are effective only when operated in conjunction with each other, and consequently the impact of each causal variable should be discussed only in a particular context. QCA also accepts that more than one configuration of

²⁵ The basic principles of Boolean algebra as applied to social science are reviewed and illustrated in Appendix 2.

causal variables may generate the same outcome. Accordingly, QCA locates different paths to the emergence of an outcome and therefore enables the analyst to classify the outcomes based on different configurations of the causal variables. Apart from deriving the patterns of causal factors leading towards the emergence of outcomes, QCA also identifies the causal conditions related to the 'negative outcomes', thus to the absence of the phenomena of interest.

In conclusion, QCA may be summarised in the following key points. QCA:

1. Is a comparative analysis with an explicit goal to explain
2. Is a case-oriented approach
3. Focuses on the cases as wholes
4. Examines cases as the configuration of selected causal/independent variables and outcomes/dependent variables
5. Works with the presence/absence dichotomy, and presents it in the algebra forms of presence (1) and absence (0)
6. Considers both causes (independent variables) and outcomes (dependent variables) as qualitative phenomena, such as the presence or absence of events, processes or structures
7. Focuses on the combination and the interaction amongst the various factors as responsible for the emergence of outcome
8. Assumes that different combinations of causes may produce a single outcome
9. Explains both positive and negative outcomes and considers them equally important for causal analysis
10. Employs a concept of necessary and sufficient causal conditions
11. Offers deterministic, not probabilistic explanations for the emergence of an outcome.

3.3 The Procedure

There are certain steps and analytic tools in using QCA. The analytic tools in carrying out QCA are: truth tables, primitive equations, prime implicants, and logically minimal Boolean functions.

The actual implementation of the method starts from selecting causal variables. The method requires considerable care in deciding on the number of causal variables to be included and how to choose those variables. Selecting causal variables is followed by operationalisation of the outcome using the existing theoretical perspectives and empirical literature on the topic. As Boolean algebra operates only with dichotomous measures an analyst has to specify all causal variables and the outcomes using a presence/absence dichotomy. What is needed in this data reduction phase of the method implementation are very clear criteria in the categorisation of

variables. Furthermore, the coding system and the procedure should be outlined before the data gathering process actually starts.

After a selection of causal and outcome variables²⁶ and having decided upon coding procedure, the analyst starts with building a truth table. A truth table is a raw data matrix, which comprises causal conditions and outcomes across a number of cases. Each row in a truth table represents either a logical or a real combination of values of causal variables. Each row of a truth table also sets an output value on the dependent variable. The truth table is completed when all the cases and codes on the causal and outcome conditions are displayed using binary mathematical forms.

This matrix of binary data (presence/absence dichotomies) is then subjected to a procedure of Boolean minimisation. The procedure involves comparing groups of the cases based on the presence/absence of the outcome conditions and the presence/absence of the selected causal conditions²⁷. These combinations are compared with each other and then logically simplified through a bottom-up process of paired combinations. In carrying out bottom-up comparison, through two steps of minimisation²⁸, the comparison ends up with a logically minimal Boolean expression as an output of the analysis. This provides logically minimal configurations which account for the emergence of particular outcomes.

QCA provides additional features for carrying out causal analyses. As the logically minimal Boolean expression may locate different paths to the emergence of an outcome it becomes possible to do a classification of the outcomes based on different configurations of the causes. Accordingly, the analyst may carry out a further interpretation using a more detailed account of the phenomenon in question. Furthermore, by factoring Boolean equations it is possible to interpret results in terms of necessary and sufficient causal conditions. One aspect of the method's utility is the possibility of writing down final equations with a negative outcome that can help in explaining the conditions accounting for failure of a particular event.

There are some specific issues and additional steps in using QCA to evaluate theoretical arguments. These are outlined below.

In evaluating theoretical arguments QCA maps the areas of agreement and disagreement between the theoretical propositions (T) and the results of minimisation of the truth table (R). In

²⁶ While typical quantitative analyses operate with a terminology of 'independent and dependent variables', QCA uses 'causal conditions and outcomes'. This study will use the QCA terminology.

²⁷ Cases with the same values on the outcome conditions are grouped together in the same logical configuration. QCA then analyses these unique combinations of input values, not cases per se. Accordingly, the relative frequency of cases across these combinations is of no special relevance to QCA. However, it is possible to incorporate such information into an analysis, as done in Ragin (1987).

²⁸ See Appendix 2.

assessing theories by using QCA it is not appropriate to make a strict parallel with the classical approach in testing hypotheses. QCA does not, as a rule, reject theories in the same way that classical statistical analysis does. Typically, the end result of QCA is a statement of the explanatory limits of the causal variables identified with different theories, not their mechanical rejection or acceptance.

In introducing QCA Ragin (1987, Chapter 7) outlined how theoretical arguments about causal combinations may be incorporated into QCA and also showed the compatibility of the method with the goals of theory testing. Ragin also illustrated how to evaluate theoretical models/arguments by calculating the intersection between the final Boolean equation (R) and the hypotheses formulated in Boolean terms (T). By calculating these intersections it is possible to derive three subsets of causal combinations: both hypothesised and empirically confirmed, hypothesised but not detected within the empirical evidence, and finally causal configurations empirically found but not hypothesised. Ragin also argued that this third intersection of theoretical explanations and empirical evidence would demonstrate shortcomings of a theory/model.

Thus, the steps in using QCA for evaluating theoretical arguments are:

- Step 1: To express theoretical arguments in Boolean terms and to write down Boolean equations that explain the concept of the proposed composite/combinatorial models;
- Step 2: To select and define causal conditions and outcome variables
- Step 3: To decide upon coding systems to transform both outcomes and causal conditions into the presence-absence dichotomy;
- Step 4: To systematise empirical evidence and to construct the 'real' truth table;
- Step 5: To address the problem of contradictions (if appropriate), and then to check if there are too many cases with the same causal configurations and different outcomes;
- Step 6: To address diversity of causal combinations (if appropriate) and to decide on how to treat non-existent combinations of causal conditions;
- Step 7: To write down primitive equations emerging from every row of the truth table and accordingly the 'sums of the products';

Step 8: To carry out the process of Boolean minimisation, and to write down prime implicants and a prime implicants chart (if appropriate) showing the convergence of primitive equations towards the final minimal equation;

Step 9: To calculate the Boolean intersections (if appropriate) between the function representing theoretical expectations and the functions derived from the truth table;

Step 10: To derive three types of causal combinations (both hypothesised and found in empirical evidence; hypothesised but not found in empirical evidence; found in empirical evidence but not hypothesised) and to outline possible shortcomings of the proposed model.

Having sketched the steps in using QCA, the two subsequent sections review some applications of QCA and outline critical points, requirements, and specific problems associated with the method's application.

3.4 Applications

Since 1987²⁹ QCA has become increasingly popular among social science researchers and has been applied to different academic disciplines. QCA has been used in political science (Ragin, 1987; Berg-Schlosser and De Meur, 1994; Foran, 1997), sociology (Wickham-Crowley, 1991; Brown and Boswell, 1995), anthropology (Lang, 1993), forestry science (Hellström, 1998; Rudel and Roper, 1997), management science, such as organisational management (Romme, 1995) and labour management (Coverdill et al. 1994). Also, the method has been applied to human capital investment analysis (Hollingsworth, 1996), and used in policy analyses, such as labour policy analysis (Biggert, 1997) and social policy analysis (Amenta and Poulsen, 1996).

Most QCA applications have focused on macro-sociological issues. For instance, Griffin et al. (1991) analysed causes of the diverging rates of unionisation among advanced industrial democracies; Hicks et al. (1995) studied the emergence of social insurance programmes in the U.S.; Berg-Schlosser and De Meur (1994) explored the rise of democratic political systems in Europe between the two world wars, while Wickham-Crowley (1991) provided a comprehensive analysis of causes accounting for success and failure of Latin American Revolutions. QCA has also been used to perform specific research tasks. Ragin et al. (1984)

²⁹ It should be mentioned that Ragin applied the principles of Boolean logic to social science for the first time in 1984. It was in a study on discrimination within academic settings (Ragin et al. 1984). However, QCA was for the first time thoroughly explained in Ragin (1987). Ragin selected three examples from the sociological and political science literature and showed how the method could be used in the evaluation of theoretical arguments and in construction of an empirical typology (*Ibidem*, 125-163).

used QCA³⁰ as an aid to interpret the results of statistical analysis, while Coverdill et al. (1994) contrasted the logic and results of QCA with traditional qualitative and quantitative analyses in a study on labour management practices. Moreover, QCA has been used in constructing an empirically grounded typology of some phenomena, such as a typology of social movement organizations (Cress and Snow, 1996).

As noted earlier, QCA is suitable for evaluating theoretical propositions, particularly contextual causal arguments. A study by Amenta and Poulsen (1996) illustrates the evaluation of a composite or 'hybrid' model using QCA. Romme (1995) and Amenta et al. (1992) used the same capacity of the method in assessing their proposed integrative models of 'self-organising process' and 'successful social movements' respectively. Some applications of QCA were designed to evaluate the usefulness of the competing theories to explain certain phenomena. For example, Wickham-Crowley (1991) examined a number of separate one-factor theories of Latin American revolutions, while Berg-Schlosser and De Meur (1994) examined a variety of theoretical arguments about conditions for the emergence of democratic political systems. Biggert (1997) used QCA to assess the utility of two theories in explaining the reasons for the passage of labour laws in the U.S. during this century. Other exemplars of using QCA to assess theoretical arguments include testing hypotheses for the emergence of a cultural phenomenon (Lang, 1993), or about the diversity of pension systems among the advanced capitalistic countries (Ragin, 1994c).

In general, applications of QCA have yielded some improvements of the method, mainly in terms of providing new avenues for analytic work or including a dynamic component into coding systems. Wickham-Crowley (1991), for instance, showed how QCA exploits negative cases in explaining failures and success in Latin American revolutions. Amenta et al. (1992) suggested that prime implicants, as one stage of the Boolean minimisation, provided the possibility for additional analytic work. Basically, instead of calculating and analysing only the final, logically minimal Boolean equation, the authors interpreted sets of different empirically derived causal configurations.

A study by Cress and Snow (1996) illustrated both factoring of Boolean functions and how to derive necessary and sufficient conditions. Finally, it is worth mentioning work by Lieberson and O'Bell (1992) as a specific application of QCA. They proposed a truth table approach to the interpretation of complex data patterns without performing the process of Boolean minimisation, i.e. to derive prime implicants and to use prime implicants charts. Instead, the authors focused on the analysis of configurations and used QCA largely as a format to represent and analyse empirical evidence.

³⁰ Ragin et al. (1984) is so far the only one application of QCA to a study of micro-social phenomena.

Table 3.1 Some Solutions/Improvements in Coding Outcome and Causal Variables for QCA

Problem	Solutions	Exemplars
1. Coding outcome variables	<p>Outcome variables may be trichotomized (2, 1, 0) and then transformed into binary forms using Z scores</p> <p>Outcome variables may be represented by two columns having configurations as 1 0, 00, 01 and then to calculate Boolean equations for each column separately</p> <p>Outcome variables maybe coded as the changes where those changes which require explanations (positive changes) are coded as 1s while negative changes and no changes are coded as 0s</p>	<p>Ragin (1987); Ragin et al. (1984)</p> <p>Griffin et al. (1991)</p> <p>Romme (1995)</p>
2. Coding causal variables	<p>Causal variables may be represented as a code of two columns in the truth tables, as 10; 11; 01; 00; or three columns code as 111, 101, etc.</p> <p>Variables may be also coded as 1; 1-; 0, where 1- are used to indicate that the variable is present to some degree, and in the course of the minimisation process will be finally considered as 0s.</p> <p>Causal variables may be also coded based on the concept of changes, such as upward movement (10), no cases (00), and downward movement (01)</p>	<p>Ragin et al. (1984); Griffin et al. (1991)</p> <p>Foran (1997)</p> <p>Griffin et al. (1991)</p>
3. Transforming data into ordinal categories to fit a truth table	<p>Interval-level variables may be transformed into binary forms using cluster analysis (assigning each case to a particular cluster of an outcome) or a simpler solution (assigning 3s, and 5s on a interval scales to 1s in a truth table);</p> <p>Variables may be dichotomised according to certain thresholds (75 - 25%; or 80- 20%)</p> <p>In the case where there is no definition of 'intensity' or 'strength', variables may be coded as 1s or 0s according to the researcher's view (intense conflicts 1, moderate conflicts 0, or for instance strong egalitarianism 1, weak egalitarianism 0)</p>	<p>Ragin (1994b); Hollingsworth et al. (1996)</p> <p>Berg-Schlosser and De Meur (1994); Hicks (1994)</p> <p>Hellström (1998); Berg-Schlosser and De Meur (1994)</p>
5. Coding procedure	<p>It is possible to carry out coding by more researchers and to derive the areas of agreement which are then included in the analysis</p>	<p>Romme (1995)</p>

QCA has also been used in analysing case studies across different time periods. Romme (1995) for instance developed an approach where each case was divided into a number of key periods. It was then possible to follow the key periods identified in the course of empirical research, and to represent the causal configurations related to this period as one row in the truth table. Hollingsworth et al. (1996) built the truth table with the rows representing the same case during different decades. Finally, Griffin et al. (1991) applied QCA to time-series by clarifying and dating periods included in the analysis separately for each case. The periods were framed by two

extremes in the occurrence of the outcome, while dating and coding of the independent variables was strictly related to the time periods selected for assessing the outcome.

Applications of QCA have also shown that the method may be used with virtually any kind of evidence, provided that only the data are sufficiently systematic. Some authors have used QCA to simplify and systematise data collected through the classic field methods. For instance, Coverdill et al. (1994) and Cress and Snow (1996) used QCA to analyse interview and observational data collected in field work. Similarly, quite a few authors (Amenta et al. 1992; Wickham-Crowley, 1991; Hicks et al. 1995; Hellström, 1998; Foran, 1997) used QCA as a means to systematise and interpret the large amounts of both qualitative and quantitative data derived from secondary sources.

As noted in the preceding section, in applying QCA it is necessary to decide on the coding procedure for transforming the variables into binary forms. So far, empirical applications of QCA to a variety of research settings have yielded some advanced coding procedures for transforming variables with different measurements into dichotomous forms. Table 3.1 outlines some solutions and improvements in coding of variables for QCA.

3.5 Requirements and Limitations

This section addresses the critical points and the challenges of QCA, as they have been seen through analysis of the exemplars. It also encompasses reflections on the way in which the method structures the dialogue between theory and evidence.

The elegance and a relatively simple philosophy are some of the hallmarks of QCA. The Boolean principles used in qualitative comparative analysis are easy to understand. It should be noted here that QCA is not as sophisticated as some other quantitative approaches to comparative social science, such as multivariate techniques. However, QCA does impose certain demands on the analysts that are not usually faced in statistical analyses. There are also some specific requirements and problems that may arise in applying the Boolean-based qualitative comparative analysis: These are discussed below.

First, the selection of causal variables is one of the critical points in the method's implementation, because of both technical and epistemological reasons. Technically, QCA may operate with a few variables since the number of causal configurations grows exponentially from a base of two³¹. Thus, a large number of independent variables might make QCA unwieldy

³¹ See Appendix 2, point 4.

and decreases the likelihood that any given combination will have an empirical reference. Selecting variables for QCA is also a more important and difficult task than selecting variables in inferential statistical research. The ground for such an assertion comes from the nature of QCA. Qualitative comparative analysis is deterministic, not probabilistic in explaining the emergence of outcomes. In that sense, any of the classical (inferential) statistics instruments, such as degrees of the freedom and confidence interval, cannot be applied here. With any new causal variable included in such a statistical analysis it is expected to decrease the non-explained variance of an outcome, but QCA does not involve such a procedure. Including additional causal variables in QCA it is likely to obtain misleading or unclear results.

Because of the potential for getting unclear results, the analyst needs to take considerable care in deciding on the number of causal variables to be included and how to choose those variables. Applications of QCA referred to earlier show five ways in selecting causal variables. Wickham-Crowley (1991), Griffin et al. (1991), and Hicks et al. (1993) used a comprehensive approach, where all the existing theoretical perspectives on the subject were included. In the end the authors obtained a large number of causal variables representing all the relevant hypotheses about the subject. The second strategy was used in evaluating theoretical arguments (Ragin, 1987, 1994c; Romme, 1995; Biggert, 1997). Since this approach started from a strong theoretical position the number of causal factors was limited. Thus, the selection of the causal variables was clearly bounded by the variables embodied in the model. The third approach was to select only those causal factors that proved significant in already completed statistical analysis, mainly in multiple-regression analysis (Amenta et al. 1992; Griffin et al. 1991). Griffin et al. (1991) also went beyond the 'significant approach' and employed the fourth, so-called 'a second look' strategy, attaching selected statistically insignificant measures to significant ones. Finally, Coverdill et al. (1994) used an inductive approach in selecting causal variables for the analysis.

Second, regardless of the way in which the analyst selects causal variables, a severe problem still exists of how to measure and express both outcome and causal variables in dichotomous forms. What is needed in this data reduction phase of the method implementation are very clear criteria in the categorisation of variables. However, this transformation of different measurements of variables into nominal ones may be problematic. Authors who applied QCA noted that the method is rather sensitive to the precise cut-off points used to categorise continuous variables. Although there are some improvements and innovations in incorporating dynamics into QCA, it is still an on-going issue in the literature. Also, as Griffin et al. (1991) or Hicks et al. (1995) noted, an element of arbitrariness is present in dichotomisation of variables that are not intrinsically dichotomous. However, applications of QCA have proposed some solutions and ways in coding systems which softens the rigidity of categorical data. One of the

solutions for coding is to use two or three columns for the description of variables (see Table 3.1). For instance, Ragin et al. (1984), Griffin et al. (1991) and Romme (1995) suggested a trichotomous division of an outcome (substantive, some and no evidence of the emergence of an outcome). Causal variables can also be represented as a code of two columns in the truth table, and each column is then independently subjected to the process of Boolean minimisation.

Third, in constructing the truth tables it is likely that the analyst will face the problem of limited diversity. This means that the set of empirically observed causal combinations may be smaller than the set of logically possible ones and that some combinations of causal conditions cannot be documented by empirical evidence. The analyst can treat the causal combination lacking empirical instances as: negative cases, giving them 0s on all outcome variables; as positive, giving them 1s on all outcome variables, or making theoretical specifications and studying additional literature to assign any of the values to a particular outcome. It is also obvious that the results of QCA depend on how the analyst treats the logically possible but not unobserved causal configuration. Consequently, the causal explanation would depend upon whether a maximalist (an outcome would have been present) or minimalist approach (an outcome would have been absent) was taken. Ragin (1987) proposed doing both approaches and afterwards to compare the results as a means of overcoming the problem of limited diversity. Other authors turned this limitation of the method into an opportunity for an additional interpretation of non-existing cases, as shown in Amenta and Poulsen (1996).

Fourth, apart from limited diversity, it is also possible to face the problem of contradictory rows. The problem of contradictory rows refers to the cases that have the same combinations of the causal conditions but do not show clear tendencies towards the outcome. That is, a combination of potential causal variables sometimes leads to the outcome and sometimes not. To resolve this problem some authors derived Boolean equations for certain, possible and likely outcomes and did an additional interpretation of the cluster of causal configurations³². Amenta and Poulsen (1996), Amenta et al. (1992), Coverdill et al. (1994) resolved contradictory rows by re-examining empirical data and carrying out an additional research. Therefore, problems may arise during the construction of the truth table, forcing an analyst to rethink and change the selection and coding of variables. An analyst takes the initial coding decision mainly as a starting point for a continued dialogue between theory, evidence, and method. QCA structures this dialogue in a specific way by providing a systematic replaceable approach to data analysis.

³² Thus, by including only positive cases and considering contradictory cases as negative instances it is possible to derive a causal combination that always leads to the outcome. By coding contradictory rows as 1s the analyst will derive causal conditions under which the outcome is possible. Finally, it is possible to resolve contradictory rows following the main tendencies and get the function explaining a combination with a high possibility to occur.

In conclusion, Boolean-based qualitative comparative analysis forces the analyst to think very hard about cases, selecting and coding of variables. QCA forces the analyst to make a number of decisions concerning limited diversity and contradictory rows. Accordingly, QCA requires substantive and historical knowledge about each of the cases included in the comparative analysis. The method also requires a very good knowledge of the literature concerning outcome and relevant causal variables.

3.6 Conclusion

QCA is a case-oriented approach to comparative research with an explicit goal to provide causal explanations. QCA is also a variable-oriented approach since each case is transformed into a configuration of selected causal/independent and outcome/dependent variables. These causal configurations are first presented as nominal data with a yes/no or presence/absence dichotomy, and then holistically compared by using the principles of Boolean logic. As a result, QCA offers deterministic causal explanations for the presence/absence of some outcomes. Basically, these explanations embrace a combination of causal or independent variables considered to be important for the emergence of an outcome.

QCA is systematic, and replicable in the terms of procedure. The method systematises and transforms empirical evidence into algebraic forms suitable for the data reduction process and imposes principles of comparison. QCA uses truth tables as a tool for data reduction while maintaining the integrity of each case. The construction of truth tables imposes some specific requirements such as the selection of causal variables and the decisions on the coding procedure for transforming the variables into dichotomous forms. The analyst has also to make a number of decisions to resolve the potential problems of limited diversity and contradictory rows. Applications of QCA have shown some solutions for those problems and have also provided some refinements to the rigidity of categorical data.

While the focus of this chapter has been on the general characteristics of QCA, the thesis now turns towards explaining how the method was applied to a study of ethnic entrepreneurship in New Zealand agriculture.

CHAPTER 4

USING QCA FOR AN EMPIRICAL EVALUATION OF THE COMPOSITE MODEL OF ETHNIC ENTREPRENEURSHIP

4.1 Introduction

This chapter answers two questions - why and how to apply QCA to empirically assess the composite model of ethnic entrepreneurship in the particular research setting of New Zealand agriculture. Therefore, the goal is to outline the grounds on which the thesis proposes to use QCA as a tool in assessing the composite model of EE proposed in Chapter 2, and also to perform the first three steps of the QCA procedure in evaluating theoretical arguments. These steps include the formulation of theoretical propositions, clarifying outcome and causal variables, and deciding on coding systems for their transformation to a state appropriate for QCA. The remainder of this chapter introduces the research setting and selects the cases for the empirical evaluation of the proposed model.

4.2 The Rationale for Applying QCA

As noted in the preceding chapter QCA is seen as a suitable method to evaluate theoretical arguments, specially those derived from combinatorial models, also referred to as composite, or hybrid models. Authors who used this hypothesis-testing role of QCA (Biggert, 1997; Romme, 1995; Amenta and Poulsen, 1996; Brown and Boswell, 1995; Berg-Schlosser and De Meur, 1994; Hicks, 1994) considered the method as appropriate to empirically prove specified, deterministic relations between a set of hypothesised causal variables and an outcome. Since QCA is well suited for an empirical evaluation of composite models, the method is considered here as appropriate for discussing and evaluating the composite model of EE developed in Chapter 2.

Apart from the fact that QCA is well suited for testing deductive expectations derived from the formal/composite models, QCA is considered by many authors (Brown and Boswell, 1995; Brown, 2000; Ragin, 1987, 1991; Griffin and Ragin, 1994) as a powerful tool for assessing causality. As noted earlier, QCA was actually introduced as a method for providing a causal analysis in social sciences, and it is designed to provide causal statements based on a moderate number of cases. This feature of QCA is also considered as an additional justification for using this method in exploring the causes of the emergence of ethnic business networks in agricultural settings.

Are there any other methodological approaches that could be used in this thesis in order to carry out a deductive analysis and provide causal explanations? In answering this question it may be

said that an event-structure analysis (ESA) appears to be the most appropriate alternative approach. Some of the empirical studies within the ethnic mobilisation literature have been carried out in the tradition of ESA. For instance, this method was used to systematically examine consequences and causes of racial conflicts (Brown, 2000). Both Qualitative Comparative Analysis (QCA) and Event-Structure Analysis (ESA) are new formal methods of qualitative analysis which share important analytic features that distinguish them from conventional statistical procedure. Both analyse nominal data of present/absent variety, offer deterministic rather than probabilistic explanations and generally express causal relations as complex conjectures of factors and conditions (Griffin and Ragin, 1994). While ESA is considered appropriate for causal analysis with an emphasis on process and contingency, QCA is considered appropriate for a deductive type of research, with focus on testing theoretical arguments about the emergence of an outcome. Each can be used to interpret cases or events holistically focussing on their attributes (QCA) or actions (ESA).

However, ESA differs notably from QCA in two ways: what is analysed and how causal explanations are constructed. ESA focuses on a single, culturally or historically specific event, more precisely a narrative of the event. Because ESA analyses only one event at a time, it does not formally compare cases, and consequently does not use comparative logic to derive causal explanations, as it is the case in performing QCA. Actually, ESA is a formal technique of narrative analysis, and by using ETHNO³³ tracks the temporal ordering and sequencing of actions in order to explain a singular event³⁴. Accordingly, ESA is more historical than comparative in its approach to causal explanations, and tends to equate a temporal order of actions with a causal explanation. QCA identifies similarities among the cases with the same outcome and differences between cases conforming to different outcomes. Thus, QCA focuses on outcomes rather than processes and is intrinsically comparative, while ESA relies on the use of narrative accounts and accordingly emphasises description. Taking these things into account, QCA is considered more appropriate for this thesis given its emphasis on causal explanations of outcomes and its strong orientation towards comparative analysis. By using QCA it may be possible to overcome the lack of comparative research design in the existing EE literature as argued in Chapter 2.

It should be also noted that other methods of deductive and causal analyses, such as the logit and probit regression, or path analysis obviously were not suitable here because of practical and substantive reasons.

³³ The ESA's interactive computer program.

³⁴ For detailed explanations of ESA and its applications see Brown (2000), Griffin (1993) Griffin and Ragin (1994).

In conclusion, QCA has several potential advantages for an empirical assessment of the theoretical arguments developed in this thesis. Firstly, QCA has a capability for testing hypotheses. Secondly, the method is well suited for analysing contextual arguments, such as those derived from the composite models. Thirdly, QCA is designed to provide causal explanations, and hence appropriate for causal analysis of the emergence of ethnic business networks in the particular research setting. Fourthly, QCA as a strictly comparative oriented method, is considered most relevant for a comparative research design employed in this thesis. The method is also appropriate for research settings where the variables are of such a nature that they cannot be defined and measured by the traditional statistical approach. QCA also allows for the investigation of larger time frames, and especially when empirical research yields both qualitative and quantitative data, QCA may simplify the complexity of the data in a systematic manner.

4.3 Initial Steps in Applying QCA

This section covers Steps 1-3 of the QCA procedure in evaluating theoretical arguments. As outlined in Chapter 3 these steps include expressing theoretical arguments in Boolean terms, defining causal and outcome variables, and deciding on coding systems for their transformation into the presence-absence dichotomy.

4.3.1 Theoretical Expectations Formulated in Boolean Forms

Two sets of hypotheses can be derived from the composite model of EE. These are: the ethnic network and the conflict hypotheses.

The composite model of EE, proposed in Chapter 2, expects that host hostility (HH) in conjunction with collectivistic cultural endowments (CCE) will generate stable ethnic structures within ethnic communities in business. These ethnic networks (EBN) are, therefore, considered as a direct result of the group's response to the hostile environment, but supported by the particular cultural endowments.

Hence, the ethnic network hypothesis (T_1) formulated as a Boolean function is:

$$(T_1) \quad HH \times CCE = EBN \quad (4.1)$$

Following the logic of the composite model, ethnic collectivistic actions in economic matters as represented by ethnic social networks will have the recursive effects which would result in conflicts (C) between ethnic entrepreneurs and the host population. The model assumes that

these conflicts arise over economic matters and ethnic solidarity, or the propensity of ethnic groups to maintain a distinctive, cohesive cultural entity.

This model holds that ethnic networks, through the mobilisation and internal distribution of resources, would increase the group's competitiveness. The ethnic network enhances entrepreneurial potential of the ethnic groups through three main ways. First, the network provides ethnic entrepreneurship with a low - cost, loyal and trustworthy co-ethnic labour force. Secondly, it provides reliable information (about market, laws, industrial trends, fiscal policy, reliable advisers, etc). Thirdly, the network provides access to various kinds of collective aid. A related perception is that such organised ethnic groups represent an economic threat (ET) to the competing business groups within the host population. The host business groups will react when they perceive that their economic power is threatened by the actions of ethnic groups, be that threat real or imagined (Beker, 1983). In addition to economic matters conflicts may arise over the solidarity ethnic groups display. Such ethnic solidarity may be stereotyped negatively by the host business groups (ES^N)³⁵, and therefore ethnic groups may face negative stereotypes about social 'clannishness' and inability to assimilate.

Hence, the conflict hypothesis (T_2) formulated as a Boolean function is:

$$(T_2) \quad ET + ES^N = C \quad (4.2)$$

The composite model, and ethnic entrepreneurship literature in general, did not specify whether the effects of these two variables, (ET) and (ES^N), should be taken in combination. Consequently, it is hypothesised here that these two causal variables should be taken separately³⁶ in explaining their influence in generating conflicts (C) between ethnic entrepreneurs and the host population.

There is a problem in mapping the conflict variable (C) which should be addressed here. General literature on ethnic conflicts (Baker, 1983; Olzak and West, 1991; Williams, 1994) underlines the correlation between ethnic conflicts and general economic circumstances, arguing that conflicts coincide with periods of economic downturns or crises. At this point it becomes clear that the actions of the host business groups in relation to ethnic enterprises may be influenced by general economic circumstances as well. In applying these considerations to this thesis it is proposed to include an additional, control variable - economic depression (ED).

By including this additional variable in (T_2) in the interpretation of the cases, it is argued that

³⁵ A raised symbol of 'N' indicates the negative stereotyping of ethnic solidarity.

³⁶ Refers to the logical operator 'or' as marked with '+'.

conflict hypothesis is qualitatively true if the relation postulated occurred within the absence of economic depression in the society. Hence, the modifying conflict hypothesis is defined as:

$$(T_2) (ET + ES^N) \times ed = C \quad (4.3)$$

Accordingly QCA will test to see if a presence of two recursive effects of ethnic social networks occurs within the absence of economic depression. The intention here is to empirically and systematically assess recursive effects of ethnic social networks that could be materialised in conflicts. By including additional variables of ED, the thesis tries to eliminate the association of general economic problems with the economic activities of the ethnic groups - since these are not recursive effects of the existence of ethnic cohesive communities in business.

4.3.2 Specifying and Coding Outcome Variables

The proposed composite model encompasses two outcome variables: ethnic business networks (EBN) and conflicts between ethnic groups in business and competing host business groups (C).

In order to clarify (EBN), the first outcome variable, this thesis uses an economic sociology perspective in the conceptualisation of social networks (Portes, 1995; Granovetter, 1995; Powell and Smith-Doerr, 1994; Davern, 1997). Social networks are generally defined as webs of interpersonal interactions commonly comprised of relatives, friends, or co-ethnic associates. According to Granovetter (1995), the concept of network focuses on repetitive and stable transactions between individuals who are usually connected by strong bonds of kinship, religion or ethnicity.

According to the economic sociology literature (Davern, 1997), there are four basic components that form the basis of social network research. These are the structural, resource, normative and dynamic components. The structural aspect refers to the configuration of the actors and ties within a network. The resource component focuses on specific resources/aids accessible to an individual through their network ties. The normative component consists of the norms, regulatory rules and effective sanctions that govern the behaviour of actors within a particular network. Finally, the dynamic component takes into account an evolution of networks. These four components of social networks are often combined in research to analyse socio-economic behaviour and processes³⁷.

³⁷ Davern (1997, pp. 292-298) reviewed how these four components of social network have been employed in studying various topics in economic sociology. It should be noted that the dynamic component of social networks is the least-studied area, since there are only a few studies that investigate changes in networks over time.

In order to operationalise the concept of ethnic social networks for the purpose of empirical research, this study proposes to use the resource and the normative components as noted above³⁸. Hence, the thesis dichotomised the (EBN) variable in such a way that the presence of ethnic networks assumes the mobilisation and distribution of resources to individual enterprises inside ethnic communities, and the existence of the mutual obligations and trust between the members of ethnic groups. Mutual trust is the basis for ethnic communities in business, and trust is generated by shared ethnic identities and with normative regulations of reciprocity and obligation amongst the members of the communities (Portes and Sensenbrenner, 1993; Portes, 1995).

While it is possible to dichotomise EBN, assuming that ethnic groups may succeed or fail in organising network based economic mechanisms, the matters are different in mapping the second outcome variable - conflicts between ethnic entrepreneurs and the host business groups (C). Conflicts are phenomena difficult to clarify because they can vary from public opposition towards violent protests. In this thesis, conflicts are defined as collective actions aimed at displacing and neutralising opponents (Williams, 1994, p. 54; Olzak and West, 1991, p. 458). Accordingly, conflicts may be conceptualised as visible actions or substantial vocal activity of the host business groups aimed at expulsion of the ethnic group in business from the country or to restrict their activity. Indicators of (C) will be articulated negative actions and attitudes of the domestic host population, which may be manifested, for instance as calls for expulsions of the ethnic business population, emerging in the media, or being the subject matter of parliamentary debates.

In order to operationalise this variable the thesis will rely on two QCA applications (Brown and Boswell, 1995; Hellström, 1997) considered relevant in this respect. Following these applications the thesis includes only the positive aspects of the phenomena. Building the truth table for the conflicts hypothesis will be slightly different. Basically, conflicts will be identified first, and after that antecedents of the conflicts will be discussed using the proposed causal conditions as the main guide for analysis. The point here is that a cluster of causal conditions precedes or accompanies the outcomes of interest. Hence, each line in the truth table will represent a particular ethnic conflict between host business and ethnic business groups framed by locality and time boundaries. It is important to note that in order to be coded as 'conflicts', opposition to the presence of ethnic entrepreneurs needs to be collective and articulated on a regular basis.

³⁸ Namely, there are two reasons for such operationalisation of EBN. The first, that a networks-based concept of ethnic entrepreneurship, which is at the core of this thesis, emphasises the resource component. The normative component has dominated as a concept in some recent economic sociology studies on immigrant communities (Portes, 1995, 1998; Portes and Sensenbrenner, 1993). The structural and, particularly the dynamic component of social networks, have received less attention in the literature.

4.3.3 Specifying and Coding Causal Conditions

Hypotheses T₁ and T₂ derived from the composite model of EE encompasses five causal conditions:

1. presence/absence of host hostility;
2. presence/absence of collectivistic cultural endowments;
3. presence/absence of an economic threat;
4. presence/absence of negative stereotyping of ethnic solidarity;
5. presence/absence of economic recession.

In line with the economic sociology literature, host hostility (HH) is conceptualised as an active opposition to the group's entry to or permanent presence in the country (Portes, 1995). Host hostility encompasses two levels of opposition/reception. The first refers to the government's policy towards different ethnic groups. The second level involves societal reception. Since using QCA it is possible to represent the HH variable as a two-column code³⁹. Consequently, there are four logical combinations describing the particular situations an ethnic group may face. These are:

- 1 1 - Hostile government policy/negative, prejudicial social reception
- 1 0 - Hostile government policy/ positive, non-prejudicial social reception
- 0 1 - Receptive or indifferent government policy / negative, prejudicial social reception
- 0 0 - Receptive or indifferent government policy/ positive, non-prejudicial social reception.

The presence of hostile government policy will be mapped based on the host society's legislative restriction of the entrance of certain ethnic groups, or their access to the resources which are available to the host population. Receptive policy is outlined here as legal entry of different ethnic groups with or without settlement assistance. While it is likely that the analysis of immigration regulations and policy would yield indicators for coding government policy towards ethnic groups as hostile or receptive, the coding of social reception is more difficult to perform. Social/public reception may be manifested in different forms and intensity, and therefore it is hard to define what level of negative/positive reception should be considered sufficient for influencing socio-economic behaviour of ethnic groups. At this point the thesis proposes two ways to overcome this potential problem. One is to anticipate that societal reception is conditioned by the cultural origin of an ethnic group, and to classify ethnic groups based on the concept of cultural distance between an ethnic group and the host population. This

³⁹ In QCA, causal variables may be represented as a code of two columns in the truth tables, as 10; 11; 01; 00. See Ragin et al. (1984) and Griffin et al. (1991).

concept holds that the more distant a group is in term of cultural characteristics from the host population, the more likely that a group will face negative societal perceptions. In this case, the coding system for HH can be done only after defining the particular research setting and analysing how different ethnic groups were perceived and accepted by the host society. The second way, derived primarily by the rule of simplicity, is to code HH as 1/presence if there is at least one form of host hostility recognised in the empirical research. The thesis proposes to select that option for coding HH which yields a simpler solution in building the truth table.

Besides host hostility the model assumes that the groups' cultural endowments regarding collectivism (CCE) are a necessary factor for the existence of ethnic social networks. In an attempt to dichotomise the CCE variable the thesis proposes using the individualism/collectivism construct (I/C), as conceptualised by Hofstede (1984) and recently improved by Kim (1994) and Triandis (1994). The I/C construct encompasses empirically testable dimensions of cultures and can be used in different academic disciplines. The use of this dichotomy as an explanatory variable in cross - cultural research was clearly visible in the literature of the 1980s, that the 1980s decade was labelled as 'the decade of I/C' (Kim et al. 1994, p. 1).

The individualism/collectivism dichotomy was derived by Hofstede (1984, 1996) in his breakthrough work on the consequences of cultures on management. Hofstede carried out empirical research to uncover universal dimensions of national cultures. One of four cultural dimensions⁴⁰ was labelled 'individualism versus collectivism'. According to Hofstede the individualism vs. collectivism concept describes the degree to which individuals are integrated into groups. Individualism then refers to societies in which the ties between individuals are loose, and self-interest, autonomy and personal freedom are highly valued. In contrast, collectivism stresses the 'we' consciousness, collective identity, group solidarity, sharing, duties and obligations, and group decisions. Based on these abstract concepts Hofstede empirically derived the individualism index (IDV)⁴¹, and classified countries along the individualist-collectivistic scale showing scores for the countries analysed.

This individualism versus collectivism cultural dimension has been widely accepted and used by many researchers in comparing cultures and discussing their consequences on management styles (Ali et al. 1997), entrepreneurship (Morris et al. 1994), and some aspects of industrial relations (Bochner and Hesketh, 1994). Empirical studies based on cross-national surveys

⁴⁰ Hofstede's work on cultural consequences on management considered four cultural dimensions. These were: individualism versus collectivism; large or small power distance; strong or weak uncertainty avoidance, and masculinity versus femininity.

⁴¹ The IDV index, a quantitative, measurement parameter of the individualism, is plotted in Hofstede (1984, p. 189)

dominated in discussing Hofstede's concepts. The question arises about the appropriateness of the individualism index, as derived from a country-level analysis, in comparing cultures within a single country. Or, in another words, what is the applicability of Hofstede's concepts and measurement scales in analysing cultural endowment of the different ethnic/immigrant groups within a single country? An application of Hofstede's work on cultural dimensions at a country level was carried out in Bochner and Hesketh (1994). They compared cultural endowments of the different immigrant groups in the context of a single, culturally diverse country-Australia. They further argued that, with respect to the individualism/collectivism dimension, cultural endowments of immigrant groups are identical to those of their respective countries of origin. However, problems arose in the cases of those immigrant groups whose countries of origin were not included in the original Hofstede's study. To overcome this problem, Bochner and Hesketh (1994) used proxies for these groups by assigning the index of the countries which were geographically closest. Such an approach is rather questionable and may cause skewed and misleading results in an eventual QCA application.

While Hofstede empirically derived the individualism index from a country-level analysis, a collection of essays in Kim et al. (1994) unfolds a more descriptive categorisation of I/C which can be applied to both the group and individual level of analysis. Influenced by Hofstede's work on the individualism/collectivism dichotomy, some authors tried to overcome the quantitative measurements of the index by transforming it into key elements of collectivism and individualism. As noted in Triandis (1994) and Kim (1994) the I/C construct consists of a set of constructing elements and ideas which basically describe the degree to which individuals are integrated into groups. The key elements of collectivism are an integration of individuals into strong, cohesive groups, subordination of their personal interests to the goals of groups, an orientation towards collective outcomes, seeking protection from a group, and an emphasis on sharing, cooperation, loyalty and group harmony. Essential attributes of individualism are giving priority to the goals of individuals, self-orientation, and self-sufficiency. Using these contrasting facets of individualism vs. collectivism, major defining characteristics of the I/C constructs are outlined in Table 4.1.

Considering potential practical problems which might arise in using Hofstede's index of individualism, the thesis proposes to operationalise CCE by using use the individualism index and defining characteristics of the I/C construct concurrently. This means that the individualism index will be used as an initial guidance for coding the cultural endowments of those ethnic groups whose national origin can be clearly associated with the countries featured in Hofstede's scheme. Therefore, all cultures having the individualism index (IDV) of 50 or less will be coded 1, otherwise 0. The IDV index is plotted in Hofstede (1996, pp. 391-394), and earlier in Hofstede (1984, p. 189). The descriptive categories of the I/C constructs will be used in

crosschecking and in coding cultural endowments for the ethnic groups which have to be analysed apart from their national identity.

Table 4.1 Defining Characteristics of the Individualism/Collectivism Construct

Individualism	Collectivism
Self-orientation	Group orientation
Self reliance	Interdependence and mutual aid
The self- as basic unit of survival	A group or collectivity as basic unit of survival
Economic individualism	Economic collectivism
Low loyalty to the institutions	High loyalty to other people and institutions
Self-interest, individual accomplishment	Collective welfare and effort, cooperation, duties, obligations

Sourced from Kim et al. (1994), Hofstede (1996)

The second hypothesis (T₂) encompasses three causal variables: an economic threat, negative stereotyping of ethnic solidarity and economic depression.

The first causal condition for the emergence of ethnic conflict is a perception by host business groups that ethnic business groups represent an economic threat to their economic interests. Following work by Quillian (1995) an economic threat is conceptualised here as a largely collective phenomenon since the point is on the group's interests. In order to code presence/absence of an economic threat (ET) this thesis follows indicators as anticipated by Bonacich (1973), and Bonacich and Turner (1980). Generally, these indicators refer to the competitiveness of ethnic business groups in terms of low prices, particular cost cutting strategies (such as using unpaid family and co-ethnic labour), the existence of internal cooperation, rapid generation and distribution of the resources⁴². Furthermore, these indicators may be described as concerns of host business groups about the relative size of the ethnic population in the business, through the fear of being overcome by the ethnic business and displaced from that particular occupation.

The second recursive effect of ethnic collectivistic actions in economic matters is classified as negative stereotyping of ethnic solidarity in business (ES^N). The point in understanding and coding this causal condition is that there are negative perceptions about cohesive ethnic groups in business, not in terms of economic but cultural categories. Strictly following the middleman minority literature (Bonacich, 1973; Turner and Bonacich, 1980) it is possible to break this into

⁴²The ethnic groups' movement up the agricultural ladder from the position of dependent farm workers to that of independent farm owners and the rapidly increasing rate of land control by ethnic population may be perceived as an economic threat to the dominant business group.

some empirically testable indicators. These include accusations of not having allegiance or loyalty to the society, being resistant to assimilation, disloyalty, exclusivity, self-segregation, clannishness, secretiveness, withdrawal, or standoffishness.

Finally, the causal condition of the presence/absence of economic depression will be coded by using general sources on economic history of New Zealand that already identified periods of the recessions.

4.3.4 A Summary of the Coding Systems and the Procedure

The above section specified how both outcome and causal conditions could be operationalised for the purpose of empirical research. The chapter identifies qualitative variables that will be applied in an empirical evaluation of the composite models. The indicators for coding the presence of outcomes and causal conditions are summarised in Table 4.2.

Table 4.2 A Summary of Indicators for Coding the Presence of Outcomes and Causal Conditions in QCA

The Ethnic Network Hypothesis (T₁)		
<u>Ethnic Business Networks (EBN)</u>	<u>Host Hostility (HH)</u>	<u>Collectivistic Cultural Endowments (CCE)</u>
The resource and normative components of social networks	An active opposition to the group's entry or permanence in the country	The original cultural tradition ethnic groups retain
Evidence of the mobilisation and intra-group distribution of resources: the existence of mutual obligations and trust	A two column code (1) Government reception – hostile policy towards ethnic groups; legislative restrictions of the entrance or the access to the resources (2) Social reception - negative, prejudicial social reception; different forms	The descriptive categories of the I/C construct and The Individualism Index (IDV), as derived by Hofstede, of 50 or less
The Conflict Hypothesis (T₂)		
<u>Conflicts (C)</u>	<u>Economic Threat (ET)</u>	<u>Negative Perception of Ethnic Solidarity (ES^N)</u>
Visible calls for expulsion of the ethnic business population	The perceived or real economic threat the ethnic business groups pose to the host business group	Negative perceptions about cohesive ethnic groups in business in terms of cultural categories
Negative attitudes and actions; articulated, collective opposition	Competitiveness; concerns about fast growing ethnic groups in business	Self-segregation; social clannishness; disloyalty;

*The presence of economic depression (ED) will be coded using sources on economic history of New Zealand.

Following the logic of QCA, the coding system presented here is an initial one and may be modified after some early data collection and analyses are done. If, in the process of the coding, serious problems arise in detecting indicators for coding, the coding system will be redefined. Furthermore, if in the course of empirical research a new explanatory variable emerges it will also be included. In QCA it is also appropriate to leave some codes as '?' or in parentheses, and after the entire analysis is completed, to code a particular variable in a comparative manner considering its value within the context of different cases. A track of these eventual steps will be recorded and included in the analysis. The intention of doing these additional steps is to build the truth table without contradictory rows, which would provide logical, and parsimonious explanations for two outcomes included in the composite model of EE.

After deriving theoretical expectations and selecting the variables, it is now necessary to define the research setting and select cases/units of analysis for an empirical testing of the proposed composite model.

4.4 Ethnic Groups and Immigration Policy in New Zealand

This section introduces the research setting by first providing an overview of ethnic groups involved in New Zealand agriculture, and then outlining New Zealand immigration policy that influenced the social position of different ethnic groups.

Ethnic groups which have entered agriculture from the earliest periods of colonisation of New Zealand have formed a notable rural mosaic. Chronologically, non-British immigrant groups started entering New Zealand farming through special settlements of the 1840s-1870s. Scandinavians, Germans, French and Bohemians are associated with the early history of agricultural development in particular localities of colonial New Zealand. The Scandinavians were in the forefront of dairy development and their initial contribution to the development of the infrastructure in the North Island was immense (McGill, 1982; Peterson, 1956; Yap, 1982). During the last three decades of the nineteenth century the relatively extensive presence of the Chinese was noticed in Otago, where they pioneered market gardening (Ng, 1993; Beatson and Beatson, 1990). Market gardening has been the dominant occupational niche of the Chinese in New Zealand for many decades. Similarly, the history of Indians in New Zealand has been closely bound up with market gardening industries, particularly in the North Island (Taher, 1965; Leckie, 1981). They entered New Zealand agriculture during the 1920s and increasingly in the 1930s and 1940s. During the first decades of this century Lebanese and Dalmatian settlers established a number of vineyards in the Henderson and Kumeu districts in the North Island (Scott, 1964; Moran, 1958). During the same period Italians began to be associated mainly with the development of market gardening in Nelson and the Hutt Valley (Burnley, 1972; Yap,

1982). The 1950s and 1960s period is characterised by an obvious influx of Dutch immigrants in terms of the number of immigrants who went into farming, and also in their substantive role in transferring technology into New Zealand agriculture (van Roon, 1971; van Dungen, 1992). The early 1990s recorded sporadic movement of some continental European immigrant groups into organic farming, olive and grape growing and bulb industry (Schouten, 1992).

During the period of about 150 years some ethnic business groups have become a constant and notable element of the economic history in New Zealand. The immigrants who played a significant role in New Zealand agriculture as farm owners or tenants were primarily of Asian and South European origin. To a lesser extent, apart from the distinctive Dutch involvement in New Zealand agricultural history, they were of North and Western European origin. In terms of their consistently significant role in New Zealand vegetable production and distribution, the Chinese stand out as a distinctive ethnic group. Some ethnic groups have been largely associated with the history of production and distribution of wine in New Zealand, for example, Dalmatians, Lebanese, French and Germans. The Germans are also considered as the pioneers of the hop and tobacco industries, while the Dutch contributed substantially to the establishment of the poultry and modern horticultural industries in New Zealand. Apart from these mainstream groups there are a few small groups that nevertheless made a valuable contribution to the development of New Zealand agriculture, such as the Polish in the onion industry, and the Bohemians and Swiss in the dairy industry.

Such a mosaic of ethnic rural groups developed under a rather selective, strongly controlled, assimilation-oriented NZ immigration policy. The immigration policy sustained detailed control over immigration streams in order to ensure a high degree of ethnic cohesion, and easy assimilation of new immigrants⁴³. New Zealand has traditionally relied on an immigration policy designed to provide additional population via assisted immigration primarily from the British Isles and subsequently other sources. In terms of the right to enter New Zealand a distinctive line was drawn between two kinds of immigrant population: British subjects, who, initially wholly and for a long time, substantially formed the immigration flows, could enter New Zealand freely, and non-British subjects, who were selected and treated differently based on their national origin.

The assimilationist perspective and, consequently, the concept of cultural distance became ingrained in New Zealand immigration policy during the second half of the nineteenth century and lasted virtually until the 1970s (Lochore, 1951; O'Connor, 1968; Roy, 1970; Brooking and

⁴³ New Zealand immigration policy has been discussed in several studies. The most valuable from the point of view of this study are Lochore (1951), O'Connor (1968), Roy (1970), Yap (1982), Pearson (1990), Kasper (1990), Brawley (1993), McKinnon (1996), Zodgekar (1997).

Robel, 1995; Yap, 1982). During that time immigrants were selected and ranked based on their ability to assimilate into the host society. The ability to assimilate was considered to be in linear correlation with the cultural distance between host society and the cultural background of immigrants. The whole idea behind the concept of cultural distance was that the immigrants close to the culture of the dominant group will assimilate quite quickly and easily to New Zealand society.

In regard to non-British immigrants government policy devised and defined a preferential ranking system according to cultural distance/desirability, and clustered immigrant groups into three distinctive groups. There was an obvious preference for immigrant groups from North and Western European countries which were seen as culturally similar, and therefore the most favourable in terms of settling in this country. Southern European groups were considered culturally different and rated as less favourable, while Asians, as fundamentally different from the dominant British cultural background, were considered the least favourable immigrant groups.

Such a government policy was inevitably discriminatory against the entry of immigrants having a particular national origin. During 1870-1920, the New Zealand Parliament discussed and passed a number of Immigration Acts designed to restrict the entry and occupational niches of immigrants from Southern Europe and Asia (Trlin, 1970; Taher, 1965). In 1920 Parliament passed the Immigration Restriction Amendment Act 1920, further restricting the entry of these immigrant groups, and remained as part of immigration policy until well after the Second World War (Ip, 1995; Brawley, 1993; O'Connor, 1968; Trlin, 1971). During the 1970s the immigration policy began to abandon the assimilationist perspective, and in 1987 the practice of legal discrimination on the grounds of ethnic origin was abolished (Kasper, 1990; McKinnon, 1996; Zodgekar, 1997).

The above outline of New Zealand immigration policy, which shows its selectiveness in treating different ethnic groups, provided a basis to cluster the groups that will form the focus of this study.

4.5 Selecting the Cases for QCA

The selection of cases for QCA should be guided by theoretical criteria, and focused on including all relevant instances of the phenomenon of interest. Ragin et al. (1996) noted some considerations in selecting cases, such as to achieve maximum heterogeneity for minimum number of cases, and to perform a selection based on the outcome variable. However, the full extent of diversity may become apparent only when the cases included are analysed more

closely. In that case QCA allows the analyst to revise an initial selection of cases leading to the elimination or addition of cases.

Although Ragin stressed the need for compelling criteria in selecting the cases, QCA applications have not paid corresponding attention to this issue. Generally, the applications reviewed do not encompass a separate section discussing the criteria for the selection of cases. Among those that do, the major criteria mentioned are particular values of the outcome variable (Brown and Boswell, 1995); and the combination of heterogeneity and data availability (Romme, 1995), or feasibility of empirical research (Cress and Snow, 1996).

Returning to the application of QCA to the research setting of New Zealand agriculture, it is proposed to conceptualise ethnic groups involved in agriculture as cases for the comparative analysis. It is further proposed to select ethnic groups based on their relevance to the key dimensions of the theoretical considerations in this thesis. The basic guide was to include those non - British ethnic groups who entered New Zealand agriculture in considerable numbers⁴⁴ as owners or operators of agricultural enterprises (Bennet, 1980, p. 203). Further steps in selecting cases involved outlining which groups were excluded from the analysis and why.

Considering the history and the features of New Zealand immigration policy settlers from Great Britain and Ireland⁴⁵ are considered as the majority of the population. As noted earlier, the literature on ethnic entrepreneurship in general discusses ethnic resource mobilisation only within minority groups. Accordingly, British⁴⁶ and Irish ethnic groups are outside the scope of this thesis as only those groups treated as minorities in New Zealand have been included.

The second step in selection of the cases is the exclusion of the Maori ethnic group because they are the indigenous population of New Zealand. Literature on ethnicity in agriculture predominantly discussed rural ethnic groups which evolved from cases of immigration flows. Indigenous populations of rural areas are discussed sparingly and not in the same context as those immigrant rural groupings. Analysing the indigenous rural population requires taking into consideration the historical context of colonisation and treaty agreements between the native population and the state. The doctrine of tribal sovereignty and the unique political status of the indigenous population in rural areas sets them apart from other rural communities. American Indian reservations, for instance, have a high degree of autonomy from state and local authorities where the land is tribally owned and used by tribal members (Downing, 1985; Snipp,

⁴⁴ Includes those ethnic groups which were somehow linked to agriculture as an occupation niche.

⁴⁵ Following argumentation provided by McKinnon (1996), and earlier by Lochore (1951) Irish citizens were seen and treated as technically British subjects and hence a part of the dominant group.

⁴⁶ English, Welsh and Scottish ethnic groups.

1996; Kuvlesky et al. 1982). These are considerable specifics, which do not make a comparison of immigrant and indigenous populations in rural areas appropriate. Considering the historical origins of Maori agricultural enterprises, organisational structure governing Maori land, and their relations to the State in general (Kingi, 1997), Maori involvement in New Zealand agriculture is outside the scope of this thesis.

Table 4. 3 Framing the Units of Analysis

Ethnic groups	Period analysed	Type of agriculture production
<u>Unassisted immigration</u>		
Chinese	mid 1870s -1980s	market gardening
Indians	1920s - 1960s/1980s	market gardening/ dairy industry
Lebanese	1890s - 1980s	grape growing and wine making
Dalmatians	late 1890s -1960s/1970s	grape growing and wine making
Italians	1900s -1960s/1970s	market gardening
<u>The Vogel immigration scheme and special settlements</u>		
Scandinavians	1880s - 1920s	dairy industry
Germans	1850s -1920s	mixed crops/hops and tobacco growing
Bohemians	1860s -1950s/1960s	dairy industry
Other assisted groups	1840s-1920s	market gardening/ dairy industry/ wine making
<u>Assisted immigration after the World War Two</u>		
Dutch	1950s - 1990s	horticulture/dairy/poultry

After excluding the majority and indigenous population from the analysis, the ethnic groups proposed to be included are as shown in Table 4.3. Also, after reviewing the features of New Zealand's immigration policy and how immigration groups were treated based on the concept of cultural distance/desirability, it is now possible to cluster the ethnic groups to be studied. There are ten ethnic groups which are classified into three clusters. These are Asian groups (which include Chinese, Indian, Lebanese⁴⁷), South Europeans (which include Dalmatians, and Italians), and finally all assisted groups (Scandinavians, Germans, Bohemians, Dutch and other small groups) which will be discussed as one cluster. The first two clusters of groups were formed during the unassisted voluntary migration period (1870s-1920s). Assisted migration schemes were formed largely during Vogel's period, apart from the Dutch immigrants who came here as assisted immigrants during the early post World War Two period. The final step in

⁴⁷ An inclusion of the Lebanese within the Asian groups is discussed in Chapter 5.

selecting⁴⁸ the cases is to set up boundaries around time. Accordingly, the time frames set up for each group refers to the periods during which agriculture was the occupational niche of each group included.

In terms of research design the thesis proposes using a multiple group/one industry design, already noted as relatively neglected in the literature on ethnic entrepreneurship. The context of New Zealand agriculture is seen as appropriate since it first retains a moderate number of ethnic groups involved in agriculture, and, secondly, these ethnic groups have experienced different social acceptance within the mainstream host society. Therefore, it is possible to carry out inter-group comparisons within the same industry, varying the reception context of immigration, and allowing for the cultural endowments of ethnic groups to vary as well.

4.6 Data Gathering and Analysis

General articles on QCA (Ragin, 1987, 1989; Ragin and Hein, 1993; Ragin et al. 1996) do not discuss the specifics of data gathering in the context of QCA. What can be drawn or understood from the QCA applications is that the data gathering process is defined by the nature of the variables. Moreover, it is appropriate to have a few data gathering strategies within the same analysis, as used to analyse different causal and outcome variables (Coverdill et al. 1994). It may be also said that making use of available data has been the dominant data gathering strategy within the QCA applications. Several authors (Amenta et al. 1992; Wickham-Crowley, 1991; Hicks et al. 1995; Hellström, 1998; Foran, 1997) have relied on already existing studies in order to code variables included in the analysis.

In terms of the data gathering strategy the thesis will be 'available-data research' (Singleton et al. 1993; Bulmer, 1984; Neuman, 1994) and will rely on the examination of available sources, both academic and non-academic. The focus will be on collecting data that are amenable to building a truth table and coding causal conditions and outcome variables as presence-absence dichotomies. Simple Boolean functions and variables as defined earlier in this chapter will guide the process of collecting and analysing empirical evidence. Accordingly, the point here is to search through a wide range of the empirical sources on particular ethnic groups in New Zealand agriculture in order to find supporting evidence for coding the variables included.

Extensive bibliographic work on the ethnic groups has located numerous, dispersed sources on social and to the lesser extent economic history of ethnic communities in rural New Zealand. Sorting and organising the empirical evidence yielded six categories of sources to be used in

⁴⁸ Following the recent elaborations on QCA (Ragin et al. 1996) it would be appropriate to replace the term 'selecting the case' with 'framing units of analysis'.

this thesis. They are listed below, starting with the general, public sources and concluding with the exclusively academic sources.

The first category includes government sources on immigration policy and legislation, such as the Statutes of New Zealand, Parliamentary Debates, the Journal and Appendices of the House of Representatives, and the various Immigration Acts;

The second category includes newspapers articles, the farming press, especially *Farming First*, *The Farmers' Weekly*, *The Country*, and Annual Conference Reports of the Farmers' Union held during the first half of this century. These sources are seen as fruitful for tracing the relationships between ethnic and non-ethnic farming populations.

The third category includes available archival data, such as letters, diaries, autobiographies and especially in-depth interviews⁴⁹ describing the life of the farmers of different ethnic origins;

The fourth category of sources are records of events kept by ethnic associations - such as statutes, missions, minutes of the meetings, and different publications usually put out at centennial celebrations of the ethnic settlements in the particular localities;

The fifth category, largely descriptive, are church and missionary reports related to the early economic life of ethnic groups⁵⁰, and finally

The sixth category, the most numerous one, includes sociological, geographical and historical studies of different ethnic groups in the New Zealand context.

Following the logic of QCA the point here is to gather data needed for the construction of a truth table. This study uses a variety of empirical sources in order to detach critical indicators and supporting evidence for coding the variables. Data gathering has covered a long historical period and ethnic groups have been studied within the certain time frames (Table 4.3).

An analysis of the empirical evidence proceeded on a case-by-case basis. In carrying out each case study the analysis was restricted to the key variables with the task to assess the causal relations postulated in the model. For each individual case study it was essential to assign the coding on the causal combinations and outcome variables included in the analysis. The individual case reports were structured and relatively uniform, following defined sequences of

⁴⁹ Deposited in the oral history collection of the Alexander Turnbull Library, Wellington

⁵⁰ These sources are considered particularly valuable in discussing the involvement of the French, Bohemians and early Chinese in New Zealand agriculture.

the analysis.

As noted earlier in Chapter 3, one of the most demanding aspects of QCA is the construction of useful truth tables. An enormous amount of the research should be done before a worthwhile truth table can be constructed. It was also noted that the analyst should become familiar with the cases included and study them intensively. Therefore, the goal of this stage of research was to provide an analysis of the cases selected, and in result to provide the coding of outcome and independent variables/causal conditions that were then incorporated in the final, empirically based truth table.

4.7 Conclusion

Several important issues were clarified in this chapter. The first one was to justify the use of QCA in the thesis. Subsequently, all the preparations necessary for performing QCA were outlined, such as the formulation of theoretical propositions, and clarification and coding of the variables included. The final issue outlined in this chapter was to specify a comparative research design proposed for an empirical assessment of the composite model of EE.

QCA is considered appropriate for using in this study for substantive and practical reasons. The principal reason for using QCA was drawn from the fact that the method is suitable for testing theoretical arguments derived from composite models. Accordingly, the method is considered appropriate for an empirical assessment of the composite model of EE as developed in the second half of Chapter 2. In addition, QCA is seen as suitable for structuring and systematising the complex empirical data derived from different sources and covering a long time frame.

The thesis employs QCA for detecting theoretically based arguments within a body of empirical evidence. Following the logic of QCA the focus is on interpreting empirical evidence using theoretical arguments as guidance in assembling and analysing large amount of data related to the case studies. The investigation of the presence and the absence of the key variables- causal conditions and outcomes - structured the case studies.

In order to empirically assess theoretical arguments the thesis employs a multiple groups/one industry research design, and analyses a moderate number of ethnic groups involved in New Zealand agriculture. A systematic, holistic comparison of the ethnic groups included in the empirical analysis is presented in the two succeeding chapters.

CHAPTER 5

ETHNIC GROUPS IN NEW ZEALAND AGRICULTURE: COMPARATIVE CASE STUDIES

5.1 Introduction

This and succeeding chapters perform qualitative comparative analysis of ethnic groups in New Zealand agriculture. Results of the analysis are presented at two levels. The first level, covered in this chapter, contains comparative case studies and provides a structured, relatively uniform analysis of the empirical evidence. The second level, presented next in Chapter 6, collates individual case study reports and derives causal explanations for the emergence of ethnic social networks and of the ethnic conflicts as revealed within New Zealand agriculture. In terms of the QCA procedure both chapters perform Step 4 - the systematisation of empirical evidence and the building of the 'real' truth table. In addition Chapter 6 performs the remaining five steps of the QCA procedure⁵¹.

Chapter 5 encompasses eleven individual case study reports with consistent and pre-defined sequences of analysis. Each case study report begins with a brief description of a specific ethnic group in New Zealand agriculture. This is followed by the analysis of empirical evidence related to the key variables as derived from the composite model of ethnic entrepreneurship and clarified in the preceding chapter. The objective is to assign the presence/absence code to causal conditions and outcomes across all cases. Each individual case study report concludes with a truth table, which represent the data for the QCA, displaying the scores on all empirically derived causal combinations and resulting outcomes.

The eleven ethnic groups included in the empirical analysis were classified into three clusters. These are Asian, South European, and other European, the latter including the North, Western and Central European ethnic groups.

5.2 Asians

5.2.1 Introduction

This section analyses immigrants from Asian countries who have entered New Zealand agriculture in considerable numbers. These include Chinese and Indians and, to a lesser extent,

⁵¹ As outlined in Chapter 3, section 3.3.

Lebanese,⁵² who have consistently played an important role in the history of New Zealand agriculture (Taher, 1965). They were largely associated with market gardening, viticulture and the dairy industry.

Chronologically, Asian immigration into New Zealand agriculture began in the 1860s with the arrival of Chinese immigrants. They moved into the Otago goldfields and formed semi-permanent rural settlements attached to the co-ethnic mining communities. During the 1870s and increasing during the 1880s, the Chinese entered market gardening initially on the outskirts of Otago's towns, and later spreading throughout the country. From the beginning of this century, Lebanese, and later Indians started to appear in significant numbers as owners of farming enterprises predominantly in the North Island. Both the Chinese and Indians experienced an occupational transition from the initially pursued goldmining or rural labouring towards self-employment in the agricultural industry. Such an occupational transition did not occur within the Lebanese immigrants, where one family strongly associated with viticulture, Corbans, has been constantly involved in the winemaking industry since the beginning of this century.

This section begins with presenting a case study of the Chinese market gardeners in New Zealand agriculture.

5.2.2 The Chinese Market Gardeners

In terms of regional distribution, demographic characteristics, and farming patterns, the history of the Chinese involved in New Zealand agriculture may be divided into four distinctive phases⁵³. Broadly speaking, the Chinese have passed through the stage of ethnic enclave economy (1860s-1870s), early forms of business partnerships (1870s-1920s), the small family business period (1920s-1940s), and the professional period since 1940s.

The first phase (1860s-1870s), could be described as an establishment of the Chinese ethnic

⁵² An inclusion of the Lebanese within the Asian groups may require some clarification. The New Zealand government considered, for administrative purposes, that all immigrants coming from the continent of Asia would be classified as one group. Following this geographic categorisation, the Lebanese were included in the old immigration records and Parliamentary debates as Asians. For instance, in discussing the Asiatic Restriction Bill in 1896, Asians were specified "as persons of any part of Asia or the islands adjacent to Asia, or in Asiatic seas" (cited in Sedgwick, 1982, p. 202). In addition, the New Zealand Population Census from 1936 considered Lebanese to be the second-oldest group of Asian immigrants in this country (Taher, 1965). Such treatment of the Lebanese paralleled the Australian legislation of that time. As noted in the social history of the Lebanese in Australia (Batrouney and Batrouney, 1985), the Asian immigrants were generally listed as 'Easterns' and this classification included immigrants from Lebanon and Syria under the category of Near East.

⁵³ The phases outlined are relevant primarily for describing the history of the involvement of a particular ethnic group in New Zealand agriculture.

enclave economy attached to the co-ethnics mining communities, essentially in the Otago province⁵⁴. Empirical evidence shows that the Otago Chinese involved in agriculture at that time developed an ethnic enclave economy and that the initial market for Chinese business entirely appeared within the immigrant community itself (Thornton, 1968; Sedgwick, 1982; Forrest, 1961; Ng, 1993; Taher, 1970; Beatson and Beatson, 1990). Accordingly, such Chinese businesses had the primary goal of providing food supply for the Chinese involved in gold mining.

In the first stage of their settlement, the Chinese were generally located away from the host population and had developed exclusive ethnic settlements of a semi-permanent character. In such settlements the Chinese had restrictive contacts with outsiders. In analysing the non-mining population on the Otago goldfields, Forrest (1961) reported that the Chinese tended to trade almost exclusively with their compatriots. Ng (1993) also noticed that it was common for Chinese miners of central Otago to form a patch of garden to supply first themselves and then co-ethnics. Mayhew (1987) literally referred to these sites as “piece of China transplanted in a strange land” (*Ibidem*, p. 91). Both groups, small-scale Chinese market gardeners and miners, were interrelated in their activities and mutually dependent. The missionary reports provided by Rev. Alexander Don showed,⁵⁵ that as the groups of Chinese miners moved into various places, smaller groups of food producers and supplies followed them establishing new settlements⁵⁶.

Indeed, the Chinese ethnic enclaves in agriculture grew up to serve the market of co-ethnics which were created wherever concentrations of Chinese arose. During the 1860s, such settlements were established on the outskirts of Lawrence, Cromwell, Arrowtown, Waipouri, Waitahuna and Beaumont townships. By 1869 the Chinese market gardeners were concentrated on the Taupeka, Dunstan and Naseby fields and the Round Hill goldfields. Chinese market

⁵⁴ The first evidence of Chinese involvement in New Zealand agriculture can be found in the history of goldmining in central Otago. The opening up of the Otago goldfields in the 1860s provided an entry point for the eventual migration of the Chinese, mainly Cantonese, to New Zealand (Pearson, 1990; Taher, 1970; McGill, 1982; Thornton, 1968; McKinnon, 1996). Arriving to work the more difficult goldfields, they settled in the province taking up market gardening as a supplementary activity to the mining occupation.

⁵⁵ One of the earliest pieces of evidence regarding the Chinese in Otago was provided by Reverend Alexander Don who was missionary to the Chinese in Otago from 1866-1908, and frequently visited the various gold mining settlements of the Chinese (cited in Sedgwick, 1982; Kang, 1985; Ng, 1993). His accounts showed an isolation of the mining groups, their orientation towards the home land, and strong remittance flows. According to Rev. Don, those groups of gold miners were strongly dependent on the groups of Chinese food suppliers who carried out their own vegetable production on the highly devastated land, using traditional techniques of soil preparation.

⁵⁶ However, until the 1870s market gardening was a minor occupation of the Chinese immigrants in New Zealand. Approximately 3 percent of the Chinese population in the gold fields were engaged in vegetable production for their own countrymen (Sedgwick, 1982).

gardeners were also recorded in Clyde, Ophir, Matakau, and Palmerston⁵⁷.

In the second phase (1870s-1920s), market gardening became the major occupation of the New Zealand Chinese. With the decline in gold mining the Chinese populations dispersed throughout the country and took up other occupations, with the majority of them moving towards self-employment as market gardeners and as food retailers. This occupational transition marked the socio-economic history of the Chinese for many decades, producing the stereotypes of New Zealand Chinese as market gardeners (Ng, 1993; Beatson and Beatson, 1990). In such occupational displacement, the Chinese also followed the main stream of demographic transition in the post-gold period (Forrest, 1961; Taher, 1970). Namely, by leaving the gold fields of Central Otago and taking up market gardening, the Chinese settled in the fringe areas of the urban centres and started businesses of their own⁵⁸. They settled across all the country, and the period of transition from the goldfields of Otago towards settlement in suburban areas of the North Island and other areas of the South Island lasted until the 1920s.

The existence of the Chinese market gardens was recorded in the rural-urban fringe areas of Christchurch, Ashburton, Temuka, Timaru, Oamaru and Palmerston. In addition, one large section of the Chinese community became established as market gardeners on the Taieri Plains. On the Dunstan field, Chinese market gardeners were centred on the Waikerikeri valley, near Clyde, and also on the Taupeka. In the North Island they concentrated around Hastings, Levin, Wellington, Palmerston North, Otaki, Ohakune, Raetihi, Wanganui, Napier, Gisborne, Foxton, and Auckland. Places such as Pukekohe, Levin, Otaki, and Ohakune still have Chinese market gardening communities which were established at the beginning of the century (Sedgwick, 1982; Thornton, 1968).

At that time (1870s-1920s) the influx of the Chinese market gardeners was obvious⁵⁹. The Chinese pioneered most of the market gardening areas of Otago and played an important role in

⁵⁷ The presence of the Chinese market gardeners before 1870 is difficult to document precisely. The best available evidence comes from historical sources (Mayhew 1977; McLintock, 1949) and missionary reports, cited in Ng (1993) and Sedgwick (1982).

⁵⁸ The Chinese market gardeners settled across the whole country and as Rev. Don wrote "When the surface mining was exhausted, many took on other occupations, spreading over the colony, hardly a town is without its Chinese stores and market gardeners" (cited in Ng, 1993, pp. 302-303). Until 1916, there were around 1,400 market gardening and food retailing out of around 2,000 Chinese living in New Zealand at that time (McGill, 1982).

⁵⁹ The noticeable advances in New Zealand agriculture made by Chinese were recognised almost from the beginning of their involvement in the agricultural industry. The following piece of evidence comes from the Chinese petition from 1888 as a response to the imposed immigration restrictions: "Before the arrival of the Chinese, fruit and vegetables were scarce commodities to many New Zealand workers and poorer people. Sometimes they had to pay a high price for them. After the Chinese took over the trade, fruit and vegetables have never been short in supply and are selling at more competitive prices" (Sedgwick, 1982, p. 198). Also in the opposition towards the Undesirable Immigrants Bill in 1894, it was noted that the Chinese gardeners had made a considerable contribution by turning small pieces of land into productive gardens that provided vegetables at reasonable prices (*Ibidem*, p. 201).

Otago's agricultural development until the 1920s. According to Ng (1993), the first Chinese market garden at Oamaru was established in 1870, while in 1874 there were around eight Chinese market gardeners at Lawrence. Also, at Wetherstones, the same year, "...a party of Chinese started a market garden by the town boundary" (*Ibidem*, p. 323). In 1889, there were 110 Chinese commercial gardeners in Dunedin. They grew vegetables such as Chinese cabbage, potatoes, peas, strawberries and gooseberries. The Chinese were also among the early Otago developers of commercial orchards. The first piece of evidence referring to Otago Chinese fruit growers was in 1878, that is, the orchards of Chee Fun of Roxburg (*Ibidem*, p.323). The Chinese orchardist Wong Lung of Waitahuna was mentioned in the Rev. Don's notes of 1881, as well as Lye Bow at Butcher's Gully, who had one of the first commercial apricot orchards in Otago (*Ibidem*, pp. 323-324). In October 1898, the *Dunstan Times* reported about Charlie Lock Chong, a strawberry producer of Matakauui, who was believed to be amongst the largest Chinese market gardeners in Otago at that time (*Ibidem*, 1993, p. 323). There were also some Chinese orchardists in the Alexandra district, such as Lye Bow, Ah Why, and Sue Him. Furthermore, the *Dunstan Times* mentioned Mee Sings' orchards at Bald Hill Flat in 1895 (*Ibidem*, pp. 323-324). Finally, Kirk (1985, p. 359), in analysing the post-gold history of Mosgiel, referred to some Chinese family names which had already become familiar in Mosgiel, as Ding Chun, C.C. Ding, Sam Young, J. Wong, Toong Lee and York Guy.

The Chinese enterprises at the beginning of the century included in a range of the sizes, from a one man with an acre of land to fourteen or more men working as much as forty-one acres of leased land (Sedgwick, 1982; Meyer and McLellan, 1988). However, it was most common for the Chinese market gardening community, at that time a dominantly male community⁶⁰, to lease land and operate a garden together. For instance, Ng (1993) referred to the partnerships of the Chinese market gardener and orchardist, Ah Sam and Jue Quin of Roxburg in 1903. The partnerships of the Chinese market gardeners consisted of people from the same district, with employment of co-ethnics. Some Chinese migrants who established market gardens increased their households by bringing their relatives and/or co-ethnics from other parts of New Zealand or directly from China. At that time, migration networks were established bringing new immigrants from particular villages in southern China to work in the market gardening enterprises of the co-ethnics in New Zealand. Rev. Don recorded business partnerships of the Chinese working together and noted that they invariably came from the same district, even from the same village (Ng, 1993).

While in the initial stage of their settlement in New Zealand, the Chinese were strongly attached

⁶⁰ The families of the Chinese already in New Zealand were not allowed to enter the country until the 1930s without paying a poll-tax. However, during the 1920s, some Chinese who paid the poll-tax managed to bring in family members from China.

to supplying co-ethnics, in the later stage (1870s-1920s) they moved on towards enlarging the businesses and developing ties with European customers. Also during that period, the first signs of horizontal and vertical integration within the Chinese market gardening community in New Zealand occurred. The Chinese opened fruit and vegetable shops to sell the produce grown by co-ethnic market gardeners. The Chinese fruit and vegetable retail businesses appeared in New Zealand from 1878. However, they were typically on leased land⁶¹ and kept their business at a low capital level, with a marked flow of remittances to the home country (Sedgwick, 1982; Taher, 1970).

In the third phase (1920s-1940s), a family-operated farm became the dominant form of Chinese involvement in market gardening. During this time, the demographic structure of the Chinese community in general had changed towards a more balanced gender and age distribution (Taher, 1965). Consequently, already existing business partnerships within Chinese market gardeners evolved into small family business. The Chinese extended families, which were recorded in a number of market gardening locations in New Zealand (Thornton, 1968; Lee, 1974; Ip, 1995; Ng, 1993) functioned as an economic unit. Moreover, the entrepreneurial strategy implemented by Chinese families in business was derived from the traditional Confucian cultural system⁶² (Pearson, 1990; Thornton, 1968; Sedgwick, 1982; Beatson and Beatson, 1990).

In terms of residential patterns, Chinese market gardeners moved again towards a further concentration, particularly in the region of South Auckland (Thornton, 1968; Taher, 1970). During the 1920s, the Chinese undertook market gardening in Avondale, Onehunga, Mangere, and Pukekohe. As may be seen from the table of movement of the Chinese market gardeners, presented in Lee (1974, p. 10), the Chinese market gardeners moved to the Auckland region from other market gardening areas, for instance Dunedin, Gisborne and Hamilton. They were attracted by an increasing demand for vegetable production. In the South Island, they stayed in urban-rural fringes of Christchurch, Oamaru, Palmerston, and around Ashburton, Temuka and Timaru.

During this period the Chinese began consolidating their position in market gardening and greengrocery, and even started enlarging their businesses. Chinese market gardeners showed a tendency towards both horizontal and vertical integration. The common pattern of this stage was a further development of family retail business and most of these vendors acted as retail outlets for vegetable production from market gardens. For instance, Thornton (1968) referred to the relationships between Chinese market gardeners of the Taieri Plains and affiliated shops selling

⁶¹ The Chinese settlers in New Zealand were not allowed to own land until the early 1940s.

⁶² This point will be discussed in more detail while elaborating on collectivistic cultural endowments within the Chinese business community.

food in Dunedin City. In addition, Ip (1995) and Ng (1959) separately noticed examples of the family retailers having supply from the co-ethnic market gardeners. However, enlarging and managing already existing business was conditioned by the size of the family (Lee, 1974).

In the fourth stage (after 1940s), market gardening started to lose its dominance in the occupational niche of the Chinese in New Zealand. However, it became part of what may be described as the professional phase of their involvement in New Zealand agriculture. This period is also characterised by the establishment of a professional association of Chinese market gardeners in New Zealand - the Dominion Federation of New Zealand Chinese Commercial Growers. During the post-war period New Zealand Chinese showed stability, started buying land and entering highly capital intensive production. They also established fruit orchards and glasshouses, started growing flowers for commercial purposes, and poultry farming (Ng, 1993)⁶³. However, the third and fourth generations of Chinese market gardeners, i.e. since the 1940s, have shown mobility towards the more highly ranked occupations. Consequently, there has been concern about fewer Chinese growers in New Zealand (Lee, 1974), and as *Horticultural News* reported in July 1990⁶⁴ “Unless more gardeners bring relatives from China to carry on the work the traditional Chinese market gardeners will become a thing of the past.”

To sum up, more than one hundred years of the history of the Chinese involved in agricultural production may be described as a transition from a mobile ethnic enclave economy towards stabilised small family business. The Chinese involved in New Zealand agriculture moved from supplying mining communities of co-ethnics in Otago towards establishing an ethnic professional association, achieving the dominant position in the production of vegetables.

Having described the evolution of the Chinese community in New Zealand agriculture this section now moves to the analysis of empirical evidence appropriate for coding causal and outcome conditions as clarified in this QCA.

Host hostility (HH). A number of authors agree that there was noticeable host hostility which marked the position of the Chinese in New Zealand society for around three-quarters of a century (Thornton, 1968; Ip, 1995; Beatson and Beatson, 1990; Pearson, 1990; Sedgwick, 1982, 1984; Ng, 1959; Murphy, 1994; McKinnon, 1996). Basically, the Chinese were labelled as undesirable immigrants, and openly discriminated against by many years of anti-Chinese legislation. Hostile reaction against the Chinese resulted in restrictions on their entry into New Zealand, and led to the imposition of a number of exclusion regulations within the legal system.

⁶³ Traditional types of crops producing on the Chinese market gardens are spinach, beans, cabbage, carrots, lettuce, cauliflower, early potatoes and onions.

⁶⁴ Lee (1990, pp. 10-11).

The first anti-Chinese Act was introduced in 1881⁶⁵ and was followed by further legislation which openly singled out the Chinese and was explicitly designed to limit their number in New Zealand. A chronology of the anti-Chinese Immigration Acts⁶⁶ displayed the intensity of the host society to exclude Chinese from the country.

The Chinese Exclusion Act of 1881 drastically reduced immigration from China by introducing a poll-tax. The Chinese were also the only immigrant group in New Zealand that had to pay such a tax (Murphy, 1994; Ip, 1995, 1996). Similarly, the purpose of the later Immigration Acts of 1896 and 1899 was to exclude Chinese from the country. All three Acts were explicitly labelled "Chinese Immigrants Act"⁶⁷. In addition, the Old Age Pension Act of 1898 specifically excluded the Chinese from receiving the first form of social welfare introduced in New Zealand. The Chinese were also denied the right of citizenship from 1908, and this barring from citizenship meant the loss of entitlement to any form of social welfare service, such as the unemployment benefit. Apart from the openly hostile government policy, the Chinese often faced a noticeably negative social reception, evidence of which was recorded in political speeches, election campaigns and the local press of the late nineteenth and early twenty-century (Ip, 1995; Sedgwick, 1982; McKinnon, 1996; Palat, 1996; Sedgwick, 1982, Ng, 1959; Ng, 1993; Murphy, 1994; Taher, 1970).

From the mid 1930s, some of the anti-Chinese legalisations began to be removed. Between 1936-38 the Labour government abolished legislation which denied Chinese social welfare benefits (Sedgwick, 1982). The poll-tax was finally abolished in 1944, and the Minister of Finance referred to the removal of the poll tax, included in the Financial Bill of 1944, by stating: " I do not know of anything more pleasant from the Government's point of view, or that of anyone who understands the political history of the Far Eastern people, than that we are in effect

⁶⁵ Even before the passing of the first Chinese exclusion act in 1881, the presence of the Chinese was the subject of virulent criticism. The evidence collected in 1871 by a Parliamentary select Committee on the Chinese immigration (Sedgwick, 1982; McKinnon, 1996; Pearson, 1990) recorded the noticeable anti-Chinese feeling. Furthermore, police reports of that time indicated the cruel hostility towards the Chinese miners (Hill, 1986), while the press reported strong sounds of anti-Chinese feeling and calls for their exclusion from the country (Sedgwick, 1982).

⁶⁶ The chronology of the anti-Chinese immigration restrictions, as compiled from Sedgwick (1982) McKinnon (1996), Murphy (1994), and Pearson (1990) is:

1881 Chinese Immigrants Restriction Act
 1888 The Act to Amend the Chinese Immigrants Act of 1881
 1896 Asiatic Restriction Bill
 1899 Immigration Restriction Bill
 1901 Chinese Immigrants Amendment Act
 1907 Chinese Immigrants Amendment Bill
 1908 Immigration Restriction Amendment Bill
 1920 Immigration Restriction Amendment Bill

⁶⁷ According to the Immigration Bill of 1881 the number of Chinese who could be landed from one ship was limited to one for every ten tone of the vessel's weight and a poll-tax of ten pounds was imposed on every Chinese immigrant. The tonnage equivalent of one Chinese was raised to one hundred in 1888. This was doubled in 1896 and the poll-tax raised to one hundred pounds in 1899.

removing a blot on our legislation” (*Evening Post*, December 1944, cited in Ng, 1959, p. 31). Finally, in the early 1940s, the Chinese received the right to own land, and in 1952 the right of naturalisation (Ip, 1995).

Although some specific anti-Chinese laws were removed, the government, until the 1970s, continued to impose general restrictive measures on immigrants based on their national origin (Kasper, 1990; Roy, 1970). Accordingly, the immigration authorities continued to class the Chinese as a culturally distinctive and non-assimilable immigrant group (Kasper, 1990; Ip, 1995, 1996). The societal reception which the Chinese faced in the post 1940s period may be characterised as still negative, but modified with the emergence of more positive and supportive stance, which was influenced by changes in political circumstances (Pearson, 1990; Ng, 1959; Sedgwick, 1982). It is generally considered that from the 1970s onwards New Zealand immigration discontinued with its assimilationist perspective and removed all legislation designed to treat immigrants differently based on the country of origin.

As the accounts above have shown there were some changes in official government policy towards the Chinese in New Zealand. Accordingly, it is possible to do a periodisation of the host hostility (HH) variable as one of the causal variables of this QCA⁶⁸. The period between the 1870s up to the 1940s is characterised by the existence of both hostile government policy and negative societal reception towards Chinese immigrants. Thus, the code for the (HH) variable as it refers to that period is present/present. However, it becomes more difficult to assign clear codes to the (HH) variable for the period from the 1940s to the 1970s. Specifically, this was the period where some of anti-Chinese laws were removed, but general restrictive measures continued to exist to the some extent. Furthermore, the societal reception as one level in mapping host hostility proved to be difficult to code as well. At the moment it is considered appropriate to assign the code ‘(presence)/ (presence)’⁶⁹, as outlined in the first truth table on page 87. The coding for the period after the 1970s is absent/absent, since the empirical evidence concerning New Zealand immigration policy shows the removal of discriminative measures based on ethnic origin.

A problem arises here of how to address the flexibility of the immigration legislation as applied to the Chinese. While it was possible to clarify the presence-absence dichotomy of the exclusion regulations imposed on the Chinese immigrants between the 1870s and the 1940s, some modifications in the application of these regulations afterwards made the coding of the (HH)

⁶⁸ Following the logic of QCA, it is possible to do a periodisation of causal variables. Accordingly a causal configuration and related outcome for the particular period become a row of a truth table.

⁶⁹ Following Ragin (1987, p. 140), it was decided here to use parentheses to indicate that there was not sufficient empirical evidence to accurately assign the codes, or that there were some other problems in coding.

problematic. The actual implementation of anti Chinese immigration laws varied, mainly due to the political circumstances (Sedgwick, 1982; Pearson, 1990; Ip, 1995), and allowed for some exceptions. This point is succinctly summarised by Roy (1970, p. 23): “...New Zealand immigration legislation, though framed with quite different intentions, has the quite unexpected merit of leaving a wide margin of flexibility to alter an immigration policy, without necessarily changing the law in any way”.

To simplify the analysis and solve the problem of unclear coding it has been decided to use the concept of cultural distance as a proxy for the (HH) variable. The concept of cultural distance, as derived from the assimilationist perspective, framed New Zealand immigration until the 1970s. The concept holds that the more distant a group is in terms of cultural characteristics from the host population, the longer and more difficult is the period of assimilation and more likely that a group will be considered culturally undesirable. The immigration policy, therefore rested upon the premise that the national origin of immigrants is a reliable indication of the capacity for assimilation.

This QCA proposes to trichotomize the cultural distance (CD) variable by using qualitative categorisation⁷⁰. New Zealand’s immigration policy, as outlined in Chapter 4, proved to be reasonably compatible with this solution in coding causal variables. Namely, using empirical sources on immigration regulation imposed on particular immigrant groups, it becomes possible to classify ethnic groups into three categories based on the concept of cultural distance, and to clearly assign particular codes. Using an approach in coding causal conditions as performed by Griffin et al. (1991), it is proposed here to use the following trichotomy in coding the cultural distance: fundamental, some, and none/irrelevant. The coding system will be: the code ‘fundamental cultural distance’ will be assigned to the immigrant groups from Asia, the code ‘some cultural distance’ to South Europeans, and the code ‘no cultural distance’ to the other continental European groups (Kasper, 1990; Zodgekar, 1997; McKinnon, 1996; Lochore, 1951; Roy, 1970; Brooking and Robel, 1995; Pearson, 1990). The code ‘irrelevant’ refers to the post 1970s when the government abolished the assimilation perspective (McKinnon, 1996; Brooking and Robel, 1995). By using this trichotomy it becomes now possible to: simplify the coding procedure, avoid unclear coding, and, probably more importantly, to recognise the substantial differences between the ethnic groups in regard to the host hostility they faced in New Zealand⁷¹.

⁷⁰ Some QCA applications employ a trichotomy in the qualitative categorisation of causal variables. Thus, in coding causal variables it is possible to use a code of two columns in the truth table or a more descriptive categorisation such as strong, medium and none. See QCA applications by Ragin (1994c), Ragin et al. (1984), and Griffin et al. (1991).

⁷¹ This point was also developed by Pearson (1990, pp. 96-97). In calling for more comparative research on ethnic groups in New Zealand, Pearson argues that such research should acknowledge the differentials between the discrimination some ethnic groups faced - between the Chinese and Dalmatians for instance.

Accordingly, in the case of Chinese market gardeners, the code for the cultural distance for the period mid 1870s up to 1970s is 'fundamental', and the code 'none/irrelevant' for the period afterwards. Thus, the (HH) variable in the truth table for the Chinese may be replaced by the cultural distance (CD), as done on page 87.

The succeeding segment of QCA describes cultural endowments as displayed within the Chinese business community in New Zealand and how they served as a basis for promoting their internal organising capacity. These cultural endowments will be discussed entirely in relation to the Chinese market gardeners.

Collectivistic cultural endowments (CCE). A number of authors have underlined that the entrepreneurial strategy implemented by Chinese engaged in New Zealand agriculture was influenced by Confucian cultural values (Thornton, 1968; Ip, 1995; Pearson, 1990). The Confucian belief system shaped the Chinese community in New Zealand agriculture by maintaining community solidarity in the business through familial and kinship associations. The Confucian belief system also had its expression in inheritance patterns and management style of the Chinese-operated agricultural enterprises (Lee, 1974; Thornton, 1968; Ng, 1959; Ip, 1996).

The Confucian belief system provides the psychological foundation for the family system as the basis of all social life, with its tremendous emphasis on filial piety towards parents. As such it promotes dutiful conduct to one's superiors and particularly to one's family. Confucianism has also been described as a system that promotes strong bonds at the local level, where face-to-face relationships exist. Moreover, Confucianism is entirely oriented towards collectivism, insisting on reciprocal social obligations and loyalty⁷² (Granovetter, 1995; Hofstede, 1984; Stanbridge, 1990).

Empirical evidence shows how Confucianism was ingrained in the partnerships and family business of the Chinese market gardeners. Thornton (1968) provided an account for the strong family loyalty developed among the Chinese market gardeners on the Taiari Plains. For instance, in the words of Mrs Doo, one of the first Chinese women to come to New Zealand in 1922 "Our number one rule is family loyalty above all else" (quoted in Ip, 1996, p. 59). Full

⁷² Confucian moral values are explained through the Twenty Four Stories of Filial Affection, as shown in the *New Zealand Chinese Growers Monthly Journal* (Stanbridge, 1990). Regarding the manifestation of these values in economic affairs it is important to mention two canons. In the first one, 'Obedience to One's Parents'- Filial Piety is upheld as an essential human relationship. According to the Confucian philosophy obedience comes through physical service to one's parents. The involvement of children in family business is perhaps the greatest evidence of the way filial piety has been ingrained in economic affairs. In the second one, 'Respect for One's Elders'- the Family Group is cultivated in the respect for the immediate family and kinships, and furthermore, has its materialisation in the joint effort of all family members in making the business successful.

commitment to the family business of the Chinese in NZ was also recorded in Ng (1959), Ip (1995), Lee (1974), and Ng (1993). Loyalty, derived from the practice of ancestor worship, was also recorded within the business partnership, as for instance in the case of the Otago Chinese (Ng, 1993).

Family ties of mutual obligation and trust encourage highly motivated and cooperative group effort by drawing on their internal solidarity in the pursuit of common objectives. The pooling of profits resulting from coordinated familial effort was common amongst the Chinese market gardeners (Sedgwick, 1982; Thornton, 1968). Another essential feature of the Chinese market gardeners was the reliance on all family members who worked together in the same business. There are also accounts of females and children who supported the family labour force⁷³. The availability of such labour is again related to the unique social organization of the Chinese market gardeners based on close kinship ties. It could be said that the practice of ancestor worship and filial piety has strengthened the authority of such a system.

An integral feature of Confucianism, ingrained in family business, is the law of the eldest son to follow the family business, and who, in addition, takes responsibility for the elderly members of the family and supports younger ones. Thornton (1968) documented such inheritance patterns amongst Chinese market gardeners and food retailers in Dunedin. Lee (1974) also noted that ethnic succession amongst the Chinese market gardeners in the Auckland regions was due to the maintenance of traditional inheritance patterns.

Finally, Confucian cultural systems were also employed as a basis for extending business relations beyond family and kin-groups. Overall, the Chinese market gardeners relied on cultural endowments that enabled collective action and mobilisation of intra-group resources. Accordingly, they formed various ethnic social networks based on the principles of reciprocity and mutual trust. Since Confucian values intrinsically promote collectivism, and these values were consistently upheld within the Chinese market gardeners, the code for the (CCE) is the presence.

The QCA proceeds with an analysis of the ethnic business networks developed within Chinese market gardeners in New Zealand.

⁷³ Ip's oral history of the New Zealand Chinese quotes Mrs P. Wong from Napier as saying "Of course, I always helped in the shop. I used to get up early, and started studying at 5.30 am until I had to go to the shop at 7.30 to prepare the window for it to open at 8 am; then I would go to school... I'd work in the garden on non-auction days, and on weekends and Sundays" (Ip, 1996, p. 71).

Ethnic business networks (EBN) Empirical evidence indicates the presence of informal ethnic business networks between the Chinese market gardeners in New Zealand, during the period from the mid 1870s up to the late 1960s.

The Chinese market gardeners worked in organisations comparable to the matrilineal Chinese clans. The Chinese market gardeners in New Zealand represent four family clans, Poon-Fah, Szeyap, Tsangshing, Kong Chew (Ip, 1995, p. 61). The members of a clan have the same surname because they are family related, being descendants of a common ancestor many centuries ago. The family clans played an important cohesive role within the Chinese market gardener community in New Zealand (Lee, 1974; Ng, 1959). The function of the familial associations was to deal with the adjustment of the Chinese to the strange environment, relying on the base of mutual aid and protection. The family clans helped Chinese immigrants to establish themselves and offered some protection and security in times of any kind of crisis.

These Chinese family clans are further organised into *bongsa*, groups based on common descent from specific areas of mainland China (Ng, 1959; Sedgwick, 1982). Such groups spoke the same Chinese dialect. Basically, there are two dialect groups within the Chinese market gardeners: the Poon-yu *bongsa* is dominant amongst the Chinese market gardeners in Palmerston North, Otaki, Wellington and Stirling (Meyer and McLellan, 1988), and Se-yips dialect group is dominant in the Ashburton area (Ng, 1959).

Within these groupings, ties of kinship and the same local origin have reinforced commercial relationships. In building these associations in business the Chinese relied on their traditional cultural values. That is, every member of the family clans or *bongsa* respected the Confucian-derived obligations to act with honour towards relatives or co-ethnics whenever possible. For instance, early partnerships which developed amongst the Chinese market gardeners were based on mutual aid, providing support and employment for new coming Chinese immigrants. Such partnerships served the need of mutual aid, and if a kinsman was in trouble it was right and proper to give him employment or a partnership in one's business (Ng, 1993; Sedgwick, 1982). The sources referring to the period of the 1920s-1960s also indicated how the Chinese family clans were further connected in developing ethnic business strategy. The Chinese market gardeners of the Taieri Plains (Thornton, 1968), central Auckland (Lee, 1974), and the Otaki district (Meyer and McLellan, 1988) were bound together by clan, dialect or locality ties and these connections helped them attain the resources needed to start a business. Any required hired labour for market gardeners came from new immigrants from the same village of the home land. Family clans were at the core of migration chains and provided the necessary funds, supporting and coordinating the immigration flows. As Sedgwick (1982) noted, those already involved in market gardening supported newcomers by paying the compulsory poll-tax. For

instance, the poll-tax for the groups of farmers who came here in the 1919-1926 period, was paid from already established Chinese within the market gardening community (*Ibidem*, p. 317).

The Chinese market gardeners also generated resources through *hui kan* associations⁷⁴. The *hui kan* enabled the Chinese to pool their savings and helped them establish and coordinate their ethnic business. Such ethnic self-help associations⁷⁵, based on kinship and regional ties, provided funds for those who were in need of assistance. There is evidence of mutual sharing and of their own forms of social security during the depression of the 1930s, as they were excluded from any form of government social benefit scheme (Sedgwick, 1982, p. 370). At that time the Chinese also launched the new gardening areas in Auckland and Wellington, for those co-ethnics who were unemployed, trying to organise them into the mainstream occupation, which was still market gardening.

These ethnic associations were based on mutual obligation and the principles of reciprocity. Apparent mutual obligation within the family clans and among community members in general was sustained and regulated by effective instruments of community control. Moreover, the sanctioning capacity the Chinese community in New Zealand enforced informal business contracts between the Chinese market gardeners.

Informal business networks among Chinese market gardeners existed from the 1880s mainly until the 1950/1960s. Ip (1995, p. 178) noted that "the period 1920s-1950s was in fact the golden period of Chinese associations". Thornton (1968) and particularly Lee (1974) referred to the existence of the Chinese business networks in the late 1960s. The empirical evidence does not indicate the current existence of any form of mutual aid or intra-groups mobilisation of the resources among the Chinese market gardeners in New Zealand.

The majority of the Chinese origin market gardeners in New Zealand are now organised into a professional association - the Dominion Federation of New Zealand Chinese Commercial Growers (CCG)⁷⁶. The association started in 1943 on the initiative and with substantial

⁷⁴ The *hui kan* associations-rotating credit associations-are also found in most overseas Chinese communities in business (Sowell, 1983; Light; 1972). These association match the *kenjin* social networks developed within the Japanese market gardeners in California (Light, 1972; Tsukashima, 1991).

⁷⁵ Raising the funds for such credit associations and self-helping funds was done by levying each Chinese family according to the number of adult males, or each Chinese family in market gardening according to the area under cultivation (Ng, 1959; Sedgwick, 1982). Also, as noted in the Declaration of the 4th Congress of the Chinese Association in 1939 (80 percent of the members were marker gardeners) "A penalty on those who refuse donations was adopted" (Sedgwick, 1982, p. 394). The regulations of the New Zealand Chinese Association as they proposed in 1909 explicitly stated that "Those who try to evade paying the Association a levy will be dealt with severely" (*Ibidem*, p. 673).

⁷⁶ It is estimated that 75 up to 80 percent of growers with Chinese ethnic origins associate and identify themselves as Chinese and are members of the Dominion Federation of New Zealand Chinese Commercial Growers (*Commercial Grower*, April / May 1994).

assistance of the New Zealand government⁷⁷. The general objectives of the Chinese growers association were to protect the growers' rights, to disseminate scientific information, and to increase their knowledge (Sedgwick, 1982). Moreover, in 1949 the Chinese Commercial Growers Association launched its own publication - the *New Zealand Chinese Growers' Monthly Journal*⁷⁸.

The association was active in collaborating with government agencies in order to protect and to gain special preferences for the Chinese market growers. For instance, CCG was involved in consultations with the Department of Agriculture about changing requirements in the industry, and requesting an exclusion for Chinese market gardeners from passing language tests as a part of the naturalisation programme in 1953. Moreover, CCG coordinated, together with the Department of Labour, the immigration of fifty market gardeners from China in 1974 in order to replace the elderly Chinese members whose children did not take over the farms (Sedgwick, 1982).

However, in the mean time, the Chinese growers' association has attained considerable independent status from both the government and other Chinese associations in New Zealand (Sedgwick, 1982). In 1957 the government dropped all financial support to the Chinese growers' association and excluded it from receiving the levy collected from the growers⁷⁹.

The association started to justify its economic interests by making a case to recover the levy collected from its members under the new compulsory regime. The association was also vocal in discussing the Commodity Levies Act 1990, asking for its entitlements to levies (*Commercial Grower*, April/May 1994), and recently, in 1997 at the annual Vegfed conference by supporting the Equitable Funding Proposal (*Commercial Grower*, August 1997).

In discussing CCG in the context of ethnic business networks (EBN) it is essential to note the

⁷⁷ The Chinese Commercial Growers association (CCG) started in 1943 with the initiative of the then Prime Minister, Peter Fraser. As a number of authors agree (Sedgwick, 1982; Ip, 1995; Ng, 1959), the government's motive in organising Chinese market growers was pragmatic. It was necessary to coordinate activities and to simulate market gardeners to provide additional supplies of vegetables during the wartime. Thus, the Government launched the activities to organise the Chinese within a formal professional association (Ip, 1995). Moreover, it was the first instance of recognition by the New Zealand government of a Chinese organization (Sedgwick, 1982; Ip, 1995; Ng, 1959). The government role in fostering of the CCG was confirmed in the words of an executive of the Association in 1950:

“Both the New Zealand Government and the Chinese people here looked upon us with great expectations as we are the only organization in the Chinese community which is granted a regular allowance from the New Zealand Government⁷⁷” (cited in Sedgwick, 1982, p. 459).

⁷⁸ The Journal (published between 1949-1972) played an important role in spreading knowledge about Chinese culture and history, and become, in fact, the voice of the Chinese community in New Zealand. See the Chinese lessons and the teaching of Confucian moral and social messages published in the *New Zealand Chinese Growers Monthly Journal*, 1950-52 (Stanbridge, 1990).

⁷⁹ According to the Vegetable Levies Act in 1957 the Dominion Council of Commercial Gardeners (Vegfed) was the sole recipient of all levy proceeds.

following points. First, what is particularly unique about this organization is the fact that the growers' association had been initiated by the government. Even the Chinese market gardeners recognised that "it was because of the government and the country's need during a time of war that the Federation was started in the first place"⁸⁰. Second, the establishment of the CCG was a substantial indication of changed relationships between the Chinese community and the New Zealand government. Sedgwick (1982) discusses the CCG as one of the formal organizations in the Chinese community which was, for a considerable period of time, a mediator between the Chinese community and the Government. Third, according to the constitution of CCG, last amended in 1982, membership is not limited to the growers of Chinese origin (*Commercial Grower*, April/May 1994). Fourth, the CCG does not perform the role of a self-help organization, and does not replace the informal, ethnically exclusive networks which used to be developed within the Chinese market gardening community. It is substantially different from traditional Chinese associations and did not facilitate the mobilisation and distribution of resources only within the Chinese community. Therefore, the CCG association is not considered here as a mode of ethnically bounded business network.

Considering at this point the causal variables which were included in the ethnic network hypothesis (T_1), a truth table for the Chinese in New Zealand agriculture is:

Period	HH	CCE	EBN
mid 1870-1940s	Present/Present	Present	Present
1940s- 1970s	(Present)/(Present)	Present	Present
post 1970s	Absent/Absent	Present	Absent

By using the concept of cultural distance as a proxy for the (HH) variable, the truth table for the Chinese becomes:

Period	Cultural distance	CCE	EBN
mid 1870-1970s	Fundamental	Present	Present
post 1970s	None/Irrelevant	Present	Absent

After discussing the empirical evidence related to the ethnic network hypothesis (T_1) the analysis continues by elaborating on the recursive effects that the networks formed within the Chinese market gardening community might have on causing conflicts between the Chinese and competing host population. The procedure for discussing empirical evidence related to the conflict hypothesis (T_2), as outlined in Chapter 4, requires firstly identifying an outcome-that is conflict, and then assessing the causal conditions as proposed by the hypothesis. Thus, this

⁸⁰ The words of the national secretary of the association in 1953 as paraphrased by Sedgwick (1982, p. 476).

section now examines farming protests which occurred in New Zealand history and which involved the Chinese market gardening community.

Empirical evidence of farming protests in New Zealand history shows the sporadic actions or more vocal Anti-Chinese protests within the local market gardening community. Those defined as conflicts are the anti-Chinese protests in the late 1870s, the early 1890s, and mid 1920s. Those anti-Chinese protests are now further discussed⁸¹ following the principles of QCA. Sporadic actions, where the opposition to the presence of the Chinese market gardeners was neither collective nor lengthy, include incidents during the 1880s, 1907 and 1912.

Anti-Chinese protests during the late 1870s. As noted above, in describing the evolution of the Chinese market gardening community during the 1870s, the Chinese in New Zealand went through occupational transitions from gold-mining activity towards self-employment as market gardeners. During that period the Chinese also started to face public antagonism and protests as articulated among the European market gardeners in Otago⁸². In fact, such anti-Chinese agitation among the market gardening community in Otago was simply added to the already existing hostility of the local mining community⁸³.

Attitudes towards the presence of the Chinese, as market gardeners settling outside mining areas, were fairly negative (Ng, 1993; Ng, 1959; Hall, 1929). During the late 1870s the Otago mining and local business community became unified and demanded that restrictive measures be imposed on the Chinese in New Zealand. Moreover, by using various local government measures they tried to prevent Chinese from settling down and leasing land (Ng, 1993). Apart from these direct actions which were channelled through county councils, there was generally negative public opinion centred around the presence of Chinese market gardeners within local communities. Articles published in Otago local newspapers such as the *Mt Ida Chronicle*, *Dunstan Times*, and *Taupeka Times* reflected these anti-Chinese attitudes (as cited in Ng, 1993, pp. 276-280). Public opinion opposing the Chinese presence developed to such an extent that

⁸¹ Note that the anti-Chinese protests of the 1920s are discussed as an integral part of the anti-Asian campaign among the Pukekohe market gardeners, and explained later in this chapter.

⁸² Also referred to as European market gardeners (Pearson, 1990; Ng, 1993), white market gardeners (Ng, 1993), or white competitors (Beatson and Beatson, 1990). Since employing terminology of ethnic entrepreneurship literature this study uses mainly the terms such as local business groups or the competing host business groups. The term 'European competition' or 'European market gardeners' will be used sporadically when it is thought appropriate.

⁸³ There were noticeable anti-Chinese protests in the mining industry, the first occupational niche occupied by the Chinese in New Zealand (Forrest, 1961; Lyon, 1971). As more Chinese miners began to arrive and settled down on Otago gold fields, the European miners felt that their security was threatened and began to oppose the presence of the Chinese. That hostility was manifested in public speeches (Kang, 1985) or physical brutality on Chinese persons within the goldfields of New Zealand (Hill, 1986). In 1871, anti-Chinese opposition was so intense that the Government was forced to convene a parliamentary select committee to decide on future policy towards the Chinese in New Zealand (Sedgwick, 1982).

anti-Chinese legislation was discussed in Parliament during the second half of the 1870s. It resulted in the introduction of the Asiatic Restriction Bill of 1879 in Parliament, and afterwards in the enacting of the Chinese Immigrants Restriction Act of 1881 (Hall, 1929).

Economic threat (ET). The anti-Chinese protests in the late 1870s were developed on arguments stating that the Chinese posed an economic threat to the local miners and European market gardeners. The European market gardeners and the general local business community developed anti Chinese arguments accusing them of being industrious, unfairly competitive, and entering an occupation which was popular amongst the European population of that time (Sedgwick, 1982). It was generally considered that the Chinese made good gardeners, but also that their “superior industry and plodding perseverance would, in the end, eat us out of house and home” (from AJHR⁸⁴, 1871, H-5, p. 12, as quoted in Sedgwick, 1982, p. 98). European market gardeners clearly expressed concerns that their livelihood was threatened by the influx of Chinese market gardeners. Such perceptions of economic threat were included in a political platform of leading politicians of that time, such as G. Grey (a memo to the Parliament in 1879, quoted in Murphy, 1994, p. 10) or in public speeches by R. Seddon (Ip, 1995; Ng, 1959).

Negative stereotyping of ethnic solidarity (ES^N). Most of the anti-Chinese feelings of the 1870s was based on non-assimilability of the Chinese, their self-segregation from mainstream society and their living in isolated communities. The Chinese were also considered by official immigration policy as a culturally distinct and an undesirable ethnic group. Moreover, newspapers of that time detailed negative stereotypes of the Chinese developed within the host population. As accounts provided in Beatson and Beatson (1990) and Murphy (1994) showed, cartoons in the local press and letters to editors were generally bitter, hostile and vicious. However, there is not sufficient evidence to clearly code the presence of negative stereotyping of ethnic solidarity in business. There is only one reference related to this, which is relevant for the earlier period when the Chinese gold mining workers were accused of living and working in groups. It is testimony from AJHR dated from 1871 concerning one particular incident between the Chinese and European miners in Otago, where “the Chinese although generally thought to be only re-working areas left by European, were on the contrary staking out new areas and, what was worse, they were mining them in groups” (paraphrased in Sedgwick, 1982, p. 98). The (ES^N) variable is thus coded as ‘present’ but in parentheses, in order to note that there was some negative stereotyping of ethnic solidarity within the Chinese community but this related to the general cultural considerations, not specifically to ethnic solidarity in business.

The anti-Chinese protests of the late 1870s developed during the period when the economic

⁸⁴ *Appendices to the Journal of the House of Representatives.*

situation in Otago in particular, became depressed. Wheat and wool prices fell markedly in 1879, and in the second half of the 1870s there were downturns in prices on the grain market (Lloyd Prichard, 1970). Therefore, in terms of the coding for QCA it may be said that the anti-Chinese protests of the late 1870s coincided with the presence of the economic depression.

Before proceeding further with the empirical analysis, it is appropriate to make a digression and to outline the periods of economic downturns/depression in the economic history of New Zealand. These will then be used in the coding of the economic depression (ED) variable through the remaining sections of QCA.

Economic depression (ED). In coding this variable the study relies on the three major sources of economic history of New Zealand up to the mid 1940s, namely Hawke (1985), Lloyd Prichard, (1970), and Simkin (1951). In general, economic fluctuations in New Zealand may be described as: depression from the late 1870s to the early 1890s, prosperity 1895-1920, and depression again from the 1920s through the 1930s.

During the nineteenth century and the first decades of this century New Zealand developed a dependent, non-diversified economy (Hawke, 1985; Lloyd Prichard, 1970). Since the primary sector was the dominant export activity fluctuations of prices on the world market, and falls in raw materials prices created major instability in the national economy. Apart from noticeable fluctuations in exports, downturns in public spending and private capital imports were additional major determinants of fluctuations in New Zealand's economy. The late 1870s marked a fall in gold production, and in general a negative trade balance with increases in internal debt. The economic depression continued through the 1880s and early 1890s due to falling export prices and a decrease in public spending. Some economic historians (Hawke, 1985; Lloyd Prichard, 1970) use the term 'long depression' to characterise the period 1879-1895, which was essentially characterised by low prices for primary exports and in falling prices throughout the world economy. After 1895 the New Zealand economy experienced economic prosperity due to the rise in prices of meat, wool and dairy products. This period of prosperity lasted until the 1920s, being interrupted by two short depressions in 1907/1909, and after that in 1911/1912, mainly caused by falling prices of flax and wheat. The depression years returned again in the late 1920s and early 1930s, the features of which were high prices for land and low prices for farm products.

After anti-Chinese protests in Otago of the late 1870s, articulated by local miners and market gardeners, there were sporadic incidents during late 1880s involving isolated attacks on Chinese market gardeners. The *New Zealand Herald* reported in March 1888 that some Chinese market gardeners were assaulted in Dunedin and Auckland (Sedgwick, 1982). However, these actions

were of a sporadic nature and did not last for long.

Anti-Chinese protests during the early 1890s. During the early 1890s the small business community, represented by European market gardeners and the labour movement had united in anti-Chinese opposition. Some local business associations opposed the movement of the Chinese into particular localities and occupations, and had pressed the government to impose anti-Chinese immigration legislation. In 1894, the Trades and Labour Council in Wellington petitioned that the residence taxes should be imposed on the local Chinese fruit retailers (Sedgwick, 1982). The same sources recounted that The Knights of Labour opposed the movement of Chinese into the Wairarapa in March 1892. Chinese businesses were closely observed by local business associations, and in Wellington, for instance, the local Grocer's and Early Closing Association in 1891 appointed a committee to observe the business practice of Chinese fruit shops. Newspapers also provided revealing accounts of the negative societal perception towards Chinese market gardeners. Articles in the local press debated the implications of Chinese competition in business. In 1895 there was concern about 200 Chinese gardeners, perceived by the Christchurch business community to be settling down and opening fruit shops (Sedgwick, 1982). Also, a large part of the debates in the House of Parliament in 1895 were based on the Chinese involvement in the growing of vegetables. For instance, opposition to the Chinese presence in that business was underlined in discussions on the Asiatic and Other Immigration Restriction Bill of 1895 and resulted in the passing of the Asiatic Restriction Bill of 1896 (*Ibidem*, p. 196).

Economic threat (ET). Chinese market gardeners were perceived as an economic threat in the locations where they were competing with European commercial market gardening, such as Otago (Ng, 1993); Canterbury and Wellington (Sedgwick, 1982). These accounts agree that Chinese businesses experienced lower operating costs because of the existence of trust within the community. In addition, the existence of the rotating credit associations meant that their capital was pooled and credits were available without interest. Such competitiveness of the Chinese market gardening community was simply perceived as unfair and unscrupulous. The content of the newspaper articles of that time describes Chinese competition using terminology such as "foul, contrary to nature and unjust" (Sedgwick, 1982, p. 260) and argued that Europeans could not compete with the Chinese in growing vegetables. Also, the anti Chinese politicians of that time, W. P. Reeves and R. Seddon, viewed the Chinese as an economic threat to the European market gardeners in New Zealand (Ip, 1995).

Negative stereotyping of ethnic solidarity (ES^N). Negative perceptions of the solidarity within the Chinese market gardening community were an integral part of the general considerations of the Chinese as a culturally distant and undesirable ethnic group. The cultural distance between

the Chinese immigrants and the host, dominantly British population, was extensive and present as an issue in the parliamentary discussions of the 1890s, and used to justify the introduction of anti-Chinese legalisations of that time (Sedgwick, 1982; Ip, 1995; Ng, 1959). Yet, it is difficult to detect negative perceptions about cohesiveness of the Chinese market gardening community in particular. Similar to the above analysis of the conflicts of the late 1870s, coding for (ES^N) will be '(present)' in order to note a lack of the empirical evidence in the coding of this variable.

In terms of the general economic circumstances surrounding the anti-Chinese protests of the early 1890s it is clear that they were developed during the final years of the long depression.

Finally, there were two isolated, short-lived and strongly localised anti-Chinese actions in 1907 and 1912, which are not coded and discussed as conflicts in terms of this QCA. However, they are briefly outlined here in order to emphasise the intensity and the duration of the anti-Chinese protests of the late 1870s and early 1890s.

There were some sporadic incidents during 1907 involving the Chinese market gardening community. In June 1907, some local anti-Chinese attacks were reported in the area of Masterton (Sedgwick, 1982). The anti-Asiatic League from Masterton also asked for absolute prohibition of the entry of the Chinese into New Zealand. Also in early 1907 *The New Zealand Truth* expressed concerns about the supposed monopoly of the fruit trade by the Chinese and characterised the Chinese activity in the fruit and vegetable business as unscrupulous, and being unfairly competitive with the local European business. During March 1912 the Christchurch local press reported some sporadic incidents involving Chinese market gardeners. The *Lyttelton Times* reported attacks on two Chinese fruit shops and how local businesses agreed to boycott Chinese shops (cited in Sedgwick, 1982, p. 239). The local business community made a petition to suggest "to the citizens of Christchurch the advisability of buying their fruit from Europeans and of confining their patronage to white tradespeople" (*Ibidem*, p. 239). The Anti-Chinese League in Christchurch, which consisted predominantly of fruit retailers, also lobbied the Government to introduce a total ban on Chinese immigration (*The Press* from March 1912, cited in Sedgwick, 1982, p. 240).

In summary, the QCA for the two anti-Chinese protests coded as the conflicts, derives the following causal configurations:

Conflicts/Farming protests (C)	Economic threat (ET)	Negative perception of ethnic solidarity (ES ^N)	Economic depression (ED)
Anti-Chinese protests 1878/1879	Present	(Present)	Present
Anti-Chinese protests of the early 1890s	Present	(Present)	Present

Anti-Chinese protests of the late 1870s and early 1890s were articulated amongst the European market gardening community—the host business group who perceived the Chinese market gardeners as an economic threat. Accordingly they responded, uniting with the gold mining community or with labour movements, pressuring the government to prevent or restrict the Chinese presence in the same occupation and to introduce anti-Chinese immigration regulations. Both protests coincided with a period of long depression (1876-1895). However, QCA of the anti-Chinese protests has revealed some limitations in elaborating the second causal condition as derived from the conflict hypothesis, that is, the presence of the negative stereotyping of ethnic solidarity in the business. The empirical analysis has shown so far, that it is hard to detach specific evidence for coding the presence of negative perception of the solidarity that ethnic groups display in business. Negative perceptions of community solidarity were present, but within general considerations of the Chinese as culturally distinctive and hence an unassimilable ethnic group.

5.2.3 The Indians - Gujarati Market Gardeners and Punjabi Dairy Farmers

Similar to the Chinese, the Indians involved in New Zealand agriculture have passed through three distinctive phases in terms of occupational and residential patterns⁸⁵. These are: the early phase of rural labouring (1890s-1920s), the formation and expansion of the family business (1920s-mid 1940s), and the later period of stabilisation and residential clustering of the family business.

During the early phase⁸⁶ (1890s-1920s), the Indians were mainly involved in various rural labour activities, such as hawking fruit and vegetables, scrub-cutting, land drainage, swamp reclamation and land clearing (Leckie, 1981; Taher, 1965, 1970). Accordingly, the residential distribution of the early Indian immigrants in New Zealand was clearly influenced by the location of primary industry where they could find jobs as farm labourers. During the pioneering or hawking phase, the Auckland and Wellington regions, together with Frankton, Waikato and Taupiri represented the major centres of Gujarati settlement in New Zealand⁸⁷.

⁸⁵ The Indians began to arrive in New Zealand from about 1890. Gujaratis and Punjabis are the two major Indian ethnic groups to settle in New Zealand. The majority of Indians in New Zealand (more than 90 percent) emigrated from a nucleus of small villages in Surat District, Gujarat, in Western India (Leckie, 1981). A relatively smaller group of Indian immigrants also came from villages in the Jullundur and Hoshiarpur Districts of Punjab (Tiwari, 1980; Vasil and Yoon, 1996; McLeod, 1992). Although there are some specific differences in residential and occupational patterns between Gujaratis and Punjabis, in terms of the main points important to this research, they are discussed together as the collective term - Indians.

⁸⁶ Also referred to as 'pioneering phase' (Leckie, 1995) or 'hawking phase' (McLeod, 1992)

⁸⁷ Leckie (1981, pp. 287; 292; 299; 403-405) provides accounts of the early Gujarati involvement in hawking around urban centres in the North Island.

During that early period, Punjabis entered rural labouring occupations as scrub-cutters and flax-workers on the Hauraki plains, and elsewhere in the Waikato (McGill, 1982; McLeod, 1992).

The early phase was a transitional phase in the moving of Gujarati and Punjabi immigrants towards self employment in market gardening and the dairy industry, which became their economic niche for the next three decades (Taher, 1965). During the 1920s, and increasingly in the 1930s and the 1940s, Gujaratis were moving in large numbers from the labouring jobs to self-employed market gardening, while some Punjabis became involved in dairying and moved from rural labouring or sharemilking towards acquisition of their own dairy farms. This was a period of expansion by the Indians into New Zealand agriculture, the establishing of family businesses and the achievement of relatively stable occupational and residential patterns. For example, the Gujaratis began to establish themselves as market gardeners on leased or bought land, particularly in Franklin County. The settlement of Gujaratis at Pukekohe as self-employed market gardeners is the best-documented case of their involvement in the New Zealand agricultural industry⁸⁸. A small number of Gujaratis were also leasing land around Otahuhu and later on in the counties of Otorohanga, Tauranga, and Whakatane. As McGee (1962) and later on Taher (1970) documented, small but visible communities of Gujarati market gardeners developed around Hamilton, Rotorua, Dannevirke, New Plymouth, Levin, Otaki, Napier, Hastings and Palmerston North.

While most Gujaratis settled around urban centres in the North Island, Punjabi dairy farmers clustered in the King Country, with important settlements around Te Awamutu, Otorohanga and Taumarunui (McLeod, 1992; Tiwari, 1980; Taher, 1965). During the early 1920s and particularly during the 1930s, the purchasing of dairy farms by the Punjabis became more frequent⁸⁹, and the foundations of some very prosperous dairying enterprises were laid during that period⁹⁰.

The progress from rural labouring towards self-employment and the establishment of the family business within the Indian community was achieved largely through three ways: the

⁸⁸ In the early 1920s around sixty Gujaratis were employed as labourers for European market gardeners in Franklin County. Later on, they started leasing and buying the land, mainly for producing onions and potatoes, and by 1929 five Indian market gardens had been established at Pukekohe. According to Tiwari (1980), the first Gujarati to settle down in Franklin County was Mitha Unk. Other Gujaratis who settled there were the three brothers Chhiba who together leased twenty-two acres. In addition, Leckie (1981, pp. 439-440) mentions the following names of early Gujaratis involved in market gardening at Pukekohe - the Girdhar, Hari, Parsot, Patel and Vallabh families.

⁸⁹ The earliest case of a dairy farm owned by a Punjabi was a fifty acre property near Kihikihi which was bought by Harnam Singh in 1919 (McLeod, 1992). Since the 1930s a few Punjabis bought dairy farms which were mainly clustered near Te Aroha. McLeod (1992, pp. 31-48) provides accounts of locality, date of purchase and the size of the Punjabis dairy farms initially purchased in the 1930s. Some of the family names mentioned were the Kapoor and Singh brothers.

⁹⁰ For instance, Mount Cosy Jersey stud, near Otorohanga, was purchased by Mangal Singh in 1935.

accumulation of capital, business partnership, and 'agricultural ladders'. The first and most common path, particularly present amongst the Gujaratis, was to begin by hawking or rural labouring until enough capital was accumulated to purchase smallholdings, and then to become self-employed in market gardening⁹¹. The second path in acquiring their own business was to begin working for a Gujarati market gardener and then to become self-employed through a business partnership. It was often a case of family, relatives and co-fellow workers brought to this country through migration chains who first worked for the Gujarati businesses and later formed partnerships, eventually acquiring their own farm, usually within the same locality (Tiwari, 1980). The third path was typical for Punjabi dairy farmers. Sharemilking systems within the New Zealand dairy industry provided the Punjabis with the ability to move through 'agricultural ladders' and eventually acquiring their own dairy farm.

After the mid 1940s, the third phase in the development of the Indian ethnic business community in New Zealand agriculture occurred. During that time the Gujarati market gardeners concentrated on the Pukekohe area. In recent times, the Punjabi dairy farmers have concentrated along Piako Road, near Morrinsville, forming a cluster of approximately of one hundred Punjabi-owned dairy farms⁹². The Punjabi dairy farming community in New Zealand has been renewed since the 1980s, mainly due to the increasing number of immigrants coming through the migration chain established between the Waikato and two districts in Punjab, India⁹³. Finally, since the 1960s, and particularly during 1970s a growing number of Gujaratis and Punjabis had entered the professional phase of the socio-economic niche, resulting in a declining involvement in agriculture. While Gujarati have mainly entered retail business in Wellington and Auckland (Leckie, 1995), Punjabis started investing in dairy shops (McLeod, 1992).

In conclusion, the involvement of Indians in New Zealand agriculture has been centred on Gujarati market gardeners and Punjabis dairy farmers. As self-employed farmers they entered agriculture during the 1920s, having previously been a largely mobile population involved in various rural labouring activities. After a period of small business expansion that lasted through to the mid 1940s, Indians have recently concentrated into a few localities in the North Island. The following QCA for the Indians, therefore, covers the period from the 1920s onwards since within that time frame both Gujarati and Punjabis have persisted as self-employed farmers.

Host hostility (HH). Although from a Commonwealth country, Indians were included in the

⁹¹ Detailed accounts of the formation of the Gujarati family business in market gardening can be found in Leckie (1981) and Taher (1980).

⁹² As estimated by McLeod (1992).

⁹³ By bringing relatives and by means of arranged marriages, migration chains maintained the flow of Punjabi immigrants to New Zealand and their direct inclusion into dairy farming businesses.

general anti-Asian immigration policy of the early century. Government policy towards Indians was designed in a specific way,⁹⁴ and the Indians were still affected by the passage of the Immigration Restriction Act of 1899, 1902, 1908, and by the Immigration Restriction Amendment Act of 1910. Finally, in 1920 the Immigration Restriction Amendment Bill was introduced, which affected Indian immigration to New Zealand until the late 1960s (O'Connor, 1968, Roy, 1970; Brawley, 1993). Authorities on the history of Asian immigration to New Zealand (Vasil and Yoon, 1996; Roy, 1970; McKinnon, 1996) and of the Indian community (Leckie, 1981) agree that since the 1960s/1970s onwards immigration policy towards Indians has not been hostile but indifferent, and has not specifically prevented them from entering and staying in New Zealand.

Apart from hostile immigration policy traced through government records and official legal documents, Indians also experienced noticeable societal rejection during the first decades of their immigration to New Zealand. Articles and editorials published in local newspapers unfolded a picture of distinctly negative attitudes towards the presence of Indians in the country⁹⁵. Oral testimony collected by Tiwari (1980) from the Gujarati market gardeners in Pukekohe confirmed they had to face severe informal discrimination during the 1920s. The negative public view of Indians and the noticeable social rejection persisted, according to Leckie (1985), until the late 1960s. Hence, the negative societal reception as one level in mapping the (HH) variable can be coded as 'presence' during the period of the 1920s to the late 1960s/1970s.

There were, however, some modifications to the government policy concerning the Indians that should be addressed here. Although the 1920 Immigration Act was still in force, there is a considerable body of empirical evidence showing that the immigration laws imposed on Indians had been slowly relaxed from the mid 1940s (Taher, 1965, 1970). Basically, there was a change in the government's application of the principles embodied in the 1920 Act, with a shift from exclusive measures towards restrictive measures imposed on Indian immigration in New Zealand. In order to address these changes in government policy, QCA distinguishes the period from mid 1940s-1960/1970s and has coded the hostile government reception as (present). Similar to the QCA for the Chinese, the parentheses are attached in order to signify that there were some problems in assigning a clear code.

It is repeated here that the problem of an unclear coding of the (HH) variable may be solved by

⁹⁴ With the introduction of a language and literacy test in the 1899 Immigration Restriction Act and later in the immigration laws in 1908 and in 1910, the government included Indians in the general anti-Asian immigration policy of that time.

⁹⁵ For instance, *The Evening Post* of July 8, 1920.

using the concept of cultural distance instead. Accordingly, the (HH) column as outlined on page 99, may be replaced by the column of cultural distance. In that case the Indians are assigned the code 'the fundamental cultural distance' referring to the period 1920s-1970s, and 'none/irrelevant' cultural distance for the period from 1970s onwards.

Collectivistic cultural endowments (CCE). Sources on both Gujarati market gardeners and Punjabi dairy farmers emphasise the elements of traditional cultural heritage which the immigrants brought to New Zealand and remained attached to (Palakshappa, 1980; Tiwari, 1980; Leckie, 1981; Grimes, 1957). The striking feature of the Indian cultural legacy in New Zealand is the maintenance of the joint-family. Sources, such as the empirical research carried out by Palakshappa (1980) among the Punjabis in the Waikato, or by Leckie (1981) and Grimes (1957) among Gujaratis, noticed the existence of the joint family that is a cultural institution largely collectivistic in nature. Members of these communities displayed remarkable economic and social obligations to relatives and kinsmen from the same village. Members were also supposed to subordinate their own personal interests to the goals of the family group. In general, family integrity, cohesion, loyalty to a group and interdependence were apparent within the Indian community in New Zealand.

Caste, considered as a specific cultural asset, largely affected the occupation of Gujaratis and Punjabis in New Zealand. The majority of New Zealand Gujaratis belong to two agricultural castes, namely the *Koli* and the *Kanabi*, while most Punjabis who settled in New Zealand were Sikhs, belonging to the *Jat* caste, a dominant land-holding caste (Leckie, 1995, p. 121-142). The real unit of the caste system is the *Jati* or sub-caste, which is an endogamous group with a traditionally defined occupation and which also has a certain amount of ritual and cultural autonomy. Although the caste system was not fully transferred to New Zealand⁹⁶, it is essential to recognise the cohesive aspects of a caste (*jati*) as an agency for achieving cohesiveness and loyalty within the Indian community. In summary, apart from defining occupations of the Indians in New Zealand⁹⁷, caste also implies *jati*-identity, providing a sense of belonging and in-group oriented behaviour.

Matching the key elements of the I/C constructs as outlined in Table 4.1 with a description of the cultural assets within the Indian community in New Zealand agriculture (Palakshappa, 1980; Tiwari, 1980; Leckie, 1981; Grimes, 1957), the code for the variable of collectivistic cultural

⁹⁶ Leckie (1981), Tiwari (1980), McGill (1982), and Taher (1965) agree that caste as a stratification system within Indian society, has not been transferred to New Zealand, nor anywhere that Indian immigrants have settled down. However, caste identity in New Zealand has been replaced with an association with kinsmen or co-fellows from the same village or district.

⁹⁷ For example, the majority of Punjabi migrants all over the world belong to agricultural castes and enter agricultural industries. Caste identity has also influenced the occupations of Gujaratis in Africa and Fiji (Light et al. 1993).

endowments (CCE) is 'present'. Hofstede (1984) also considered the Indian culture as collectivistic⁹⁸. However, a comment should be made here about clarifying the I/C dichotomy within the Indian culture. Some overseas cross-cultural research strongly maintains that Indian culture is rather more complex and encompasses a mix of both individualistic and collectivistic cultural orientations⁹⁹. Without attempting to further elaborate on the complexity of the Indian culture, since it is outside the scope of this research, it may be accepted that the cultural endowments of Indians in New Zealand are collectivistic since they encompass two important factors constituting collectivism, namely family integrity and interdependence (Kim, 1994; Kim et al. 1994).

Therefore, there are certain collectivistic cultural endowments which Indian groups brought from the home country, that potentially may be used in establishing network-based economic mechanisms. The following section of the QCA explores if that cultural legacy was incorporated into the economic life of the Indian community in New Zealand agriculture.

Ethnic business networks (EBN) Indian immigrants involved in New Zealand agriculture formed informal ethnic business networks. Like the extended family and clan of the Chinese, the joint family, kinship and village connections played a vital role in organising economic life among the Indian immigrants in New Zealand agriculture. As a number of empirical accounts indicate (McGee, 1962; Taher, 1965; McLeod, 1992; Tiwari, 1980; Leckie, 1981; Grimes, 1957), the Gujarati market gardeners and Punjabi dairy farmers formed tight-knit communities in business and were bound together by ties of mutual and reciprocal obligations.

In-group orientation in business and the existence of extended patrilineal family networks (*kutumb*) within the Gujarati market gardening community was evident until the 1960s/1970s (Tiwari, 1980; Grimes, 1957). These networks maintained the mobilisation of labour and capital. Typically, already established Gujarati market gardeners would sponsor and employ relatives or immigrants from the same village. As the literature sources have confirmed, such reliance on the loyal, reliable and low-paid labour force of relatives or co-fellows would eventually be transformed into partnerships¹⁰⁰. In addition to labour which was mobilised entirely within the community, Gujarati entering business also relied on information and capital obtained through the internal structures of the community. If Gujaratis needed to borrow money to start up the business, they would rely on the support from self-help financial institutions

⁹⁸ The individualism index (IDV) for the Indian culture as derived by Hofstede (1984) is 46.

⁹⁹ Sinha and Tripathi (1994) discussed how the coexistence of collectivism and individualism is reflected in various facets of Indian culture.

¹⁰⁰ Leckie (1981, pp. 436; 558) reported about partnerships between two or three brothers in market gardening and referred to the family history of the following Gujarati market gardeners - the Chhiba, Bava, Naran, and Parbhubhai family.

formed by relatives or immigrants from the same village. Those loan agreements realised within kinships-based networks were unwritten, based on trust as collateral. No interest was paid on loans obtained from fellow Gujaratis (Leckie, 1981). Once settled down in the business, it was a matter of trust and *dharma* (duty) to support the new immigrants and to meet those unwritten obligations. Apart from the immigrants from the same villages these kind of agreements were extended and also included the members of one's caste (Leckie, 1981; Tiwari, 1980).

Similarly, Punjabi dairy farmers frequently utilised family and kinship ties in starting and expanding their business (McLeod, 1992; Tiwari, 1980). In the case of the early Punjabis, the so-called 'Hindu farm'¹⁰¹ performed as *gurdwara* (a Sikh temple) and as a place that served the useful purpose of supporting newly-arrived Punjabi migrants. The history of the developing Punjabi dairy community in the Waikato showed how family dairy enterprises were held together through informal networks. Dairy farms were mainly transferred within the community, either through arrangements relying on the joint families or by transferring to co-fellows. McLeod (1992, p. 28) provides a list of the certificates of title under the Land Transfer Act that show the exclusive transferring of leases from one Punjabi to another one. Joint family-enterprises in the dairy business existed until the late 1970s but in diminishing numbers¹⁰².

Finally, the codes assigned to the causal and outcome variables based on the empirical research on Indian ethnic groups in New Zealand agriculture are outlined below:

Period	HH	CCE	EBN
1920s-mid 1940s	Present/Present	Present	Present
mid 1940s- 1960/70s	(Present)/(Present)	Present	Present
post 1970s	Absent/Absent	Present	Absent

By replacing the (HH) column with the concept of cultural distance, the truth table becomes:

Period	Cultural distance	CCE	EBN
1920s-1960/70s	Fundamental	Present	Present
post 1970s	None/Irrelevant	Present	Absent

QCA now considers anti-Indian farming protests as they occurred in New Zealand history. The empirical evidence shows the intense and anti Indian actions which took place during the mid twenties in Pukekohe. There were also some sporadic incidents involving Indian market gardeners in 1937 and 1952 which, however, did not develop into the conflicts, as clarified in

¹⁰¹ This was a dairy farm near Kihikihi (Te Awamunutu) purchased by the Singh family in 1919. For a long time the farm served as a community centre for the Punjabis.

¹⁰² In 1964, Taher (1965) carried out a survey among 40 Punjabi dairy farmers and found that 60 percent of the farms were joint family enterprises, mainly between father and sons or brothers. In the late 1970s Palakshappa (1980) surveyed 42 Punjabi family farms in the same locality and found that there was only one joint family enterprise.

this study.

Anti-Asian protests in Pukekohe in the mid 1920s. The most outstanding example of anti-Indian, and in general, anti-Asian protests¹⁰³ in rural New Zealand happened in Pukekohe during the mid-twenties. During that time Indians (Gujaratis) began to lease or buy land for market gardening and settled down primarily in Pukekohe. Such occupational transformation and residential concentration of Indians created noticeable negative public concern. The local population, mainly potato growers were at the heart of anti-Indian feelings in Pukekohe, clearly expressed through their concern about the influx of Indians to the area. As one European grower of Pukekohe noted in his complaint: "One man will come and lease a piece of land, and then the others will follow" (cited in Leckie, 1981, p. 441). The *Franklin Times* of 20 November, 1925 reported public concern about the presence of Indian market gardeners in Franklin County. In the same journal in January 1926 it was explicitly stated that "the Hindu residence on Pukekohe Hill and in any European community was undesirable" (cited in Leckie, 1981, p. 598).

Those editorials and general negative public perceptions of the presence of Indian market gardeners further developed into articulated and synchronised actions by the host business groups-the local potato farmers. The most striking feature of these actions was the emergence of the White New Zealand League in 1926 which became the voice of the host business community. The League advocated exclusionist policies towards Indians and urged Government to enact legislation to prevent further settlements by Indians, and, in general, Asians on the land. This was summed up in a motion adopted at the inaugural meeting of the League: "That the businessmen and landowners in the district-those interested support any action, if favourable by the Chamber of Commerce, to approach the Government to introduce legislation making it illegal to lease or sell land to Asiatics" (cited in Leckie, 1985, p. 110).

The League gained support from the local Chamber of Commerce and as the *Franklin Times* of February 3, 1926 reported, "The Chamber of Commerce decided to join the League in its goal of securing legislation to exclude Asians from New Zealand" (Leckie, 1985, p. 111). In July 1926 the same aim was adopted by the Franklin Agricultural and Pastoral Association. Federated Farmers in Franklin County called for the confiscation of Asians' land and their immediate repatriation. Potato and onion growers in Pukekohe, at a meeting on 17 April 1926, also endorsed a petition to Parliament requesting legislation to prohibit the selling or leasing of land to Indians. In 1926 some farmers' associations (Franklin Growers' Associations) and

¹⁰³ Leckie (1985) argued that the opposition towards Asian market gardeners in Pukekohe was directed at both Chinese and Indian market gardeners. However the Indian market gardeners were at the core of the ethnic conflicts in Pukekohe, mainly because the Chinese were comparatively less concentrated in that locality.

branch associations (Canterbury Fruit Growers' Association) joined in supporting calls for such a policy (Leckie, 1985).

Economic threat (ET). The main points in opposition to Indian, in fact, Asian market gardeners in Pukekohe, may be summarised in the words of a local potato grower as “fear of economic competition,and fear that the Asiatics overrun the country” (Leckie, 1985, p. 110). In a citation by the White New Zealand League (1926), Asian market gardeners were accused of taking over “the means of production in this industry (market gardening) in a few years” (cited in Sedgwick, 1982, p. 347). Some passages from the booklet published by The White New Zealand League in 1927 stated that:

“A review of New Zealand from a business standpoint discloses the fact of a steady but sure progress made by these (Asiatic) people into our agricultural and commercial life..... Some parts of the Dominion are more suitable for onion and potato and vegetable growing than others, and this is being found out by Asiatics, with the result that they are beginning to congregate in a few places... Asiatics have in fifteen years almost eliminated the white man from the fruit trade in the chief cities of the dominion. While in market gardening they have extended their operations in all directions, and in the course of the next few years, must have control of this industry, which at one time was a legitimate livelihood for hundreds of our own people.” (Tiwari, 1980, pp. 9-10).

The White New Zealand League further argued that the threat of unfair Asian competition was hitting particularly the self-employed, small-scale farmers. As a response, local farmers came together with a small group of Auckland businessmen and established the White Producers' Co-operative Association with the goal of dealing “only with white farmers and producers co-operating for their benefit and excluding Asians” (Leckie, 1985, p.120).

Negative stereotyping of ethnic solidarity (ES^N). The Indian market gardeners of Pukekohe were stereotyped in the local press as being a homogenous and quite unassimilable (as cited in Leckie, 1981, p. 620). The pamphlets of the White New Zealand League also referred to the “clannishness” of the Chinese and Indian growers (Sedgwick, 1982). However, similar to the coding of this variable in the case of the conflicts involving the Chinese market gardeners, there are some limitations to the empirical evidence. It cannot be said with accuracy whether these negative perceptions of ethnic solidarity were clearly related to the in-group orientation in business. Therefore, the code for (ES^N) variable will be (present) in order to signify the presence of the negative perception of the community solidarity in general.

Economic depression (ED). New Zealand experienced a period of overall economic depression in the years following World War One. The economic crisis was particularly marked in

Pukekohe where the local potato growers were affected by low prices. Following the sources on the economic history of New Zealand, reviewed earlier, the (ED) variable will be coded as 'present'.

Thus, the causal configuration for the anti-Asian protests in Pukekohe in the mid 1920s is:

Conflicts/Farming protests (C)	Economic threat (ET)	Negative perception of ethnic solidarity (ES ^N)	Economic depression (ED)
Anti-Asian protests of the mid 1920s-Pukekohe	Present	(Present)	Present

Taking into account the periods in which the Indians were leasing and buying land and carrying out small scale farming, the Pukekohe case has remained as only one example of farming protests involving Indian market gardeners. The empirical evidence also showed that in 1937 and in 1952 there were some sporadic anti-Indian activities carried out by the local farming community. In 1937, the Fruit Marketing Committee called for the compulsory registration of Asian¹⁰⁴ fruit retailers by thumbprint (Leckie, 1995). In 1952, as reported by the *New Zealand Herald*, (February 6, 1952) and the *Franklin Times* (August 29, 1952)¹⁰⁵ Federated Farmers of Franklin strongly advocated further immigration restrictions and were calling even for the confiscation of land owned by Asian immigrants.

5.2.4 The Lebanese Grape Growers and Wine Makers

A unique, small immigrant group that made its presence felt in New Zealand agriculture were the Lebanese. While it is possible to talk about the occupational concentration of the Chinese and Indians in agriculture, among the Lebanese such concentration was not marked. Lebanese entered other industries showing a strong preference towards self-employment and, in general, they remained in the urban centres of New Zealand (Thornton, 1968). A sub-group of the Orthodox Lebanese¹⁰⁶ in New Zealand, represented by the extensive family of Corbans, entered the wine-making industry. Clearly, their contribution to the New Zealand wine industry was disproportionately larger than the size of the family business and they became synonymous with

¹⁰⁴ It was again directed namely against the Indian market gardeners.

¹⁰⁵ Cited in Leckie (1985, p. 124)

¹⁰⁶ Religious division was apparent in the social history of Lebanese immigrants in New Zealand. The majority Roman Catholic community was located in Dunedin and the minority Greek Orthodox, namely the Corban family was located in Auckland. Religion is important because it structures traditional Lebanese society and furthermore strongly influences occupational specialisation of Lebanese immigrants elsewhere. Apart from the involvement of the Orthodox Lebanese in the New Zealand winemaking industry, there is a religious stream within Lebanese immigrants in Australia, represented by the Druze settlers who concentrated in viticultural and horticultural industries in Berri, South Australia (Batrouney and Batrouney, 1985).

the history of grape growing and wine distribution in this country¹⁰⁷.

However, from the QCA point of view, the sub-group of Lebanese involved in New Zealand agriculture, as represented by the Corban family, is not relevant for discussing the mobilisation of resources within social structures developed within an ethnic community. Apart from the Corban family, there were no other Lebanese families in the same business that would have permitted elaborating on the existence of ethnic social networks as defined earlier in Chapter 4. Nevertheless, a brief description of the Corban family business is included here as an integral part of reviewing the development of ethnic communities in New Zealand agriculture.

The story of the Lebanese in New Zealand agriculture, as represented by the Corban family started in 1902, when Abraham Assid Corban, a founder of Corbans in New Zealand, bought a property near Henderson, planting four acres of grapes, and named it "Mt Lebanon Vineyards" (Scott, 1977). Soon after, in 1909 the property was already considered "the model vineyard of New Zealand and an object lesson to winegrowers" (as described by R. Bragato, cited in Scott, 1964, p. 62). Within fifteen years, the original four acres had expanded to fifteen, and by 1938 the Corban family business had forty-five acres of vineyards. In 1940 the Corbans purchased various properties two miles from the original Mt Lebanon vineyard and established an eight-acre vineyard known as Corban Valley Road Vineyards (Thorpy, 1971). An extension of the Corban family business was noticeable during the 1960s. In the early 1970s they had 350 acres planted in grapes at Henderson and Kumeu and 160 acres contracted (Cooper, 1988; Workman and Moran, 1993).

Corbans became the leaders in developing the New Zealand wine industry and their actions are acknowledged widely as important in shaping the evolution of the industry. For instance, the Corban family extended the wine industry in new localities and regions (Norrie, 1990), they obtained capital for expansion by changing the capital structures and became subsidiaries of holding companies¹⁰⁸, and took part in the formation of the growers' associations (Cooper, 1988). The Corbans are also known for some technical improvements which include the planting of new grape varieties, the use of yeast cultures in fermentations, and the production of the first sparkling wines in New Zealand (Scott, 1977; Cooper, 1988).

¹⁰⁷ For more than forty years the Corban family business was dominant in the New Zealand wine industry (Cooper, 1988) and its successor Corbans Wines Ltd. is among the largest New Zealand-owned wineries. According to the Annual Report of the Wine Institute of New Zealand Inc, for 1997 Corbans Wines Ltd. is in the category of the estates with the annual grape wine sales exceeding two million litres.

¹⁰⁸ The Corban family business, in fact a partnership wholly owned by four sons, was in 1963 converted to a limited liability company, Corban Wines Ltd. Initially, Corbans retained the controlling interest by holding 81 percent of the share capital, but in the 1980s the Corban family lost its financial control (Cooper, 1988). In the 1990s the Corban business was owned by the DB Group Ltd. (Workman and Moran, 1993), and in 2000 was bought out by Montana (*The Press*, 20 February, 2001).

5.2.5 Conclusion

During a significant period of their involvement in New Zealand agriculture both Chinese and Indian immigrants were embedded in ethnic business networks and mobilised resources through those networks. Empirical evidence indicated the principled, group-oriented behaviour and collective style of entrepreneurship among the Chinese and Gujarati market gardeners and Punjabi dairy farmers. The evidence also showed how the members of those ethnic business communities remained attached to certain cultural endowments which in fact facilitated the establishment of informal, ethnically-bounded business networks. Such highly organised ethnic business communities did come into conflict with the competing host business groups. So far, the empirical analysis using QCA suggests that such conflicts would arise in a situation when the host business groups perceived that members of ethnic business communities as an economic threat. In addition, conflicts involving Chinese and Indian business groups coincided with periods of economic depression in New Zealand.

The empirical analysis of three Asian ethnic groups involved in New Zealand agriculture revealed problems in selecting of the cases and coding of the causal variables. At this stage it was decided to: redefine the coding of the host hostility (HH) variable, to revise initially selected cases and accordingly to exclude the Lebanese as not relevant for the QCA performed in this study; to use parentheses in coding one of two causal variables derived from the conflict hypothesis - negative stereotyping of ethnic solidarity in business-signifying that there was not sufficient empirical evidence to accurately assign the codes. These revisions and considerations are included in QCA of the remaining comparative case studies.

5.3 South Europeans

5.3.1 Introduction

Dalmatian viticulturists and Italian market gardeners represent the South European ethnic groups involved in New Zealand agriculture. Both Dalmatian and Italian immigrants started arriving in New Zealand as unassisted immigrants at the beginning of this century through various migration chains¹⁰⁹. These chains were able to sustain continuing migration from Southern Europe until the 1960s. While the Dalmatians were associated with the establishment

¹⁰⁹ Chain migration is a form of migration based on primary family relations. Lochore (1951, p. 24) defines a migration chain as “an established route along which migrants continue to move over a period of many years from a European peasant community to a modified community in the new land”. General literature on immigration often uses a definition by Macdonald and Macdonald (cited in Trlin, 1979, p. 33): “Chain migration can be defined as the movement in which prospective migrants learn of opportunities, are provided with transportation and the initial accommodation and employment arranged by means of primary social relationship with previous migrants”.

and expansion of grape growing in the Henderson and Kumeu districts of the North Island, the Italian immigrants added to the development of market gardening in Nelson and the Hutt Valley. Moreover, the South European immigrants played a major part in the creation of professional viticultural and market gardening associations in New Zealand.

5.3.2 The Dalmatian Grape Growers and Wine Makers

Historically, viticulture was the second economic niche of the Dalmatian immigrants in New Zealand. Their first niche was gum digging. They went through an occupational transition from the late 1890s up to the 1920s and this was characterised by the complementary economic activities of gum digging and winemaking, where savings accumulated on the gum fields were used to purchase land and plant vineyards (Trlin, 1979). Between the 1920s and the 1960s, grape growing and wine making became the dominant occupation of the Dalmatians in New Zealand, recording a marked increase in the number of Dalmatian family-owned vineyards (Trlin, 1970; Moran, 1958). The period since the 1960s has been characterised by changing capital structures and transformation of the traditional family-owned businesses into holding companies (Workman and Moran, 1993; Norrie, 1990).

The Dalmatian involvement in New Zealand viticulture started in the late 1890s when Dalmatian immigrants, initially gum diggers, began planting vineyards in Henderson-Oratia, on the then outskirts of Auckland in the North Island¹¹⁰. By the early 1920s a number of the vineyards had been established, and Dalmatian vineyards were considered as "... a striking example of what may be accomplished in the way of converting the once despised gumlands into highly profitable country" (an extract from *The Weekly News*, May 1910, cited in Cooper, 1988, p. 26). Three relatively stable settlements of Dalmatian-owned vineyards were established in the North Island: one at Herekino, another in the Red Hill-Te Kopuru-Aratapu district near Dargaville and the third in the Henderson-Oratia-Taupaki-Kumeu area (Trlin, 1968, 1979).

The second stage of Dalmatian involvement in New Zealand viticulture (1920s-1960s) was characterised by the forming of migration chains which brought an increasing number of immigrants and thus sustained the expansion of the Dalmatian wine making community. An expansion of the Henderson-Kumeu vineyards was marked during the 1919-1939 period when some of the most prominent Dalmatian owned family enterprises were established— Mazuran, Fistovich, Antunovich, Vitasovich, Brajkovich, Nobilo, Erceg, Yukich, Delegat, Ivicovich

¹¹⁰ According to Trlin (1979) the first Dalmatian settlement in New Zealand viticulture was founded by Stipan Yelich in 1895, in Henderson. Some of the earliest Dalmatian vineyards in Henderson were established by Frankovich brothers in 1899, Jose Vella in 1902, (what would become Pleasant Valley Wines Ltd.), Joseph Balich in 1912, Simo Ujdur in 1915, and Josip Babich in 1919 (what would become Babich Wines Ltd.), (Cooper, 1988; Scott, 1964).

(Cooper, 1988, Scott, 1964; Trlin, 1979). As Moran (1958, p. 81) estimated, the wine acreages and production in Henderson rose by over 300 percent between 1940 and 1950. In general, Henderson would remain as the major rural settlement of Dalmatians in New Zealand. Moran (1958) estimates that during the 1950s around 90 percent of the Henderson vineyards were operated by Dalmatian immigrants.

Since the 1960s Dalmatian-owned family businesses have undergone substantial transformation in conjunction with the whole New Zealand wine industry. During that time an outstanding feature of the Dalmatian winemaking community was the heavy investment by overseas companies in previously family-owned wineries (Cooper, 1988; Workman and Moran, 1993). For instance, the Nobile family business became a holding company in the early 1960s when an overseas company, Gilbey Corporation, took up a substantial shareholding, provided the funds for technical improvement and expansion of the business, and formed a new company named Gilbey-Nobile Limited (Cooper, 1988; Norrie, 1990). The Yukich family business represents another example of such capital transformation of the traditional family-owned winemaking business. In the early 1970s, the family business was transformed into Montana Wines Limited, which Trophy (1971, p. 111) referred to as the most dynamic and expanding wine business in New Zealand. A number of the Dalmatian family-owned businesses passed through the capital transformation phase¹¹¹. Some original Dalmatian-owned enterprises, and now holding companies (Montana, Villa Maria, Nobile Vinters), maintained their expansion by starting multiple site operations and contracting grape growers throughout the country (Workman and Moran, 1993). Finally, these transformations of family-owned business coincide with rapid urban expansion, resulting in declining employment of Dalmatians in primary industry in New Zealand¹¹².

To summarise, the involvement of Dalmatians into New Zealand viticulture became noticeable between the 1920s and the 1960s when a number of Dalmatian family-owned vineyards were established. The transition of traditional family wineries to private companies in the early 1960s resulted in the further expansion and professionalisation of the grape and winemaking industry in New Zealand. However, in terms of management style, mobilisation of the resource and general ethnic business strategy, the private companies, which succeeded from the Dalmatian family-owned businesses, are not relevant for this QCA, because the families no longer have the

¹¹¹In the Annual Report of Wine Institute of New Zealand (Inc) for 1997, the following Dalmatian family names were listed as holding companies: Vuletic (Providence Vineyards Ltd), Vitasovich as Landmark Estate Wines Ltd, Brajkovich (Kumeu River Wines Ltd), Vuletic (Longview Estate), Erceg (Pacific Vineyards Ltd), Soljan (Soljans Wines Ltd), Vitasovich (Woodhouse Wines Ltd), Babich (Babich Wines Ltd), Fredatovich (Lincoln Vineyards Ltd), Selak (Selak Wines Ltd), Delegat (Delegat's Wine Estate Ltd), Fistonich (Villa Maria Estate Ltd).

¹¹² The proportion of Dalmatians employed in primary industry decreased from 47 percent in 1936 to around 10 percent in 1966 (Trlin, 1970).

control over the businesses. Thus, the following section discusses empirical evidence related exclusively to the Dalmatian family business between the late 1890s and the beginning of the 1960s.

Host hostility (HH). Taking into account changes in the coding system which emanated from the analysis of the Asian ethnic groups in New Zealand agriculture, the coding of the (HH) is here replaced by a trichotomized categorisation of the concept of cultural distance. Thus, the trait for the cultural distance assigned to the Dalmatians is ‘some cultural distance’, referring to the period from the late 1890s to the 1970s.

During that time the New Zealand Government imposed immigration legislation designed to restrict the entry of immigrants from Southern Europe. Apart from the legislation strictly related to the occupational sphere¹¹³, the general restrictive immigration policy was imposed on Dalmatians through the 1899 Immigration Act and the 1920 Immigration Amendment Act. While those two Immigration Acts were generally supposed to exclude non-British immigration (primarily Asians), its application to South European immigration was basically to control and restrict the immigration streams to some extent. This interpretation of the Acts can be found in Trlin (1968, 1970), Yap (1982), O’Connor (1968), and Pearson (1990).

Collectivistic cultural endowments (CCE). Sources outlining Dalmatian cultural heritage indicated the existence of specific cultural institutions that were largely collectivistic in nature. These were *zadruga* – its actual meaning is ‘co-operative’, and *moba*, which may be defined as ‘rotating labour pool arrangements’.

The *zadruga* was a traditional joint family, mainly represented within South Slavs. It consisted of two or more families closely related by blood, or adopted, who own the means of production communally, and who produce and consume the means of livelihood jointly, and control property and labour communally (Canvin, 1970). *Moba* was a tradition of sharing and contributing in the labour activities within a rural community. The principles of reciprocity and rotation were ingrained to such an extent that mobilising additional labour units was easily carried out.

Translating this into the I/C construct, the key elements of the Dalmatian cultural heritage may be described as the maintenance of close communal ties, self-help institutions in rural communities, a cooperative system of work and the persistence of family solidarity. Clearly, these descriptive categories are defining characteristics of collectivism and the (CCE) variable

¹¹³ The legislation refers to the Kauri Gum Industry Acts from 1898, 1908, 1910 that were introduced to prevent Dalmatian immigrants from entering the gum-digging occupation (Yap, 1982; Trlin, 1979).

for the Dalmatians is coded as present ¹¹⁴. Accordingly, it may be said that Dalmatian winemakers were empowered with certain collectivistic cultural institutions that could potentially be used in promoting intra-group orientation in the business.

Ethnic business networks (EBN). According to empirical sources (Canvin, 1970; Trlin, 1979; Moran, 1958), the incorporation of the Dalmatian family-owned business into any kind of ethnically bounded business networks appears to be absent or poorly developed. Dalmatian wine makers mainly recognised the family and the close kinship ties in business. Such family-based networks in the business were not extended by including the other co-ethnics connected by the same dialect or common descent from a specific locality of origin. The empirical evidence does not indicate the presence of intra-group solidarity in the business or social structure for mobilising the resources within the community.

In analysing the winemaking industry in Henderson, Moran (1958) noted a lack of co-operation among the Dalmatian family-business in setting up common marketing activities. The empirical accounts showed the existence of all operations (grape growing, processing, packing, marketing, transport, and communication) being integrated within the one family enterprise ¹¹⁵. Moreover, Moran (1958) and later on Canvin (1970) showed that pooling of capital and labour outside the family were not common amongst the Dalmatian winemakers ¹¹⁶.

For Dalmatian wine makers, the nuclear family business was the primary responsibility. However, in contrast to the Chinese and Indian agriculture enterprises, these family businesses were not further incorporated into the ethnic business community. Basically, the Dalmatian wine makers in New Zealand may be described as the combinations of nuclear families formed through and sustained by continuing chain migration ¹¹⁷. A lack of economic cooperation, and even splits between Dalmatian winemaking families, were evident (Cooper, 1988). Moreover, some sources indicated a rivalry between Dalmatian families and the absence of a general sense of trust within a community (Canvin, 1970). However, a sense of ethnic identification was

¹¹⁴ Hofstede (1984) did not estimate the index of individualism for the Dalmatian culture, and this was compounded with a single index for the culture of the Yugoslavia society (IDV = 27). Thus, this study considers only cultural institutions as displayed within a region of Dalmatia, and has focused on the descriptive categories of cultural endowments as proposed by the I/C construct.

¹¹⁵ Unlike Chinese family operated business the Dalmatian families did not extend and diversify through the process of horizontal and vertical integration within the ethnic community. Apart from integration of the Chinese market gardeners, it is worthwhile mentioning that Totara SYC, the country's only Chinese-owned winery, was mainly developed to supply Chinese restaurants (Cooper, 1988).

¹¹⁶ The evidence suggests that pooling of labour or capital existed, but exclusively within the family members during short periods of time - namely between mid 1920s and mid 1930s. See case studies of the Dalmatian immigrants as presented in Canvin (1970).

¹¹⁷ Lochore (1951) and later Trlin (1979) provided detail accounts of a relatively small area in central Dalmatia, namely the district of Makarska and Vrgorac, and the islands of Korcula and Hvar, where the migration chains originated from.

developed and certainly promoted by a number of ethnic voluntary associations (Trlin, 1970, 1979). While these groups performed political, social and cultural functions, their involvement in promoting inter-group solidarity within the business, at least amongst the Dalmatians in rural areas of New Zealand, was not documented¹¹⁸.

Dalmatian wine makers were evidently active in forming and leading professional associations of viticulturists. In 1926, a group of Dalmatian winemakers, together with the Corban family, formed the Viticultural Association of New Zealand¹¹⁹. The Association had a strict professional mission, and as authorities in the history of wine making industry in New Zealand (Cooper, 1988; Scott, 1964) agree, the formation of the Viticultural Association of New Zealand was a response by winegrowers to the several adversities facing the wine industry at that time¹²⁰. However, since its formation the Association has suffered from noticeable internal factions, conflicts of interests and division between large and smaller growers, resulting in the breaking away from the Viticulture Association of New Zealand and the establishment of splinter groups¹²¹. Finally, in 1975 the Wine Institute was established, again having a Dalmatian winemaker as the president and Dalmatians as members of the executive committees (Trlin, 1979; Scott, 1964; Cooper, 1988). Although these viticultural associations consisted mainly of and were led by Dalmatian winemakers, they did not perform the role of the classical ethnic business association. Membership was not restricted by ethnicity, and the Association did not endure any kind of ethnically bounded solidarity within the wine industry.

Therefore, the absence of ethnic business networks within the Dalmatian wine makers occurs within the following causal configuration:

Period	Cultural distance	CCE	EBN
late 1890s-1960/70s	Some	Present	Absent

¹¹⁸ Ethnic voluntary associations within the Dalmatian community are studied in detail by Trlin (1979). Trlin documented, for instance, how *The First Yugoslav Club Inc.* (1930) and *The Croatian Cultural and Benevolent Society* (1933) performed social and cultural functions. The aims of these associations were to strengthen community spirit and to preserve cultural identity amongst the Dalmatians in New Zealand, to help new immigrants to adjust to the new society, and basically to help the poor and those in need. However, they merely served the needs of the urban Dalmatian settlers.

¹¹⁹ Earlier in 1911, another professional association of winemakers was formed - the New Zealand Viticultural Association (Cooper, 1988). The Association petitioned the Government to adjourn the prohibition legislation and other regulations imposed to restrict the activities of the winemaking industry. Trlin (1979) and Scott (1964) listed four Dalmatian winemakers as the association committee members.

¹²⁰ The Government introduced Licensing Acts in 1908, the Sale of Food and Drugs Acts in 1908, the Sale of Liquor Restrictions in 1917, and in 1932 sales taxes on New Zealand wines (Scott, 1964).

¹²¹ Large scale growers and wine makers separated from the Viticultural Associations in 1943 and established the New Zealand Wine Council and the Hawke's Bay Grape Winegrowers' Association. In the following two decades there were additional reorganisations of the growers association, such as the establishment of the Wine Manufacturers' Federation of New Zealand and the New Zealand Grape Producers' and Wine Manufacturers' Association (Inc.). The latter one was initiated by an independent action of Paul Groshek - a Slovenian winemaker (Scott, 1964).

Regarding the conflict hypothesis (T_2), it should be noted that there was evidence of ethnic tension and opposition to the Dalmatians on the gumfields (Trlin, 1979). This resulted in Parliamentary debates and the introduction of anti-Dalmatian laws strictly related to the occupational sphere¹²². The empirical evidence does not suggest that opposition to the Dalmatian immigrants in the gum digging industry was extended to the grape and winemaking industry. However, what the evidence does show is that Dalmatian wine makers, together with the whole winemaking community at that time, were subjected to general public criticism and government regulations and control. These regulations (as listed in Scott, 1964, pp. 64-72) aimed at controlling and restricting the winemaking industry in New Zealand. Since the Dalmatians who arrived during the first decades of this century were noticeably involved in the winemaking industry, particularly in certain localities of the North Island, it was understandable that the general prohibitionist movement and calls for restrictions on the winemaking industry were directed towards the Dalmatians as well as other winemakers¹²³. As such, these actions are not considered as indicators of the existence of any particular conflicts, as defined in this QCA.

5.3.3 The Italian Market Gardeners

Market gardening was the socio-economic niche of the Italian immigrants in New Zealand between the early 1900s and the late 1960s¹²⁴. During that time Italian market gardeners concentrated in the Taita-Avalon area in the Hutt Valley, and at The Wood suburb in Nelson¹²⁵. The strongest movement of Italian market gardeners into these two areas was recorded during the 1920s and the 1930s (Burnley, 1972; Elenio, 1995). During the 1950s and the 1960s Italian market gardeners intensified production through building glasshouses and specialised in

¹²² The following Acts were introduced to prevent Dalmatian immigrants from entering the gum-digging occupation: The Kauri Gum Industry Act 1898, The Kauri Gum Industry Act, 1908, and Amendment Act, 1910 (Yap, 1982; Trlin, 1979). Dalmatians were the biggest single ethnic group on the gumfields and their activity was perceived by the British diggers to be an economic threat (Trlin, 1979). In essence, the regulations embodied in these Acts reserved gum digging fields for the exclusive use of British subjects. Since Dalmatians were the dominant ethnic group on the gum digging fields, these measures primarily affected them and their economic niche in New Zealand. Such a viewpoint concerning the Kauri Gum Industry Acts was advocated by Yap (1982).

¹²³ For instance, in 1914 in Parliamentary debate on the Licensing Amendment Act, the Prime Minister W.F. Massey made an attack on Dalmatian winemakers, asking for drastic measures to be imposed in order to defeat the production and selling of their wines (Scott, 1964).

¹²⁴ The earliest Italian rural settlement in New Zealand dated from 1875 when a group of Italian immigrants came through the Vogel immigration scheme and took part in the Jackson's Bay special settlement in South Westland. However, due to various factors the settlement failed (it lasted from 1875-1879) and they did not manage to establish long lasting economic activities (Yap, 1982). Also, between 1880 and 1905 a small number of Italians were involved in dairy farming in Lyell, Westland (Burnley, 1972; Morris, 1973).

¹²⁵ Two Italian market garden settlements in Nelson and the Hutt Valley were the result of chain migration. The Nelson settlement was formed by the immigrants from Potenza and Massalubrense and Sorrento (South and Central Italy), while migration chains from the provinces of Treviso, Vicenza, Belluno, Udine and Pistoia (North Italy) developed market gardening at the Taita-Avalon location in the Hutt Valley (Lochore, 1951)

tomatoes as the major crop¹²⁶. By the 1970s the main settlement of Italian market gardeners in New Zealand (Hutt Valley), experienced a significant decline (Yap, 1982).

The Italian rural settlement at The Wood suburb in Nelson was established between 1900 and 1920. The Italian family enterprises were small, one to three acres in size, and specialised in tomato growing. By the late 1950s there were 37 acres of market garden owned by Italians (Burnley, 1972). The settlement in the Hutt Valley, established around the same time¹²⁷, was much larger and less specialised. Burnley (1972) estimated that in 1941 there were 480 acres of market gardening land in the Hutt Valley, of which 200 acres were Italian owned. However, by the late 1960s less than 30 acres of Italian owned market gardens remained (Yap, 1982)¹²⁸.

Thus, the succeeding QCA considers the empirical evidence relevant for the two Italian rural settlements in New Zealand and refers to the period of the first six to seven decades of this century.

Host hostility (HH). Following the earlier introduced modifications in coding of this variable, the trait for cultural distance assigned to the Italians is 'some cultural distance', referring to the period from the late 1890s to the 1970s. Similarly to the Dalmatians, Italian immigrants were also subjected to some legislative restrictions relating to the occupational sphere. In 1940, the Government imposed special restrictions on Italian fishermen and placed severe restrictions on businesses owned by Italians¹²⁹. However, these measures were temporary and effective only during the wartime.

Collectivistic cultural endowments (CCE). Existing studies on Italian peasant society before emigration to New Zealand, provided accounts of the existence of collective solidarity and collaboration. Sources on cultural aspects of peasant society, particularly in Central and North Italy, documented the tradition of mutual aid, solidarity and the existence of an extensive

¹²⁶ In 1968, 12 percent of tomato growers in New Zealand were Italians (Yap, 1982).

¹²⁷ In the history of Italian migration to the Wellington region, Elenio (1995, p. 35) referred to Thomas Pescini as the first known Italian market gardener in the Hutt Valley. Other early Italian gardeners were the families of F. Borra, F. Ferreti and F. Mazzola, who started market gardening between 1906-1912. Today, some streets in the Hutt Valley are named after early Italian market gardeners-Barsi, DeMenech, Ferreti.

¹²⁸ The decline of the Italian settlement in the Hutt Valley was due mainly to the establishment of a housing development by the Government. In the early 1990s there were few growers of Italian origin still active in the Hutt Valley (Elenio, 1995). In the late 1960s the settlement in Nelson was still stable (Burnley, 1972). This study did not locate any sources on the development of the Italian community in Nelson after that time.

¹²⁹ Elenio (1995) listed restrictions imposed specially on the Italian fishermen during World War Two, such as the introduction of a system of identification for Italians and the checking of Italian fishing boats in Island Bay, Napier and Auckland. Italian fishermen were also not allowed closer than about half a mile from Wellington, and they had to keep a log of their operations. In an overview of the history of the Nelson region, McAloon (1997) mentioned some official actions taken against Italian immigrants in Nelson.

sharecropping family¹³⁰.

Referring to the culture of the North and Central Italian provinces in the second half of the nineteenth century, Putnam (1993) emphasised the tradition of community solidarity, which was embedded in mutual aid societies, cooperatives, and trade guilds. In rural settings, the presence of a sense of community and in-group solidarity was evident through an institution of sharecropping families, and continuous mutual aid and exchange of services between neighbours. Sharecropping families “in fact developed a rich networks of exchanges and mutual aid. Typical of these was *aiutarella*, the exchange of labour between families at crucial moments in the agricultural calendar, such as at threshing time.” (*Ibidem*, 142-143). Fukuyama (1995) also mentioned sharecropping families as cultural assets of Italian rural societies. The sharecropping families lived as a group on the land they farmed and worked as a unit and commonly owned property, tools and animals. The head of an extensive sharecropping family was, in fact, a legal representative of the family who had the power to sign up the contract with the landowner.

Fukuyama (1995) further argued that the extended sharecropping families in Northern and Central Italy constituted cohesive socio-economic units very much like the Chinese peasant households. He implied that there were obvious parallels between Italian and Chinese culture, and even referred to the Italian cultural tradition as Italian Confucianism. The notion of Italian Confucianism, as conceptualised by Fukuyama (1995), assumes the existence of *familism*, that is, family integrity, subordination of individuals to family as a one’s only source of economic and social security.

Familism remained strong throughout Italy and, for instance, Gans (1982) referred to some empirical sources which reported the existence of the extended family and strong family ties around the turn of the century in Southern Italy. The extended family “...provided mutual aid and companionship under the leadership of a family head, who was chosen informally from among the adult men, and who maintained the family honour, supervised disputes, and administrated inter-household aid” (*Ibidem*, p. 200). To be correct, both Gans and Putnam also referred to other studies, which noted the lack of community organization and civic activity in a

¹³⁰ Although Italy has been a unified nation state since the 1850s, it is also characterised by regionalism, since there are marked variations in many aspects of historical, social and economic factors between the regions. Thus, cultural aspects of the traditional Italian peasant society are presented, taking into account exclusively the provinces where the migration chains originated from. Apart from two migration chains which came from Potenza and Sorrento, all Italian market gardeners in New Zealand came or originated from the provinces in Central and Northern Italy.

Southern Italian village¹³¹. However, general cross-cultural research regarded Southern Italian culture as collectivistic, and in the words of Triandis (1994, p. 41), “Individualism is very high in the United States and generally the English-speaking countries.....Collectivism can be found in parts of Europe (e.g., Southern Italy, rural Greece) and much of Africa, Asia, and Latin America”.

Finally, in analysing Italian migration chains to New Zealand, Burnley (1972) argued that the Italian migrants came from a culture where family and kinship bonds were strong, stronger than in most Western European societies. The extended family existed in areas where the migration chains originated from, and was compounded with strong village identity and provincial solidarity.

The above empirical accounts may be translated into the descriptive characteristics of the I/C construct. Collectivistic endowments as analysed in the context of traditional Italian peasant society indicated the key elements of collectivism, such as family integrity, the tradition of mutual aid societies and cooperatives, collective welfare and cooperation. Thus, the culture tradition of Italians involved in New Zealand market gardening may be considered as collectivistic, and accordingly the code for the (CCE) variable is ‘present’¹³².

Ethnic business networks (EBN). Available empirical evidence does not indicate that the Italian market gardeners formed ethnic business networks. Family orientation in the business was apparent, but business solidarity and practice of mutual support did not develop beyond the extensive family. Basically, there was no recognition of the kinship bond and ethnical connections in the business.

In the history of the Hutt Valley settlement Elenio (1995) documented how social and economic obligations and responsibility among the Italian market gardeners were strictly related to the family circle. Although extended families existed, they were spread over many different farms rather than remaining within a single dwelling place. Burnley (1972) was the only reference that

¹³¹ Empirical research, as reviewed in Putnam (1993) and Gans (1982) documented that within Southern Italian society individuals were tightly subordinated to families and indeed have little identity outside their families. Such strong *familialism*, however, was compounded with an absence of community assistance and solidarity, and, in fact, relatives and close family were the only source of in-group life and mutual aid.

¹³² It should be noted there is a discrepancy between Hofstede’s index of individualism and the above noted features of the cultural tradition of Italian market gardeners. Hofstede (1984) considered Italian culture as highly individualistic since the estimated index of individualism was 76. Empirical sources consulted in this study documented a noticeable collectivistic orientation within Italian rural society during the second half of the nineteenth century. These empirical sources referred to the culture in particular regions of Italy - the source areas of migration stream to New Zealand. Thus, it may be argued that such descriptive aspects of the Italian cultural tradition have primacy over the numeric, country-level index of individualism.

mentioned the existence of strong kinship networks within Italian rural settlements in New Zealand. However, it was more in terms of social relations than economic interconnectedness, and the author also referred to the apparent economic individualism (*Ibidem*, p. 71). According to the recollections of informants - Italian market gardeners - as provided by Burnley (1972) the family was the central point of socio-economic life. Cooperation in business and involvement within in-group activities outside family ties was rather limited. Concerning business connections there was no orientation towards the collective interests of the community, and unlike the Asian business communities there was no business networking beyond the families.

Two Italian market garden settlements in Nelson and the Hutt Valley were the results of chain migration¹³³. Lochore (1951), Burnley (1972), and recently Elenio (1995), documented that Italian market gardeners grouped themselves in terms of kinship connections and the village of origin. Similarly to Dalmatians wine makers there was a noticeable separateness between migration chains within Italian market gardeners. An absence of intermarriage between migration chains and the presence of rivalry between the families were also documented (Lochore, 1951; McGill, 1982). Thus, it is not possible to talk about the cohesiveness of the Italian market gardeners and constant in-group orientation in the business. Available empirical sources do not show the existence of any structures for the mobilisation and distribution of resources or informal mutual aid societies, as it was documented in the case of Chinese and Indian markets gardeners.

Similarly to the Dalmatian wine makers, Italian market gardeners played a prominent part in the affairs of the professional associations such as the Hutt Valley Producers' Association formed in 1921 (Elenio, 1995). The Association mainly assisted its members¹³⁴ by buying and selling goods used in market gardening. The Association stopped with these activities in 1925, and then resumed in January 1928 mainly due to the engagement of some Italian market gardeners, such as J. Pescini, for instance. The objectives were again strictly professional such as to provide packing cases, manure, insecticides, spray pumps – basically anything the market gardeners needed. Membership was not conditioned by ethnicity and was opened to those whose income was derived “directly and indirectly from the sale of produce grown or produced on land owned or occupied by him” (*Ibidem*, p. 40)¹³⁵. In 1937 and 1938 the association expressed strong

¹³³ Burnley (1976) also identified distinctive chains of Italian migrants settled as market gardeners in Australia. Between 1920s and 1950s they formed well-known settlements in Fremantle (Perth) and at the urban-rural fringes of Sydney and Melbourne. During the same time migrant chains from Northern Italy formed the winemaking colony in Asti, California (Saloutos, 1975).

¹³⁴ Elenio (1995) mentioned the following Italian market gardeners - F. Ferreti, Justin and Mazzini Pescini, and Frank Mazzola – as important for the establishment of the Association.

¹³⁵ As may be seen from the from page of the *Hutt Valley Producers' Journal* – the official organ of the Association, the president and the vice president of the Association were Italian market gardeners (F. Ferreti and M. Pescini), while members of executive committee were non-Italians (Elenio, 1995, p.39).

concerns about the actions of the Government which wanted to take land in the Hutt Valley for the housing purposes. The market gardeners organised protest meetings and visited W. Nash, the Minister of Finance, in order to protect the farming land from the housing development. However, some changes took place in the Hutt Valley, and it was reflected in the activity of the Association. Because of the declining number of growers the Association stopped selling fertilisers in the mid 1960s, and finally dissolved in 1984. What is important from the point of view of this study is that the Hutt Valley Producers' Association was not ethnically bounded, but clearly a professional association of the market gardeners in the particular locality.

Recalling the comments about an apparent family orientation within the Dalmatian winegrowers it may be added here that Italian market gardeners followed the same pattern. In the case of both groups there was the evidence of family solidarity in the business. However, the existence of community solidarity in the business and ethnic business networks was not documented.

The absence of the ethnic business networks within the Italian market gardeners occurs within the following causal configuration:

Period	Cultural distance	CCE	EBN
1900s-1960/70s	Some	Present	Absent

Unlike Chinese and Indian market gardeners the presence of Italians in the New Zealand market gardening industry was not associated with any particular protest from the local business groups. In fact, there is one piece of evidence from the early 1940s in letters to the editor of the local newspaper, where the Italian gardeners were criticised by consumers because of high prices (Elenio, 1995, p. 40). However, these negative attitudes are incomparable to the intensity of the anti-Asian protests articulated within the local market gardening community.

5.3.4 Conclusion

The South European ethnic groups involved in New Zealand agriculture have displayed a distinctive ethnic business strategy. Their immigration in New Zealand, and their residential and occupational segmentation was largely sustained by a mode of chain migration. Chain migration contributed to the establishment of a few settlements of Dalmatian-owned vineyards and Italian market gardeners. Both Dalmatian and Italian immigrants came from rural societies with strong collective solidarity and a tradition of mutual aid. Thus, they possessed cultural endowments which may have facilitated the formation of an economic collectivistic mechanism. However, they did not form social structures within the community for mobilising and distributing resources. In contrast to the Asians involved in New Zealand agriculture, South Europeans did not form ethnically homogenous business networks based on trust and reciprocity. Family

loyalty and solidarity were recognised amongst the Dalmatian wine makers and Italian market gardeners. Those forms of solidarity in business, however, were not extended to the community level, and the absence of in-group orientations in business was an important feature of both ethnic groups in New Zealand agriculture. Finally, the empirical evidence does not indicate that the presence of the South Europeans in winemaking and market gardening during the first six to seven decades of this century caused protests within host business groups.

5.4 North, West, and Central Europeans

5.4.1 Introduction

This section analyses other continental European immigrant groups that became involved in New Zealand agriculture, namely Scandinavians, Germans, Dutch and some minor groups: French, Polish and Bohemians. Although immigrants from these countries came to New Zealand during different historical periods, they were all included in government-assisted schemes designed for selected non-British European immigrant groups. The immigrants from Scandinavia, Germany and Poland arrived during the last decades of the nineteenth century, mainly through the Wakefield and Vogel schemes for organised and systematic immigration in New Zealand¹³⁶. The French were part of the general colonisation of the South Island and formed a small colony at Akaroa, while Bohemians were clustered within a distinct religious settlement at Puhoi (north of Auckland). Dutch settlers were brought in through an immigration agreement with the Netherlands Government, and they remain the only post-war migration group which entered New Zealand agriculture in substantial numbers.

¹³⁶ German immigration to New Zealand started as part of the New Zealand Company colonization of Nelson and the Wakefield immigration scheme of the 1840s. During the 1870s, Germans also played an important role in the establishment of Special Settlements throughout the country (Yap, 1982; Burnley, 1970). During the 1870s Sir Julius Vogel promoted an active policy of development, funded by government loans and aimed at building infrastructure that would open up farming and stimulate agricultural output. Part of Vogel's scheme involved the establishment of Special Settlements or clusters of colonists located in remote and usually bushed areas, and who were expected to take part in public works. Special settlements consisted of a limited number of immigrant families, placed in specific locations with land set apart for them to buy on deferred payment. The idea behind such settlements was, in the first instance, to provide labour for public works, and to build local infrastructures, and thus encourage development of particular areas. Between 1870-1876, around 3,500 Scandinavians were brought in to open up the Seventy Mile Bush region in the lower North Island (Petersen, 1956). The Polish immigrants were part of general settlement programs, settling in particular localities, along with the other immigrant groups who came through the Vogel schemes, mainly Germans and Scandinavians.

5.4.2 The Scandinavian Dairy Farmers

The Scandinavians¹³⁷ were closely associated with the early development of the dairy industry in the lower North Island. They entered New Zealand agriculture through assisted immigration plans and were located in special settlements. After initial bush clearing, coupled with subsistence farming, they obtained land through a deferred-payment scheme¹³⁸ and became involved in the dairy industry (especially the Danes). The bush farming period took place during the 1870s, while a succeeding period of stabilised agricultural production within Scandinavian rural communities lasted until the 1920s¹³⁹. However, Scandinavian farmers did not tend to remain in agriculture and during late 1920s a number of these farmers moved away from the initial rural settlements¹⁴⁰. By the 1930s, exclusive rural Scandinavian settlements disappeared.

Scandinavian immigrants were mainly placed at the Seventy Mile Bush,¹⁴¹ in the southern Hawke's Bay and Manawatu district. There were six Scandinavian settlements established at those locations during the 1870s-Dannevirke, Norsewood, Makaretu, Matamau, Mauriceville, and Eketahuna (formerly Melleskov). The strongest and most compact settlement of Scandinavians was Mauriceville (Petersen, 1956).

Mauriceville was also was a site of the first dairy factory established by the Scandinavian settlers. In 1889, seven Danish immigrants¹⁴² launched the 'Mauriceville Dairy Company Limited' with the objective of manufacturing butter and cheese and, as Petersen (1956) noted,

¹³⁷ The notion 'Scandinavians' refers to the immigrants from the North European countries: Sweden, Norway and Denmark. Immigrants from Finland are not discussed here since they did not enter New Zealand agriculture. However, they made a noteworthy contribution to the development of the forestry industry in New Zealand, as can be seen in a review of the book on Finnish settlers in New Zealand (Trlin, 1997).

¹³⁸ Under the deferred-payment scheme every family of Scandinavian settlers was granted forty acres of bush land but without land title since they had to purchase it. The terms of purchase were that the price would be one pound per acre, payable by instalments spread over three years, and no payments were required during the first two years. Settlers were also expected to build a house, clear up the bush and plant at least five acres of land (Grigg, 1973; Lyng, 1939; Yap, 1982; Bagnall, 1976). Hence, farming within Scandinavian rural settlements was complementary to bush clearing and road construction.

¹³⁹ When the bush areas were cleared and public works contracts completed, Scandinavians turned their main effort towards farming. It was expected that dairy farming would provide a stable means of livelihood. As comprehensive accounts of the Scandinavians in New Zealand dairy industry given by Lyng (1939) showed, Scandinavian farmers during the late 1890s were able to keep a large number of cows, and they produced a large quantity of the butter. Moreover, the Scandinavian demonstrated a notable risk taking behaviour as they mortgaged the land and borrowed for investments in order to make improvements on their farms.

¹⁴⁰ The decline of Scandinavian rural settlements in New Zealand can be observed through changes in Scandinavian religious congregations. As accounts provided by Lyng (1939) showed, there were fifteen Lutheran churches in 1896, ten in 1926 and in 1938 the Scandinavian Lutheran church virtually came to an end in New Zealand.

¹⁴¹ The Seventy Mile Bush was the land along the road from Wellington to Napier, and included the area from Makaretu on the north to the Scandinavian Camp near Masterton (See maps in Petersen, 1956, p. 24, and Lyng, 1939, p.166).

¹⁴² Petersen (1956, p. 122) listed the following family names of the first share holders in the Mauriceville dairy factory and in fact founders of the local dairy industry-W. Jessen, G. Gundersen, L.A.Schou, P.C. Madsen, J.P. Petersen, J.Andersen and J.Jessen.

this would become an important centre of the local dairy industry. Later on, in 1891, Pastor H. M. Ries, a Danish immigrant, initiated the establishment of the first butter and cheese factory at Norsewood (Lyng, 1939)¹⁴³.

Thus, the history of the Scandinavians involved in New Zealand agriculture may be described as a transition from initial bush farming towards the establishment of dairy farms in particular localities in the North Island. The following QCA of the Scandinavians dairy farmers covers the period between the 1880s and the 1920s/1930s. Within that period, Scandinavians have persisted as self-employed farmers and dairying was the dominant occupation within the Scandinavian rural settlements.

Host Hostility/Cultural Distance. As has already been pointed out, in section 5.2 while introducing the changes in coding of this variable, the Scandinavians are assigned the code 'no cultural distance'. Clearly, Scandinavian immigration took place within a framework of receptive government policy and noticeably positive social reception. The Scandinavians were considered as culturally similar to the host population and therefore were seen as appropriate immigrants for taking part in the assisted immigration schemes of the 1870s¹⁴⁴. Apart from the sources on general immigration policy (McKinnon, 1996), such references could be found in studies dealing with the social history of Scandinavians in New Zealand, such as a detailed work by Lyng (1939), and the study on attitudes to Scandinavian immigration in the second half of the 1870s (Grigg, 1973). Scandinavians were also favourably compared with Chinese immigrants in a debate on Asian immigration in New Zealand during the last decades of the nineteenth century (Hall, 1929).

Collectivistic cultural endowments (CCE). While it was possible to locate empirical sources that provided accounts of societal reception of the Scandinavian immigrants in New Zealand, there is an apparent lack of research on the cultural tradition they brought with them. This problem may be overcome by using overseas sources which elaborate the cultural tradition of the Scandinavian-origin farmers who settled in the U.S. during the late nineteenth century. For instance, Pedersen (1951) noted in his study of the Danish dairy farmers in central Wisconsin, that they valued independence and individual freedom very highly. The Danish settlers in

¹⁴³ A history of the Mauriceville dairy factory as presented by Petersen (1956), and earlier by Lyng (1939), showed that there were initial problems with finance and insufficient supply of milk. In order to overcome the problems in supply Scandinavian farmers purchased additional cows, and from 1900 the company increased its area of supply and introduced some technical improvements.

¹⁴⁴ The concept of the assisted scheme rested on the premise that the groups who are similar to the majority population will assimilate quickly. It is an often-repeated fact that all groups that came through the Vogel scheme were naturalised within a year after arriving (Lochore, 1951; Brooking and Robel, 1995). The relevant point is also made by McKinnon (1996, p. 16) who, while commenting on the assimilation within the Scandinavians in New Zealand, pointed out that "What is remarkable, however, is the ease and rapidity with which that assimilation took place".

general demonstrated loyalty to immediate family, self-reliance, and self-orientation. Pedersen did not record that Scandinavian (Danish) farmers brought with them distinctive cultural traditions that were collectivistic in nature. Thus, it is reasonable to argue that the cultural traditions of Scandinavian-origin farmer overseas are individualist. Finally, it should be added that cross-cultural research has clearly considered Scandinavian culture as highly individualistic (Triandis et al. 1998, p. 276)¹⁴⁵.

Accordingly, the cultural endowments of the Scandinavian farmers in New Zealand may be regarded as individualistic, and hence the proposed code for CCE is 'absent'.

Ethnic business networks (EBN). Available empirical evidence does not indicate that the Scandinavians formed ethnic business networks, in the sense that this concept is defined in the thesis. There was no evidence of intra-group solidarity in business or an identifiable social structure of support within the communities of Scandinavian dairy farmers. Accordingly, the code for the outcome variable - ethnic business network - is 'absent'.

Nevertheless, there are some points that need to be clarified here. As some empirical accounts showed (Petersen, 1956; Lyng, 1939; Warr, 1988), solidarity and cooperative work did exist within Scandinavian rural settlements during the first years of establishment. For instance, Petersen (1956) argued that family solidarity and neighbourhood were recognised among the Scandinavians: "The fight for establishment and existence was a family affair in which all joined. The loyalty of the family group and the cooperation of neighbours was an important factor in the progress of the settlement" (*Ibidem*, p. 63). It may be said that cooperative groups efforts and mutual help were common features of the bush settlements and in fact essential for their survival (Warr, 1988)¹⁴⁶. Finally, according to Lyng (1939), probably the most detailed account on Scandinavian rural settlements in New Zealand¹⁴⁷, the isolation of the settlements fostered a spirit of self-reliance and of mutual help. The isolation of the settlements and harsh physical conditions might have enforced some type of community work. However, the above issues are not relevant for the coding procedure in the research since QCA deals with the period after initial struggles for survival and opening of the settlements, that is after the 1880s.

¹⁴⁵ Hofstede's empirically derived individualism index (IDV) for the Scandinavian societies is higher than 50, and varies from 75 for Danish to 68 for the Norwegian culture (Hofstede, 1984).

¹⁴⁶ Warr (1988) provides a detailed explanation on the development of the dairy industry out of bush settlements in the North Island during the last decades of the nineteenth century.

¹⁴⁷ Lyng's study of the influx of Scandinavian to New Zealand, was founded on notes collected during a period of forty-four years. The study provides rather voluminous accounts of the Scandinavian dairy farmers.

What is also important for this QCA is that the empirical evidence on the Scandinavian dairy farmers, referring to the period 1880s-1920s, does not indicate the presence of intra-group solidarity in the business. Although cooperative work and neighbour support during the early stage of the development was recorded, they cannot be considered as positive indicators of existence of a stable social structure for the mobilisation and distribution of resources within Scandinavian farming communities. A question arises here of how to treat the involvement of the Scandinavian farmers in dairy cooperatives. The formation of the Mauriceville dairy factory and dairy cooperatives was typical for the dairy industry in general of that time¹⁴⁸. Definitely, these associations, essential for the early development of the dairy industry were not instances of ethnic resource mobilisation. They were classical forms of commercial bodies formed to overcome a lack of capital resources needed for the development of the industry.

To sum up, empirical evidence did not record ethnic solidarity in business or any specific social structure of support within Scandinavian farming communities in New Zealand. In contrast to the Chinese and Indian immigrants who were involved at approximately the same time, Scandinavian dairy farmers did not form ethnic business networks. Cooperation and mutual assistance might have existed in the early years of settlement but what is important is the fact that there were no indications of ethnically-based actions in mobilisation of the resources.

The absence of ethnic business networks among the Scandinavian dairy farmers occurred within supportive societal contexts and the absence of a collectivistic cultural tradition, as outlined below:

Period	Cultural distance	CCE	EBN
1880s-1920s	None	Absent	Absent

¹⁴⁸ The establishment of the Mauriceville dairy factory was one of the examples of developing dairy co-operatives in New Zealand during the 1880s. As Warr (1988) has stated, cooperatives in the New Zealand dairy industry were evident and of a growing importance during the 1890s. In 1894, nearly 40 percent of dairy factories were co-operatively owned, while in 1906 it was 60 percent.

5.4.3 The German Crop Farmers and Growers

The German immigrants¹⁴⁹ involved in New Zealand agriculture came through the organized settlements of the 1840s, followed by a sporadic migration in the 1850s and the 1860s. The German settlers also arrived through immigration schemes of the 1870s. The North Germany Lutheran Mission facilitated the early migration streams and promoted an organised German immigration to Nelson. The immigration streams of the 1870s tended to be engaged on public works schemes and the establishment of rural settlements. Generally speaking, a substantial influx of German immigrants to New Zealand ceased before the First World War (Burnley, 1973).

Among German rural settlements in New Zealand, Nelson holds a special place as the first and the biggest settlement, which is still recognisable in the sense of the impact German immigrants had in shaping local farming and landscape. The immigrants arrived in 1843 and 1844, and after initial periods of struggle, particularly caused by flooding¹⁵⁰, they established the German villages of 'St. Paulidorf', Sarau, Ranzau (now Upper Moutere and Hope), Neudorf, and Rosental¹⁵¹. Apart from a short-lived settlement of St. Paulidorf, all four settlements developed into compact, distinctive farming communities, with the Lutheran church being a central place

¹⁴⁹ A point should be made here in regard of the origin of the German settlers in New Zealand. This thesis follows Lochore's (1951) approach and discusses separately three immigrant groups who originally came from the German Confederation, and who spoke German at the time of arrival. These were the Germans, Polish and Bohemians. The German immigrants to New Zealand came mainly from the Protestant North German areas of Hanover, Prussia, Brandenburg, Mecklenburg and Saxony. Two other German-speaking groups, Bohemians and Polish, are considered in this thesis as separate ethnic groups since they meet the defining characteristics of ethnic groups as outlined at the beginning of the thesis. Thus, both Bohemian and Polish immigrants had a common cultural tradition, distinctive yet unified religious beliefs, and a particularly strong sense of common historical origin. As noted in *The New Zealand Times* (7 July 1917, cited in Silk, 1923, p. 177) Prime Minister Massey made a clear distinction between the Bohemians and the Germans, and explained their contribution to New Zealand. It should be added that I.H. Burnley, considered as one of the most cited authorities on continental European settlements in nineteenth century New Zealand, in his study on German immigration to New Zealand (Burnley, 1973) does not discuss Bohemians under the category of German immigration. Regarding the immigrants who came from German Poland (Prussia) – that is the area around Danzig, and Posen - they "undoubtedly regarded themselves as Poles" (Lochore, 1951, p. 60). Finally, overseas sources on ethnicity in agriculture, such as Saloutos (1976) and Yoder (1997) discussed Bohemians and Polish immigrants separately, and not within a frame of German immigration.

¹⁵⁰ As McAloon (1997, p. 37) noted in a regional history of Nelson "The Germans could hardly have picked a worse time to emigrate to Nelson". The first groups of German settlers who arrived in the 1840s experienced a rather difficult time at the beginning, caused by mismanagement of the Nelson settlement, inappropriate representation, problems in land settlements as some sections were not suitable for cultivation, insufficient number of sections, lack of capital, and natural disasters.

¹⁵¹ The first groups of German immigrants settled in the lower Moutere Valley and established a village called 'St. Paulidorf'. Because of flooding that settlement was abandoned and the majority of the initial settlers, together with immigrants who arrived in 1844 moved to the Waimea Plain and established a village called of Ranzau, later renamed Hope. The third settlement, known as Sarau, was established in the 1850s in the Upper Moutere valley. German settlement in the Nelson region developed further during the 1860s with the founding of a new settlement, Neudorf, close to Upper Moutere. Rosental was established in 1869 by the Rose family who were later joined by the Stade, Nagel, Evers, and Schildhauer families (Allan, 1965; Bade, 1993). The Dencker and Syboth families founded the Neudorf settlement and later on the Bosselman, Sixtus, Ducker, Ewers, Beuke and Siggelkow families joined them (Allan, 1965; Bade, 1993, Briars and Leith, 1994; McMurtry, 1992; Bensemann, 1995; Heine, 1994).

of the communities (Briars and Leith, 1994; Bade, 1993; Burnley, 1973; Yap, 1982).

The German settlers of Nelson started cultivating arable farm crops, such as barley, oats, and wheat¹⁵² as soon as 1845. After initial subsistence agriculture,¹⁵³ they turned towards tobacco and hop growing, with subsidiary sheep and dairy farming. German settlers also established orchards. In 1849, they had over a hundred fruit trees, which included, as noted by Allan (1965, p.339), the usual North German fruits, together with walnuts, figs, lemons, oranges, and grapes. Tobacco growing started at Ranzau from the 1880s and by the early 1900s German settlers became involved in hop growing¹⁵⁴.

Apart from the Nelson area, other German rural settlements in the South Island were established at Oxford, Waimate, and around Geraldine and Gore¹⁵⁵. Germans settled at Oxford during the 1870s as part of the Government public works scheme. They acquired smallholdings grouped along particular bush line tracks, and farming - cultivating grains and potatoes (Hawkins, 1957) - was sporadic in the principally saw milling community. In Otago, Germans took part in forest clearing and railway construction, and they settled mainly at Waiholo on the Taieri Plains, where around 100 German families were farming in 1886. German sheep and crop farmers settled around Gore in the 1870/1880s¹⁵⁶. In South Canterbury, German settlers were present in the Waimate district from the 1860s where they moved into sheep and mixed crop farming (Bade, 1993a; Burnley, 1973)¹⁵⁷ and near Geraldine, where they became mixed crop and livestock farmers.

German immigration to the North Island began in the 1860s with the formation of the Pukepapa

¹⁵² There were accounts dated from September 1845 concerning barley selling at the German colony at Ranzau (as cited in Allan, 1965, p. 337). Also, Pastor Heine who was revisiting Nelson German settlements between 1845-49 reported the successful cultivation of vegetables (*Ibidem*).

¹⁵³ As McAloon (1997) argued, within Nelson German settlements there were a few farmers who had more or less substantial holdings and many more smallholders combining subsistence farming with other labour activities. However, after arrival, many of the German settlers bought a block of land, and it is believed that the majority of them had increased the size of their original holdings (Clark, 1949). As was noted in the history of the settlers of central Moutere (McMurtry, 1993), the small size of their holdings forced diverse farming patterns upon the settlers.

¹⁵⁴ The Kellings brothers of Ranzau were the first to turn to hop growing (Briars and Leith, 1994). Numerous empirical sources (Briars and Leith, 1994; Allan, 1965; Bade, 1993) on the Nelson German settlements pointed to the Kellings brothers as the most prosperous German farmers. Apart from cultivating hops, they also grew tobacco, grapes and fruit trees.

¹⁵⁵ German immigrants were also associated with settlements at Jackson's Bay and in Banks Peninsula. Germans were part of the Jackson's Bay Special Settlement and they were settled together with Scandinavians, Italian, Polish, Irish, English, and Scots immigrants. The settlement lasted only for a few years (1875-1877), immigrants then moving to other localities throughout the country (Yap, 1982). In 1840, a few German immigrants arrived in Canterbury as part of the French settlement in Akaroa and they settled at Takamatua Bay, formerly German Bay (Bade, 1993a).

¹⁵⁶ Family names associated with early development of Germantown near Gore were Bucholz, Voigt, Lietze, Regefske, Duvolofske and Klucofske (Morris, 1993).

¹⁵⁷ Bade (1993a) and Burnley (1973) referred to the following family names associated with the German settlement in the Waimate area: Werges, Schrader, Engelbrecht, Ruddenklau, Rickmann and Kuegler.

Group Settlement, near Marton. Later (1872-1886), Germans who came as part of the Vogel public works scheme were located in the Taranaki and Waiarapa regions. The settlers were engaged in building infrastructure and as subsidiary activity they cultivated potato and cereal crops. During that time small clusters of German farms were established at Inglewood, Midhurst, Halcombe and near Carterton and Masterton (Burnley, 1973).

The German rural settlements listed above, and the Nelson settlements in particular, had a strong religious tone. It may be said that the Lutheran church coloured all German rural settlements and remained the focal point of community life. The vigour of the Lutheran church was one of the factors which promoted a cohesiveness of rural German settlements in New Zealand. German settlers were committed to the establishment of farm communities with a centralised and stable church affiliation. For instance, Pastor Heine, who in 1849 wrote about the religious behaviour of the Germans at Ranzau, noted that they formed communities according to the regulations of the Lutheran Church (McMurtry, 1992, p. 96). In addition, recollections of the religious life within the Sarau settlements¹⁵⁸ offer accounts of the church as having a dominant influence in the life of the early settlers, and in preserving German culture.

Thus, German immigrants established ethnic rural settlements throughout New Zealand during the late nineteenth century. These settlements took the pattern of German-like villages with a notable role played by the Lutheran church. In general, the German rural settlements diminished and gradually came to an end by the 1920s¹⁵⁹.

This section now proceeds with analysing empirical evidence of the German immigrants using the QCA approach.

Host Hostility/Cultural Distance. Clearly, German as well as Scandinavian immigrants were received by receptive government policy and an apparent positive social reception¹⁶⁰. Thus,

¹⁵⁸ Contained in the interviews with the descendants of the early German settlers, including interviews with A. Heine (3491, 1994/11/1), F. Bensemann, (3492, 1995/8/17), N. Perry (3493, 1995/8/18). Interviews were part of the Sarau (Upper Moutere) Oral History Project and kept at the Alexander Turnbull Library, Wellington.

¹⁵⁹ However, in the Upper Moutere, some descendants of the original settlers retained the original properties until the 1950s and 1960s. According to the field survey done by Burnley in 1962, 85 percent of the original German holdings were still occupied by third, fourth or fifth generation descendants (Burnley, 1973). This means that descendants of the German farmers can claim to be on centennial farms, which are defined as farms owned by the lineal descendants of ancestors who initially owned the farms for at least one hundred years (Foster et al. 1987, p. 367).

¹⁶⁰ There were relatively short periods of anti-German feeling at the outbreak of the First World War and during the late 1930s. In 1914 there was a certain amount of public pressure on the German community to declare their patriotism to the British Government. As a result, a number of German place names were changed and some families anglicised their surnames to avoid being labelled as Germans descendants (Graham, 1992, 1992a; interviews with A. Heine, F. Bensemann, and N. Perry - The Sarau (Upper Moutere) Oral History Project). These temporary periods of public hostility are not relevant for the QCA because they occurred outside the time frame.

following the same principles in coding this variable, German immigrant groups would be assigned the code 'no cultural distance'.

The attitude of the New Zealand Government towards German immigration in general was quite supportive and favourable. For instance, the cordial atmosphere surrounding their arrival was illustrated in the local press. The *Nelson Examiner* reported in 1843: "No emigrants are more valuable than the Germans" (Allan, 1965, p. 314). Also, Germans as prospective immigrants were portrayed quite positively in the Appendix to the Journal of the House of Representatives of 1862, and as cited in Schmidt (1933, p.41), the Government expressed its willingness to encourage an influx of Germans into New Zealand. As Lochore (1951) and Yap (1982) noted, referring to the early German settlers, they became assimilated quite quickly. This was, after all, a major reason for Germans being given preference over other Continental groups, as it was considered that the relative closeness of their language and culture to the British would enable them to assimilate easily¹⁶¹.

Collectivistic cultural endowments (CCE). As with the Scandinavian dairy farmers, empirical sources on the cultural endowments of German origin farmers are rather limited. In fact, there are few sources describing the maintenance of cultural traditions within German rural settlements, and how immigrants created a 'little Germany' at many localities throughout New Zealand. There are also accounts of religious attachment within these settlements, and to some extent, references to the characteristic German bond of land and family¹⁶². However, the empirical sources mentioned above do not offer much in terms of the individualism versus collectivism cultural dimension. What empirical evidence does disclose are some defining characteristics of individualism, such as loyalty to immediate family and economic individualism.

In addition, current cross-cultural research (Kim, 1994) considered German society as highly individualistic¹⁶³, arguing that individualism emanated from the philosophy of liberalism and the Protestant ethic. Unlike the Chinese cultural tradition where Confucianism glorifies collectivism, Western European liberalism embraces economic individualism as a prime principle. Following the same logic and relying primarily on cross-cultural research and available sources, it is argued that the cultural endowments of the German-origin farmers fall

¹⁶¹ It should be added that the Government took action in order to uphold the assimilation of German immigrants and helped those German immigrants who intended to take up British citizenship. From the 1840s the first naturalisation Acts were passed by the Government to enable German settlers to buy land Yap (1982).

¹⁶² An extensive ethnographic work by Solomon (1984, 1985, 1993) on German farming communities in the Midwest (US) produced accounts of apparent land attachment and persistence of a distinctive, culturally derived inheritance patterns within the farming families of German origin.

¹⁶³ Individualism index (IDV) for the German society is higher than 50, and scores 66 (Hofstede, 1984).

under the category of individualism, and hence the code of the CCE is 'absent'.

Ethnic business networks (EBN). Apart from family orientation and mutual appreciation of neighbours' help, the empirical evidence does not suggest the existence of an ethnically-based structure for the mobilisation of resources amongst the German farming families. In terms of organising economic life it may be said that the Germans relied on the nuclear family. For instance, empirical accounts, some of which are recently presented and quite detailed, such as the Sarau (Upper Moutere) Oral History Project or a historical analysis of the Moutere German settlers (McMurtry, 1992), documented family orientation to business. Similarly, as with the Scandinavian farming communities, a certain type of mutual help has existed in the early German settlements, mainly caused by geographical isolation and natural disasters. However, there were no accounts of a lasting general community spirit which materialised in the economic adjustment of the German settlers. Nor are there indications of the integration of the economy along ethnic lines or distinctive, ethnically-bounded systems of mutual help and support. Thus, the code proposed for EBN variable is 'absent'.

Thus, available empirical evidence on this comparative case as discussed using the QCA approach yields the following causal configuration – a row in the truth table:

Period	Cultural distance	CCE	EBN
1850s-1920s	None	Absent	Absent

The following two comparative case studies cover the other German speaking immigrants-Bohemians involved in the dairy industry at Puhoi, and Poles who settled in a few localities throughout the country, and best known for their involvement in the New Zealand onion industry.

5.4.4 The Bohemian Dairy Farmers

Between 1863 and 1872 small groups of mixed German and Czech-speaking Catholics from Bohemia¹⁶⁴, settled in Puhoi, thirty miles north of Auckland. The Bohemians established a small farming community that survived as a distinctive ethnic rural enclave until after World War Two (Williams, 1981, 1993).

The Bohemians came as assisted immigrants during the Vogel period sponsored by the New Zealand Government, and similar to other continental European groups, they were offered land

¹⁶⁴ Bohemians in New Zealand mainly originated from a place called Staab, eighty kilometres south-west of Prague. In the 1860s Bohemia was a province of the Austro-Hungarian Empire (Haworth and Gasteinger, 1994; Williams, 1993).

in exchange for bush clearing and road construction¹⁶⁵. In the first decade of settlement they managed to clear the forest and after initial subsistence, mixed crop farming, the Bohemians later turned towards dairy production. The history of the settlement as presented in Schmidt (1933) and Mooney (1963) showed that the Puhoi settlement had made remarkable progress during the 1870s and the 1880s¹⁶⁶. The rise of the dairy industry began in 1910 when Bohemian dairy farmers significantly increased butter and cheese production, and the opening of the local dairy factory¹⁶⁷ further supported such a development. A rapid growth of dairy farming at Puhoi was recorded between 1910 and 1925, while the diversification of economic activity and entrance into non-farming activity followed afterwards, particularly during the 1980s (Williams, 1981, 1993)¹⁶⁸.

Bohemian immigrants established an ethnically homogenous and largely isolated settlement, united by their strong Roman Catholic beliefs. Religious factors have figured more prominently within Bohemians than any other groups discussed in this study¹⁶⁹. The stable Catholic Church at Puhoi maintained a strong authoritarian hold on Bohemian farming families. Religious factors were crucial in achieving cohesiveness, community spirit and cooperation within Bohemian farmers. Religion as a principal factor in the shaping of the Puhoi settlement was emphasised by both earlier (Silk, 1923; Schmidt, 1933)¹⁷⁰ and recent authors (Haworth and Gasteinger, 1994). These authors also elaborated, and agreed, that the isolation of Puhoi, religious affiliation and commitment, piety and preservation of the faith among Bohemian farmers formed an exclusive

¹⁶⁵The details of the Bohemian settlement as outlined in Schmidt (1933, p. 43) were that the proposed scheme entitled each immigrant to receive twenty acres of land, and every child aged between five and eighteen would receive twenty acres as well. There were some conditions to be complied with, and the most important was that settlers reside continually on their allotments for five years. Within ten years they had to pay two pounds an acre for their land, and after that they would receive ownership. Schmidt (1933) and Mooney (1963) referred to the following names of the early Bohemian settlers: the Bayer, Rauner, Schischka, Straka Turnwald, Wenzlick, Schollum and Dudelsack families.

¹⁶⁶ According to the accounts provided in Schmidt (1933, p. 78), in 1869 there were six hundred acres of land under cultivation, and each Bohemian family had at least five or six cows. In 1871 there were 1,200 acres of grass and crops, while in 1883 the Puhoi community reached over an area of 3,000 acres (Schmidt, 1933, 78). This was remarkable progress considering the small population of Puhoi—around four hundred in the late 1880s (Silk, 1923, p. 69). Rev. Father D. V. Silk (1923) referred to the impression of Puhoi in 1876, 15 years after the initial settlement, where descriptive accounts showed the improvement of the farming community at Puhoi in terms of both economic activity and social life—education and church. The next account dating from 1914 (Silk, 1923, p. 174) also showed prosperity of the Puhoi community where the dairy industry became the main activity.

¹⁶⁷Refers to the opening of Glynn Dairy factory near Puhoi in 1910 (Mooney, 1963). A year earlier, Bohemian immigrants tried to establish a cooperative dairy company at Puhoi, but were unsuccessful in that attempt (*Ibidem*).

¹⁶⁸ It should be noted here that Puhoi Valley Cheese Company, nowadays synonymous with the production of speciality cheeses such as quark, camembert, fetta, and brie, has no connections with the early involvement of Bohemian farmers in the local dairy industry. The company was established in 1982, and it was entirely an endeavour of a single entrepreneur, L. Darroch (Rewi and Nicholas, 1995).

¹⁶⁹ Puhoi settlement has been also referred to as an 'a purely Catholic settlement' (Silk, 1923, p. 200).

¹⁷⁰ In History of Puhoi, the Rev. Father D. V. Silk (Silk, 1923, p. 27) had written that Bohemians "came to New Zealand strong adherents to the Faith, and that Faith they tenaciously retained, unsullied and unstained...".

religious settlement¹⁷¹.

Following this line of thought, it may be said that the farming community of Bohemians at Puhoi approached the concept of a rural religious enclave (Sommers and Napier, 1993; Driedger, 1995; Paterson, 1989). As rural religious enclaves are not relevant for this QCA, it is proposed to exclude a case study of Bohemian dairy farmers from a historical-comparative analysis of ethnic groups in New Zealand agriculture, and the building of the Boolean truth table. Being noticeable in terms of folklore and the prosperity they achieved, the Bohemian dairy community of Puhoi has been reviewed here nevertheless.

5.4.5 The Polish Dairy Farmers and Onion Growers

A relatively small influx of Polish immigrants to rural localities in New Zealand occurred from the 1870s to the 1920s. The Polish immigrants were initially part of general settlement programs, and settled in particular localities along with the other immigrant groups who came through the Vogel schemes, mainly Germans and Scandinavians. However, in contrast to other groups, the Polish rural settlements developed throughout the country - on the Taieri plains (Allanton and Waihola), in Canterbury (Marshlands), Taranaki (Inglewood and Midhurst), and Halcombe (Burnley, 1970; Bade, 1993a).

In the South Island a number of Polish families came to work on public works schemes and settled mainly on the Taieri plains. On completion of their contracts with the government they obtained plots of land on deferred payment schemes, and they became mainly involved in dairying and market gardening. During the late 1870s the Allanton (old Greytown) and Waihola localities (south of Dunedin), were the most notable Polish rural settlements¹⁷² According to data provided by Burnley (1973), in 1878 over ten percent of the population at Allanton was of Polish ethnicity. Also during the 1870s and increasingly during the 1880s a small cluster of Polish immigrants settled at Marshlands, northwest of Christchurch. They obtained land on deferred-payment schemes, and began to cultivate and drain the land. After an initial period of semi-subsistence cropping, the settlers turned to market gardening and eventually became well known as onion growers. In a history of the South Island by Clark (1949) and in some newer sources (Bade, 1993a; McGill, 1982), Polish immigrants were recognised for their contribution

¹⁷¹ Brooking and Robel (1995) regarded the Puhoi settlement as one of the few religiously united rural settlements which remained isolated until recently. Together with the Bohemians of Puhoi they listed the Nova Scotian Scots of Waipu, the Ulster Protestants of Katikati, and the Irish Catholics of Wrey's Bush in Southland (*Ibidem*, p. 35).

¹⁷² In the history of Allanton, Shaw and Farrant (1949, p. 99) listed the following family names of Polish settlers who were involved in farming during the 1870s and the 1880s - Kovaleski, Smolenski, Beleski, Gorinski, Pedofski, Swatalli, Rubal and Jung. Referring to the same period Morris (1993, p. 74) mentioned some Polish farming families who settled in Waihola - Orłowski, Plewa, Dowalowski, Jankowski, Rekowski, etc.

to the onion industry in New Zealand¹⁷³.

In the North Island, the most significant Polish settlements were around Inglewood, Midhurst, and at Halcombe (Burnley, 1970). Polish immigrants obtained land on a deferred payment scheme, and after initial period of arable farming, they turned to dairying¹⁷⁴. It is considered that the Poles, together with other immigrant groups, pioneered the dairying industry in Taranaki, and they were particularly associated with the overall development of Inglewood (Yap, 1982)¹⁷⁵.

Thus, the involvement of the Poles in New Zealand is particularly associated with the development of the dairy and onion industries. Polish rural settlements emerged through assisted schemes of the mid 1870s and basically persisted up to the 1920s (Burnley, 1970). What then can be said, if anything, about Polish immigrants within the framework of this QCA?

Host Hostility (HH). Being a part, although a minor one, of the general assisted immigrant scheme of the mid 1870s, the Poles experienced positive social and government reception and were treated as a culturally similar and hence an assimilable ethnic group. Thus, the trait for the cultural distance for the Poles, as to the other assisted European groups, is 'none' referring to the period from the mid 1870s to the 1920s.

Collectivistic cultural endowments (CCE). Empirical sources on the cultural tradition of the Polish farmers in New Zealand are very limited and therefore do not permit an appropriate discussion on cultural endowments here. There are, however, accounts of the strong religious orientation among the Polish immigrants to retain their Roman Catholic faith and continue some religious celebrations common to Polish peasant society of the late nineteenth century (Yap, 1982; Burnley, 1970). However, in the course of this empirical research, no sources were located which would provide information appropriate for an elaboration of the individualism /collectivism construct as encompassed within the Polish culture. At this point it has been decided to attach a question mark, instead of the code, since no assignment is possible, due to the lack of appropriate empirical evidence.

¹⁷³ The most noticeable and lasting influence of the Poles in New Zealand agriculture was in the onion industry, and in Clark's words "it is for their superb onion crops that they are famous today" (Clark, 1949 p. 148). The Marshlands onions became distributed throughout New Zealand and also exported to Australia (Bade, 1993a). Polish onion growers who established onion growing in the Marshlands were the Bolaski, Rogal, Shimanski, Gottermeyer, and Kresanowki (Clark, 1949; Bade, 1993a).

¹⁷⁴ The establishment of rural Polish communities overseas followed similar patterns. As Saloutos (1976) noted, the Polish rural communities formed in Minnesota, Dakota and the Great Lakes during the mid 1880s were settled mostly by immigrants who first worked in the local industries (railway construction, saw milling) before they became farm owners.

¹⁷⁵ Yap (1982, p. 204) listed twenty-four Polish families of Taranaki who were landowners in 1882. The farm size of Polish landowners varied between 50-166 acres and the biggest farms belonged to the Drozdowski, Fabish, Uhlenberg, and Neustrowski families.

Ethnic business networks (EBN). There is little research that deals specifically with the economic activity of Polish farmers. What may be drawn from the available evidence (Yap, 1982; Burnley, 1970) is that the Polish farmers who settled on the Taieri plains did not display any kind of intra-group solidarity in business. Unlike the Chinese market gardeners who settled at the same locality during the same period of the late 1870s and the 1880s, Polish farming families were nucleated with no sign of interconnectedness in business being recorded. In general, rural Poles in New Zealand remained within nucleated farm holdings (Burnley, 1970, 1973), and these holdings were not grouped and did not occur in compact blocks as in the Bohemian settlement at Puhoi, the German settlement in the Moutere Valley, or even Chinese market gardeners in the Auckland area.

Considering these points in the context of comparative research, which is at the core of QCA, it is possible to assign the code 'absent' to the (EBN) variable. However, it is necessary to acknowledge that the empirical evidence is rather sketchy and weakly supports such coding. To acknowledge these limitations this code will be placed in parentheses¹⁷⁶ as shown below:

Period	Cultural distance	CCE	EBN
mid 1870s - 1920s	None	?	(Absent)

Therefore, in carrying out a comparative case study of Polish immigrants who entered New Zealand agriculture, it was not possible to derive a complete row as a building block of the truth table.

5.4.6 The French Grape Growers and Wine Makers

French immigrants, together with Lebanese and Dalmatians, played a prominent role in the early development of viticulture in New Zealand (Moran, 1958). French involvement in this industry is associated with two ethnic settlements - Akaroa in the South Island and missionary vineyards in Hawke's Bay.

The French settlement at Akaroa¹⁷⁷ began in August 1840 when sixty-three immigrants were brought in through the *Nanto-Bordelaise* Company - the French New Zealand Company. The

¹⁷⁶To repeat here, the question mark alone indicates the absolute absence of the evidence for the coding, while parentheses are used to indicate coding that is only weakly indicated by the evidence.

¹⁷⁷ The Akaroa settlement was planned as part of a French expansion into the Pacific and a colonization of the South Island. The French settlers arrived in 1840 in order to annex the South Island to France, but in the meantime the British government had proclaimed sovereignty over the whole of New Zealand. The chronology of the political plans and activities of immigration companies appointed to carry out the first shipment of French settlers to Akaroa are explained in Tremewan (1990a, pp. 62-67), and Hight and Straubel (1957, pp. 58-75).

settlers¹⁷⁸ were given five acres of land per adult man provided it was cleared within five years. Three allotments of the land were allocated for immigrants and as Hight and Straubel (1957, p. 76) noted, "Allotments were laid out for them to the west of the stream where they had landed, in what is now known as the French town. As enough open land on the foreshore could not be found for all, the six Germans were allotted sections on the next bay to the west, now known as Takamatua but until 1915 called German Bay. The land to the east of the landing place was set up for British settlers..."

The French settlers brought with them vegetable seeds, young fruit trees such as apples, pears, nuts, and vine cuttings. Tremewan (1990) provides accounts that show the French had cleared an acre of the land per family within three months of their arrival and soon planted vegetables and started grape-growing¹⁷⁹. Empirical evidence from 1842, as presented in Hight and Straubel (1957, p. 78) also suggests success in agricultural production carried out by the French immigrants. As Jacobson (1940) and recently Tremewan (1990) noted most of the immigrants were able to make more than a subsistence living from their five acres, supplying visiting whaling ships-until the mid-1840s - with some French settlers even managing to accumulate capital and to buy more land from the company¹⁸⁰. In addition to the vegetables produced by the immigrants, Captain Lavaud, a French naval commander in charge of the settlement, established 'French Farm', in order to supply the French navy stationed at Akaroa. Eventually, 'French Farm' also became important in providing the seeds and plants for the local French farmers (Jacobson, 1940).

Soon after arrival French immigrants established the first vineyards in Akaroa. There is evidence dated from September 1842, which states that: "The French at once started to prepare their gardens, and to grow grapes, some of them developing this branch of horticulture in a high degree of efficiency, making excellent wine therefrom" (Buick, 1928, p. 206). An account from 1872, as presented by Pawson (1987, p. 45), noted "the cottages of the French settlers, each with their little vineyard dotting the hillside". Later on, in 1895, Romeo Bragato described the vineyards of the French settlers in Akaroa and gave an affirmative opinion concerning the state and quality of the wine produced there (Scott, 1964; Thorpy, 1971). However, in the *Report on*

¹⁷⁸ Although planned as an exclusively French settlement, Akaroa has not been an entirely French ethnic settlement since other immigrant groups took part in its development from the early stages. Together with French immigrants, there was a group of Germans, who settled separately at a nearby location (Hight and Straubel, 1957). The presence of British settlers in Akaroa became more visible from 1842-43 (Tremewan, 1990; Pawson, 1987)

¹⁷⁹ Agricultural production by French settlers is briefly described in Buick (1928) and Jacobson (1940), while Tremewan (1990, pp. 179-183) has provided the most detailed accounts of types and quantity of the production in the early days of the Akaroa settlement.

¹⁸⁰ Tremewan (1990, p.198) lists the family names of the early Akaroa settlers who bought more land, in addition to the five acres originally allocated. Some of the French farmers who acquired more land between 1842 and 1845 were the Benoit, Lelièvre, Gendrot and Lemonnier families.

the Prospects of Viticulture in New Zealand 1895, Bragato also expressed concerns about continuity of wine growing in Akaroa, noting that “ It would seem that the pioneer French settlers of Akaroa failed to communicate to their offspring even a small percentage of that enthusiasm over the cultivation of the wine which they were in such a large measure possessed of,...” (cited in Thorpy, 1971, p. 24). The vineyards in Akaroa established in the early 1840s became neglected at the end of century (Cooper, 1988), and in 1919 some reports indicated that there was no commercial production of wine at Akaroa (Scott, 1964).

Generally speaking, the prosperity of the French settlement lasted until the mid 1840s. Empirical accounts provided in Hight and Straubel (1957, p. 84), dated from February 1846, documented how French settlement in Akaroa started to decline. After abandonment of the French naval station at Akaroa in 1846 and ending of the whaling industry in 1848, the local economy struggled to survive¹⁸¹. Additional constraints facing the development of Akaroa were the noticeable physical isolation of the settlement at that time, lack of infrastructure and the uncertainty of the future of the French settlement in the light of the newly imposed British sovereignty (Tremewan, 1990, 1990a). Apart from the general stagnation and even demise of agriculture activities amongst the French settlers, the Akaroa settlement also lost its ethnic dimension after the 1850s. Initially planned to be a ‘fossil fragment of old France’ (Scott, 1964, p. 23), French Akaroa became gradually more British in terms of administration and the dominance of the British settlers¹⁸².

Apart from a short-lived settlement in Akaroa, the Mission Vineyards in Hawke's Bay were another area of French involvement in grape growing and winemaking in New Zealand. French Marist Brothers¹⁸³ started grape growing at different localities in Hawke's Bay such as Pakowhai, Meeanee and at Greenmeadows (Thorpy, 1971; King, 1997). These vineyards were in fact planted within mission outposts in the North Island, and were used for producing sacramental wines (Cooper, 1988). The vineyards erected by the French Marists were moved a

¹⁸¹ The *Lyttelton Times*, of November 18, 1854, published a markedly pessimistic report concerning the decline of the French settlement at Akaroa:

“The French settlers built pretty houses, plated vineyards and flower gardens, and lived chiefly upon the expenditure of the government establishment, assisted by whaling vessels frequenting the harbour. Akaroa was a large restaurant for the South Sea whalers...But times changed. The French government finding their political views defeated, withdrew their support from the place, the *Nanto-Bordelaise Cie.* transferred its interest to other lands. The whales deserted the coast; the whaling stations were abandoned to the rats; and the whaling ships ceased to frequent the harbour. No more money came to Akaroa. There was no extent of cultivated land, no market for produce, no articles of export. Some of the settlers returned to France, some died, others went to the diggings, none came to supply their place,...houses became deserted, rotten, ruined; the land was allowed to go out of cultivation:...” (Clark, 1949, pp.64-65).

¹⁸²In the early 1850s most of French settlers became naturalized British subjects (Hight and Straubel, 1957; Tremewan, 1990a). Also, during that time the inhabitants of so called French Town and German Town at Akaroa became integrated into a dominant British settlement (Tremewan, 1990).

¹⁸³ Marists brothers are members of the Society of Mary, a French religious congregation appointed to carry the Catholic mission to the Pacific (O'Meeghan, 1992).

few times because of the flooding, the best known one being the present Mission vineyard at Greenmeadows in Hawke's Bay. This missionary vineyard, established in the early 1900s, is regarded as the oldest vineyard in New Zealand to have remained under the same management, and it is still owned by The Society of Mary. This has been officially recognized by the attaching a plaque at the site with the inscription 'New Zealand's Oldest Established Winemakers. Established 1851 in Hawke's Bay' (McGill, 1982, p. 21).

It is considered that the missionary vineyards had a big influence on the industry in the local area and even served as a model vineyard for the local growers (Thophy, 1971; Scott, 1964; McGill, 1982). For instance, while the vineyards were at Meeanee, a locality near Napier, it was reported that "The name and fame of the Marist Fathers is being quoted on all sides as successful labourers in the vineyard" (*The New Zealand Farmer* of April 1894, p. 128). The same source also acknowledged the success of the Mission in growing grapes and fruits. Missionary wines from the same locality won a silver medal at the Paris Exhibition in 1892. Finally, when Romeo Bragato visited the Meeanee missionary vineyards in 1895, he pointed out that the wine produced there was of outstanding quality (Scott, 1964).

Although French settlers made a significant impact on the early development of the winemaking industry at particular localities in New Zealand, they are not discussed in the context of this QCA. Reasons for this are the short term existence of Akaroa as an ethnic settlement, and the narrow focus of the Mission vineyards in Hawke's Bay since they were established as part of missionary posts and hence not primarily business oriented.

While still elaborating on the nineteenth century European immigration to New Zealand, it is worthwhile mentioning two minor ethnic groups that also entered agricultural production - the Hungarians and the Swiss. A few Hungarian families took up dairying and potato growing at Tuatapere in the Southland (Lochore, 1951; McGill, 1982). The Swiss, who came through the same assisted immigration schemes as Scandinavians and Germans, were involved in the dairy industry in Taranaki. They were particularly associated with the dairy and cheese making industry in Eltham as well as in Patea, Hawera and Stratford (Stoffel, 1993). Both groups assimilated into the host society rather quickly and their movement into the rural areas of New Zealand ceased completely before the First World War (Lochore, 1951).

Assisted immigration schemes were resumed after the Second World War, when a significant number of Dutch immigrants entered New Zealand agriculture.

5.4.7 The Dutch Horticulturalists and Dairy Farmers

The Dutch are “virtually the only recent immigrants to have taken up agricultural occupations in appreciable numbers” (van Roon, 1971, p. i). Dutch immigrants enriched New Zealand agriculture in many aspects, but particularly in the terms of innovations, they brought in¹⁸⁴.

Dutch immigrants were extensively sponsored under the New Zealand immigration policy of the 1950s. They began arriving from the 1950s, and the peaks in migration flows occurred in the periods 1958-1961 and 1980-81¹⁸⁵. The Dutch, unlike other immigrant groups, are not clustered in particular geographical locations and hence did not establish visible ethnic settlements. In terms of residential distribution, they have spread throughout the country and have established a settlement pattern remarkably similar to that of the host population (Thomson, 1967, 1970; Alexander, 1972). Dutch immigrants have also shown a preference towards settling down in rural areas, and a high level of occupational and residential stability.

An affinity towards agriculture, as displayed amongst the Dutch immigrants after arriving in New Zealand, could be largely explained by two points: the high social standing of agriculture in the Netherlands, where farming was seen as a “dependable or solid occupation” (van Roon, 1971, p. 14), and a desire for self-employment. Agriculture, particularly the dairy industry in New Zealand, was found to be attractive because of the availability of an ‘agricultural ladder’ which allowed a relatively easy path to farm ownership, via sharemilking. Sharemilking systems¹⁸⁶ within the New Zealand dairy industry provided the Dutch immigrants with the ability to gain farm ownership, by starting as farm labours, and through 50/50 sharemilking arrangements to acquire their own dairy farm. As empirical research showed, the success of the Dutch in becoming dairy farm owners was evident. From 1946-1964 over 70 percent of the farmers of Dutch origin included in Thomson’s national survey¹⁸⁷ had gained farm ownership.

¹⁸⁴The list of innovations brought in by Dutch origin farmers includes: the import of bulbs and the establishment of the bulb industry in New Zealand (the Conijn and van Eeden families); new recipes for bakery (the Klissser family) and meat (the Verkerk family), and chocolate industry (van Heyningen). Dutch immigrants gradually improved domestic horticultural production, and for instance the ten Hove family developed the Royal Gala variety of apples. Van Echten, van der Bergs, Schouten, and Dykstras families made a considerable impact on an establishment of the poultry industry. The Rympas family of Loburn, near Christchurch was one of the first in New Zealand to begin making quark and buttermilk, known under a commercial trade mark of Karikaas (Schouten, 1992; McGill, 1982; van Dungen, 1992). Meyer Gouda Cheese and Mercer Cheese factory, considered as one of the most famous cheese factories in New Zealand (Rewi and Nicholson, 1995) were established and run by Dutch immigrants.

¹⁸⁵ Source: New Zealand. Department of Statistics (1952-71) *Population, Migration, Building.*; (1971-94) *Demographic Trends*. Department of Statistics Publications, Wellington.

¹⁸⁶ By the term ‘agricultural ladder’ is meant the process by which farm labourers can work in stages to farm ownership. The most common are the 29, 39 and 50 percent sharemilking contracts, and the intention is to set up a 50/50 system in the shortest possible time. In the case of the Dutch immigrants, many attained 50/50 sharemilking contracts within five to six years after arrival.

¹⁸⁷ Thomson (1970) carried out a relatively large survey of the Dutch immigrants in New Zealand (1,699 respondents), in order to gather information about immigrant occupational mobility and routes towards self-employment.

Progress to farm ownership was also noticed in van Roon's (1971) nation-wide survey¹⁸⁸ of Dutch immigrants in New Zealand agriculture. In 1970, the non-owners constituted a very small proportion (1.5 percent) of the total number of Dutch farmers included in that survey.

Dairying and horticulture attracted the largest number of the Dutch immigrants involved in agriculture - about 80 percent¹⁸⁹. Those involved in the dairy industry tended to be of farming background, to have farming experience before emigrating and a low level of education. Conversely, horticulturalists¹⁹⁰ tend to come from an urban background, to have a good education and enter the industry on a part-time basis, generally on very small properties. Nevertheless, both sub-groups of the Dutch immigrants in New Zealand agriculture showed the continuing influence of ethnic background in term of farming practice, particularly knowledge of glasshouse cropping, rotation, and flower cultivation.

Empirical evidence on the Dutch in New Zealand agriculture is now subjected to the QCA.

Host hostility/Cultural distance. Under the New Zealand immigration policy of the 1950s, Dutch immigrants were the most encouraged group to come and were extensively sponsored (Thomson, 1970; Yap, 1982). They were considered to be similar in culture to the host population and therefore more likely to assimilate quickly and effortlessly. Indeed they did assimilate rather fast and became the most blended-in group of immigrants in New Zealand (Thomson, 1970; McGill, 1982), and recently Schouten (1992) and van Dungen (1992) referred to the Dutch as 'the invisible immigrants'. Undoubtedly, both New Zealand government and society¹⁹¹ have favourable attitudes towards Dutch immigrants. Hence, the code for this variable will be 'none /irrelevant', where the second attribute refers to the post 1970s period of ending the assimilation oriented immigration policy in New Zealand.

Cultural collectivistic endowments (CCE). The Dutch have many strong cultural affinities of Western European liberalism, and as such their cultural tradition is deep-rooted in individualism (Kim et al. 1994). In addition, Hofstede (1984) classified the Netherlands as a very individualistic country, since scoring index of individualism (IDV) of 82. Hofstede's work on individualism as one dimension of cultural variations is more relevant for the Dutch than any

¹⁸⁸ van Roon (1971) carried out extensive research on the Dutch farmers in New Zealand, and so far this is the most comprehensive account of the involvement of an ethnic group in New Zealand agriculture. van Roon carried out a survey of 714 respondents, and she analysed in detail the distribution and characteristics of the farming population of Dutch origin.

¹⁸⁹ Similar to New Zealand, the Dutch immigrants in Tasmania largely entered horticulture and dairying (van Roon, 1971).

¹⁹⁰ Mainly involved in glasshouse cropping and cut flower production

¹⁹¹ It is worthwhile mentioning the results of survey on attitudes towards immigrants carried out during 1970 in the Auckland area (Trlin, 1979). According to that survey Dutch migrants were ranked high on a preference hierarchy for willingness to admit immigrants from a particular country.

other group included in this study. Chronologically, the immigration flow from the Netherlands to New Zealand was still active when Hofstede started collecting the data for his study on cultural consequences, that is, in the mid 1960s. Also, empirical research among the Dutch immigrants in New Zealand has demonstrated a low level of interdependence, the dominance of the nuclear family¹⁹², and the apparent individualism (Thornton, 1968)¹⁹³. There is, therefore, a solid ground for considering cultural tradition of the Dutch as fundamentally individualistic, and assigning the code 'absent' to this variable.

Ethnic business networks (EBN) Data analysis encountered compelling evidence for coding this variable as 'absent'. Available sources on Dutch farmers show their distinctive individualism and independence in business. No collective activity in terms of pooling and sharing resources was noticed among Dutch farmers. While in-group orientation was stronger and more effective among Asian business communities, it was apparently weak among immigrants from the Netherlands. The Dutch were not in-group oriented in either economic or social activities (Thornton, 1968). Progress to farm ownership has generally been based on little assistance from any source outside the family, or as Yap (1982, p. 186) noted Dutch immigrants had little in terms of established migrant community to draw upon for support. van Roon's survey is again valuable in this regard. She underlined the fact that less than a fifth (in fact 18 percent, *Ibidem*, p. 59) of the Dutch farmers interviewed stated that they had received some assistance from relatives or friends to acquire farm ownership. There are also sporadic cases of Dutch farming families (van Roon argued that it should be less than twelve, *Ibidem*, p. 58) who co-operated closely to become established as farmers, mainly by pooling income to establish one farm after another. This pattern of family aid was more common in dairying where for instance brothers would follow one another from the Netherlands and go straight into sharemilking with those already in New Zealand. However, no signs of an established system of in-group support were documented. Reliance only on the family members in mobilising labour or accumulating capital was also recorded in the New Zealand–Netherlands Foundation Oral History Project¹⁹⁴, and sporadically in the farming press¹⁹⁵.

¹⁹² For instance, in the Dunedin sample of the Dutch, Thornton (1968) found out that all the Dutch households were nuclear families.

¹⁹³ Thornton (1968, p. 84) summarised the socio-economic behaviour of the Dutch settlers in Dunedin, as 'the individual Dutchman'.

¹⁹⁴ An interview with van den Heuvel, a Dutch farmer, New Zealand–Netherlands Foundation Oral History Project (1993/1/27).

¹⁹⁵ Farming press provided valuable information on the Dutch farmers in New Zealand. For instance, there are newspapers articles on particular farming families of Dutch origin, which were published occasionally in *Dairy Exporter* and *New Zealand Farmer*. The articles outlined how individual Dutch families have progressed in New Zealand agriculture. Additionally, *Horticulture News* and *New Zealand Growing Today* illustrated farm businesses of the recent Dutch, and Western European immigrants in general, who mainly entered horticulture and also some new crop industries. Analysing the content of some articles (Dunn, 1995; Moore, 1992) it did not appear that, apart from nucleus family, there were any other sources of support within farming businesses of the ethnic origin.

Thus, the Dutch immigrants in New Zealand agriculture conform to the following configuration of causal conditions and outcome:

Period	Cultural distance	CCE	EBN
1950s-1990s	None/Irrelevant	Absent	Absent

5.4.8 Conclusion

Assisted migration schemes have been an important element of the social history of New Zealand in both nineteenth and twentieth centuries. Within all these schemes, an obvious preference was shown for the immigrants from the North and West Europe. They were considered culturally similar and therefore ranked as most favourable in terms of an ability to assimilate into the host society. Clearly, immigrant groups coming from those European regions faced receptive government policy and noticeably positive social receptions.

Immigrants from Scandinavia, Germany, France, Poland and Bohemia were located within group settlements and developed ethnically recognisable farming communities. Once the pioneering phase and bush farming ended, the immigrants became associated with the local development of agriculture. The ethnic rural settlements established contained clusters of farming families sharing common tradition, language and in particular, religion. Lutheranism was instrumental in the establishment and a relatively long survival of the German group settlements in Nelson, and to a lesser extent in the developing Scandinavian settlements in the North Island. Roman Catholicism was important among rural Polish in New Zealand and was the basic force in the development of French missionary vineyards in the North Island. However, the most compelling influence of religion in shaping rural communities was documented in the case of the Bohemian settlement at Puhoi.

While rural ethnic settlements of the nineteenth century were characterised by homogeneity, cultural preservation, and some degree of isolation, it was a markedly different pattern of settlement compared to that of post-war Dutch immigrants. The Dutch were dispersed throughout the country and they tended to remain nucleated in terms of economic activity and settlement.

QCA of six comparative case studies discussed as one cluster of the North, West, and Central Europeans, yielded only three complete rows as building blocks of the 'real' truth table. It was argued that a rural Catholic settlement of Puhoi, and short lived and missionary settlements of the French, since being rural religious enclaves, were not relevant for this research. The QCA also recognised some problems in coding the cultural tradition of the nineteenth century immigrants who came from traditional rural societies. In the absence of research dealing

specifically with the cultural traditions of the German and even so more for the Scandinavian-origin farmers in New Zealand, a solution was found in using overseas sources that elaborated on the same groups. When it was not possible to make an informed coding assessment, as in the case of the Polish farmers, it was decided to leave a question mark instead of the codes, as appropriate in QCA.

Three complete rows containing codes on causal conditions and outcomes were derived from the comparative case studies of the Scandinavian, German and Dutch immigrant groups. These groups corresponded to the same causal configurations, setting the same, qualitative score of absence on the outcome variable. Thus, originally coming from the individualistic cultural tradition and being considered as culturally similar to the host society, these groups did not display a salient in-group orientation in business, nor did they form social structures for the mobilisation and distributing resources.

5.5 Chapter Conclusions

This chapter systematically examined eleven comparative case studies of ethnic groups involved in New Zealand agriculture. The ethnic groups were discussed within three clusters. The analysis was restricted to the key variables included in an empirical assessment of the theoretical arguments as defined earlier in Chapters 2 and 4. The task was to assign qualitative 'presence/absence' scores on causal conditions and outcomes across all cases included. Hence, the focus was on detaching critical indicators and supporting evidence for coding the variables. In terms of sequences of the analysis, variables relating to the ethnic network hypothesis (T_1) are presented first, and after that, when it was appropriate, the conflict hypothesis (T_2) was discussed too.

Following the logic of QCA, the initial coding system and selection of the cases were taken as a starting point for a continued dialogue between theoretical arguments and empirical evidence. Thus, parentheses were used to indicate codes that are only weakly indicated by the evidence, and when the available data were insufficient in deciding upon the coding it was decided to put a question mark instead. In addition, when some problems arose in the coding, the data analysis was stopped in order to redefine variables, and then re-started. These refinements include changes in the coding of the host hostility variable that was replaced by a trichotomised attribute of the cultural distance. Such a proxy for the host hostility variable is considered rather pertinent to an empirical study on the different immigrant groups in New Zealand, since immigration policy ranked and clustered immigrants into three distinctive groups based on the concept of cultural distance between the host population and incoming immigrant group. These revisions and considerations, first notified while doing the comparative case study of the Chinese market

gardeners, are included in the QCA of the remaining comparative case studies. The refinements carried out in this chapter also include a revision of the cases initially selected.

As a result, this chapter derived different combinations of causal conditions and their associated outcome values as materialized within each of the individual case studies. These will become the rows of truth tables, which are constructed and discussed in the following chapter.

CHAPTER 6

RESULTS OF QUALITATIVE COMPARATIVE ANALYSIS

6.1 Introduction

This chapter integrates the eleven comparative case studies by collating rows of the truth tables which include causal and outcome variables across the cases analysed. The truth tables assembled will be used in the evaluation of the two hypotheses as derived from the composite model of ethnic entrepreneurship, and discussed earlier in Chapters 2 and 4. Apart from building truth tables, Chapter 6 performs, where it is applicable, Steps 5 - 10 of the QCA procedure.

6.2 Results of Qualitative Comparative Analysis: Truth Tables and Boolean Functions

Following the logic of QCA, results of the empirical research will be represented in a truth table. To repeat, a truth table is a data matrix of binary data that lists every causal configuration that appears in the data, along with their corresponding values for the outcome. These causal configurations are compared holistically and then logically simplified through Boolean minimisation. This step results in a logically minimal Boolean function. The final Boolean function derived from the empirically based truth table is then compared with a hypothesis expressed in Boolean terms.

The composite model of ethnic entrepreneurship, which is at the core of the theoretical considerations in the thesis, suggests two hypotheses – the ethnic social network hypothesis and the conflict hypothesis. Both hypotheses will be empirically evaluated in the next two sections, and presented in the same pattern. That is, each section commences by repeating the theoretical arguments, as introduced earlier in Chapter 2. After that, a final, empirically based truth table is presented. Following some alterations - where it was necessary - the tables are then simplified in order to derive the final minimal Boolean function. Boolean functions representing theoretical expectations and the functions derived from the real truth tables are compared. The point is to map the areas of agreement and disagreement between the theoretical arguments (T) and the results of minimisation of empirically derived truth tables (R).

6.2.1 The Ethnic Networks Hypothesis

As argued earlier in Chapter 2, the composite model of ethnic entrepreneurship holds that the existence of host hostility towards ethnic groups (HH) in conjunction with collectivistic cultural endowments (CCE) will generate stable ethnic structures within ethnic communities in business

(EBN). These theoretical expectations were later expressed in Boolean terms and included in the ethnic network hypothesis (T_1). The hypothesis (T_1) formulated as a Boolean function and introduced in Chapter 4 was:

$$(T_1) \text{ HH} \times \text{CCE} = \text{EBN} \quad (4.1)$$

These key variables were assessed within each of the eleven comparative case studies. In the course of empirical research some adjustments were made in conceptualization and coding of the (HH) variable and revision of the cases initially selected. The causal configurations as derived from empirical research then became rows in the truth table shown in Table 6.1. Table 6.1 presents a distribution of causal conditions and outcomes across the comparative case studies discussed in the preceding chapter. Every empirically identified combination of causal condition is laid out in the two middle columns of the truth table, followed by the outcome values in the last column.

Table 6.1. Qualitative Attributes of Causal Conditions and Outcome as Included in the Ethnic Network Hypothesis

Ethnic groups/period	Causal conditions		Outcome
	Host Hostility (HH)/ Cultural Distance(CD)	Collectivistic Cultural Endowments (CCE)	
Chinese (mid 1870-1970s)	Fundamental	Present	Present
Chinese (post 1970s)	None/Irrelevant	Present	Absent
Indians (1920s-1960/70s)	Fundamental	Present	Present
Indians (post 1970s)	None/Irrelevant	Present	Absent
Dalmatians (late 1890s-1960/70s)	Some	Present	Absent
Italians (1900s-1960/70s)	Some	Present	Absent
Dutch (1950s-1990s)	None/Irrelevant	Absent	Absent
Scandinavians (1880s-1920s)	None/Irrelevant	Absent	Absent
Germans (1840s-1920s)	None/Irrelevant	Absent	Absent
Polish (1870s-1920s)	None/Irrelevant	?	(Absent)

A brief inspection of the truth table reveals that there is only one incomplete row, derived from a comparative case study of the Polish farmers during the period from the 1870s to the 1920s. As was noted in introducing QCA, it is appropriate to assign ‘?’ instead of a code or to leave some codes in parentheses. After the entire analysis is completed it becomes feasible to code a particular variable in a comparative manner considering its value within the context of different cases.

The unresolved coding was caused by the total lack of, or limited, empirical evidence as in the case of coding cultural tradition and discussing stable ethnic structure within the Polish community. A comparative case study on the Polish farmers can be considered within the context of other cases and it now becomes possible to draw parallels with the nineteenth century immigrants who arrived in New Zealand from Central and West European rural societies. Considering, therefore, that the cultural background of Polish immigrants is closely related to that of the German culture, and which is individualistic, the code for CCE is most likely to be 'absent'. Following the same approach, the problem of limited evidence in coding the (EBN) variable may be overcome by considering this outcome variable within the context of the Asian business groups. These groups entered New Zealand agriculture at approximately the same time and in the same localities as the Polish farmers. Although the empirical evidence is limited, it can be considered within a context of other groups that the EBN in the case of the Polish farmers can be assigned as 'absent'.

Table 6.1 was constructed by using qualitative attributes of 'presence' and 'absence' of causal conditions and an outcome as derived from the empirical research. It is necessary therefore to use binary forms for the coding of variables in order to move on to the next step of Boolean minimization. Since the variable of cultural distance, introduced as a proxy for the (HH) variable, was trichotomised, the column of this causal variable is now extended to three columns, and each variable assigned 1 or 0. The causal variable may now be represented as a code of three columns in the truth tables as 111, 101, etc. It is important to note here that a similar approach, including a trichotomised attribute in the truth tables, was carried out in Ragin et al. (1984) and Griffin et al. (1991). Table 6.2 displays the alterations discussed above.

The transformed truth table now enables the two following steps in QCA to be performed - to address the possible problems of contradictions and limited diversity. Clearly, the empirically derived truth table does not encompass any contradictory rows, that is, cases with the same causal combinations and different outcomes. In performing QCA another requirement is to decide on how to evaluate logically possible but empirically non-existent causal combinations. To address this issue it is necessary to first derive all logically possible causal combinations and after that to compare them with the empirical ones. Such a data matrix where each row represents a logical combination of values on causal conditions and outcomes is presented in Table 6.3. Since QCA relies on Boolean logic, a number of causal conditions determine the number of combinations that are logically possible. Accordingly, the number of the rows in the truth tables is an exponential function of a number of causal conditions (2^n). After the variable of cultural distance was trichotomised, there will be four variables on the input side,

Table 6.2 Boolean Truth Table for the Ethnic Network Hypothesis

Ethnic groups/periods	Causal Conditions			Collectivistic Cultural Endowments (CCE)	Outcomes Ethnic Business Networks (EBN)
	Cultural Distance(CD)				
	FCD	SCD	NCD		
Chinese (mid 1870-1970s)	1	0	0	1	1
Chinese (post 1970s)	0	0	1	1	0
Indians (1920-1960/70s)	1	0	0	1	1
Indians (post 1970s)	0	0	1	1	0
Dalmatians (late 1890s-1960/70s)	0	1	0	1	0
Italians (1900s-1960/70s)	0	1	0	1	0
Scandinavians (1880s-1920s)	0	0	1	0	0
Germans (1840s-1920s)	0	0	1	0	0
Polish (1870s-1920s)	0	0	1	0	0
Dutch (1950s-1990s)	0	0	1	0	0

Note that (FCD) stands for fundamental cultural distance, (SCD) for some cultural distance, and (NCD) for no cultural distance.

and a data matrix yields sixteen logically possible combinations (Table 6.3).

Table 6.3. Data Matrix of Logically Possible Causal Combinations for the Ethnic Network Hypothesis

Row No.	Configuration of causal conditions				Outcome
	FCD	SCD	NCD	CCE	EBN
1	1	1	1	1	?
2	1	1	1	0	?
3	1	1	0	0	?
4	1	1	0	1	?
5	1	0	1	0	?
6	1	0	0	0	?
7	1	0	0	1	1
8	1	0	1	1	?
9	0	1	1	1	?
10	0	1	1	0	?
11	0	1	0	0	?
12	0	1	0	1	0
13	0	0	1	0	0
14	0	0	0	0	?
15	0	0	0	1	?
16	0	0	1	1	0

As illustrated above, every logically positive combination of causal conditions is laid out in the middle four columns of the data matrix, followed by the outcome values in the last column. A question mark in the outcome column denotes that a particular, logically possible configuration of causal conditions was not recorded within the empirical evidence. Although the data-matrix implies 16 possible combinations, only four appeared in the research setting of New Zealand. Empirically derived causal conditions, assigned a particular code for the outcome, are recorded in the rows 7 (Chinese and Indians until the 1960/70s), row 12 (Dalmatians and Italians), 13 (Scandinavians, Germans, Dutch and Polish), and row 16 (Chinese and Indians after the 1970s). Obviously, causal combinations lacking empirical instances are numerous and even outnumbered those found in the course of empirical research. This can place serious constraints on the testing of causal arguments, which is at the core of this QCA.

An important decision in performing QCA concerns the treatment of the logically possible combinations of causal conditions that were not documented by empirical evidence. QCA applications (Hicks et al. 1995; Amenta and Poulsen, 1996) have suggested two main ways to

treat these combinations. One is to assume that if cases with these characteristics existed they would be associated with Os and would not be among those groups that developed EBN. Thus, according to this reasoning, if a causal combination does not exist its absence may indicate that it involves a combination of conditions that would not lead towards the establishment of EBN. An alternative approach to the causal combinations is to assign them the same 'don't care' values and to drop them from the further analysis. Ragin (1987) even suggests employing both solutions and to select the one which produces the logically simpler solution of the truth table.

Taking into account a relatively big number of non-existing causal configurations in the context of this research it would be imprudent to assume that they would not have produced an outcome. The second main way to treat the logically possible but not empirically observed causal combination is to exclude these causal configurations from the truth table. This approach is considered plausible in the context of this research. Such a decision simply arises from the characteristics of the New Zealand immigration policy within the time frame discussed. Rudiments of that policy were expressed here in trichotomized attributes of the cultural distance, and as such can be regarded as mutually exclusive variables. Accepting this, it is possible to address the problem of limited diversity through two steps. The first step is to elaborate on those non-existing causal combinations which, taken as mutually exclusive variables, definitely cannot exist. Rows 1, 2, 3, 4, 5, 8, 9, 10, 14, 15 in the data matrix (Table 6.3) conform to this situation. For instance it is impossible to have a case with all three sub-variables present (row 1), two variables present (row 4), or absence of all of them (rows 14, 15). After eliminating these rows, only two causal conditions of nonexistent combinations remained feasible and these are the causal configuration in rows 6 and 11. The first causal combination (1 0 0 0) refers to a group which is considered to be fundamentally different from the host society in terms of the cultural background, but which at the same time does not retain any cultural tradition of collectivism. Obviously, such a situation was not likely to have empirically occurred within the context of New Zealand immigration policy, where ethnic groups with cultural background similar to the host society were favoured. The same applies to the second causal configuration, as presented in row 11 (0 1 0 0). This configuration, while logically possible, also creates some doubts about its viability. The existence of an immigrant group which could have been treated as South Europeans for instance, but without having a collectivistic tradition, is unlikely to occur.

The second step in addressing limited diversity - to elaborate on those causal configurations which, although logically possible, were not likely to empirically have occurred within a New Zealand context-shows that these causal combinations can be dropped. Accordingly Table 6.2 remains intact.

The process of Boolean minimization of the truth table (Table 6.2) requires that the cases conforming to the same causal configuration be grouped together into so-called primitive terms/equations¹⁹⁶. Table 6.4 presents the primitive terms for the cases included in the analysis, and show the distribution of explanatory conditions and the outcome. Evidently, there are only four causal configurations identified in the empirical research. It should be repeated here, that configurations appear only once in a truth table, regardless of their frequency of occurrence in the data.

Table 6.4 Primitive Terms for the Comparative Cases (R₁)

Configuration of causal conditions ¹⁹⁷				Outcome	Cases
FCD	SCD	NCD	CCE	EBN	
1	0	0	1	1	Chinese and Indians (until the 1970s)
0	0	1	1	0	Chinese and Indians (after the 1970s)
0	1	0	1	0	Dalmatians and Italians
0	0	1	0	0	Scandinavians, Germans, Polish and Dutch

Table 6.4 shows the existence of only one configuration of causal conditions (independent variables), which is linked with the occurrence of EBN¹⁹⁸. The row with a positive outcome, therefore, becomes the final, empirically derived Boolean equation (R₁) for the occurrence of ethnic business networks.

$$(R_1) \text{ FCD} \times \text{scd} \times \text{ncd} \times \text{CCE} = \text{EBN} \quad (6.1)$$

Obviously the presence of FCD assumes the absence of other two sub variables¹⁹⁹ and the Boolean function (6.1) may be simplified even further to:

$$(R_1) \text{ FCD} \times \text{CCE} = \text{EBN} \quad (6.2)$$

¹⁹⁶ See Appendix 2 on Boolean logic.

¹⁹⁷ Note that (FCD) stands for fundamental cultural distance, (SCD) for some cultural distance, and (NCD) for no cultural distance.

¹⁹⁸ In Ragin's view, an upper case letter indicates the presence of the attribute and a lower case letter indicates absence. Each variable is presented as a three letter code since there is a small number of variables included in the analysis.

¹⁹⁹ 'Some cultural distance' and 'no cultural distance', as materialised exclusively within the context of New Zealand immigration.

The empirical analysis has located one possible path to the formation of ethnic business networks. That is, groups who were ranked by the New Zealand immigration authorities as having fundamental, cultural distance and who possessed collectivistic cultural traditions established EBN. As expected, the presence of collectivistic cultural endowment was a necessary condition for occurrence of the positive outcome. The empirically derived Boolean function (6.2) also supports the hypothesised relations between social factors and the establishment of EBN. However, a problem arises in attempting to strictly calculate Boolean intersections between theoretically (4.1) and empirically derived (6.2) Boolean functions. Theoretical arguments as proposed in Chapter 2 and later transformed into Boolean terms in Chapter 4 before empirical research actually started, dealt with the concept of host hostility. The empirical research afterwards, introduced a trichotomized attribute of cultural distance, insisting on three distinct situations which groups can face.

At this point it is possible to contemplate a theoretical Boolean function which could encompass the concept of cultural distance. Logically assuming that any level of cultural distance would be considered as a necessary condition for the emergence of ethnic business networks, a slightly modified theoretical Boolean function, (T'_1) would be:

$$(T'_1) \quad (FCD + SCD) \times CCE = EBN \quad (6.5)$$

A comparison of the modified theoretical Boolean function (6.5) with the empirically derived Boolean equation (6.2) shows that they agree in that collectivistic cultural endowments constitute a necessary condition for the outcome. Apart from the cultural factors the area of agreement also includes social factors. However, while modified theoretical arguments expect that any level of cultural distance associated with a particular ethnic group would lead towards the outcome, the empirical research suggests that only those groups regarded and treated by the host population as being fundamentally different in terms of the cultural background, would develop ethnic business networks.

With regard to the negative outcomes, there are three causal configurations associated with the absence of EBN. Initial causal configurations laid out in columns one and three differ on one variable, and that is the presence/absence of collectivistic cultural endowments. Following the rule of Boolean minimisation²⁰⁰, this causal condition can be accepted as irrelevant and hence eliminated. A simple prime implicant chart for these configurations is presented in Table 6.5. This is as far as the minimization procedure can go.

²⁰⁰ As outlined in Appendix 2.

Table 6.5 Prime Implicant Chart for Negative Outcomes (0s)

Prime implicants	Initial causal configurations		
	0 0 1 1	0 1 0 1	0 0 1 0
0 0 1 -	x		x
0 1 0 1		x	

These two prime implicants can be rewritten as:

$$(r_1) \quad (fcd \times scd \times NCD) + (fcd \times SCD \times ncd \times CCE) = ebn \quad (6.6)$$

The above (r_1) is also the empirically derived Boolean equation for the absence of EBN²⁰¹. Applying the same logic as in the equation (6.2), and hence simplifying (r_1) by taking into account mutually exclusive variables, where the presence of one automatically includes the presence of others, resulting in the following Boolean function:

$$(r_1) \quad NCD + (SCD \times CCE) = ebn \quad (6.7)$$

Taken together the empirically observed cases of negative outcome (failed EBN) are described by the equation 6.7. The QCA locates two routes towards negative outcomes. The equation states simply that there are two combinations of conditions that result in an absence of networks within ethnic groups. In the first configuration, an absence of fundamental cultural distance is necessary and is a sufficient causal factor in failing to develop ethnic business networks. The second one, which is rather provocative, is that even the presence of SCD in conjunction with the presence of CCE is not enough to lead towards the EBN. Similarly to the Boolean function for the positive outcome, the Boolean function for the negative requires discussions to see if particular causal configurations make sense in relation to this empirical setting and existing literature on ethnic entrepreneurship.

In summary, this section started by listing the empirical evidence into a form of truth table with qualitative attributes assigned to all the variables included. After transforming these attributes into binary ones, solving the incomplete row of the truth table, addressing the problem of limited diversity within a frame of the mutually exclusive variable, it was possible to derive the minimal Boolean function for both positive and negative outcomes. The empirical research provided a support for the theoretical arguments by confirming both situational and cultural factors have been the principal causes of ethnic business networks.

²⁰¹ The application of De Morgan Law was considered to be unnecessary in this study. An intention was to derive the Boolean function for the negative outcome as based on the empirical evidence, not on the algebraic inverse of the function for the positive outcome.

6.2.2 The Conflict Hypothesis

The composite model of ethnic entrepreneurship, as introduced in Chapter 2, stresses two recursive effects of ethnic collectivistic actions responsible for causing conflicts (C) between ethnic entrepreneurs and the host population. The conflict hypothesis derived implies that conflicts (C) between ethnic entrepreneurs and the host population arise from fear that ethnic groups may represent an economic threat (ET) or over negative stereotyping of ethnic solidarity in business (ES^N). It was argued that the conflict hypothesis is qualitatively true if the relation postulated occurred within the absence of economic depression in the society. Hence, the conflict hypothesis (T_2) formulated as a Boolean function and introduced in Chapter 4 is:

$$(T_2) (ET + ES^N) \times ed = C \quad (4.3)$$

In order to test these theoretical arguments, empirical research intended firstly to identify the outcome - ethnic conflicts that took place in the history of ethnic business communities in New Zealand agriculture - and then to assess the causal conditions as proposed by the hypothesis. The empirical analysis elaborates three causal conditions - the presence of economic threat, negative stereotyping of ethnic solidarity, and economic depression as postulated to be causal conditions leading towards ethnic conflicts. Empirical research on ethnic conflicts as they have occurred in New Zealand agriculture²⁰² resulted in the simple Boolean truth tables shown in Table 6.6. Each line in the truth table represents a particular ethnic conflict between host business and ethnic business groups framed by locality and time boundaries.

Table 6.6 Qualitative 'Presence-Absence' Scores on Causal Conditions Included in the Conflict Hypothesis

Conflicts/Farming protests (C)	Economic threat (ET)	Negative perception of ethnic solidarity (ES^N)	Economic depression (ED)
Anti-Chinese protests 1878/1879	Present	(Present)	Present
Anti-Chinese protests of the early 1890s	Present	(Present)	Present
Anti-Asian protests of the mid 1920s-Pukekohe	Present	(Present)	Present

The above truth table also requires that the matters of the incomplete rows and limited diversity be addressed.

In coding each of the three farming protests involving Asian market gardeners it was noted that there were substantial problems in analysing negative perceptions of community solidarity as

²⁰² As a digression, the ethnic conflict hypothesis was not discussed within the third cluster analysed - North, Central, and Western groups. The empirical sources did not confirm an existence of a pronounced economic antagonism between these ethnic groups and the host business population.

they materialized within ethnic business communities. The point in the understanding and then coding this causal condition was to identify if there were any negative perceptions about cohesive ethnic groups in business, and whether they were derived as recursive effects of the existence of network-based economic mechanisms. However, in the course of analysing empirical sources on these particular ethnic conflicts, it was noted that negative perceptions of ethnic solidarity within the Asian business communities were present, but within general considerations of the Asian immigrants as culturally distinctive and therefore unassimilable. It was difficult to detect negative perceptions about cohesiveness of the Asian market gardening community in particular, since such perceptions were blended within the general anti-Asian feelings developed within the host population during particular historical periods. These feelings were sometimes further articulated within visible farming protest involving ethnic farmers (market gardeners in this case), and therefore became the indicators of the presence of the outcome (C) as well. Accordingly, there are problems with the conceptualising of this variable. Empirical research in the preceding chapter drew attention to the problem but did not offer any solution, as, for instance, was done in the case of replacing the HH variable with the concept of cultural distance. Having pointed out these problems, the negative stereotyping of ethnic solidarity in business (ES^N) is then coded as 'present' but within parentheses.

It seems that there are two solutions in solving the problems of incomplete rows in the truth tables. Admittedly both solutions are succinct. The first one is to eliminate this second causal variable included in the conflict hypothesis. The justification for such a solution is ingrained in the logic of QCA, where it is possible to manipulate the causal configurations within unclear rows in order to derive the function for the outcome that will certainly occur²⁰³. In that case, the final, empirically derived Boolean equation (R'_2) for the occurrence of ethnic conflicts is:

$$(R'_2) \quad ET \times ED = C \quad (6.8)$$

The second solution in dealing with the codes in parentheses is to simply remove them. A common sense solution could be to argue that since the negative perception of ethnic solidarity in business was in existence during certain periods of time, the code of 'present' can be assigned. Such coding was to some extent supported by the empirical evidence. In following this line of thought the empirical Boolean function would be:

$$(R''_2) \quad ET \times ES^N \times ED = C \quad (6.9)$$

²⁰³ Amenta and Poulsen (1996) provide a similar approach while delivering Boolean functions that encompass the causal combinations for which the outcome is certain.

Nevertheless, the above considerations on how to provide accurate coding of the causal variables became less important when taking into account the problem of limited diversity. It is obvious that the diversity of empirically derived causal configurations is extremely limited here. Table 6.4 shows that only one configuration of causal conditions (independent variables) was identified in the empirical research and linked with the occurrence of ethnic conflicts between the host business population and the Asian business community. A data matrix of logically possible causal combinations for the ethnic conflict hypothesis would encompass eight rows (2^n where $n = 3$), having only one causal combination to be empirically found. Clearly, it would be pointless to elaborate on such a data matrix, since any speculations about the non-existing causal configuration would be too strong, bearing in mind the number of logically possible combinations which do not have empirical references.

What can be drawn from the rather limited diversity of the empirical situations is that conflicts did occur when the perception of an economic threat and that they coincided with periods of economic depression in New Zealand. It could be said that the areas of agreement between the final Boolean function (starting with R'_2 as the straightforward one) and the theoretical function include only the presence of an economic threat (ET) as a causal variable. By including another Boolean empirical function (R''_2), the areas of agreement also included the presence of negative stereotyping ethnic solidarity in the business ES^N . The areas of disagreement include the third causal condition - the absence of economic depression. All the conflicts identified within the empirical evidence arose within the periods of economic depression. Since the empirical evidence did not provide enough diversity of the situations, it is not plausible to discuss whether the first two causal conditions would lead towards the conflicts within periods of economic prosperity.

In concluding this section, it is important to restate that according to the empirical research there were three distinct farming protests involving ethnic business communities in New Zealand. All three conflicts of the late nineteenth and early twentieth century were related to Asian market gardeners. The simple Boolean function shows that the ethnic conflicts were expressed in terms of fear of economic competition and were always directly tied to the periods of economic recession. However, this statement concerning causation is necessarily restricted only to the combination of causally relevant conditions that were empirically identified. That also means that any inference drawn from the truth table for the conflict hypothesis (Table 6.6) should be accepted along with these reservations, because there were too many combinations of the causes that were not actually found within the empirical evidence.

6.3 Conclusion

Results of the empirical research are presented in Chapter 6 using the two basic analytic tools—truth tables and Boolean functions. The empirical evidence on the comparative case studies are firstly presented in the truth tables while transforming cases in the logical forms, suitable for presenting patterns of causal configurations. Afterwards, following the logic of QCA, some adjustments were performed in order to achieve the truth tables with parsimonious and complete rows. The truth tables were then minimised in order to derive the final Boolean functions for the emergence of ethnic business networks and of the ethnic competition and conflicts, as resulting from the empirical research. Basically, these functions identified logically irreducible combinations of causal conditions that were associated with the presence/absence of outcomes.

This chapter derived simple Boolean functions for both positive and negative outcomes and compared them with the theoretical arguments. With regard to the first - ethnic network hypothesis - the empirical results essentially supported the composite model of ethnic entrepreneurship. An empirical evaluation of the conflict hypothesis ended less successfully in terms of identifying causal factors implying the emergence of ethnic conflicts. A low degree of diversity among the cases placed severe constraints on possibility for testing causal arguments theoretically postulated.

However, as it was noted in the proceeding chapters, QCA applies a theory to the cases in order to interpret and understand them. It is also possible to obtain considerable insights from the final Boolean functions. Bearing this in mind, the thesis now turns from formal causal logic towards discussion of the results of QCA with reference to the issue of ethnicity and entrepreneurship in New Zealand agriculture.

CHAPTER 7

ETHNICITY AND ENTREPRENEURSHIP IN NEW ZEALAND AGRICULTURE: DISCUSSION OF RESULTS OF QCA

7.1 Introduction

In contrast to the preceding chapter, which was mainly concerned with a formal analysis of the empirical evidence using the logic and principles of QCA, this chapter now discusses the empirically derived Boolean causal functions. The discussion is based on description, analysis and interpretation of key factors and patterns and is presented in a traditional manner, that is, without reference to QCA concepts. Basically, Chapter 7 looks at the causal conditions which were empirically confirmed to be relevant for forming network-based economic mechanisms within some ethnic groups involved in New Zealand agriculture. The focus is also on analysing how and whether recursive effects of ethnic business networks can cause conflicts between ethnic business groups and local business interests.

This chapter begins with an outline of the forms, causes and consequences of ethnic entrepreneurship within the particular empirical setting of rural New Zealand. The point is to see if the composite model of ethnic entrepreneurship can account for the inter-group differences in the mobilisation of resources through ethnic networks. The chapter then addresses limitations of the composite model of ethnic entrepreneurship and other limitations of the empirical research. The chapter finishes with some reflections on QCA.

7.2 Ethnic Entrepreneurship in New Zealand Agriculture: Forms, Causes and Consequences

The entrance of an immigrant population into New Zealand agriculture occurred mainly in the second half of the nineteenth and first few decades of the twentieth century, creating a distinct and recognisable ethnic mosaic of rural New Zealand. This mosaic was characterised by involvement of a few ethnic groups who became associated with a particular type of agricultural production and fulfilled a vital role in the development of some rural localities. Ethnic groups which have had a consistently significant role in New Zealand agriculture were Asian market gardeners and dairy farmers, South European viticulturists and market gardeners, South European market gardeners and growers, and other continental European groups who were mainly involved in the dairy industry, mixed farming and growing sectors. While Asian and South European groups arrived as unassisted voluntary immigrants, largely a product of chain migration, other European groups were part of assisted immigration schemes.

The development of these ethnic communities in rural New Zealand followed a common path.

They experienced an occupational transition from the initial pursuit of rural labouring, coupled with goldmining, gum digging and bush clearing, moving towards self-employment in the agricultural sector. The establishment of a particular economic niche in agriculture, in mainly labour-intensive farming, was achieved by using different strategies for accumulating resources in order to start up their farming enterprises and by reliance on ethnically ingrained knowledge.

The empirical research carried out in this thesis showed that some groups involved in New Zealand agriculture displayed a distinct ethnic business strategy. Features of this strategy were the development of collective actions among the entrepreneurs and the formation of ethnic social networks which contributed resources to individual enterprises within the ethnic communities. These networks, as ingrained elements of ethnic entrepreneurship, were developed within Asian business communities in New Zealand agriculture.

Highly organised Asian communities in New Zealand agriculture developed a strong intra-group orientation within their businesses and formed social structures for the support of ethnic farming enterprises. These social-organizational mechanisms within the Asian community facilitated the intra-group mobilisation and distribution of resources. Namely, network-based mechanisms were at the core of economic life for both Chinese and Gujarati market gardening, and Punjabi dairy communities. It may be said that these mechanisms were deeply rooted in the cultural traditions brought from the home country and remained economically utilitarian in their involvement in New Zealand agriculture. For instance, the economic activity of Chinese farming enterprises was embedded within culturally coloured, informal networks such as *hui* and *bongsa*²⁰⁴. Indian farming enterprises were also organised into ethnically exclusive business networks which mimic the traditional structures of support from the home country. Thus, *jati* identity, village and provincial connections shaped economic activities of Gujarati and Punjabi immigrants in New Zealand agriculture. Moreover, Gujarati market gardeners tended to be organised in a number of extended patrilineal family networks, known as *kutumb*.

Ethnic business networks developed among Asian entrepreneurs in New Zealand agriculture encompassed both normative and resource components as outlined in the economic sociology literature (Davern, 1997; Portes, 1995, 1998; Portes and Sensenbrenner, 1993). Thus, these

²⁰⁴ Chinese market gardeners in New Zealand were organised within four family clans, two *bongsa*-dialect groups and numerous *hui* - rotating credit associations. These associations were derived from Chinese traditional society and were based on Confucian ethics of reciprocity and mutual obligations.

networks, informal by character, were based on mutual obligations, trust²⁰⁵, the principles of reciprocity and the capacity for internal sanction by the community. Within such informal ethnic associations, Asian market gardeners and Punjabi dairy farmers were reciprocally obligated towards co-ethnic members, and in the absence of legal enforcement, business transactions were backed by codes of conduct and the sanctioning power of the community.

Ethnic business networks provided Asian entrepreneurs in New Zealand agriculture with reliable and low-cost information, a loyal and low cost co-ethnic labour force, skills, advice, and also enabled income pooling, and the mobilisation and distribution of capital. These ethnically bounded networks created and channelled resources which the immigrants could draw on to establish and extend their business. For instance, there was the widespread practice of self-helping institutions such as *hui* - rotating credit associations within the Chinese market gardening community. *Hui* were able to provide sufficient capital for the formation of small businesses. Ethnic collective action among Asian market gardeners also promoted intra group horizontal and vertical integration in the business²⁰⁶, partnership with co-ethnics, and ethnic homogeneity of economic transactions²⁰⁷.

In contrast to the Asians entrepreneurs in New Zealand agriculture, continental Europeans did

²⁰⁵ There is the large body of literature on 'trust' as an ingrained element of ethnic networks. Economics of trust and informal institutions as developed within ethnic business communities has been discussed within New Institutional Economics (Landa, 1996). Trust and networks were also discussed within transaction costs economics (Wintrobe, 1995). Economic sociologists elaborated on how trust influenced the organization of economic transactions within ethnic business communities (Portes and Sensenbrenner, 1993; Granovetter, 1995). Finally, probably the most cited and influential work on trust in economic transactions is that of Fukuyama (1995).

²⁰⁶ Vertical integration involves the combination of operations in different stages of production (production to marketing) while horizontal integration occurs where the enterprises expands by creating multiple units at the same or similar stages of the production process. The Chinese community in New Zealand agriculture was noted in overseas literature as a classic case of established vertical integration between growers, wholesalers and retailers of fruit and vegetables (Bonacich, 1973, p. 584). The Chinese growers also developed horizontal integration that controlled the intra-group competition.

²⁰⁷ The ability of Asian entrepreneurs in New Zealand agriculture to mobilise resources because of their membership in the business networks can be also referred to as social capital. Social capital refers to 'the capacity of individuals to command scarce resources by virtue of their membership in networks or broader social structures' (Portes, 1995, p. 12). The concept of social capital has attracted considerable attention with academic and public debates during the 1990s. Relying on theoretical perspectives on social capital as developed by Coleman (1988), Putnam (1993) and Portes and Sensenbrenner (1993), a number of authors applied this concept to a variety of empirical settings. For instance, Flora (1998) analysed social capital within a North American rural community development, while Fukuyama (1995) compared a number of countries in terms of their social capital strengths, explaining how the existence of mutual trust, loyalty and cooperation could ensure economic prosperity. Focusing on the existence of mutual aid association and the tradition of coordination and cooperation for mutual help, Putnam (1993) debated the topic of civic participation in Italy and the consequences for regional development. Portes and Sensenbrenner (1993) and Portes (1995) used examples from the economic sociology of immigration to explore how immigrants within network-based mechanisms gained certain economic advantages, such as privileged access to some resources, preference for co-ethnics in economic transactions, reduction of formal contract and, accordingly, lower transaction costs. Finally, it is worthwhile mentioning the more recent efforts by the World Bank (Dasgupta and Serageldin, 2000) to quantify and measure social capital such as positive outcomes of mutual-aid associations of farmers included in irrigation projects worldwide.

not form a support structure for intra group mobilisation of resources. Nevertheless, there is evidence of well-developed family-based business networks among the Italian and Dalmatian growers. In this sense, there are some similarities between Asian and South European entrepreneurs in New Zealand agriculture. Both Asian and South European farming enterprises were intrinsically family businesses, where the extended family has been the basic socio-economic unit. They both strongly favoured family solidarity and family obligations in business. However, it is important to recognise here that while the Chinese and Indian family networks were further included into ethnically bounded business networks and displayed community solidarity in business, Dalmatian and Italian family networks were not extended towards the community level. Thus, South European business communities showed a clear tendency towards forming family based networks only, and obligations and responsibilities in business did not go beyond the close family connections. Conversely, economic behaviour of Asian entrepreneurs was oriented towards the collective interests of the ethnic community.

In further summarising the features of ethnic business strategies, as crystallised in the comparative case studies, it became obvious that there were some commonalities among the groups in terms of strategies they deployed. Relating these to the work of Ivan Light (1979, 1984) on the collective style of ethnic enterprises in the U.S., it may be argued that there were two poles of ethnic business strategies within New Zealand agriculture. These were the collectivistic and the individualist orientations within the business. A reliance on intra-group resources and the dimension of economic collectivism was notable in Asian entrepreneurs. In contrast, there were some European groups that displayed an individualistic style of entrepreneurship, and an apparently weak in-group orientation in business. South Europeans displayed some characteristics that distinguished them from either a purely collectivistic or individualistic strategy. They formed extensive family-based networks in business, but what is important in this QCA is the fact that these networks were not extended to the community. Neither Dalmatian growers nor Italian market gardeners formed social structures for mobilizing resources within the community. Thus, the strength and nature of obligations within Dalmatian and Italian owned family businesses were more individualistically oriented than in the Chinese and Indian communities. Consequently, the ethnic business strategy developed by the South European entrepreneurs could be called 'quasi-collective' when compared to the economic

collectivism developed within the Asian business community in New Zealand²⁰⁸. The common features of each ethnic business strategy are outlined in Table 7.1.

Table 7.1 A Typology of Ethnic Business Strategies Developed within New Zealand
Agriculture

Ethnic group	Key features of the strategy
<u>Collectivistic style</u>	
Chinese market gardeners Gujarati market gardeners Punjabi dairy farmers	<ul style="list-style-type: none"> - collective resources which ethnic entrepreneurs may use - intra-group orientation in the business - formation of informal, ethnically bounded business networks - Asian entrepreneurs organised family clans, <i>kutumbs</i>, <i>bangsa</i>, and <i>hui</i>-rotating credit associations - preferences for co-ethnics in the economic transactions-ethnic homogeneity of the economic transactions- - vertical and horizontal integration
<u>'Quasi' collectivistic style</u>	
Dalmatian growers and wine makers Italian market gardeners	<ul style="list-style-type: none"> - reliance on family-based networks in carrying out economic activities - family business not further incorporated into ethnic business networks - a lack of economic cooperation between the family businesses - split and rivalry within the producers - no group support networks - no intra-group solidarity in the business - no mobilising of the resources within the community - social obligations and responsibility did not go beyond the close family clan
<u>Individualistic style</u>	
Scandinavian dairy farmers German crop farmers and growers Polish dairy farmers and onion growers Dutch horticulturalists and dairy farmers	<ul style="list-style-type: none"> - no solidarity in economic affairs - no social structure for mobilisation of resources - loyalty in the business existed exclusively within nuclear families

Comparative case analyses presented earlier also indicated that apart from the ethnically

²⁰⁸ The idea for applying a notion of 'quasi collectivism' to business strategy developed by South Europeans came from Auster and Aldrich (1984, p. 51). These two authors cited work by Lovell-Troy (1980) who originally introduced this term in discussing Greek business communities in the United States, and labelled them as being 'quasi-collective' economically, compared to the Asian business communities. While within the Asian communities, as Auster and Aldrich (1984, p. 51) argued, "ethnic obligation applies equally to all members and their economic behaviour is oriented towards the collective interests of the ethnic community"²⁰⁸; within the Greek community "responsibility and obligation to the nuclear family override collective ethnic responsibility". This notion, therefore, may be used in referring to an ethnic business strategy whose features are essentially a family orientation in business, but without direct, reciprocal and continued support developed at the community level.

exclusive networks that developed within the Asian community, immigrants involved in New Zealand agriculture generally became involved in non-ethnic professional associations, such as growers associations or dairy cooperatives. For instance, a group of Dalmatian winemakers formed the Viticultural Association of New Zealand, while Italian market gardeners had a prominent role in the establishment of another professional association, The Hutt Valley Producers' Association. Scandinavians formed the first dairy cooperative in the region they settled in – the Mauriceville Dairy Company Limited. Since these associations were not ethnically exclusive, they cannot be considered as a form of genuine ethnic business networks²⁰⁹. The Chinese Commercial Growers Association was the only one whose name could insinuate an ethnic character of membership. However, as elaborated in detail within the comparative case of the Chinese market gardeners, there is solid ground for considering this association as a formal, non-ethnic professional association.

Thus, ethnic business networks which are at the core of this empirical research, were only a feature of Asian ethnic groups involved in New Zealand agriculture. These groups developed a collective style of entrepreneurship which depended on group resources, mutual cooperation in economic matters, and in general an in-group orientation in economic affairs. Ethnic business networks acted as channels for the mobilisation and distribution of resources to individual enterprises inside ethnic communities. They were also the most important social structure within which the economic transactions of Asian entrepreneurs were embedded.

In terms of causal forces behind such an economic structure of the ethnic business communities, this QCA pointed out both social and cultural factors²¹⁰. This QCA also suggested only one route to the emergence of ethnic business networks in New Zealand agriculture. As logical Boolean function (R₁) (6.2) indicated, a combination of particular social factors and the collectivistic cultural endowments were empirically proved to be necessary causal conditions for forming ethnic business networks which were developed by Asian market gardeners and dairy farmers. Generally speaking, certain social factors enhanced group solidarity and mutual

²⁰⁹ The crucial point in separating ethnic business networks from any other professional or ethnic associations, is that the networks served primarily for intra-group mobilisation of resources. Admittedly, there might also have been some overlap between ethnic business networks and the voluntary formal associations of immigrants. For instance, social and cultural clubs, and ethnic newspapers could serve as channels for obtaining information, advice, and knowledge, and even for initial financial support for the new immigrants. However, as the empirical research pointed out, these formal associations were more the property of the urban immigrants, and more importantly, they did not function primarily as a mode of ethnic economic mobilisation.

Dairy cooperatives, on the other hand, functioned strictly as professional associations, particularly for the accumulation of the capital. Although Scandinavian immigrants played an important role in the initial establishment of dairy cooperatives in New Zealand, clearly these cooperatives were not ethnically bounded.

²¹⁰ In that sense the results closely correspond to what Turner and Bonacich (1980, p.145), and Bonacich and Modell, 1980, pp. 27-29) referred to as situational and cultural factors.

cooperation in economic matters, and crucially affected the pattern and economic organization within Asian business communities. The hostile attitudes and restrictions imposed by the host society forced these ethnic groups to turn towards intra-group support and this would intensify ethnic solidarity in business. Thus, it may be expected that the groups which faced considerable limitations in obtaining resources (for an economic activity), and which were available for the majority population, would have developed ethnically exclusive business networks. According to the empirical findings, these groups would be able to do this only if they were endowed with certain cultural traditions of collectivism. For instance, the presence of collectivistic cultural endowments was the common legacy of both Chinese and Gujarat market gardeners. However, the cultural repertoire brought from the home country could remain latent, unless there were specific social factors that would initiate the establishing of collectivistic ethnic mechanisms. The failure to establish ethnic business networks within the South European market gardeners and growers confirmed that²¹¹.

In considering a conjectural influence of social and cultural factors this research complements the work done by Bonacich and Modell (1980) and Tsukashima (1991). These authors analysed an empirical case concerning the Japanese in US agriculture, and developed a similar conclusion, that both societal and cultural factors should be taken into consideration while explaining the economic life of ethnic groups. However, the authors employed a 'one group/one industry' research design, which prevailed in the literature on ethnicity in agriculture, and, accordingly, were not able to address these influences in the context of other ethnic groups. While employing a comparative approach, this thesis strongly suggests that the joint influence of social and cultural factors provides a comprehensive explanation for ethnic solidarity in business and the formation of ethnic business networks in New Zealand agriculture.

As this research further indicated, there were some specific conditions to the consideration of social factors as a necessary causal variable for forming ethnic business networks in New Zealand agriculture. While the theoretically derived Boolean functions (T_1) (4.1) and (T'_1) (6.5) expected ethnic business networks to be formed when an ethnic group faced host hostility and was treated as culturally different, this empirical research further specifies these functions. According to the results of this QCA, only those ethnic groups that were considered as fundamentally different would develop ethnically bounded business networks. Within the empirical setting of rural New Zealand, such groups were of Asian origin. In comparison to the other ethnic groups analysed, only Asian market gardeners and dairy farmers encountered considerable limitations in obtaining the resources that were accessible for the members of the host society and, to some extent, the members of other ethnic groups. South European market

²¹¹ As depicted in the second causal configuration in (r_1) (6.7).

gardeners and growers encountered some degree of restrictions, but not to the extent which would force them to remain intra-group oriented in obtaining the resources for starting up and carrying on the business. Simply, for South European immigrants, opportunities were available outside the ethnic community and consequently dependence on resources controlled by ethnic institutions was not recognised within Dalmatian and Italian ethnic groups. This empirical research, therefore, recognised the substantial differences between the ethnic groups with regard to the host hostility they faced and how this affected economic life in terms of mobilising resources.

The importance of the cultural distance between the dominant host population and ethnic groups became even more apparent when explaining the absence of business networking within particular groups. As shown in the Boolean logical function (r_1) (6.7), two causal configurations emerged from the empirical analysis. Within the first configuration, the absence of any cultural distance between an ethnic group and the host society was considered a sufficient and necessary factor in failing to develop ethnic business networks. This configuration referred to those European ethnic groups who were culturally similar to the host society, and who did not face any form of discrimination. Notably, they did not tend to rely on in-group resources in carrying out business. Overall socio-economic adjustments by the Scandinavian, German, Polish and more recent Dutch farmers and growers have been influenced by positive societal perception they encountered. It is unlikely that these groups would develop ethnically-bounded solidarity in business. The second casual configuration referred to the South European market gardeners and growers, who, although facing some degree of cultural distance and being endowed with a cultural tradition of collectivism, did not establish any community-based special, distinct networks for mobilising resources. Such findings go beyond a simple acceptance of social factors as responsible for initiating intra-group solidarity in the business. The QCA strongly suggests that with other conditions being equal, an ethnic group has to face considerable social rejection and be perceived and treated by the host society as having a fundamentally different cultural tradition, in order to start employing some elements of cultural tradition as tools in surviving in the new society.

These more subtle differences between immigrant groups in terms of discriminatory measures and the societal acceptance they encounter could become apparent only within comparative research. The comparison of the Asian and South European farmers within the particular setting of rural New Zealand of the nineteenth and the twentieth century, pointed towards substantively different characteristics and the variable extent of the hostile government policy and negative social reception faced by these groups. These differences proved to be significant in accounting for variations in ethnic solidarity in business and for succeeding/failing in forming ethnic business networks.

The empirical research also highlighted the consequences of ethnic business networks in providing ethnic groups with certain advantages. It was documented that growth and competitiveness of Chinese and Indian owned agricultural enterprises in New Zealand were largely attributable to the forms of self-help ethnic institutions. The ability of the Chinese market gardeners, for instance, to rely on ethnic informal networks for mobilisation of credit and information could give them a comparative advantage over the entrepreneurs who were outside the ethnic communities. Chinese and Gujarati market gardeners were also able to generate, through their informal networks, a better position in terms of selling and buying the products, obtain the capital for starting up the enterprises, and enhance their ability to cut costs²¹². Capital was largely obtained from family, friends and other informal sources within the groups. Generally, it could be that the existence of informal business networks enabled the members to generate and distribute resources probably more quickly and efficiently than was possible for non-members. This supports the work of other authors (Ward and Jenkins, 1984; Waldinger et al. 1990; Light and Bhachu, 1993; Light, 1972) who, while studying different empirical cases, pointed to the competitiveness which comes as a result of the business network structures along ethnic lines.

Under some conditions the existence of ethnic business networks may eventually place ethnic entrepreneurs in conflict with certain segments of the host business population. Thus, this thesis also attempted to analyse the recursive effects²¹³ that strengthening of community solidarity within ethnic groups in New Zealand agriculture could have in causing negative reaction and overt conflict amongst local farmers. The organizational power of ethnic networks as one of the factors leading towards ethnic conflicts was noted in the ethnic entrepreneurship literature, and discussed early in this thesis (Bonacich, 1973; Turner and Bonacich, 1980; Light, 1972). This was also recorded in some recent economic research on the emergence of ethnic conflicts (Wintrobe, 1995)²¹⁴.

The empirical evidence, as discussed within the QCA, recorded conflicts between highly

²¹² For example interest free loans, preferences in economic transactions, unpaid co-ethnic labour force.

²¹³ It should be kept in mind that the intention here is not to explain the emergence of the conflicts (ethnic conflicts are multifaceted and rather complex, and require research in themselves), but to analyse the effects, if any, of the ethnic solidarity that can lead towards the conflicts. Accepting this fact the thesis deals with both positive and negative consequences of ethnic solidarity in economic affairs, where the latter could provide the ground for conflicts between ethnic entrepreneurs and the host business population.

²¹⁴ Wintrobe (1995) discussed ethnic conflicts using the economic concepts such as factor returns, and argued that ethnic conflicts are likely to appear in the situation where the differences in income and returns persist. Since the ethnic networks can only provide advantages for the members and these cannot be transferred to the outsiders, it may be said that the difference in income and returns between the individuals included in the ethnic networks and those who remain outside, could be regarded a likely cause for the conflicts. For instance, Wintrobe (1995, p. 44) stated that "the strengthening of one ethnic network breeds fear on the part of outsiders in the same way that one nation's decision to increase its stock of weaponry breeds fear on the part of other nations".

organised Asian market gardeners and the competing host business groups. An empirically derived, straightforward Boolean function (R^2) (6.8) pointed at the strictly economic explanation of these conflicts, and indicated that the opposition to Asian entrepreneurs in New Zealand agriculture was expressed in terms of a perceived economic threat and coincided with periods of economic depression. The Chinese and Gujarati market gardeners were very widely regarded as an economic threat to the competing business groups from the host population. Clearly, the local market gardeners perceived Asian entrepreneurs as representing an economic threat to their economic interests and felt threatened by the presence and expansion of cohesive ethnic communities in business. They responded by taking certain actions intended to limit the growth of the Asian farming enterprises and to prevent them from entering the same occupation. Chronologically, these conflicts were noticeable during the period when Asian immigrants, who used to be involved in rural labouring jobs, started to become small leaseholders and owners²¹⁵.

It may be said there was an intra-class division regarding the presence of ethnic entrepreneurs in New Zealand agriculture. Basically, fear of the competitive powers of the Asian entrepreneurs was expressed amongst the self-employed, small-scale local farmers. In fact, it was small farmers who were the most vocal and active in attempts to limit and expel the Chinese and Indian origin-farmers from the same business. Opposition to the Asian presence in agriculture also came from organised labour (the working class)²¹⁶, while large scale landowners and

²¹⁵ This transition from rural labouring to independent farming, as important in terms of timing of the rise of conflicts, was also highlighted in the context of farming protests involving, for instance, the Japanese in Californian agriculture (Light, 1972; Bonacich, 1973). Californian local growers tried, through the Alien Land Law of 1913 and 1920, to force the Japanese out of self-employed farming into the position of agricultural labour (Light, 1972, p. 72-73). The focus of their actions was on restricting the right of Japanese to own or lease agricultural land.

²¹⁶ It was generally considered that an Asian labour force would lower wages and increase unemployment amongst the host population. Such public opinion was used extensively by some politicians in parliamentary debates. For instance, some of the protagonists of the anti-Chinese legislations were leading politicians of the late 1870s, the 1880s and 1890s, such as G. Grey, R. Stout, R. Seddon, W. P. Reeves who, while considered protectors of 'working men', viewed the Chinese as an economic threat to the people of New Zealand. During Seddon's time as Prime Minister (1893-1906) a number of legislative restrictions were enacted selecting immigrant groups which would be allowed to come in, and also excluding immigrants groups already in the country from certain economic activities. Later on, W. Massey and the Reform administration (1914-1928) continued with the same platform, focusing on the small business community and the working class in calling for anti-Asian immigration restrictions (Brooking and Robel, 1995; Ip, 1995).

Some of the anti-Asian protests in the mid 1920s articulated within local market farmers in Pukekohe involved the native population - Maori labourers. The focus of the campaign was on the conditions of Maori employed by the local Chinese, and in particular Indian market gardeners. The accusations were so persistent and immense that in 1929 Sir Apirana Ngata, as Minister of Native Affairs, appointed a committee to investigate the "conditions and accommodation of Maoris employed in European, Chinese and Asiatic market gardeners in Auckland and surrounding districts, 1929" (Leckie, 1981, p. 418).

Generally, the Ngata Committee argued that Maori workers were in many respects adversely affected by working in the Asian market gardens. Conversely, there were some accounts coming from the Maori workers themselves suggesting that the relations between Maori and Indian were rather friendly. As Leckie noted (1981, pp.600-601), "Maori farm labourers reported to prefer employment under Indian market gardeners rather than employment under Europeans". However, the issue of the relation between ethnic entrepreneurs and the native population, regardless of different perceptions of the nature and context of these relations, was on the agenda of the political actions of the local business groups.

employers supported the presence of a low-cost, mobile, and relatively skilled Asian labour force (Sedgwick, 1982; Taher, 1965). Asserting that ethnic business groups would come into conflict with different business groups within the surrounding society was extensively present in the literature on ethnicity and entrepreneurship, in particular within the middleman minority model (Bonacich, 1973; Bonacich and Modell, 1980; O'Brien and Fugita, 1982). The empirical research on farming protests in some other empirical settings emphasised that small farmers were at the forefront of anti-immigrant campaigns and they wanted to eliminate ethnic competitors²¹⁷. At the same time the large landowners had another perspective. They considered the employment of immigrants, as a low cost, unorganised labour force, as very profitable²¹⁸. The local labour's perception was that the presence of immigrant labour could be used by employers to undercut wages, and generally to undermine all agreements already attained by local labour organizations²¹⁹.

Empirical research on the farming protests in New Zealand also showed that there was a substantial relationship between economic conditions and the relations towards Asian entrepreneurs. Farmers' protests against the Asian business community were apparent during the years of economic depression - in the mid 1890s and the mid 1920s. The economic depression (ED) as a causal condition was initially introduced in this QCA in an attempt to eliminate the association of general economic problems with the economic activities of the ethnic groups- since these are not recursive effects of the existence of ethnic cohesive communities in business. It was expected, following the body of the literature on conflicts²²⁰,

²¹⁷ An expulsion of the Chinese entrepreneurs involved in the rice and sugar industry in Indonesia during the twentieth century (Sowell, 1983), or support for the alien land laws that prohibited Japanese farmers from owning the land in California during the 1910s and 1920s (O'Brien and Fugita, 1982; Light, 1972; Iwata, 1962) came from the local business groups involved in the same production.

²¹⁸ For instance, the Chinese were a labour source for the developing local wine industry in the Rutherglen/Wahgunyah area of Victoria, Australia (Lancashire, 2000). "A common interpretation of the employment of Chinese in preference to Europeans in the wine industry is that the wages demanded by Chinese were lower than those required by European workers. Although this explanation cannot be dismissed, other considerations also need to be taken into account. It is evident from the period that the local landowners were generally satisfied with the quality of the Chinese labour (*Ibidem*, pp.232-233). Daniel (1981) discussed employment in Californian agriculture and referred to the actions led by large-scale farm-owners during the first decade of the twentieth century, and who pressed the government for changes in immigration laws that would allow the immigration of West Indians, Mexican and in particular Chinese farm labourers. Some of the well-known immigration streams of farm workers demanded by the local business interests, were for instance *braceros* programs based on the agreement between Mexico and USA for the importation of farm workers.

²¹⁹ Major farm labour unions in California were unfavourably disposed towards Japanese labourers (O'Brien and Fugita, 1982; Bonacich and Modell, 1980). This ethnic antagonism involving local and immigrant workers was also discussed within the theory of a split labour market, introduced also by Bonacich (1972). A split labour market, or labour market which is split along ethnic lines, is characterised by a large differential in the price of labour for the same occupation, which often correlates to ethnicity.

²²⁰ As Williams (1994) recorded in a comprehensive paper about the sociology of ethnic conflicts, some empirical studies confirmed that periods of economic contractions show high levels of ethnic conflicts. Quillain (1995) referred to some other authors who found that host hostility and opposition to immigrants grew during periods of economic recession and that better economic conditions could generally improve the ethnic relations in a particular country.

that a worsening of economic circumstances would galvanize a perception of an economic threat posed by highly organised ethnic groups in business. This QCA supported these theoretical arguments. All farming protests identified within the empirical research occurred during the years of economic depression. Although, it may have been that in economic prosperity, ethnic business was not seen as a threat.

Nevertheless, what can be drawn from this QCA is that ethnic solidarity in business conferred a competitive advantage that further provoked hostility of the host business groups. Such *ad hoc* hostility, which chronologically occurred after ethnic groups entered the business, was based on economic considerations²²¹. There was the rational motivation on the part of the local farming groups to limit and even expel Asian entrepreneurs from the same business. These actions, articulated by the local farmers, were gain-motivated, and can be considered a rational reaction to the situation when the farmers perceived that their economic power was threatened by the actions of ethnic groups involved in agriculture.

Were there any irrational motivations behind anti-Asian actions developed within the farming protests discussed? In terms of the question whether ethnic solidarity in business was negatively perceived the results of this QCA are less conclusive. There were some indications that the opposition to the Asian entrepreneurs might have been facilitated not only by economic but also by cultural considerations. However, there were also some conceptual problems in assessing the negative perceptions about cohesiveness of ethnic groups in the business as an exclusively cultural issue. Therefore, it may be said that a conjectural influence of the economic depression and fear of economic competition was powerful in creating anti-Asian protests within the small-scale local farmers and growers. Such a rational background to farming protests was accompanied by general perceptions of cultural differences and hence (non) desirability of particular ethnic groups.

In summarising this section, it may be underlined that the ability to use intra-group resources collectively for establishment and development of farming enterprises were seen as hallmarks of the Asian ethnic groups in New Zealand agriculture. The activity of those ethnic farming enterprises was deeply embedded in ethnically exclusive networks which facilitated mobilisation and distribution of ethnic resources, and which provided immigrants with an economic supportive system. In terms of causal analysis, this empirical research confirmed theoretical expectations that social factors in conjunction with certain cultural endowments would cause the formation of ethnic business networks. Once formed, these networks contributed resources to ethnic entrepreneurs, and provided them with certain advantages in

²²¹ The simple, empirically derived Boolean function presented as (R'_2) in (6.8) pointed at an economic explanation of the farmers' protests against Asian business community in New Zealand agriculture.

starting up and carrying on the business. While networks could be a source of the strength of ethnic business communities, under some conditions, their existence may lead towards conflicts between ethnic entrepreneurs and some segments of the host business population.

7.3 Weaknesses of the Composite Model of Ethnic Entrepreneurship

Weaknesses of the composite model of ethnic entrepreneurship may be grouped into four categories. The first category is related to the model-building process and hence the process of synthesis. The second category refers to the structure of the model and the ways it frames the causal forces responsible for the emergence of ethnic entrepreneurship. The third category of limitations is related to the specific type of society where this model can be applied. Finally, while the weaknesses outlined were ingrained in the model itself and were possible to identify during theoretical analysis, the fourth category refers to the shortcomings of the model as derived from its empirical evaluation within the empirical setting of rural New Zealand

Firstly, the strategy implemented in the process of the synthesis may imply eclecticism and risk of oversimplifying the models of ethnic entrepreneurship. Composite models are eclectic in nature as they incorporate ideas from various theoretical approaches (Turner, 1986, 1987). Accordingly, it should be accepted that a certain degree of eclecticism in working theoretical syntheses is inevitable. However, only those variables and concepts of the models that were obviously overlapping were selected²²². Such selected variables were further connected using the social marginality approach as a conceptual basis for the synthesis. In addition, as performed in Chapter 2, the proposed composite model was also interpreted within the larger body of economic sociology literature.

The second area of limitations is associated with the level of social analysis at which the composite model tries to isolate causal factors that account for differences in mobilisation of ethnic resources and the establishment of the ethnic business networks. Criticism may arise on the grounds that there was an assumption that ethnic communities in business were 'ideal', and monolithic without internal conflicts. Obviously, the model emphasises ethnic solidarity and collective co-operation while neglecting internal fractions, known to occur in some ethnic groups²²³. In addition, the composite model, and consequently the empirical research, has paid far more attention to the collective aspects of ethnic business than to the values and motivations of the individual members of the ethnic business communities. Basically, the focus was on the external social factors that determine the behaviour of ethnic groups while ignoring individuals'

²²² As done in Chapter 2, Section 2.3.5

²²³ For instance, the Chinese community in New Zealand has not been free from internal factions (Sedgwick, 1982; Pearson, 1990) but still it managed to achieve a high level of solidarity and mutual assistance.

decision making process. The model, therefore, did not elaborate on the constraints on individuals which might have been imposed by the ethnic business networks.

The existing literature on ethnic business communities recognises that, while the ethnic business networks provide immigrants with privileged access to some resources, they also may impose some constraints on individuals' decisions. Membership in the ethnic business networks can be seen as a double-edged sword, and Waldinger (1995, p. 555) referred to the dualism between community solidarity and individual freedom of the immigrants as the 'other side' of embeddedness. While reviewing some empirical studies drawn from the immigration literature, Portes (1998), Portes and Sensenbrenner (1995), Wintrobe (1993) and Waldinger (1995) noted that the existence of ethnic networks and associated collective sanctions and community controls, implicitly exclude outsiders and restricted individuals in taking up business decisions.

Thirdly, the model can be discussed only within the particular type of societies – those ones characterised by the majority-minority and asymmetrical power relations²²⁴. In other words, the model applies to those societies where the dominant group has the power to impose certain discriminatory measures on minority groups. For example, to restrict or preclude minority groups from accessing the resources which are available to the dominant-host population. Furthermore, the model tends to be historical in the sense of not being relevant to more recent trends in immigrant business²²⁵. While insisting on ethnic resources as important in organising immigrant business, the model tends to neglect the role of class resources and hence individual human capital. Some recent research on immigrant business (Portes, 1998; Yoon, 1991) recognised the changing significance of ethnic and class resources in the course of ethnic business development and shows that over time that the importance of ethnic resources do diminish while the class resources became more important. Thus, it seems that the focus of the empirical analysis on entrepreneurship within ethnic groups moves from ethnic resources and the structure for their mobilisation, towards individualistic and class oriented business strategy employed by immigrants.

Fourthly, following the logic of QCA²²⁶ shortcomings of the proposed model are assessed by identifying causal combinations that were found in empirical evidence but not hypothesised. Thus, in terms of mapping agreements between theoretical arguments and empirical findings, there are some explanatory limits of host hostility, as was initially conceptualised and included

²²⁴ See Baker (1983).

²²⁵ Primarily referred to a corporate type of investment by the immigrants, or ethnic-owned business in professional services (Li, 1993).

²²⁶ The features of QCA in evaluating theoretical arguments are outlined in Chapter 4. It should be noted here that because of simplicity of the Booleans functions used in this thesis, it was sufficient to logically compare the functions without calculating the intersections between the final Boolean equations (R) and the hypotheses formulated in Boolean terms (T).

in the ethnic network hypothesis (T_1). While the composite model suggests that all ethnic groups facing host hostility and encompassing collectivistic endowments would form ethnic business networks, the empirical research showed that only a subset of these groups actually would do that. The crucial point that made a difference was the character and extent of the host hostility ethnic groups faced. Thus, the groups which were considered, in terms of the cultural background, being fundamentally different from the host population, and who, consequently faced substantial host hostility, would form ethnic business networks.

With regard to the assessment of the conflict hypothesis (T_2), and hence the analysis of the recursive effects of the ethnic solidarity in the business, the focus of the discussion needs to move towards issues of the conceptualisation and coding of causal variables. These issues, together with other limitations of the empirical research, are outlined in the next section.

7.4 Research Limitations

The main limitations of this research are related to the inclusion of the time-factor into the analysis, coding of the variables, and in particular limited diversity of the empirically derived causal configurations.

Since this empirical research encompasses a relatively long time frame, comparative case studies (the units of analysis) were periodised. It was decided to use an approach proposed by Romme (1995), where each of the causal configurations related to a particular key period was represented as one row in the truth table. These key periods were identified in the course of empirical research and were strictly associated with the changes of the host hostility variable. Obviously, the different periodizations of this variable could lead towards different causal configurations included in a particular row, and very likely different causal explanations²²⁷.

While the research design allowed for changes in the contexts of governmental and societal receptions experienced by ethnic groups, the variable of the collectivistic cultural endowments, as considered within a single group over the time, remained constant. This assumption about the constancy of cultural tradition within the ethnic groups analysed could be criticised. However, the problem was diminished by the fact that QCA analyses the unique combinations of causal conditions not cases per se. Thus, in deriving the final, empirically based Boolean functions, it became less important how causal variables changed within a particular comparative case. Instead, the focus was on considering all empirically identified configurations of causal conditions and outcomes, and their holistic comparison.

²²⁷ This sensitivity of QCA results to the cut off points in dating of the variables was also recognised, although in different context, by Griffin, et al. (1991).

QCA also assumes a certain amount of arbitrariness in setting cut off points for dichotomised variables. This thesis employed qualitative, and, admittedly, subjective attributes in evaluating and coding of the variables²²⁸. Quantitative measures may overcome this problem. For instance, while in the coding of the ET variable the focus was on analysing the perceptions of the European market gardeners, some more precise parameters such as the dimensions of the ethnic entrepreneurs compared to the host business groups, or the purely economic concepts of the price competitiveness, would allow analysis of whether the Asian market gardeners were posing any real economic threat to the economic interests of the host business groups. Even if the conceptualisation of the economic threat was done using quantitative measures, as for instance, performed by Quillian (1995)²²⁹, there is still an open question of the feasibility of an empirical evaluation of these measures within the context of nineteenth and early twentieth century rural New Zealand.

Substantive problems also arose in evaluating the negative perceptions of ethnic solidarity in business and the coding of the ES^N variable. As noted in Chapter 6, the empirical analysis was unsuccessful in considering negative stereotyping of ethnic solidarity outside the general cultural and even racial considerations within New Zealand society. A negative interpretation of ethnic collectivistic mechanisms within the Asian market community, for instance, were detected but blended into the general anti-Asian attitudes developed within the host population. The extent of this problem became apparent in the course of the empirical research and could not be anticipated while setting up the research design. While the authors from the middleman minority literature (Bonacich, 1973), who were used as the reference in coding of this variable, were able to discuss negative perceptions about cohesiveness of ethnic groups as strictly related to the business, it was not possible to do so within a context of this empirical research.

The coding of the variables was further limited by the availability and quality of the empirical evidence. Although an extensive bibliographic search located and procured the evidence it should be admitted that our knowledge about some aspects of the socio-economic life of early ethnic groups involved in New Zealand agriculture was limited. Furthermore, empirical sources concerning some of these groups were limited, fragmented, indirect and derived initially for

²²⁸ Since in performing this QCA the parameters for coding were qualitative in nature there is undoubtedly a problem of the researcher's bias in assigning the codes. Romme (1995) for instance tried to overcome the problem by employing a few independent coders, but this solution was not feasible for this thesis.

²²⁹ In explaining the perceived groups that immigrant groups posed to the host population, Quillian (1995) applied some quantitative parameters such as the size of these groups relative to the dominant host population. By using population data and detailed comprehensive surveys he discussed variations in perceived group threat across twelve European countries.

purposes different from this research²³⁰.

The problem of insufficiency of the evidence was anticipated in Chapter 4, where at the same time, some solutions were identified in order to overcome the problem. There were few points in performing this QCA when the evidence was insufficient for assigning a clear code. In these situations, the code was assigned in a comparative manner considering its value within the context of other comparative case studies. These incomplete causal configurations presented as rows of the truth table were completed after the entire empirical analysis was done.

Finally, it may be argued that probably the most apparent weaknesses of the research design employed in this thesis was limited diversity of the causal configurations empirically observed. As shown in data matrix in Table 6.3 the set of logically possible causal configurations far outnumbered the set of configurations documented by empirical evidence. While some authors (Amenta et al. 1992; Hicks et al. 1995; Amenta and Poulsen, 1996) implemented a rather subjective approach, proposing theoretical specification of the configurations that were not documented by empirical evidence, this thesis employed a rather simple approach in treating these configurations. Thus, instead of speculating on the empirically non-existing causal configurations, it was reasonable in the context of this research to drop these configurations as either mutually exclusive or not likely to occur in this empirical setting. The thesis does not use hypothetical causal configuration anywhere in the analysis and, therefore, employed what Ragin (1987, p. 105) called the 'conservative' solution in the data reduction process.

The casual explanations derived in the previous chapter are restricted to the few empirically observed causal configurations²³¹. Although these configurations are the only ones to occur in this empirical setting²³², some questions, which were posed while elaborating on major theoretical perspectives on ethnic entrepreneurship in agricultural settings, still remain unanswered. For instance, is it likely that an ethnic group which is not subjected to any kind of discrimination will still strongly rely on ethnic resources in undertaking entrepreneurial activity? Or, is it possible that groups which did not inherit collectivistic cultural traditions would develop solidarity in business as a response to extreme host hostility. Some authors have

²³⁰ This type of research suffers from certain limitations inherent to the secondary source analysis, such as accessibility to the data, biased selectivity of the sources, insufficient information to determine potential sources of bias and thus deficiency that might have existed in the original sources (Singleton et al. 1993; Yin, 1994; Bailey, 1987; Bulmer, 1984). These limitations were diminished, to some extent, by using a diversity of sources (when it was possible) and crosschecking. In evaluating the quality of empirical sources the general rule was simply to use available studies/sources as long as they encompass some indicators for coding causal conditions and outcomes as included in two hypotheses.

²³¹ As noted in Ragin et al (1996), the full extent of variation or heterogeneity of the cases may become apparent only after the selected cases are analysed more in more detail. Therefore, the problem of limited diversity may not be avoided.

²³² Primarily refers to the ethnic network hypothesis, and a mutual-exclusion of some configurations of causal conditions and associated outcomes.

argued that it would not be possible, as Light (1972), for instance. The empirical research carried out in this thesis does not contribute to answering these questions.

7.5 Some Reflections on QCA

The final section of this chapter summarises the researcher's reflections on the QCA. This is written to address the features, critical points and challenges of the method as they have been seen throughout the empirical analysis²³³. The intention was also to see whether this research introduces any innovations within the context of QCA applications.

At the beginning it should be restated that QCA was used in this thesis to assess the composite model of ethnic entrepreneurship on the basis of evidence from the case studies. The main purpose in using QCA was to appraise theoretical arguments, or to paraphrase Hicks (1994, p. 100), to determine whether the hypothetical explanation fits the facts of the cases. Basically, theoretical expectations were used to guide the analysis of data and to structure, systematise, and make sense of a body of evidence collected from eleven comparative case studies. This QCA ended by providing simple causal statements, in fact, deterministic formulation of the causes of the formation of ethnic business networks.

In terms of the representation of the cases, a systematic analysis of cases as configurations of causes and outcomes was at the core of this QCA. It should also be noted here that QCA did not insist on analysing cases per se, but instead on unique combinations of causal conditions and associated outcomes. Since QCA is intrinsically holistic, each case (ethnic group) remains conceptualised as a whole – an interpretable and specific combination of causal and outcome variables - and as such compared to others cases. Thus, as it became obvious in Chapter 6, the intention was to unravel causal explanations by comparing configurations of selected causal variables and outcomes. The focus was primarily on causal configuration, while relating them to a particular empirical case was of secondary importance²³⁴.

Notably, this research did not employ QCA in its fullest capacity, as some other applications

²³³ Chapter 3 also outlined the critical points and the challenges of QCA, but based on the reviewing of QCA applications in different academic disciplines and empirical settings. The intention here was to make some observations on the QCA in the context of an empirical study on ethnicity in agricultural settings.

²³⁴ In carrying out eleven comparative case studies the researcher employed what Stake (1994) referred to an instrumental interest in cases, when a particular case is examined to provide insight primarily into few particular features.

did²³⁵. This was due mainly to the limited diversity of causal configurations empirically observed, and relatively simple Boolean equations expressing the theoretical propositions. Furthermore, in performing this QCA it was not possible to carry out a few rounds of simplifications or to rely much more on multivariate computational power of Boolean logic, as, for instance, in Amenta and Poulsen (1996), or in Ragin (1994c). Considering this thesis in the context of the other QCA applications, reviewed in Chapter 3, probably the closest would be the QCA applications done by Brown and Boswell (1995), and Lieberson and O'Bell (1992). Similar to this research, Brown and Boswell (1995) applied QCA to evaluate theoretical arguments and derived a simple Boolean function in explaining interracial labour solidarity in U.S. On the other hand, Lieberson and O'Bell (1992) used what can be called a semiformal approach in applying QCA, where, as with this thesis, QCA did not deliver complex prime implicants and logical functions, but instead was used as guidance in systematisation of a large body of evidence and its subsequent representation in a form of truth table. In terms of substantial interests, this thesis also has some parallels with the example of applying QCA to a comparative study of ethnic political mobilisation in Western Europe, as outlined in Ragin (1987).

QCA also demanded a constant interaction between the empirical research and theoretical arguments, and encouraged what Ragin (1987, pp. 164-171) called the dialogue between ideas and evidence. It was particularly evident while carrying out comparative case studies in Chapter 5, specifically, when the coding system initially proposed was redefined after some early data collection and analyses were done. In addition, the selection of the cases was modified by removing few cases from the analysis. Thus, the whole QCA procedure may resemble a circle, where the researcher moved back and forward between evidence and theoretical arguments revising variables and redefining coding procedure when this was considered necessary.

Can QCA be considered as a bridge between qualitative and quantitative research strategies in comparative research, as strongly advocated by Charles Ragin? To some extent this study may illustrate that QCA selectively unites certain elements of conventional quantitative, the variable centred, and qualitative, case-oriented research. However, it would not be prudent to talk about QCA as bridging the gap between these two research strategies without alluding to the costs. QCA definitely omits some of strengths of both approaches, and instead it may be argued that QCA represents a compliment to both qualitative and quantitative research strategies.

²³⁵ An empirical analysis of diversity of pensions systems in highly developed countries as done by Ragin (1994c) is probably one of the most complex applications of QCA. The study operated with seven causal and three outcome variables, and also used cluster analyses to translate interval-scale variables to the qualitative states appropriate for truth tables.

In common with traditional quantitative research this QCA allowed a systematic, formal assessment of the variables which were preselected, defined and measured across all the cases included in the empirical analysis. There was an obvious importance of variables in QCA and the researcher had to think in terms of variables throughout the research process. However, unlike the traditional quantitative approaches, QCA drew on other aspects of the cases when deciding on coding of variables, and the initial decisions for coding were, in fact, a starting point for a continuous dialogue between ideas and evidence. It may be also added that in QCA variables are regarded as features of cases rather than being independent of cases as in classical quantitative analysis. Finally, QCA is not as complex and sophisticated as, for instance, multivariate techniques, nor log-linear analysis commonly used in variable-oriented research. Traditional quantitative research has some hypotheses-testing advantages over QCA, in terms of allowing for discussions of the areas within which hypotheses can be rejected/accepted with a certain level of probability.

QCA preserves the intensity of the case-oriented approach, but also focuses on patterns of relations between causal configurations and outcomes when examining many cases. In common with traditional qualitative research QCA is holistic and retains the causal complexity. QCA also provides a systematic, replicable approach to data analysis in doing individual case studies. However, it does not require maximum attention to details as case studies do, instead, the focus is on assessing the specific features of cases.

In the process of building truth tables it became obvious that, apart from redefining some of the causal variables, the coding procedure for some of the variables could not be finalised due to different factors. Following the logic of QCA, after the entire analysis is completed, a particular variable was assigned a code in a comparative manner considering its value within the context of different cases. In the case of such an event, a track of all steps concerning coding and changes was made transparent. It may be argued that by explicitly describing the coding procedure, and relying on a 'replication' logic and structured analysis of the empirical evidence, the reliability of QCA in general was strengthened. As some QCA applications, for instance Romme (1995), suggested, the reliability could be also increased by using a doubled coding procedure and employing independent coders. With regard to validity of QCA, the use of multiple indicators could enhance the validity in conceptualisation of the variables. However, the QCA applications reviewed, implicitly assumed that the identical measurement and conceptualisation of variables were equally valid across different cases. In accepting this, the researcher did not discuss the equivalence of concepts and their operational indicators within the ethnic groups included in the analysis²³⁶. Finally, it is important to make one observation about

²³⁶ The requirement of concept of equivalence in the comparative research as applied to the rural social research was discussed in Suchman (1964).

the external validity of Boolean causal functions derived in QCA. Generally speaking, Boolean functions can be considered heterogenic and universal since they encompass multiple routes leading towards the same outcomes, and insist on general, systematic causal configurations associated with a particular outcome. However, the empirical generalisation of the findings in doing QCA is restricted by the fact that the method basically employs a case-oriented research strategy. External validity of QCA, therefore, requires establishing the time frames and domains to which the results of empirical research can be generalised.

In concluding this section, it may be valuable to outline some possible applications of QCA within the general frame of rural research. Generally speaking, QCA is considered appropriate for studies where a great deal of information is accumulated relating to a moderate number of cases. In some situations, QCA can be viewed as a tool for organising and minimizing complex empirical data, such as, for instance was done in an ethnographic work by Cress and Snow (1996). An inductive approach in using QCA could also include a study of an empirically grounded typology of some phenomena within farm management research, such as the viability of the farming enterprises. For instance, it could be a criterion-oriented classification of farm households with regard to a particular outcome and based on the available quantitative and qualitative parameters. In that case the focus would be on analysing the diversity of the cases and deriving logically minimal statements describing this diversity, and identifying key dimensions of variations between cases. In addition, QCA may be used to holistically compare farming enterprises relying on theoretically and substantially relevant variables in order to derive the configurations of the variables that could account for a particular cluster of farm management styles.

7.6 Conclusion

The intention of this chapter was to discuss ethnicity and entrepreneurship in New Zealand agriculture in the light of theoretical arguments as outlined in Chapter 2, and then formalised as Boolean logical functions in Chapter 4 and 6. These logical causal functions were in Chapter 7 related to substantial empirical cases.

The discussion of the results of QCA has shown how social factors and the cultural traits of the ethnic groups studied were both relevant for mobilisation of intra-group resources and development of ethnic solidarity in business. Thus, a joint effect of host hostility and collectivistic cultural endowments was seen as the primary cause for the emergence of ethnic business networks within Asian ethnic groups in New Zealand agriculture. The empirical analysis pointed out how Chinese and Indian farming enterprises were embedded in ethnically exclusive networks, and how these networks advanced the economic position of ethnic entrepreneurs in starting and carrying out their business. Furthermore, apart from creating some

advantages for those ethnic businesses, networks were also associated with anti-Asian farming protests that occurred in New Zealand during the late nineteenth and early twentieth century.

CHAPTER 8

CONCLUSION

8.1 Introduction

This final chapter first summarises the thesis in terms of the procedure and the substance of the research on ethnicity in New Zealand agriculture. The theoretical, methodological, and empirical relevance of the thesis's findings are then outlined. The closing segment briefly delineates some of the areas for future research and shows how some of the concepts used in this thesis could be applied to more policy-oriented research.

8.2 Ethnicity in New Zealand Agriculture: Theory, Method, and Evidence

The general concern of this thesis is an understanding of ethnicity in agricultural settings. The thesis was prompted by an increased scholarly interest in ethnic groups involved in agriculture production worldwide. This study has been designed and undertaken specifically to explain the emergence of ethnic solidarity in agricultural settings and, therefore, has attempted to contribute to causal explanations of ethnicity in agriculture as an issue which has been relatively ignored in the literature. The thesis has addressed this issue through the application of an analytic frame of ethnic entrepreneurship as developed in economic sociology literature. Economic sociologists have emphasized the importance of social structures – social networks - for mobilizing ethnic resources, and have also discussed the reasons for the development of these structures within some ethnic groups in business. Major theoretical perspectives on ethnic entrepreneurship have specified situational and cultural factors as being responsible for the mobilization of ethnic resources in economic activities. This thesis argued that these two factors, when taken together, would provide a comprehensive explanation for ethnic solidarity in business and the development of stable social structures for the mobilisation of resources within ethnic groups involved in agriculture. Drawing upon the few similar attempts of synthesizing theoretical perspectives on ethnic entrepreneurship, the thesis developed a simple causal model which combined situational explanations with the key aspects of cultural approaches in considering the reasons for ethnic solidarity and development of ethnic networks in business. Theoretical arguments derived from such a composite model of ethnic entrepreneurship were empirically assessed within a historical-comparative analysis of ethnic groups involved in New Zealand agriculture.

The particular empirical setting of New Zealand agriculture allowed for discussion of theoretical arguments within a multi-group research design, and therefore, to elaborate on how and why some ethnic groups involved in agriculture have developed ethnic networks in economic life.

Covering the period from the 1840s to the 1980s, this thesis systematically examined ethnic groups with considerable importance for New Zealand agriculture, among which some also displayed a distinctive ethnic solidarity and intra-group orientation in business. The focus was on whether the theoretical expectations derived from the composite model of ethnic entrepreneurship were realised within the particular empirical setting of rural New Zealand, and whether they contributed to a better understanding of the factors and causal processes that have led towards the development of ethnic solidarity in business.

Theoretical arguments derived from the composite model were empirically evaluated by using Qualitative Comparative Analysis (QCA), a method designed to assess theoretical propositions by means of qualitative evidence. QCA is well suited for an empirical evaluation of composite models and it has also been considered in this thesis as a way of enriching comparative research in the existing ethnic entrepreneurship literature. The comparative research design employed in this thesis is characterised by a systematic, holistic comparison of the ethnic groups included in the empirical analysis along with generation of data on the key comparative variables. Thus, the empirical evidence concerning ethnic groups was analysed within a given conceptual framework, namely the composite model, which was defined by a set of dependent and independent variables. The point was to discuss the dynamics of the composite model of ethnic entrepreneurship within the context of comparative case studies. Following the logic of QCA eleven comparative case studies were designed to provide a formal, coherent analysis of the empirical evidence.

The thesis started by laying out major theoretical perspectives on ethnic entrepreneurship, and their application to agricultural settings. Situational explanations as developed within the middleman minority theory (Bonacich, 1973) and cultural theory as proposed by Light (1972) were seen as two major streams within the current ethnic entrepreneurship literature. The situational approach stresses how certain social factors affect the pattern, and forms of mobilisation of resources within the ethnic groups in business. The cultural approach focuses on specific cultural endowments ethnic groups hold and their activation in forming certain collectivistic mechanisms. The review of these theoretical approaches and their empirical applications, as outlined in Chapter 2, has pointed out how an evolution of the middleman minority model and the reactive version of the cultural theory led towards certain areas of convergence and the existence of overlapping properties. Thus, at that point the thesis identified the opportunity for a theoretical synthesis of the two major theoretical explanations and established the rationale for building a composite model of ethnic entrepreneurship.

The proposed composite model builds on both situational and cultural approaches to ethnic entrepreneurship. The model considers the host hostility ethnic groups experience as the

principal cause for mobilisation of ethnic resources and the formation of ethnic business networks. However, the model also expects that host hostility will generate these networks only in conjunction with collectivistic cultural endowments. Ethnic networks in business are, therefore, considered as a direct result of the group's response to the hostile environment, but upon the condition that ethnic groups retain a distinct cultural tradition of collectivism. Such a cultural tradition would encompass cultural endowments capable of promoting the groups' internal organising capacity and, therefore, of producing collectivistic entities embedded in economic activity. The model further holds that ethnic business networks advance the economic position of ethnic business groups which could result in conflicts between ethnic entrepreneurs and the competing business groups from the host population.

Theoretical arguments derived from the composite model of ethnic entrepreneurship were then empirically evaluated using the evidence on ethnic groups involved in New Zealand agriculture. Thus, the specific concern of this thesis was to determine empirically the causal conditions for the formation of network-based economic mechanisms within some ethnic groups. The point was also to see if the composite model of ethnic entrepreneurship could account for the inter-group differences in the mobilisation of resources through ethnic networks. The composite model suggested two hypotheses - the ethnic network and the conflict hypothesis - both of which were empirically assessed in this thesis. According to the ethnic networks hypothesis (T_1) the presence of the host hostility towards ethnic groups in conjunction with the presence of collectivistic cultural endowments would generate ethnic networks in business. The conflict hypothesis (T_2) stated that if ethnic entrepreneurs were perceived by the host business population as an economic threat to their interests, or if there were negative perceptions of ethnic solidarity in business, then conflicts between ethnic business groups and certain segments of the host business population were likely. The first hypothesis implied multiple conjectural causations, and it was argued in the thesis that such logic of causality can be captured in a multiple group research design using the Qualitative Comparative Analysis (QCA).

Following the procedure of QCA, these two hypotheses were firstly formulated as logical causal functions and expressed in Boolean terms. Afterwards, it was necessary to clarify outcome and causal variables, and to decide on the coding systems for their transformation to a state appropriate for QCA. That is, to transform all variables into binary forms or the presence/absence conditions. Basically, the derived Boolean algebraic functions contained the presence/absence of causal conditions hypothesised to be responsible for the emergence of outcomes. These Boolean functions served as a guide in assembling and analysing empirical evidence on the comparative case studies of ethnic groups in New Zealand agriculture. A formal protocol was developed for conducting comparative case studies and it employed a systematic, replicable approach to data gathering and analysis. Data were gathered on the key comparative

variables, relying on the examination of available empirical sources. In fact, the investigation of the presence or the absence of the key variables - causal conditions and outcomes - structured the case studies.

QCA proceeded by presenting the empirical evidence from the comparative case studies in the form of truth tables, a basic analytical tool in applying this method. Thus, the empirical analysis produced a data matrix of binary data that listed every causal configuration that appeared in the evidence, along with their corresponding values for the outcome. These transformed cases were then compared holistically and simplified in a systematic manner in order to calculate Boolean causal functions. These empirically derived logical functions are then compared with the theoretical arguments.

The thesis employed a multiple group/one industry research design and analysed eleven ethnic groups who have consistently played an important role in the history of New Zealand agriculture during the nineteenth and twentieth centuries. These groups were: Chinese, Indian and Italian immigrants mainly associated with market gardening; Lebanese, Dalmatian and French grape growers and wine makers; Scandinavian and Bohemian dairy farmers; German and Polish farmers and growers, and finally, the recent Dutch immigrants who became largely involved in the horticultural and dairy industries. These eleven ethnic groups were discussed in three clusters. These were Asian, South European, and other European, the latter including the North, Western and Central European ethnic groups.

The empirical research showed how Asian immigrants entering New Zealand agriculture developed distinctive business strategies, characterised by a strong intra-group orientation in business and the formation of the ethnically - bounded economic associations. The Chinese and Indian farming enterprises were embedded in ethnic business networks which facilitated mobilisation and distribution of resources, and provided support for ethnic entrepreneurs in starting and carrying out the business. The empirical analysis also illustrated how Asian entrepreneurs tended to make extensive use the cultural traditions of the home countries in organising these networks. For instance, the informal, ethnically - exclusive networks developed within the Chinese market gardening community were rooted in the Confucian ideology which promoted collectivism, mutual trust and reciprocity. There was a generalised sense of the trust, loyalty, and reciprocity developed amongst the Asian farmers in New Zealand. They succeeded in creating social structures to provide mutual ethnic support, and also in coordinating economic activities and controlling intra-group competition in business.

While the in-group attachment in business, and the formation of informal ethnic economic associations were notable amongst the Asian farmers, these features were absent amongst the

continental European groups in business. The empirical evidence did not indicate the presence of ethnic business networks within the Europeans immigrants who entered New Zealand agriculture. Thus, the immigrants from the South Europe, Scandinavia, Germany, Poland and recently the Netherlands, did not form social structures for the mobilisation and distribution of the resources²³⁷. Nevertheless, family loyalty and solidarity were recognised amongst the Dalmatian wine makers and Italian market gardeners who relied on family-based networks in carrying out economic activities. Those forms of solidarity in business, however, were not extended to the community level, and the absence of in-group orientations in business and the interdependence between farming enterprises were recorded within both ethnic farming groups. In delineating a typology of ethnic business strategies developed within New Zealand agriculture²³⁸, South European farmers were considered as employing a quasi-collectivistic strategy in contrast to an evident collectivistic style of the Asian entrepreneurs on one side, and individualistic orientation of the North, Western and Central European farmers on the other.

In terms of causal analysis, the empirical research showed how both situational and cultural factors were relevant for mobilisation of intra-group resources and the emergence of ethnic business networks within the Asian farming enterprises. The QCA of ethnic groups in New Zealand agriculture, therefore, provided strong support for the theoretical arguments derived from the composite model of ethnic entrepreneurship. However, while the ethnic networks hypothesis (T₁) was sustained by the empirical research, the QCA also stressed some specific conditions in considering social factors as a cause for forming ethnic business networks in New Zealand agriculture. This empirical research recognised the substantial differences between the ethnic groups with regard to the host hostility they faced and how that affected economic life in terms of mobilising resources. These differences proved to be significant in accounting for variations in ethnic solidarity in business and for succeeding/failing in forming ethnic business networks. Thus, this QCA suggested that with other conditions being equal, the ethnic groups which faced considerable host hostility would develop ethnically exclusive networks in business.

The empirical research also highlighted that these networks advanced the economic position of ethnic entrepreneurs in starting and carrying out the business. While networks were a source of the strength of ethnic business communities, under some conditions their existence led towards conflicts between ethnic entrepreneurs and some segments of the host business population.

²³⁷ While doing QCA of comparative case studies on the European ethnic groups it was argued that a rural religious settlement of the Bohemian farmers at Puhoi, and short lived and missionary settlements of the French involved in wine making industry were not pertinent for this analysis. The same applied to the Lebanese wine growers who were represented by one extensive family, and hence not relevant for discussing the mobilisation of resources within an ethnic community.

²³⁸ As presented in Chapter 7.

QCA results indicated that a perception of an economic threat within the context of economic depression were associated with the emergence of anti-Asian farming protests that occurred in rural New Zealand settings of the late nineteenth and early twentieth century. Thus, the conflict hypothesis (T₂) was sustained by this empirical research, since one of two recursive effects of ethnic solidarity was empirically identified as a causal condition related to the anti-Asian farming protests. What emerged quite clearly from the empirical research was that the presence of cohesive and highly organised Asian farming communities was associated with negative reactions amongst the domestic business population, small-size farmers in particular. Furthermore, outbreaks of farming protests over the presence of Asian market gardeners coincided with economic depressions.

The empirical research on ethnic groups in New Zealand agriculture confirmed the utility of considering social and cultural factors together in explaining the formation of ethnic networks in business. Comparative case studies of Asian entrepreneurs are probably the best illustration of how these two groups of factors provided a credible framework for explaining ethnic solidarity in business. These findings also correspond to the contemporary economic sociology literature on entrepreneurship²³⁹. That literature argues that no single variable (such as economic, cultural, structural, psychological and social factors, or state intervention and control) can be sufficient for explaining the causes and agencies in promoting entrepreneurship in general. The theoretical stance of this thesis is in line with the general concerns of economic sociology with its focus on the social determinants of economic life (Granovetter, 1995; Portes and Sensenbrenner, 1993). Thus, the research illustrated how non-economic factors influence the economic life of ethnic groups in business. The finding that strategies of ethnic communities in business were influenced by the social positions of the ethnic groups within the host society is consistent with the segment of economic sociology literature which stresses the role of social marginality in defining entrepreneurial processes²⁴⁰. Apart from focusing on the social context of economic actions, the thesis also pointed at the structure in which economic activity of ethnic groups was embedded. Social networks are seen as some of the most important structures in which economic transactions are embedded, and the current economic sociology literature²⁴¹ extensively employs networks as an analytic tool for illuminating economic behaviour. This thesis put an emphasis on one particular type of networks, those that were ethnically bounded, as social structures for mobilising and distributing resources within ethnic communities in business.

Elaborating further on the influence of, and the mutual interplay among, non-economic factors

²³⁹ See Smelser and Swedberg (1994), or Swedberg (1998).

²⁴⁰ See Smelser and Swedberg (1994), Wilken (1979), or Feagin and Imani (1994).

²⁴¹ As outlined in Swedberg (1987, 1991).

in explaining the economic actions of ethnic groups, it should be noted that empirical research pointed towards substantively different characteristics and extent of a hostile government's policy encountered by ethnic groups. These differences proved to be significant in accounting for success or failure in forming ethnic business networks. The empirical research showed that only ethnic groups who faced considerable host hostility would turn towards mobilisation of ethnic resources in economic activities and form ethnic business networks. This is one of the most intriguing findings in this research. Consideration of different degrees of the host hostility was, for instance, supported by Scott (1990) who argued that the degree of ethnic solidarity would vary in direct proportion to the degree of opposition encountered by an ethnic group. Furthermore, Portes and Sensebrenner (1993) stressed that not all immigrant groups experienced equal level of the host hostility, which could account, in part for the different strength of ethnic solidarity. They derived hypothesis-like statements on the relations between these two variables that can be empirically tested (*Ibidem*, pp. 1328-1329). Feagin and Imani (1994) also pointed to the need for further exploration of host hostility which would vary in kind and degree and could substantially influence economic development of some ethnic groups. Jenkins (1984) agreed that ethnic groups are discriminated against to different degrees and in different ways and that it would be worthwhile discussing the social reception which ethnic groups encountered, both in more detail and within more explicit comparative research. In New Zealand, Pearson (1990) asserted that comparative research on ethnic groups should acknowledge the differentials between the discrimination some groups faced.

While degree of host hostility has been discussed there has been little formal examination of it to date. This thesis, by comparing ethnic farming groups and employing QCA allowed for the delineation of differences and similarities between the groups on the key comparative variables. Further, in terms of methodological relevance this thesis has responded to the call from Aldrich and Waldinger (1990), Jenkins (1984), Feagin and Imani (1994), Baker (1983), Pearson (1990) for more rigorous, detailed comparative research on ethnic groups. The comparative research design employed in this thesis also has relevance concerning the comments made by Fukuyama (1995) on the utility of comparing Italian and Chinese ethnic businesses. Fukuyama argued that there had not been any comparative research which discussed these two groups together, and also highlighted how these ethnic businesses were similar in many respects. This thesis pointed out obvious similarities between Italian and Chinese traditions of collectivism which could potentially lead towards similar ethnic business strategy. However, they did not, due to the substantially different social reception these groups encountered in New Zealand.

Identifying social factors as responsible for the rise of ethnic solidarity in business also has some relevance for the general discussions on ethnicity which were outlined in the introductory chapter of this thesis. In explaining ethnic solidarity in business this thesis supports the

circumstantial approach, and therefore, an instrumental view of ethnicity. That is, ethnic solidarity is an emergent phenomenon which results from certain social circumstances. By considering ethnic solidarity as socially constructed and situationally sensitive, this research supports the ideas advocated, for instance, by Yancey et al. (1976) who view ethnicity as a dynamic and reactive phenomenon. It may be further argued that ethnicity is an instrument in the economic life of ethnic groups, and, as the empirical research on ethnic groups in New Zealand agriculture shows, ethnic solidarity is changeable, varies with circumstances, and consequently, may emerge or disappear.

Apart from focusing on a causal analysis of the emergence of ethnic solidarity in agricultural setting, the QCA also provide some insights into the economic life of ethnic groups in New Zealand agriculture during the nineteenth and twentieth century. Comparative case studies provided an historical and integrative review of the development of the most important ethnic groups in New Zealand agriculture. Accordingly, this thesis has some empirical relevance in terms of adding to the knowledge of ethnic business strategies in New Zealand. This knowledge, as argued in the introductory chapter, was fragmented, since the literature offered pieces of work on some aspects of ethnic groups in agriculture – primarily geographical, historical and sociological aspects. The thesis has provided a comprehensive analysis of an ethnic dimension of agriculture, one of the first socio-economic niches immigrants occupied in New Zealand.

This thesis could be also considered as one of the first attempts to apply the concepts arising from the new economic sociology literature to the empirical setting of New Zealand. While there is an increasing amount of interest being shown internationally in the ways in which social phenomena influence economic action, such economic sociologic studies are fairly rare in New Zealand literature. It is hoped that this thesis will bring some specific concepts of new economic sociology – such as embeddedness, networks, social capital - closer to the academic and public audience in New Zealand.

8.3 Policy Implications

Empirical considerations of ethnicity and agriculture, as outlined in the introductory chapter, have policy implications in the context of agricultural and rural development projects. There is some evidence concerning the role of public assistance in successfully incorporating ethnic farming groups into local agricultural production, which are worth mentioning. For instance, the Indo-Chinese farming project in Western Washington, U.S. during the 1980s managed to capitalise on immigrant knowledge and experience in the production and culture of certain vegetables and fruits (Evans, 1985). The project included several government agencies and local churches that became involved in teaching immigrants in local farming styles and regulations.

The project was also designed to enable ethnic farmers to continue with their farming practices and maintain their own cultural tradition. Such a view of the organised and planned introduction of ethnic farmers in local agricultural production was recently promoted by New Zealand Vegetable and Potato Growers Association (Vegfed)²⁴². The association launched a training and information programme to help a group of one hundred recent immigrants from Korea who became greenhouse growers in the Auckland area. The reasons behind such actions were practical and legal, as the Korean growers were given necessary information about the industry, and also were introduced in the regulations concerning the use of agrochemicals and the Resource Management Act. The association also plans to extend the programme to recent Chinese immigrants who set up their own businesses in vegetable production in Horowhenua region, in the lower North Island.

The organisation of ethnic farming groups under the guidance of government agencies, and their inclusion into agricultural production, has become even more evident in the Indonesian transmigration program – the world's biggest project on migration and agricultural development (Cofler et al. 1989). In this case the government anticipated significant inter-ethnic differences in relation to soil and plant management that were eventually used with good effect in stimulating the production of some export crops. As Cofler et al. (1989) argued, ethnic differences within the Indonesian transmigration program were as real and powerful as were the environmental and economic factors. Thus, pragmatism led towards the recognition and inclusion of ethnicity as one of the basic building blocks of the planned rural development programs. Moreover, ethnic factors, together with some other social characteristics of the farming population, such as religion, gender, etc., have become absorbed into the concept of participatory rural development.

With regard to this thesis there are some comments on policy implications that flow from the empirical research. The research has some relevance for current ethnic business development in New Zealand, and the following areas of possible public interest are outlined. These are: self-determined ethnic business development; the capitalisation on cultural capital within community - based entrepreneurship; Polynesian migration networks; promotion of business networking in the New Zealand economy, and strengthening of social capital for Maori business development.

Due to general economic circumstances, the New Zealand government may be far more reluctant than in the past to undertake macroeconomic or employment policies to alleviate the socio-economic problems of the disadvantaged, marginalised mainly sub-urban ethnic groups. Some ethnic groups, such as Pacific Islanders, are particularly afflicted by high levels of

²⁴² See an editorial by B. Gargiulo, the president of Vegfed, published in *The Commercial Grower*, 54 (6), July 1999, p. 5.

structural unemployment and low levels of human capital and income. In such a context, self-employment and the development of small business has been considered one of the most productive strategies to adopt in trying to increase employment, and to reduce reliance on social security schemes. Consequently, in the absence of direct government support ethnic/immigrant communities can be generally called upon to maximise application of their own resources to provide the job opportunities for their members. As the general literature and empirical research on ethnic entrepreneurship have shown, highly organised communities form social structures for the support of individual enterprises, and could, for instance, provide alternative access to capital or other resource for starting up a business. Obviously, since relying on alternative, non-publicly delivered resources, such self-organising and self-reliant ethnic communities in business could be seen as an attractive option for a government. However, there are some ways in which policy may strengthen an infrastructure for fostering immigrant businesses. Thus, government may seek to implement a variety of selective training and other programs which target particular community-based employment projects or minority business programs. In addition, the liberalization of formal requirements²⁴³ for immigrants starting small businesses is one measure that can encourage job creation in ethnic communities.

Paradoxically, government may promote the development of ethnic business while simultaneously maintaining policies that impede the attainment of that goal. For instance, as the knowledge accumulated on the ethnic entrepreneurs indicates, the modus operandi of the ethnic business is reliance on the low cost or unpaid, loyal family or co-ethnic labor. Labor laws adversely affect ethnic entrepreneurs since they are directed at controlling the conditions under which labor is employed. On the other hand, tight regulations of the food and restaurant industries (currently one of most important ethnic niches), are indispensable. The objective of the policy should be to achieve balance between the ease of access to business opportunities by immigrants and the need to protect workers within the ethnic business sectors and consumers in general.

This research has emphasised cultural endowments as ingrained elements of ethnic entrepreneurship and how immigrant groups select from their cultural heritage some mechanisms that remained economically utilitarian in a new society. This is relevant for the community-based employment projects which address high levels of Maori and Pacific Island unemployment through an attempt to capitalise on their 'cultural capital'. It may be said that urban Pacific groups, in particular, possess significant cultural capital which could be mobilised through market-leading community entrepreneurship²⁴⁴. Such community entrepreneurship

²⁴³ For instance, recognition of foreign diplomas for granting of licenses.

²⁴⁴ Enterprise Otara; established in the South Auckland during the early 1990s, is a case of community-based entrepreneurship.

could be effective in providing direct employment creation by using and promoting some cultural symbols such as Polynesian food, music, craft, arts, and fashion. Obviously, there is the need for the collaboration between government agencies and community-based entrepreneurship in an attempt to combine an existing rich cultural capital with the professional and managerial skills necessary for commercial realisation. However, it should be noted that the role of outside agencies should be to 'get things moving', and simply to activate and channel the use of cultural resources Maori and Pacific Island communities are endowed with. It is also important that these community-based projects do not remain largely dependent on governmental funding for their continued existence.

The cultural heritage of some recent immigrants groups and tradition of collectivism were also effectively ingrained in the establishment of the migrants' networks which operate effectively between New Zealand and some Pacific Island countries. Polynesian migrant networks have some parallels with South European migration chains discussed in this thesis. Some concepts which were often referred to, such as reciprocal obligations, family loyalty, mutual aid, have been refocused in contemporary Pacific immigration in New Zealand. Pacific people's community organisation, characterised by the dominance of extensive families and compounded by the strong village and religious identification, served as an axis along which the migrants in both the country of origin and destination are tied, resulting in frequent exchange of information and other resources. Once formed, migration networks often become self-sustaining and enable cost-reduction and risk-minimisation to the settlement of the newly arrived immigrants. Migrant networks make it easy for immigrant to find housing, jobs, obtain information, financial support and protection. Accordingly, they help to fill the gap caused by the diminishing role of the social security schemes in New Zealand.

Generally speaking, knowledge on ethnic business networks gained in this thesis is also relevant when considering business networks in an advanced market economy and in contexts other than immigrant/ethnic enterprises. The thesis claims that business networks create certain economic advantages for their members, particularly related to the virtue of mobilising resources, such as information and capital in particular, in a less-costly way. Apart from the resource component of networks, there are some positive externalities of business networking, which become actual within current economic trends. These externalities are related, for instance, to risk reduction, economies of scale, rationalisation, use of complementary technologies, blocking of competition, and the easing of barriers to international expansion of businesses. Modern business networks can take various forms, and would range from informal relationships between family and friends to the partnerships between groups of firms, including joint ventures or operating alliances. Regardless of the forms, network-based economic mechanisms in general require a relatively high level of trust and interdependence within business communities.

Currently, there is an increasing interest in New Zealand concerning the role which cooperation can play in small and medium business development (Goldfinch and Perry, 1997). If network development is to become a public policy goal it implies that there is a need for activities in promoting cooperative behaviour within local business communities. Since the general socio-economic environment in New Zealand is characterised by individualism and a low level of integration of individuals into strong, cohesive groupings, there is the need for building trust and increasing disposition towards cooperation. This may be achieved through repeated interactions and informal gathering that would target to the specific needs of particular types of businesses. Public policy may also assist by supporting the involvement of agents, in fact, business network brokers. In addition, some publicly funded business associations (local chamber of commerce for instance) could promote the awareness among their members about the opportunities networks deliver, and facilitate links between the firms.

Finally, although this thesis has not discussed the Maori ethnic group, for reasons explained in Chapter 4 and also briefly outlined later in this chapter, it is appropriate to make some tentative comments concerning incentives for promoting indigenous development. The concept of social capital referred to in this thesis can play an important role in Maori business development. In contrast to the non-ethnic business groups mentioned above, cohesiveness already exists amongst Maori who are embedded in a variety of networks and voluntary associations. These associations, together with the evident kinship orientation, mutual trust, sharing and reciprocity, are a precondition for the rise of potentially productive social capital. Social capital which is already in place requires assessment and strengthening in order to lead to benefits for Maori-owned enterprises. There are ways in which government can, and, in fact, does positively affect social capital in the Maori private sector. In addition to direct provision of technical and partial financial assistance, and disseminating of information, that build up skills of self-employed Maori people, government incentives can also focus on capacity building of the Maori business community. Thus, local authorities can act a catalyst in bringing people with a common interest together, providing opportunities for social interactions (liaison group meeting, community workshops), and also in building a positive relation between private, community and public initiatives related to the Maori business. Other areas of government involvement can be: the institutionalisation of Maori business networks and their extension beyond regional levels; the establishment of databases which can assist in locating and pooling resources available to Maori enterprises, and the promotion of trade and alliances between Maori business and other indigenous Pacific peoples.

It is likely that Maori-owned enterprises may also build on the extended family (*whanau*) or tribes (*iwi*). Similar to family or kinship-based networks developed amongst Asian and South European farming communities in New Zealand, Maori enterprises could be also embedded

within networks that include members from the same family or tribe. Some properties of networking, such as pooling of profits within *whanau*, 'returning' of a proportion of the profit back to the tribe, the coordination of family activities towards horizontal and vertical integration in business, and rotating labour pool arrangements could contribute to the success and longevity of Maori business. The existence of these arrangements is sustained and regulated by the principles of sharing, reciprocity and rotation, and, as noted above, these principles are ingrained in Maori culture. However, the activation of cultural mechanisms within the community and their utilisation for economic purposes should be considered in the light of opportunities Maori businesses encounter.

8.4 Suggestions for Future Research

In considering possible themes for future research stemming from this thesis, the following areas are indicated: an extension of the thesis by improving comparative research design, or by discussing ethnicity in the context of the other land-based industries in New Zealand; an inclusion of indigenous farming enterprises in considering ethnicity in agricultural settings; an application of the concept of social networks to farmers' knowledge systems; and finally research on social capital and rural communities in New Zealand. In outlining these areas the focus was on the possibility of overcoming some of the research limitations encountered in the thesis, and then on specific empirical research that could rely on some of the concepts used in this thesis.

In order to overcome the limited diversity of the causal configurations empirically observed within the empirical setting of New Zealand agriculture, it could be worthwhile extending the empirical research towards a cross-national analysis. Thus, subsequent research might insist on causal heterogeneity, which could be achieved by including new ethnic groups involved in agriculture in some overseas localities, or analysing the same ethnic groups in different empirical settings during various time periods. Such an extension of the empirical considerations might yield different causal configurations associated particularly with positive outcomes – that is the formation of ethnic business networks. However, carrying out a cross-national analysis of ethnic groups would require taking into account comparability of the indicators for coding key variables included in the analysis.

While doing comparative case studies it has become obvious that apart from agriculture there was a notable ethnic dimension in the history of other land-based industries in New Zealand. Some ethnic groups were important for the development of a particular industry, such as Italians in the fishing industry (Lochore, 1951; Burnley, 1973), Scandinavians in forestry (Petersen, 1956; Lyng, 1939), Dalmatians in the gum digging industry (Trlin, 1979), and Chinese and

some other non-British immigrants in the mining industry (Ng, 1993; McGill, 1982). An extension of the empirical research, by discussing ethnic groups in land-based industries in general, could be a focus of economic historiography, with detailed considerations of the technology transferred and adapted by immigrants, and accounts of economic consequences of the immigrants' involvement in these industries.

An empirical analysis of ethnicity in New Zealand agriculture or land-base industries would not be complete without including the Maori ethnic group. As argued in Chapter 4, while selecting the cases for this QCA, the empirical literature on ethnicity in agriculture does not include the indigenous rural population in the same context as immigrant rural groups. The principal reasons for discussing indigenous Maori agricultural enterprises separately from the ethnic farming in New Zealand are based on their historical origins and the uniqueness of the organisational structure governing Maori land (Kingi, 1997). Maori Incorporations and Trusts – the most common forms of ownership for the commercial management of Maori land - have become mainly involved in pastoral agriculture, forestry, horticultural, some processing industries and rural tourism. Although the contribution of Maori in the land-based industries has been substantial, it has been argued that our knowledge and understanding of Maori farmers' experience in New Zealand is rather limited (Kingi, 1997). Bearing in mind that increased competition, deregulation of markets, and the uncertainty of agriculture production, are some of the issues facing farmers in New Zealand, it will be worthwhile analysing whether the unique characteristics of Maori agribusiness provided additional opportunities for the survival of enterprises in the agricultural industry. There are a variety of issues which could be addressed through in-depth analysis on Maori agricultural enterprises, such as identification of endemic problems related to the success/failure of Maori agribusinesses; how to address social, cultural and economic objectives of Maori enterprises, and to discuss why and how Maori farmers take advantage of their tribal links to establish co-operative production and marketing ventures, such as are taking place in the meat and wine industries in the central North Island.

Moving away from elaborating on ethnic and indigenous farming enterprises in New Zealand agriculture, there are some possible applications of the concept of social networks to more general and actual issues of rural research. For instance, it may be worthwhile using a social network approach for understanding farmers' knowledge systems²⁴⁵ within a particular industry – horticulture for instance. Such empirical considerations of social networks would focus on social structures through which farmers acquire, evaluate and apply information, and would address interpersonal structures within which farmers' decisions are made.

²⁴⁵ As defined by Wells (1991).

Moreover, as noted in the preceding chapter, networks developed among ethnic business groups could be considered also as a source of economically productive social capital. Ethnic communities are of course, not the only ones that use social capital for economic advantages. Recent academic and public discussions on the concept of social capital²⁴⁶ has highlighted how communities with a high level of trust could attain high economic growth rates, and even undertake some functions of the welfare state, such as provisions of social security, health and education.

Basically, social capital, in the context of community development, refers to the features of social interactions with an emphasis on the networks, trust, and norms of reciprocity that facilitate co-ordination and co-operation for mutual benefit (Putnam, 1993; Portes, 1995). Thus, connectedness, capacity to work together towards the goals beyond individual benefits, and developed feelings of trust and security among community members, would be some of the indicators of social capital (Robinson, 1997). However, the operationalization of these indicators for the purpose of quantitative assessments of social capital is a more challenging topic, still open for future theoretical and empirical considerations. Defining social capital in more tangible ways and proposing solutions for its empirical evaluation would, for instance, allow for the identification of productive potentials and some material benefits for the people living in the communities that score highly on social capital. In addition, potential research on social capital in the context of rural community development in New Zealand could address a question as to whether social capital can be considered as the key to the attainment of sustainable economic and social development in deprived and isolated rural communities. Understanding social capital generated through church memberships, or a Maori perspective on social capital that might emphasize a sense of identity and belonging, are additional unique areas of research on social capital for rural New Zealand.

²⁴⁶ The literature on social capital is both extensive and illuminating. See for example Coleman (1988), Putnam (1993), Portes and Sensenbrenner (1993), Flora (1998), Fukuyama (1995), Portes (1995, 1998), Uphoff (2000), Warner (1999), Wall et al. (1998), Day (1998), Unger (1998), Falk and Kilpatrick (1999). For the social capital debate in the context of public policy see Robinson (1997) and Winter (2000).

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APPENDIX 1

Table A1. 1. Problem Foci, Ethnic Groups and Localities of the Analyses as Noted in the Literature on Ethnicity in Agriculture

Problem Focus	Ethnic/Rural Religious Groups	Locality	Authors
<u>Diffusion-adaptation research</u>	Polish, Welsh, Norwegian, English	Midwest, U.S.	Marshall (1948)
	Danish and Polish	Wisconsin, U.S	Pedersen (1951)
	German, Polish, Swiss, Norwegian, Danish and Swedish	Wisconsin, U.S	Duncan and Kreitlow (1954)
	German, Dutch and Norwegian	Wisconsin, U.S.	van den Ban (1960)
	Hispanic and British	Colorado, U.S.	Gutierrez and Eckert (1991)
	Amish	Ohio, U.S.	Sommers and Napier (1993)
	<u>Ethnic determinants of farming patterns (goals, strategy, farming organisation inheritance, family, community)</u>	German and Swiss	Wisconsin
	Irish, German, Dutch, Scandinavian, and Anglo-American	Minnesota, U.S.	Deininger and Marshall (1955)
	Dutch	New Zealand	van Roon (1971)
	The Chinese	New Zealand	Lee (1974)
	Italian and German	Italy	Cole and Wolf (1974)
	Middle Eastern and European	Israel.	Sadan and Weintraub (1980)
	German and Irish	Illinois, U.S.	Salamon (1980)
	Irish, German, Swedish, British and American	Midwest, U.S.	Salamon (1984)

Problem Focus	Ethnic/Rural Religious Groups	Locality	Authors
	German and British German and American (Yankee) Irish, German, English and Scandinavian German and British German and American German German Javanese and Sundanese German and British Welsh	Illinios, U.S. Kansas, U.S. Illinios, U.S. Illinios, U.S. Illinios, U.S. Illinios, U.S. Wisconsin, U.S. Indonesia Illinios, U.S. Wells	Salamon (1985) Flora and Stitz (1985) Salamon and Davis-Brown (1986) Foster (1986, 1987, 1987a) Salamon (1987) Rogers (1987) Gilbert and Akor (1988) Colfer et al. (1989) Salamon (1993) Bateman and Ray (1994)
<u>Ethnicity and entrepreneurship (social network perspective)</u>	The Japanese The Japanese The Japanese The Japanese, Anglo and Mexican The Japanese The Chinese	California, U.S. US California California, U.S. California, U.S. Thailand	Light (1972) Bonacich and Modell (1980) O'Brien and Fugita (1982) Wells (1991) Tsukashima (1991) Pongsapich (1994)
<u>Assimilation of ethnic groups in rural areas</u>	Japanese and Germans The Manitos Mennonities Dutch Dutch	Brazil New Mexico, U.S. Manitoba, Canada Australia Canada	Willems (1942) Senter (1949) Francis (1952) Hempel (1960) Rees-Powel (1966)

Problem Focus	Ethnic/Rural Religious Groups	Locality	Authors
	Italian	Australia	Burnley (1972)
	Mennonities	U.S. and Canada	Driedger (1995)

Note: The sources included are grouped based on the explicit focus of research.

APPENDIX 2

AN OVERVIEW OF BOOLEAN LOGIC

This brief overview of Boolean logic used in QCA is based on Ragin (1987, 1994a). Ragin identified ten aspects of Boolean logic that are essential to use in social science. These are as follows.

1. Use of binary data

There are two conditions or states in Boolean logic, and these are generally referred as 1 which indicates presence, and 0 indicates absence. Thus, in Boolean logic all variables, independent and dependent, are dichotomous forms and hence presented by nominal-scale measurements. There is also the convention that upper-case letters indicate the presence of a condition and lower-case letters indicate the absence of condition.

2. Boolean addition

In Boolean logic addition is equivalent to the logical operation 'or'.

3. Boolean multiplication

In Boolean logic multiplication is equivalent to the logical operator 'and', where a product is a specific combination of causal conditions. For instance, Boolean expression $Abc \Rightarrow Y$ means that the presence of variable A, combined with the absence of variable B and the absence of variable C produces the presence of the outcome Y.

4. Use of truth table to represent data

A truth table is a data matrix where each row represents a logical combination of values on causal conditions and outcomes. Each row gets an output value of either 1 or 0. In Boolean logic a number of causal conditions determines the number of combinations of causal condition that are logically possible. Accordingly, the number of the rows in the truth tables is an exponential function of a number of independent variables (2^n).

Table A2.1 is a representative truth table with three independent variables ($n=3$, 8 rows in the truth table). Each case is described as a joint influence of independent variables (A, B, C) with the logical operator 'and' marked as 'x' to produce the outcome variable Y. Again, upper-case letters indicate the presence of a causal condition of outcome, and lower-case letters indicate the absence of a causal condition or outcome. The table includes all logically possible combinations of causal factors, which may or may not occur in reality.

Table A2.1 A Representative Truth Table

Row No. (type of cases)	No. of Cases	Variables	
		Independent/Causal	Dependent/Outcome
1	3	A x B x C	= Y
2	3	A x B x c	= Y
3	2	a x B x C	= Y
4	1	a x b x C	= Y
5	6	A x b x C	= y
6	8	A x b x c	= y
7	3	a x B x c	= y
8	4	a x b x c	= y

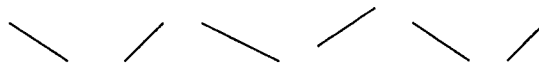
5. Combinatorial logic

Boolean logic gives the same status to the absence and the presence of causal conditions/variables. Thus, the absence of a cause has the same logical status as the presence of a cause. Moreover, a cause is not viewed in isolation but always within the contexts of the presence/ absence of other causal factors.

6. Boolean minimisation

The rule of Boolean minimisation is: if two Boolean primitive expressions, i.e. one of the lines in the truth table, differ only in one causal condition, yet produce the same outcome, we can remove the condition that is different, accepting it as irrelevant. This minimisation is based on two subsequent procedures. First, all rows of a truth table having the same value of X for the dependent variable are combined into one equation but joined with the logical operator 'or' as marked with '+'. Correspondingly, the first four original configurations, or primitive equations as taken from a representative truth table (Table A2.1), may be simplified using Boolean minimisation as :

Original causal configurations: $A x B x c + A x B x C + a x B x C + a x b x C \Rightarrow Y$



Minimised causal configurations: $A x B + B x C + a x C \Rightarrow Y$

Minimised causal configurations are also referred to as prime implicants, which is the last line illustrated above, and the second minimisation procedure involves a construction of prime implicant chart map.

7. The use of 'prime implicants'

Boolean logic uses prime implicant chart map as a link between primitive, original equations,

and prime implicants as obtained after the first phase of minimisation. The point is to write down a chart showing convergence of primitive equations towards the final minimal equation.

Table A2.2 Prime Implicants Chart

		Primitive Expressions /Original Configurations			
		Abc	ABC	aBC	abC
Prime Implicants/ Minimised Configurations	AB	x	x		
	BC	x		x	
	aC			x	x

Thus, in two causal configuration - AB and aC, prime implicants cover all four original configurations, and the logically minimal Boolean equation is $AB + aC \Rightarrow Y$.

A prime implicant chart is a table of rows, columns and cells that shows the relationship between prime implicants and the configurations from which they were derived. QCA displays a prime implicant chart by listing configurations across the top of the table (columns in the table) and prime implicants down the left hand side of the table (rows of the chart). An 'x' symbol in a cell of the chart indicates that the prime implicant in the row covers the configurations in the column. The basic goal of the chart is to select the minimum number of prime implicants needed to cover all configurations in the chart. QCA further simplifies a prime implicant chart to arrive at the final Boolean minimal function.

Furthermore, there are some optional steps involved in carrying out QCA. These are:

8. Use of De Morgan's law

It is possible to write a minimal Boolean expression for the presence (1) of an outcome, and its logical complement for the absence (0) of an outcome using De Morgan's Law. Thus, applying De Morgan's Law to the Boolean equation derived for the positive outcome, that is $AB + aC = Y$, it is possible to derive a Boolean equation for negative outcome, that is $A b + a c + b c = y$.

9. Necessary and sufficient conditions

The results of Boolean analysis may be interpreted in terms of necessary conditions (must be present for a certain phenomenon to occur) and sufficient conditions (by itself can produce a certain phenomena). Some patterns of necessary and sufficient causation expressed in Boolean equations are: $AC + BC$ (C is necessary but not sufficient causal factor); $A + Bc$ (A is

sufficient but not necessary) , B (B is both necessary and sufficient).

10. Factoring Boolean expressions

In Boolean logic it is possible to do factoring in order to find which causal conditions are necessary and which are causally equivalent. A hypothetical Boolean equation $AB + AC + AD = Y$ can be factored to show that A is necessary condition $A(B + C + D) = Y$ and that B, C, and D are causally equivalent (in combination with A) with respect to outcome Y.