

Beyond Filling the Skill Gaps

**The Entrepreneurial Drivers, Challenges, and
Contribution Channels of Skilled Indian Migrants in the
New Zealand Economy.**

Neharika Ahluwalia

A thesis submitted to Auckland University of Technology in partial
fulfilment of the requirements for the degree of
Master of Business (MBus)

2018

Faculty of Business and Law

Primary supervisor: Dr. Swati Nagar

Table of Contents

List of tables	v
List of figures	vi
Abbreviations	vii
Attestation of authorship	viii
Acknowledgements	ix
Abstract	x
Chapter 1 - Introduction	1
1.1 Research background	1
1.2 Research rationale	4
1.3 Research design	6
1.4 Thesis structure	6
Chapter 2 - Migrant Entrepreneurship	8
2.1 Introduction	8
2.1.1 Entrepreneurship	8
2.1.2 Migrant entrepreneurship	11
2.1.3 Skilled migrants	13
2.1.4 Definition of a skilled migrant entrepreneur for this thesis	14
2.2 Theories on entrepreneurial drivers	14
2.2.1 Traditional theories	15
2.2.2 Entrepreneurial activity framework	17
2.2.3 Framework for this thesis	19
2.3 Theories on entrepreneurial challenges	26
2.3.1 Resource-based theory	27
2.3.2 Institutional theory	28
2.3.3 Framework for this thesis	30
2.4 Summary	31
Chapter 3 - Skilled Migrant Entrepreneurs	32
3.1 Introduction	32
3.2 Theories on the contributions of skilled migrants	33
3.2.1 Economic growth models	34
3.2.2 Labour arbitrage framework	36
3.2.3 Impact channels theory	39
3.3 New Zealand research	42
3.4 Framework for this thesis	44
3.5 Summary	45
Chapter 4 - New Zealand Context	46
4.1 Introduction	46
4.2 New Zealand's need for skilled labour	46
4.2.1 Short skilled sectors in New Zealand	47
4.2.2 Key source countries of skilled labour to New Zealand	53
4.3 Skilled migration from India	54

4.3.1.	History of migration from India to New Zealand	54
4.3.2	Short skilled occupations filled by skilled Indian migrants	55
4.4	The entrepreneurial culture in New Zealand.....	57
4.5	Indian migrant entrepreneurs	59
4.6	The gap in literature.....	63
4.7	Refining the research questions	64
4.8	Summary	64
Chapter 5 - Research Design		66
5.1	Introduction	66
5.2	Research paradigm	66
5.3	Research approach	69
5.4	Research methods	73
5.4.1	Case study methodology.....	73
5.4.2	Data collection	74
5.4.3	Data analysis	81
5.5	Reliability and validity	83
5.6	Summary	86
Chapter 6 - Findings		87
6.1	Introduction	87
6.2	Case profiles.....	87
6.3	Within-case analysis.....	93
6.3.1	P5 - Hospitality.....	93
6.3.1.1	Entrepreneurial drivers.....	93
6.3.1.2	Entrepreneurial barriers	95
6.3.1.3	Contribution channels as an employee	96
6.3.1.4	Contribution channels as an entrepreneur.....	96
6.3.2	P7 - Health and ICT.....	98
6.3.2.1	Entrepreneurial drivers.....	98
6.3.2.2	Entrepreneurial barriers	99
6.3.2.3	Contribution channels as an employee	100
6.3.2.4	Contribution channels as an entrepreneur.....	100
6.3.3	P8 - Hospitality.....	101
6.3.3.1	Entrepreneurial drivers.....	101
6.3.3.2	Entrepreneurial barriers	102
6.3.3.3	Contribution channels as an employee	103
6.3.3.4	Contribution channels as an entrepreneur.....	103
6.4	Cross-case analysis.....	103
6.4.1	Entrepreneurial drivers.....	104
6.4.1.1	Job dissatisfaction	105
6.4.1.2	Opportunity.....	105
6.4.1.3	Financial goals.....	106
6.4.1.4	Family considerations	107
6.4.1.5	Passion	107
6.4.1.6	Desire for independence.....	108
6.4.1.7	Self-actualisation.....	108

6.4.2	Entrepreneurial traits.....	109
6.4.3	Entrepreneurial barriers	110
6.4.3.1	Resource barriers	110
6.4.3.2	Regulatory barriers	111
6.4.3.3	Normative barriers.....	113
6.4.3.4	Cognitive barriers.....	114
6.4.4	Contribution channels as employees.....	114
6.4.4.1	Fill labour market shortage	115
6.4.4.2	Increase international business /investment.....	115
6.4.4.3	Sourcing human capital.....	116
6.4.4.4	Innovation and increased productivity	116
6.4.5	Contribution channels as entrepreneurs	116
6.4.5.1	Job creation.....	117
6.4.5.2	Increase international business and/or investment	117
6.4.5.3	Increased consumption and consumer options.....	118
6.4.5.4	Innovation and increased productivity	118
6.4.5.5	Social contributions.....	118
6.5	Field notes.....	119
6.6	Documentation	119
6.7	Summary	120
Chapter 7 - Discussion		121
7.1	Introduction	121
7.2	Addressing the research questions.....	121
7.2.1	Demographic profiles.....	122
7.2.2	Entrepreneurial drivers.....	127
7.2.3	Entrepreneurial barriers and challenges.....	137
7.2.4	Contribution channels.....	143
7.3	Implications for key theories and frameworks	151
7.3.1	Entrepreneurial motivation theories	151
7.3.2	Entrepreneurial barriers theories	153
7.3.3	Contributions theories and frameworks.....	153
7.4	Summary	155
Chapter 8 - Conclusion		156
8.1	Introduction	156
8.2	Overview of the study.....	156
8.3	Key findings	159
8.4	Research contributions	161
8.5	Research limitations.....	162
8.6	Areas for future research.....	163
8.7	Summary	163
References.....		164
Appendices		195

List of tables

Table 1 - Summary of Definitional Considerations and Approaches in Literature.....	12
Table 2 - Focus Population of Immigrant Entrepreneurship Theories	17
Table 3 - Contribution Channels Framework.....	45
Table 4 - Industries Facing Skill Shortages in New Zealand	47
Table 5 - Top 10 Sub-Major Occupation Groups Filled by Skilled Migrants; 2007 - 2017	48
Table 6 - Occupational Breakdown of Top 5 Sub-Major Occupations Filled by Skilled Migrants in New Zealand; 2007 - 2017	49
Table 7 - Population Change 1986 - 2038; Indian Ethnicity in New Zealand	54
Table 8 - Top 3 Short Skilled Occupations in New Zealand; 2012-2017	55
Table 9 - Top 10 Sub-Major Occupation Groups of Skilled (Principal) Migrants in New Zealand; 2007 - 2017	55
Table 10 - Occupational Breakdown of Top 5 Sub-Major Occupation Groups of Skilled (Principal) Migrant Approvals in New Zealand; 2007 - 2017	56
Table 11 - Top 10 (Unit-group) Occupations Filled by SIMs from India; 2007 - 2017	57
Table 12 - Contribution of Small and Medium Enterprises to GDP and Employment	58
Table 13 - Philosophical Beliefs of Post-positivism	69
Table 14 - Categorisation of Case Summaries	83
Table 15 - Examples of Secondary Data Sources Used in this Study	85
Table 16 - Case Profiles from Pilot Study.....	91
Table 17 - Case Profiles after Pilot Study.....	92
Table 18 - Entrepreneurial Drivers Experienced by Research Participants	104
Table 19 - Entrepreneurial Sub-drivers of Research Participants	104
Table 20 - Entrepreneurial Traits of Research Participants.....	109
Table 21 - Entrepreneurial Barriers and Challenges to Research Participants.....	110
Table 22 - Entrepreneurial Sub-barriers and Challenges of Research Participants	111
Table 23 - Contribution Channels of Research Participants as Employees	115
Table 24 - Contributions of Research Participants as Entrepreneurs	116
Table 25 - Employment Status of the Indian Ethnic Group in New Zealand	129
Table 26 - Contributions of SIM employees versus entrepreneurs.....	151
Table 27 - Triangulation table.....	215

List of figures

Figure 1 - Key Theories and Frameworks of Entrepreneurial Motivation	15
Figure 2 - Entrepreneurial Activity Framework	18
Figure 3 - Entrepreneurial Drivers Framework.....	19
Figure 4 - Key Theories and Frameworks of Entrepreneurial Barriers and Challenges.....	27
Figure 5 - Institutional Barriers and Challenges to Entrepreneurship.....	28
Figure 6 - Entrepreneurial Barriers Framework for this Thesis	30
Figure 7 - Key Theories and Frameworks - Contributions of Skilled Migrants	34
Figure 8 - Skilled Migration by Top Five Source Countries; 2006/2007 - 2016/17	53
Figure 9 - Various Interpretations and Uses of the Term 'Research Approach' in literature ..	70
Figure 10 - Entrepreneurial Drivers of SIMs in New Zealand	136
Figure 11 - Entrepreneurial barriers and challenges to SIMs in New Zealand	143

Abbreviations

ABS - Australian Bureau of Statistics

ANZ - Australia and New Zealand Banking Group

ANZSCO - Australia and New Zealand Standard Classification of Occupations

ANZSIC - Australia and New Zealand Standard Industrial Classification

DOL - Department of Labour, New Zealand

Immigration NZ - Immigration New Zealand

IRD - Inland Revenue Department, New Zealand

MBIE - Ministry of Business, Innovation, and Employment, New Zealand

MFAT - Ministry of Foreign Affairs and Trade, New Zealand

NZAMI - New Zealand Association for Migration and Investment

NZIER - New Zealand Institute of Economic Research

NZ now - New Zealand now

OECD - Organisation for Economic Co-operation and Development

P1 - Participant 1

P2 - Participant 2

P3 - Participant 3

P4 - Participant 4

P5 - Participant 5

P6 - Participant 6

P7 - Participant 7

P8 - Participant 8

P9 - Participant 9

P10 - Participant 10

SIMs - Skilled Indian Migrants

Stats NZ - Statistics New Zealand

Attestation of authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Neharika Ahluwalia

Date

Acknowledgements

I would like to thank everyone who guided, supported and helped me in the completion of this thesis.

First and foremost, I express my gratitude to my primary supervisor, Dr. Swati Nagar, who diligently guided and assisted me in the completion of this thesis. She has been a constant support and immensely patient through the times when I struggled to focus on my writing. Thanks to her guidance, support, and positive outlook, my learning in the process of writing this thesis was not limited to academic knowledge, but it also improved my task management and self-learning. Thank you for your invaluable support and guidance throughout this research.

I would like to thank the administrative staff at the Faculty of Business and Law for their constant help and support throughout my study. I really appreciate the solution-oriented thinking and open-door policy at times of urgent requests.

I am thankful to the India New Zealand Business Council (INZBC) who provided valuable feedback and advertised my research invitation on their website. I am also grateful to the Ministry of Business, Innovation, and Employment (MBIE), who duly responded to my several information requests for this study.

I sincerely thank all the interviewees who spared their invaluable time for the data collection phase of this study. Their sincere input and keen interest in the research finding reflects that they understood the value of research and informed decisions. It was a pleasure meeting each of them and learning about their interesting and inspiring entrepreneurial journeys.

I sincerely thank Milan Ahluwalia for transcribing participant interviews and Elizabeth Ardley for diligently proofreading my work.

Lastly and most importantly, I am very thankful to my family for their constant support, care, and encouragement throughout this study. I feel really blessed for your immense love, care, and support in all my endeavours.

Abstract

Skilled migrants are an essential component of global migration flows to developed countries. This includes New Zealand, which is highly dependent on skilled migrant labour to fill its labour market shortages (DOL, 2009; MBIE, 2017b, 2018). However, New Zealand lacks context-specific research on the motivations and contributions of skilled migrants, particularly skilled migrant entrepreneurs, who are an asset to the host country (Nathan, 2014).

Therefore, this study looked at skilled migrants beyond their basic role of filling labour market shortages, to explore their entrepreneurial drivers, challenges, and contribution channels in the New Zealand economy. Specifically, this thesis uses the case of skilled migrants from India, as India has been New Zealand's top source of skilled labour since 2012 (MBIE, 2018). In fact, it is the only country for which the New Zealand government has established a strategic goal to attract and retain skilled migrants under the NZ Inc India Strategy (MFAT, n.d.).

Being exploratory in nature, this study employed a case study design (Yin, 2014). Semi-structured interviews were conducted with 10 first-generation skilled Indian migrant employees turned entrepreneurs from across New Zealand, in the short skilled sectors of health, hospitality, and ICT. These participants were selected through purposive sampling and data was manually analysed using thematic content analysis (Miles & Huberman, 2014).

The study concluded that skilled Indian migrants in skilled employment in New Zealand are more likely to be pulled than pushed into entrepreneurship. They are also likely to use more contribution channels in the role of an entrepreneur than an employee. This conclusion is reflective of the fact that over 80 percent of skilled migrants in New Zealand have high levels of jobs satisfaction (MBIE, 2012a; 2015d) and are valued in the labour market for filling skill shortages (North, 2007; MBIE, 2015d), hence less likely to be forced into entrepreneurship.

In reference to the New Zealand business environment, this study found that the regulatory setting in New Zealand encourages entrepreneurship, but its complex and

costly compliance procedures, lack of clear administrative processes, and incoherent information sources present entrepreneurial barriers and challenges for skilled Indian migrants. This is in line with the existing academic literature and documentation on migrant businesses in New Zealand. For instance, studies by North and Trlin (2004) and Cleland and Davey (2014) have identified compliance costs as a key entrepreneurial challenge for migrant businesses in New Zealand.

This research also found that regulatory policies, such as the immigration policy appear to be incognizant of some context-specific differences in industry sectors. For instance, Immigration NZ's policy changes restricting the level of immigration for hospitality occupations are often criticised because these policies ignore business-specific differences and the extensive skill shortages in this sector (Guy, 2017; Harris, 2017).

A key limitation of this study is its sample size. At the design stage, this study proposed a range of 10-20 in-depth interviews, but could only engage ten participants. This was despite extensive attempts to advertise and (snowball) sample potential participants through personal acquaintances and business organisations, such as the India New Zealand Business Council (INZBC), Asia NZ Foundation and the Office of Ethnic Communities.

The key areas identified for future research include a comparative study of the key skill source countries for New Zealand, such as China, the Philippines, South Africa and the UK. Future research can also focus on cross-country comparisons with countries that have similar immigration policies and skill needs to New Zealand, such as Australia and Canada. The entrepreneurial drivers, barriers, and contribution channels frameworks used in this thesis may be adopted for future context-specific research on skilled migrants.

Chapter 1 - Introduction

1.1 Research background

In developed economies, slow growth rates of the domestic labour force, ageing populations, and the brain drain of local talent have resulted in skill shortages in domestic labour markets (Abella, 2012; International Labour Organisation, 2015; Stats NZ, 2018c). These shortages constrain production, resulting in flow on effects, such as the inefficient use of resources, and the creation of supply gaps in an economy (Mok, Timmins, Stevens & Mason, 2012). Therefore, economies import resources from international markets (Samuelson & Nordhaus, 2004), which explains the migration of labour from skill-rich to skill-scarce economies (Massey, Arango, Hugo, Kouaouci, Pellegrino, & Taylor, 1993).

This trend is also evidenced by the fact that skilled migrants have become an increasingly important component of global migration flows, now comprising about 30 percent of all migrants in the OECD member countries (Nathan, 2014). Since the late 1990s, several OECD countries, including New Zealand, have updated their immigration policies to attract skilled labour from overseas markets (DOL, 2009). For instance, New Zealand offers permanent residence and work visas to attract skilled labour from overseas markets in several short skilled sectors, such as construction, health and information technology (Hawthorne, 2011; NZ now, 2018a, 2018b).

New Zealand's skill gaps

New Zealand faces skill shortages from dropping birth-rates, rising retirement-rates (Hope, 2016; NZAMI, 2016; Stats NZ, 2017a; Iles, 2018) and brain-drain to larger economies like Australia, United Kingdom and North America (Groysberg & Bell, 2013; Dann, 2017) despite some return-migration in recent years (Stats NZ, 2016; Radio NZ, 2017; Wilson & Fry, 2017).

In New Zealand, the demand for skilled labour increased at the rate of about one percent per annum between 1986 and 1997 and about two percent until 2005 (Razzak & Timmins, 2008). In 2008, skilled migrants accounted for around 10 percent of the employed labour force in New Zealand (OECD, 2008). In 2016, the (latest) Business

Operations Survey by Stats NZ reported a shortage of professional, management and trade-related skills in many New Zealand industries, such as construction, information and communication technologies and health (Stats NZ, n.d.-c). The OECD (2017) attributes these shortages to high levels of mismatch between jobs and qualifications in New Zealand. This is because employment in New Zealand has been shifting towards highly-skilled with the diffusion of digital technologies, but education and skill development is not at par with changing job market requirements (OECD, 2017).

Labour supply sources

To fill its labour market gaps, New Zealand has been sourcing skilled labour from several countries including China, India, the Philippines and the UK over the last two decades (MBIE, 2018).

While all the aforementioned countries are important contributors to filling New Zealand's skill gaps, India has been New Zealand's top source of skilled migrants since 2012 (MBIE, 2018). It is the only country for which the New Zealand government has established a strategic goal to attract and retain skilled migrants under the NZ Inc India Strategy. The NZ Inc India strategy¹ is a part of NZ Inc strategies, which are New Zealand government's long-term strategic goals for trade and investment with emerging partner economies (MFAT, 2011b). These include ASEAN (Association of South East Asian Nations), GCC (Gulf Cooperation Council), Australia, China and India (MFAT, n.d.).

Beyond filling the skill gaps

Although the need and demand for skilled migrants to fill labour market gaps in New Zealand is evident from the above discussion, in the long run, some of this sourced talent may move away from the labour market to emigrate to better opportunities in bigger economies or return to their home country (Portes, Guarnizo & Haller, 2002). There are also migrants who become self-employed or start their own entrepreneurial venture (Watson, Keasey, & Baker, 2000).

Of all these choices, migrants who choose the entrepreneurial path have the potential to make the highest contributions to the host economy by means of job creation,

¹ Refer to Appendix B for the official response on the government's intent to update the NZ Inc India Strategy.

innovation, increased production and consumption, knowledge diffusion and social contributions (Enderwick, Tung, & Chung, 2011; Nathan, 2014).

The entrepreneurial culture in New Zealand

New Zealand has always had a strong entrepreneurial (Frederick, 2004; Global Entrepreneurship Monitor, 2005) and innovative culture (Cornell University, INSEAD, and WIPO, 2017), as reflected in its business demography statistics, which show that a majority of businesses in New Zealand are small and medium-sized enterprises (SME), that employ less than 20 employees (Ministry of Economic Development, 2011). For instance, the 2017 Small Business Factsheet by MBIE showed that 97 percent of New Zealand businesses are SMEs owned by self-employed individuals and entrepreneurs, and one-third of these businesses have 1-19 employees (MBIE, 2017a).

Skilled migrant entrepreneurship

Skilled migrants are not immune to New Zealand's entrepreneurial spirit. Overtime, they may move from paid employment to entrepreneurship, depending on their needs and motivations (Gacheru, 2007). For instance, the owner of travel business 'Take me to the World', Nats Subramaniam, left his job as a project manager to pursue his passion for travel by starting his own travel business. His business offers leisure travel, study tours (Massey University study tours to India) and sports tours, such as organising sports training for Indian cricket academies with renowned cricketers in New Zealand (*NZ Herald*, 2014).

Similarly, the owner of Nelson based Tamarind restaurant, Denny Yeldo left his skilled job as a nurse to marry his passion for authentic Indian food with the need for work-life balance, resulting from the responsibility of a new baby (Zaki, 2018).

When skilled migrants leave paid employment to pursue entrepreneurship, employers may lose their investment in hiring, training and developing these employees (Garman, Corbett, Grady, & Brash, 2005; Dube, Freeman, & Reich, 2010); however, the economy gains a new business with prospects of job creation, productivity growth, commercialisation of high-quality innovations (van Praag & Versloot, 2007; Kritikos, 2014) and increased competition, resulting in an efficient and technically advanced

economy (Valliere & Peterson, 2009; Kritikos, 2014). This explains why governments are keen to attract skilled migrants and immigrant entrepreneurs (Rath, 2010).

1.2 Research rationale

The importance yet lack of research on skilled migrants has been recognised in various studies (Sequeira & Rasheed, 2006; Nathan, 2014). With the everchanging economic needs and the impact on economies of international environments, it is important to continually assess the state of national resource pools (Pio & Dana, 2014). This includes human capital sourced from international labour markets.

From a research perspective, the importance of context-specific research is reflected in the fact that the diverse experiences, resources and sub-cultures of different migrant groups can result in varying outcomes for them in the same host country (Koning & Verver, 2013; Ma, Zhao, Wang, & Lee, 2013). For instance, comparative research on the assimilation and integration rates of Indian entrepreneurs in UK and Singapore by Hamilton, Dana and Benfell (2008) found different results to the study in the USA, UK and Canada by Fairlie, Zissimopoulos and Krashinsky (2010), which emphasises the need for context-specific research in terms of different host economies.

While New Zealand has a growing body of literature on entrepreneurship, such as Crothers (2002), Frederick (2004), Maritz (2004), de Vries (2007, 2012), Pio, (2007, 2014) and Paulose (2011) there seems to be a dearth of research on skilled and highly skilled migrant employees and entrepreneurs (Nathan, 2014).

Research objective

In light of the above discussion and the importance of skilled migrants to the New Zealand labour market, this thesis aims to explore why skilled migrants leave paid employment. Also, given the potential contributions of skilled migrant entrepreneurs to the host economy, this thesis aims to identify their contribution channels in the New Zealand economy as a new business owner, and the barriers they face in the process of establishing their business.

Moreover, given the importance of context-specific research, this thesis focuses on New Zealand as the host economy and skilled migrants from New Zealand's top source country and key economic partner, India, as the source of human capital.

In order to theoretically inform the research design, the next two chapters review the theoretical, empirical, and methodological literature relevant to the research objective, with the assistance of the following overarching question:

What are the entrepreneurial drivers, challenges, and contribution channels of skilled migrants to their host economy?

This overarching question is further divided into three questions for each key component, namely, the entrepreneurial drivers, barriers, and contribution channels of skilled migrants.

- 1. What drives skilled migrants to leave skilled employment and pursue entrepreneurship in the host economy?*
- 2. What are the barriers and challenges faced by skilled migrants in the process of starting a business in the host economy?*
- 3. How do skilled migrants contribute to their host economy?*

Significance

The significance of this research is multi-fold. Firstly, this research seeks to make a theoretical contribution to the academic literature on skilled migrant entrepreneurs in New Zealand.

Secondly, this research aims to contribute to the completion of my Masters' degree.

Thirdly, exploring the perceived entrepreneurial drivers, barriers, and contributions of skilled migrants may provide useful insights for employers and policymakers. For instance, feedback on the job experience of skilled migrants may provide useful indications for employers on staff retention techniques, whereas identifying entrepreneurial barriers may indicate repulsions in the New Zealand business and regulatory environment if any.

Fourthly, this research will present the remigration intent of participants along with their demographic and migration profiles, which sets the parameters of their economic participation (Waldinger, 1990).

Lastly, this study seeks to identify if and why skilled migrants change their field of work, that is, move to an industry different to the one they are skilled in.

1.3 Research design

Contextual research in entrepreneurship is predisposed to qualitative approaches (Pio, 2007). As entrepreneurial motives and decisions are personal, dynamic, and complex (Kloosterman, Van der Leun, & Rath, 1999), a quantitative checklist approach cannot capture their complexity (Stevenson, 1990).

Therefore, being exploratory in nature, this research uses a multiple case study design (Yin, 2014) with a combination of criteria and snowball sampling to identify research participants across New Zealand. Primary data from 10 semi-structured interviews and field notes is used with secondary data from online documentation and archival records, serving for triangulation of data sources.

Thematic content analysis is used to address the research questions. Analysis follows Miles and Huberman's (2014) procedure of data condensation, display, and conclusion.

1.4 Thesis structure

This thesis is divided into eight chapters. Chapter 1 - Introduction, discusses the need and importance of skilled migration in New Zealand, before presenting the significance and objectives of this thesis. The chapter also outlines the design of this thesis.

Chapters 2 and 3 review the theoretical and conceptual literature on migrant entrepreneurship and skilled migrant entrepreneurs in order to pre-inform the research. Chapter 3 also reviews several definitions of entrepreneurs and immigrant entrepreneurs in order to define a migrant entrepreneur for this thesis.

Chapter 4 - New Zealand context explores the skill gaps and entrepreneurial culture in New Zealand, before concluding the section by refining the research questions in the New Zealand context.

Chapter 5 - Research design, presents the design choices of this study. The data collection, analysis methods used, and their rationale are explained after discussing the researcher's philosophical assumptions and research approach. The chapter also discusses ethical considerations for this study.

Chapter 6 - Findings, presents the primary and secondary data collected from interviews, field notes, documents, and archival records in case vignettes and summary matrices.

Chapter 7 - Discussion, discusses the research findings and compares them with the empirical literature from New Zealand.

Chapter 8 - Conclusion, presents an overview, key conclusions, contributions, and limitations of the study before making suggestions for future research.

The next chapter reviews the literature on the entrepreneurial drivers and challenges of migrants, after defining a skilled migrant for this thesis.

Chapter 2 - Migrant Entrepreneurship

2.1 Introduction

The previous chapter introduced the need, importance, yet lack of research on skilled migrants both in New Zealand and internationally. It also outlined the objective of this study, which is to explore the entrepreneurial drivers, barriers, and contribution channels of skilled migrants in the New Zealand economy.

This chapter aims to discuss the entrepreneurial drivers and barriers of skilled migrants. It starts by exploring the definitions of an entrepreneur and an immigrant entrepreneur in conjunction with Immigration New Zealand's definition of a skilled migrant, in order to define a skilled migrant entrepreneur for this thesis.

The chapter then reviews the theoretical and empirical literature on the entrepreneurial drivers and barriers of migrants, guided by the following research questions:

- 1. What drives skilled migrants to leave skilled employment and pursue entrepreneurship in the host economy?***
- 2. What are the barriers and challenges faced by skilled migrants in the process of starting a business in the host economy?***

2.1.1 Entrepreneurship

This section looks at the meanings attributed to entrepreneurship in the literature with the aim of defining an entrepreneur for this study.

Theoretical definitions

The literature identifies several definitions, roles, and characteristics of entrepreneurs. For instance, Schumpeter (1934) defines entrepreneurship as the act of finding and promoting new combinations of productive factors. Knight (1921) identifies the courage to bear uncertainty as an essential aspect of entrepreneurship. On the other hand, Kirzner (1979) suggests that an entrepreneur's fundamental function is to identify market arbitrage opportunities.

Long (1983), summarised the definition of the term 'entrepreneur' of various authors (Schumpeter, 1934; Knight, 1921; Kirzner, 1979) and identifies the characteristics of risk-

taking, innovation, and managing others as the key characteristics of an entrepreneur. Internationally recognised organisations like the Organisation for Economic Cooperation and Development (OECD, 2008) and Global Entrepreneurship Monitor (Global Entrepreneurship Monitor, 2018.) also identify innovation and new venture creation as essential components of entrepreneurship. These components and their relevance to the New Zealand context are discussed below.

Risk-taking

Entrepreneurial risk-taking is usually financial, but may also relate to technological changes, fluctuating prices, availability of natural resources (Knight, 1921), and the conscious rejection of income security from paid employment (Scase & Goffee, 1987).

Among all the above-mentioned risk forms, the conscious rejection of skilled employment is an important factor for this study. This is because New Zealand faces severe skill shortages in several sectors, and such withdrawal of skill from labour markets adds further to the skill gap. This in turn has a negative effect on the survival and productivity rates of local businesses (Mok et al., 2012).

Innovation

As an entrepreneurial characteristic, innovation is described as the creation of something new or doing something in a new manner. A new product, process, market, organisation, or supply source are all forms of innovation (Schumpeter, 1934).

Innovation is an important consideration for this study because it is essential for the long-term growth and survival of a firm (Little, 2010), given the ever-increasing competition from both domestic and international players as well as the rapid diffusion of technology across the globe (Hope, 2018).

The New Zealand business and education scene strongly encourages innovation with several start-up incubators and grants (Creative HQ, 2015). For instance, the New Zealand government's innovation agency - Callaghan Innovation encourages innovation in the country by offering several technology incubators and grants, such as Astrolab, Powerhouse, Addlabs, and R&D grants (Callaghan Innovation, 2018a, 2018b). Similarly, there are innovation incubators and accelerators sponsored by New Zealand business and universities that focus on encouraging and supporting innovation. Examples of

these accelerators include the Kiwi Landing Pad, Lightning Lab, Venture Lab, and Innovation Incubator (Kiwi Landing Pad, n.d.; Lightning lab, 2015; The University of Auckland, n.d.; Victoria University of Wellington, n.d.).

Managing capability

Managerial capability is described as the ability of an individual to lead and motivate others, and to manage risk and uncertainty (Leibenstein, 1968). It is an important characteristic for businesses owners because they have to make essential decisions for their firm, such as financing, supervising, and risk-bearing (Grieco, 2007). In fact, prior research suggests that entrepreneurs have to work harder and make more risky and non-routine decisions.

Among the aforementioned responsibilities, the responsibility of supervision increases the risk taken by entrepreneurs (Paulose, 2011) and enables them to make efficient and productive use of their capabilities by focusing on important tasks such as setting the vision and goals of their business (Wayland, 2011). Moreover, as discussed previously, the efficient use of resources is important for long-term growth and survival of a firm (Little, 2010). Therefore, managerial capability, including the hiring and supervision of employees, is an important consideration in this study.

Entrepreneurship and self-employment

Another dimension to the definition of entrepreneurship is its synonymous use with self-employment (Kloosterman & Rath, 2003); according to the literature, entrepreneurship is often measured by the incidence of self-employment in an economy (Duncan, Bollard, & Yeabsley, 1997; Reynolds, Bygrave, & Autio, 2004). At the same time, there is no dearth of researchers who consider self-employment and entrepreneurship to be different concepts (Casson, 1982; Bygrave, 1989; Gartner, 1989; Frederick, 2004).

OECD (2018) defines the term self-employment as *“the employment of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers”*. Similarly, Employment New Zealand (n.d.) and IRD (n.d.) include a wider range of individuals, such as individual contractors, sole proprietors, and individuals who hire others as self-employed for taxation purposes.

Hence, self-employment appears to be a broad term that covers businesses with and without employees. Wayland (2011) advises that entrepreneurs should hire other people and manage business and workers, rather than working in the business themselves. Also, self-employed individuals are not necessarily innovative entrepreneurs pursuing growth enhancing business projects (Grieco, 2007). Therefore, this thesis uses the term entrepreneurship separately to self-employment, and focuses on the former.

The above distinction between self-employment and entrepreneurship is important for this study because well-defined research terms and parameters ensure a uniform basis of comparing data within the study and with other studies.

2.1.2 Migrant entrepreneurship

This section looks at the definitions of migrant entrepreneurship and its synonymous use with ethnic and minority entrepreneurship, before differentiating first-generation migrants from descendants of migrants in the host country. The section ends by defining a migrant entrepreneur for this thesis.

Migrant versus immigrant

The terms migrant and immigrant are used synonymously in the wider literature and in this thesis, because the term migrant encompasses international migrants (Travis, 2015; Omisakin, 2016). Specifically, for skilled immigrants, the term skilled migrant is used in common parlance. For instance, Immigration NZ (2018a) uses the term skilled migrant category to denote skilled immigrants arriving in New Zealand from an overseas location.

Theoretical Definitions

Immigrant entrepreneurship sits at the intersection of a number of disciplines, including ethnic studies, sociology, management, economics, and policy studies (Pio, 2007). It is, therefore, an important research topic from several perspectives (Kloosterman & Rath, 2003).

The literature therefore offers various definitions of immigrant entrepreneurship. For instance, Waldinger et al. (1990) describes it as “a set of connections and regular patterns of interaction among people sharing a common national background or migration experiences”.

Butler and Greene (1997) define immigrant entrepreneurs as recent arrivals in a country who start a business out of the need for survival. Similarly, Dalhammar (2004) describes immigrant entrepreneurship as the process of an immigrant starting a business in the host country, while Pio's (2007) description includes businesses started by individuals of an ethnic origin different to the majority in the host country.

OECD definition

OECD (2008; 2011) defines immigrant entrepreneurs as foreign-born business owners "who seek to generate value through the creation or expansion of economic activity, by identifying new products, processes or markets".

Immigrant, ethnic and minority entrepreneurship

While the term immigrant entrepreneurship is often used synonymously with ethnic and minority entrepreneurship, Nestorowicz (2012) identifies the differences in the meanings and approaches to the use of these terms, as summarised in Table 1.

Table 1 - Summary of Definitional Considerations and Approaches in Literature

Terms	Meanings ²	Approaches
Immigrant entrepreneurship	Includes first-time migrants and descendants of migrants. Often denotes ethnic and minority populations.	May refer to an attitude or a labour market state.
Ethnic entrepreneurship	May include people who do not have any migration history but constitute a distinct sub-population.	May depict differences in behavioural patterns of groups that feature specific cultural characteristics.
Minority entrepreneurship	Includes all minority groups, such as sub-populations, minority ethnic groups, and gender minorities.	May refer to differences in proactivity and performance of sub-populations that have limited access to the labour market.

Adapted from Butler and Greene (1997), Dalhammar (2004), Pio (2007), OECD (2011), Nestorowicz (2012), and Cleland & Davey (2014).

A review of Table 1 suggests that the literature uses the term immigrant entrepreneurship in a broad parlance; however, approaches to its application are primarily economic and behavioural. Therefore, the next section looks at generational

² Nestorowicz (2012) does not define an immigrant in her paper. Therefore, definitions by Butler and Greene (1997), Dalhammar (2004), Pio (2007), OECD (2011) and Cleland and Davey (2014) were referred to.

classifications of migrants.

First-generation migrants and descendants of migrants

Based on the review of the literature above, immigrants can broadly be classified as first-generation migrants and descendants of migrants. First-generation migrants are individuals whose parents and who themselves were born abroad, whereas descendants of migrants include individuals with one or both parents born abroad (European Union Agency for Fundamental Rights, 2017). The literature suggests that first-generation migrants are likely to face higher risk and uncertainty in comparison to descendants of migrants, given the big changes in culture, lifestyle, and social networks (Papademetriou, Somerville, & Sumption, 2009; Oberoi, 2016).

According to Williams and Balaz (2012), the migration decision in itself is reflective of the entrepreneurial characteristic of risk-taking. For instance, a New Zealand study on immigrant youth found that the well-being outcomes of first-generation migrants were lower than second-generation migrants and natives (Spijkers, 2011). However, first-generation migrants were deemed to have better adaptation outcomes compared to second-generation migrants and natives, given their drive and need to succeed.

2.1.3 Skilled migrants

The immigration policy in a country decides which individuals are allowed or denied entry. In reference to skilled migrants, most migrant-receiving countries, such as Australia, Canada, New Zealand, and the UK use a points system that ranks individuals on their demographic characteristics, such as age, education, and work experience (Ministry of Economic Development, 2011; Donald, 2016). This screening system is designed to select individuals who can meet the labour market demands of short skilled sectors in the receiving country (Immigration NZ, 2018c).

Given the research focus, this study derives the definition of skilled migrants from Immigration New Zealand definition of skilled employment. Immigration NZ (2018b) defines skilled employment as “employment that meets a minimum remuneration threshold and requires specialist, technical or management expertise obtained through the completion of recognised relevant qualifications; or relevant work experience; or the completion of recognised relevant qualifications and/or work experience”. These

qualifications and work experience vary for different industries, but usually include a Bachelors' degree, trade certificates, and/or work experience of 3-5 years (Immigration NZ, 2018c).

Based on the review of definitions and literature on skilled migrants and migrant entrepreneurs above, the definition of a skilled migrant entrepreneur for this thesis is presented below.

2.1.4 Definition of a skilled migrant entrepreneur for this thesis

A 'skilled migrant entrepreneur' in this thesis is defined as a first-generation immigrant who has specialist, technical, or management expertise and has taken the initiative to start a new business, either out of economic necessity or to take advantage of a profitable business opportunity. Such opportunity should involve financial risk, some form of innovation, and the legal right to employ other people.

The scope of this research excludes descendants of migrants and self-employed migrants, such as sole-proprietors, individual contractors, taxi drivers, and commissioned salespeople.

2.2 Theories on entrepreneurial drivers

Entrepreneurial drivers are factors that motivate and drive an individual to start a business, rather than pursuing other career possibilities (Naffziger, Hornsby, & Kuratko, 1994; Hessels, van Gelderen, & Thurik, 2008; Jokela, Saarela, Niinikoski, & Muhosal, 2014). The literature appears to lack theories specific to the entrepreneurial drivers of skilled migrants but offers general theories and frameworks to explain the factors that drive an individual towards entrepreneurship.

This section reviews the key theories and frameworks on the entrepreneurial motivation of migrants in relation to research question 1, which is,

What drives skilled migrants to leave skilled employment and pursue entrepreneurship in the host economy?

2.2.1 Traditional theories

This sub-section presents the traditional theories on factors that drive and motivate an individual to pursue entrepreneurship. These include theories of entrepreneurial motivation and theories of immigrant entrepreneurship, as identified in Figure 1.

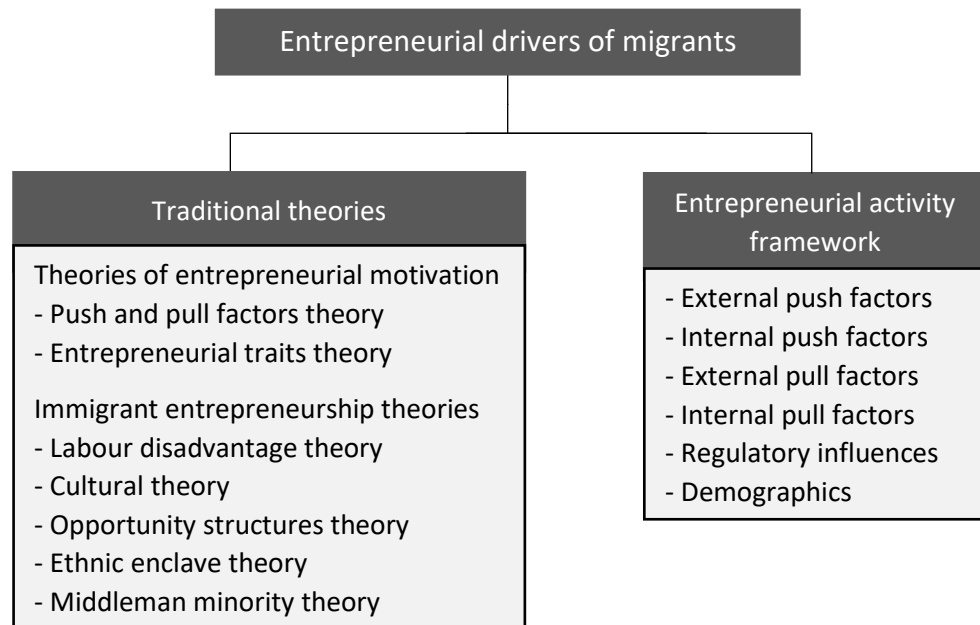


Figure 1 - Key Theories and Frameworks of Entrepreneurial Motivation

Theories of entrepreneurial motivation

The push and pull factors theory and entrepreneurial traits theory are the most basic and prominent theories of entrepreneurial motivation for both natives and migrants (Segal, Borgia, & Schoenfeld, 2005; Schjoedt, & Shaver, 2007; Moyer, 2016).

Push and pull factors simply refer to the negative and positive reasons that motivate an individual to pursue entrepreneurship (Gilad & Levine, 1986). Examples of push factors include job dissatisfaction, unemployment, labour market discrimination, and redundancy (Basu & Goswami, 1999; Kirkwood, 2009). Examples of pull factors include the need for independence, better social status, and time flexibility (Cassar, 2007).

In comparison, the entrepreneurial traits theory suggests that individual characteristics, such as risk tolerance, ambition, drive, and perseverance, increase an individual's likelihood of exploiting entrepreneurial opportunities (Shane, 2003; Shane, Locke, & Collins, 2003). Many studies have found that entrepreneurs have certain

personality traits, such as leadership, motivation, vision, responsibility and extroversion (Ledezma-Haight, Ramos, Prckovska, Rodrigues, & Gallardo-Pujol, 2016; Cantner, Goethner, & Silbereisen, 2017; Viinikainen, Heineck, Böckerman, Hintsanen, Raitakari, & Pehkonen, 2017).

Despite being popular in international research, the push and pull factors theory is criticised for its ambiguous distinction and dichotomous nature (Dawson & Henley, 2012), whereas the entrepreneurial traits theory is criticised for ignoring push and pull factors from the external environment, such as government legislation, recession and labour market outcomes.

Theories of immigrant entrepreneurship

While theories of entrepreneurial motivation are commonly used in studying the entrepreneurial drivers of both natives and migrants, theories of immigrant entrepreneurship are specific to the study of migrant entrepreneurship. These include labour disadvantage theory, cultural theory, opportunity structures theory, ethnic enclave theory, and middleman minority theory (Volery, 2007).

Being specific to migrants, it is easy to assume that theories of immigrant entrepreneurship are relevant to studies that focus on migrants. However, a review of the literature identifies that most immigrant entrepreneurship theories apply primarily to new and/or unskilled migrants, who become entrepreneurs after facing labour market discrimination in the host economy. Given that the focus of this thesis is on skilled migrants who are well integrated in the New Zealand economy and did not face labour market disadvantages on initial migration, these theories appear irrelevant to this study.

Table 2 summarises the key theories of immigrant entrepreneurship and their focus population.

Table 2 - Focus Population of Immigrant Entrepreneurship Theories

Theory		Summary	Focus population
Immigrant entrepreneurship theories	Labour disadvantage	New migrants face disadvantages in the labour market making business start-up a necessity for survival.	Unemployed new migrants
	Cultural	Immigrant groups have culturally determined features like hard work, austere living, and risk-taking that facilitate and encourage immigrant entrepreneurship.	Ethnic migrants
	Opportunity structures	Entrepreneurship is the alternative to a new migrant's inability to secure traditional employment. It can manifest from opportunities like access to ownership and a favourable regulatory environment in the host country.	New migrants
	Ethnic enclave	Unskilled migrants may seek business opportunities within immigrant communities and locations that have co-ethnic businesses due to labour market barriers, lack of higher education, and lack of skills and work experience.	New unskilled migrants
	Middleman minority	Minority migrants often become entrepreneurs after facing labour market discrimination from the majority group in the host country. These migrants usually create businesses that serve as middlemen between the dominant and subdominant groups in a society.	Unemployed ethnic minority migrants

Adapted from Li (1997), Min and Bozorgmehr (2003), and Volery (2007).

2.2.2. Entrepreneurial activity framework

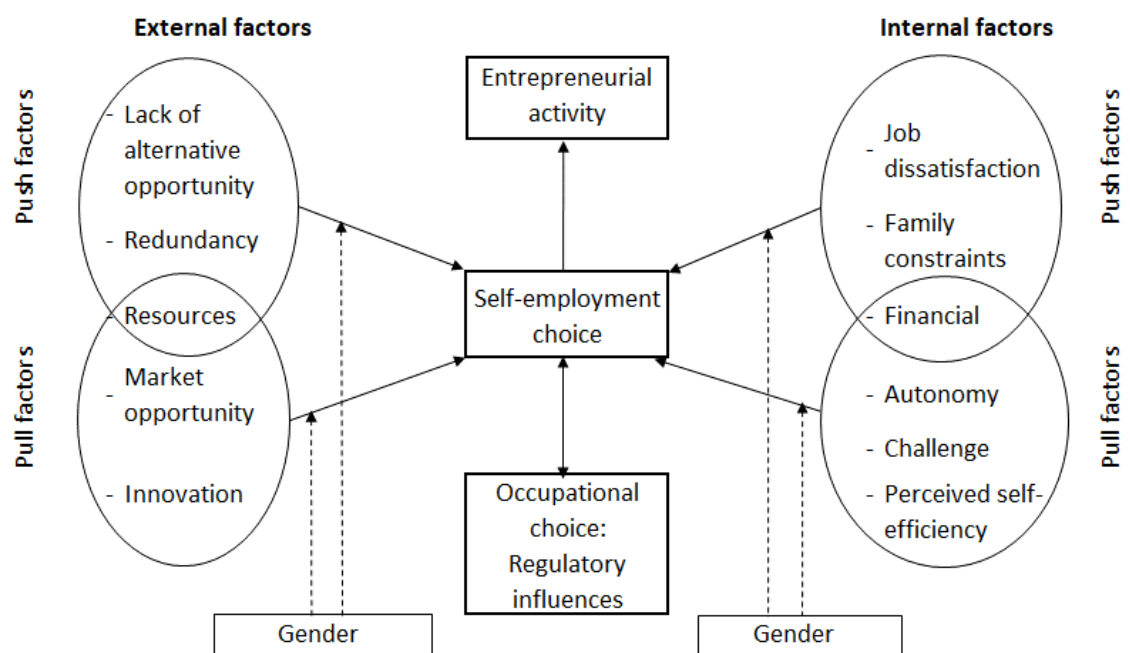
As identified previously, a key criticism of the push and pull factors theory is its ambiguous distinction and dichotomous nature (Dawson & Henley, 2012), whereas the entrepreneurial traits theory is criticised for ignoring push and pull factors from the external environment, such as government legislation, recession and labour market outcomes.

To these shortcomings, the entrepreneurial activity framework by Dawson and Henley (2012) provides a good solution. It considers, both push and pull factors,

entrepreneurial traits, and demographic and regulatory factors that impact the entrepreneurial decisions in an economy.

Figure 2 shows the original framework, which is the result of a UK based study on the prominence of push and pull factors and gender-based differences in the entrepreneurial decisions of local population (Dawson & Henley, 2012).

The study identified ambiguities in the push and pull distinctions resulting from varied interpretations and recall bias of participants. It also highlighted the need for further qualitative research. Among the aforementioned points, the consideration of varied interpretations and recall bias is completely relevant to this qualitative exploratory study.



Source: Dawson and Henley (2012).

Figure 2 - Entrepreneurial Activity Framework

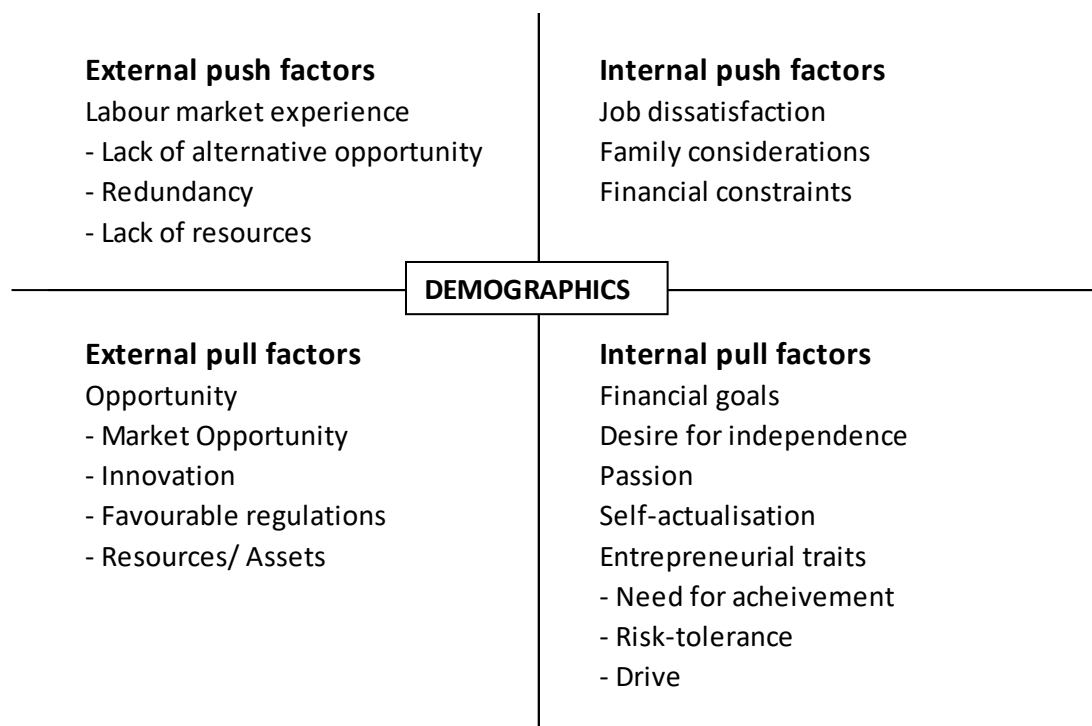
Although the above framework appears to account for motivational factors identified in the push and pull factors theory and entrepreneurial traits theory, it was derived from a study which focused on gender-based differences in the entrepreneurial decisions of the native population in the UK.

Therefore, the above framework is customised to this research by considering the key push and pull factors, entrepreneurial traits, and demographic factors from the wider literature in light of the focus population of this study. This resulted in the identification of four internal pull factors: passion, self-actualisation, risk-tolerance, and drive (Shane, 2003), and three additional demographic factors: age, ethnicity, and education/experience. The customised framework incorporating these additional factors is presented and discussed in section 2.2.3 below.

2.2.3 Framework for this thesis

Following the above discussion and identification of entrepreneurial drivers from the wider literature, this section presents the entrepreneurial drivers framework for this thesis in Figure 3 below. It is followed by a detailed discussion of its components in order to systematically address the first research question, which is,

What drives skilled migrants to leave skilled employment and pursue entrepreneurship in the host economy?



Adapted from Gilad and Levine (1986), Hakim, (1989), Shane (2003), and Dawson and Henley (2012).

Figure 3 - Entrepreneurial Drivers Framework

2.2.3.1 External push factors

Labour market experience

Labour market outcomes can be influenced by various macroeconomic issues, such as recession, financial crisis, technological change, structural issues, and lack of relevant skills.

The literature suggests that unfavourable experiences in the labour market, such as unemployment, underemployment, lack of relevant and alternative job opportunities, redundancy, and discrimination are major motivations that push individuals to start their own business (De Raijman, 1996; Basu & Goswami, 1999; Panayiotopoulos, 2008; Pio & Dana, 2014).

Specifically, for employed migrants, lack of alternative job opportunities and redundancy are the more relevant push factors.

2.2.3.2 External pull factors

Opportunities

Identifying a market gap or business opportunity, taking advantage of personal skills, and the prospect of better returns on human capital are some examples of opportunities that can motivate an individual to pursue entrepreneurship (Hakim, 1989; Borooah, Collins, Hart, & MacNabb, 1997). A favourable regulatory and institutional environment in the host economy (Davidsson, 1991) may also encourage entrepreneurial activity. Availability of production resources, financial loans, tax subsidies, start-up incentives, open market entry, and non-discrimination are examples of a favourable regulatory and institutional environment.

Individuals who are attracted to entrepreneurship after the identification of a business opportunity are known as opportunity entrepreneurs as compared to individuals who are forced into entrepreneurship by necessity (Reynolds et al., 2004; Hechavarria & Reynolds, 2009; Rasel, 2014).

According to a recent GEM (2018) survey of 54 world economies, covering 67.8% of the world's population and 86% of the world's GDP, most entrepreneurs start businesses out of opportunity, not necessity.

New Zealand appears to offer a favourable environment for starting a business, as reflected by its top global rank in the ease of starting and doing business in New Zealand

(World Bank, 2018) and the fact that 97 percent of businesses in New Zealand are small and medium-sized enterprises (Hawthorne, 2011; MBIE, 2017a). Research suggests that in New Zealand, over 10 percent of the working population are considered opportunity entrepreneurs (Frederick, 2004), and are motivated by time and work approach flexibility (Shinnar & Young, 2008).

2.2.3.3 Internal push factors

Job dissatisfaction

For employed labour, job dissatisfaction is a key reason to leave paid work and start a business (Cromie, 1987; Marlow, 1997; DeMartino & Barbato, 2003). Job dissatisfaction can result from several reasons, such as the lack of job security, work instability, lack of work-life balance, office politics, fear of redundancy, discrimination, and lack of growth opportunities (Maritz, 2004; Rissman, 2006; Benzing & Chu, 2009; Kirkwood, 2009). Additionally, the lack of freedom for creativity, innovation, and decision-making have also been identified as the reasons for a move away from paid employment (Cromie, 1987; Arora & Gambardella, 1990; Stewart & Roth, 2007; Minarcine & Shaw, 2016).

Findings from the few studies on the labour market experience and life satisfaction of skilled migrants in New Zealand suggest that skilled migrants are valued in the New Zealand labour market (Gendall, Spoonley, & Trlin, 2007; North 2007) and have higher rates of job and life satisfaction than unskilled migrants (MBIE, 2012a, 2015d).

Family considerations

Families can have a significant influence on an individual's entrepreneurship decision and vice versa. Family-related factors like family obligations and commitments (Greenfield & Nayak, 1992; DeMartino & Barbato, 2003), family security (Robichaud, McGraw, & Roger, 2001) and the desire for work-family life balance (Jennings & McDougald, 2007; Kirkwood & Tootell, 2008) are strong drivers to consider entrepreneurship (Kirkwood, 2009).

In addition to family needs, family background and practices, such as birth order, social class (Belcourt, 1988), family background in entrepreneurship (Aldrich & Cliff, 2003), and the intention to continue and build an inheritance for children are some family-specific examples of family-related entrepreneurial drivers.

There appears to be no New Zealand based research specific to skilled migrants in the context of family considerations, however, research on migrants in general suggests a strong family focus and family involvement in business across immigrant groups in New Zealand (North & Trlin, 2004; de Vries, 2007; Hunter, 2007).

Financial constraints

Money is the basic reason why people work (Vroom, 1995). The literature suggests that profit maximisation is a key aspect of entrepreneurship (Day & Sunder, 1996). While money is not the only motivation for entrepreneurship (Fischer, Reuber, & Dyke, 1993; De Martino & Barbato, 2003; Rosa & Dawson, 2006), it is an important consideration for many entrepreneurs (Alstete, 2002) and the basic reason why people work (Vroom, 1995).

Firm growth, sustainability, profitability, and personal wealth are all measured in financial terms and are the key indicators of entrepreneurial success (Amit, MacCrimmon, Zietsma, & Oesch, 2001). The prospect of higher financial returns may motivate some migrants to pursue entrepreneurship. However, personal wealth beyond financial security does not appear to be an entrepreneurial driver for migrants in New Zealand (Chapple, Gorbey, Yeabsley & Poot, 1994; de Vries, 2007).

2.2.3.4 Internal pull factors

Financial goals

As identified above, the prospect of higher financial returns in entrepreneurship can pull individuals into entrepreneurship.

Desire for independence

The desire for independence is cited as a common motivation for entrepreneurship (Kirkwood, 2009). It is an individual's preference for autonomy and greater control (Alstete, 2001; Cassar, 2007), which is manifested in the use of their own judgement rather than blindly following others' assertions (Shane et al., 2003). For example, this can include the pursuit of a new risky opportunity, taking responsibility for results and flexibility of working at locations and hours of choice (Shane et al., 2003).

The desire for independence has been identified as a prominent entrepreneurial driver for some migrant groups in New Zealand (de Vries, 2007; Pio, 2014).

Passion

Various authors have identified passion as a central component of entrepreneurial motivation (Schumpeter, 1951; Bird, 1988; Smilor, 1997; Cardon, Wincent, Singh, & Drnovsek, 2009; Conner, 2009). It is described as the intensity felt by an individual when engaging in activities of deep interest, resulting in energy that enables peak performance (Chang, 2001).

According to Brännback, Carsrud, and Elfving (2006) and Cardon et al., (2009), passion can fuel motivation, enhance mental activity and provide meaning to everyday work. Smilor (1997) suggests that passion is intrinsic and emerges when an individual has the freedom and opportunity to pursue their dreams. Shane et al. (2003) discuss egoistic passion and describe it as a passionate, selfish love for work.

Cardon et al. (2009) reviewed the literature on entrepreneurial passion and identified that that passion is neither an individual trait nor a situational quality; rather it is a fundamental emotional meta-experience, which is both discrete and intense. The international literature on entrepreneurial passion has found positive impacts on entrepreneurial intentions (Biraglia & Kadile, 2016). However, this impact has been found to vary for different ethnicities (Jamil, Omar, & Panatik, 2014).

Self-actualisation

Self-actualisation is defined as an individual's desire for fulfilment of their talents and potentialities (Maslow, 1943). When applied to entrepreneurs (Burns, 2007), it equates to an individual's need for personal development, realising their potential (Čížek, 2012) pursuing life purpose, making an impact on the world (Martell, n.d.), philanthropy, or innovation and creativity.

In his qualitative study on New Zealand based migrant entrepreneurs, de Vries (2007), identified self-actualisation as a prominent entrepreneurial driver for some migrant groups.

Need for achievement

McClelland's needs theory is widely acknowledged in the literature in reference to entrepreneurial motivation (Shane et al., 2003). The need for achievement is described as an individual's need to set challenging goals and solve problems by self, to do things

in new and better ways, and to make decisions under uncertainty (McClelland, 1967). Such individuals are hence characterised by achievement orientation, which is the drive to excel, advance, and grow.

Although Davidsson, Dahlqvist, and Wilkund (2000) argue that the need for achievement has only a small role to play in determining entrepreneurial behaviour, several studies across the globe have found a positive relationship between the need for achievement and the rate of entrepreneurial activity (Collins, Hanges, & Locke 2004; Steward & Roth, 2007; Marques, Ferreira, Gomez, & Rodrigues, 2012). According to Maritz (2004), migrants are deemed to have a high need for achievement and are hence attracted to entrepreneurship.

Risk-tolerance

As identified previously, tolerance for risk and ambiguity is an important characteristic of entrepreneurs, given the unpredictability of success in start-up businesses (McClelland, 1967; Schere, 1982; Miller & Drodge, 1986; Begley & Boyd, 1987, Venkataraman, 1997). Entrepreneurs often accept risk and uncertainty in respect to their financial and psychological wellbeing, career security, and family relations (Liles, 1974). Amongst all these factors, risking career security is important for this study, given the focus population left their paid employment and risked a stable income in favour of entrepreneurship.

Drive

Shane et al. (2003) define drive as the willingness to put forth the effort of thinking and taking action to turn ideas into reality. They differentiate the four aspects of drive as ambition, goals, energy and stamina. Ambition translates into the setting of high goals, which requires enormous energy, stamina, and persistence in the face of failure, whereas persistence is sustained by self-efficacy and love for work (Shane et al., 2003).

2.2.3.5 Demographics

Demographics include factors like age, gender, ethnicity, education, and experience (Kauffman Foundation, n.d.). According to Strangler and Spulber (2013), demographics affect entrepreneurship, innovation, and job creation in an economy. The literature offers mixed views on the impact of demographic factors on entrepreneurial activity.

For instance, some studies suggest that entrepreneurial activity is lower among the ageing population and female residents (Fung, Lai, & Ng, 2001; Zellweger, Sieger, & Halter, 2011; Kopecky, 2017). Other studies have found rising entrepreneurial rates among older adults and the female population in recent years (Lee-Wolf, 2014; Kauffman Foundation, 2017).

Similarly, ethnicity, education, and experience are also linked to an individual's attraction towards entrepreneurship (Aldrich & Waldinger, 1990; Chavan, 2000; Coduras, Levie, Kelley, Saemundsson, & Schott, 2010; Coduras, Levie, Kelley, Sæmundsson, & Schøtt, 2010). However, in relevance to skilled migrants, the demographic factors of education and experience are most relevant to this study.

The literature offers mixed views on the impact of education on entrepreneurship. For instance, Clark and Drinkwater (2010) argue that higher education opens professional opportunities, and reduces an individual's propensity for business ownership. In comparison, Campbell (1992), Gimeno, Folta, Cooper, and Woo, (1997), and Basu (1998) suggest a positive relationship between education and business success, based on improved communication, negotiation, and analytical abilities. Both professional and managerial work experience has been linked to entrepreneurial success (Carroll & Mosakowski, 1987; Cooper, Woo, & Dunkelberg, 1989; Pfeiffer & Reize, 2000) and is viewed as a key source of knowledge and training for developing product and marketing ideas, business networks, and a sense of opportunity recognition (De Koning, 1999; Romanelli & Schoonhoven, 2001).

Demographics serve an important role in the screening of skilled migrants to New Zealand as reflected by the immigration policy, which screens potential migrants by age, education, and work experience to ensure the best talent is taken into the country. Yet, New Zealand lacks statistics on the business demographics of skilled migrant entrepreneurs (refer to Appendix C).

Research question 1

The above discussion broadly identifies two key decisions in reference to research question 1:

What drives skilled migrants to leave skilled employment and pursue entrepreneurship in the host economy?

One is the skilled migrant's decision to leave paid employment, and another is their decision to start a business. Although these decisions can occur in any sequence, the focus population of this thesis is skilled migrants who leave their paid employment in order to start a business. This is because leaving skilled employment before starting a business results in increased risk from leaving a stable income source and recreates the labour market skill shortage which was initially filled by that skilled migrant. Also, at the decision stage, the choice of entrepreneurship comes without the promise of a successful new business in the same short skilled sector.

Therefore, to better understand why skilled migrants leave employment and pursue entrepreneurship, research question 1 is addressed with the following sub-questions:

- *What is the employment experience of skilled migrants in their host economy?*
- *What motivates skilled migrants to start a business in their host economy?*

2.3 Theories on entrepreneurial challenges

Entrepreneurial barriers and challenges are factors that prevent or hinder a person from starting a business (Bates, 1995; Schindehutte & Morris, 2009; Jokela et al., 2013). The literature provides several lenses for categorising entrepreneurial barriers. For instance, on an individual level, barriers may be categorised as actual and perceived (Finnerty & Krzystofik, 1985), whereas, from a market perspective, barriers may relate to competition and survival (Raeesi, Dastranj, Mohammadi, & Rasuli, 2013).

This section reviews the existing literature on entrepreneurial challenges and barriers faced by migrants, including the key theories and frameworks of entrepreneurial barriers (as presented in Figure 4) in relation to research question 2, which is,

What are the barriers and challenges faced by skilled migrants in the process of starting a business in the host economy?

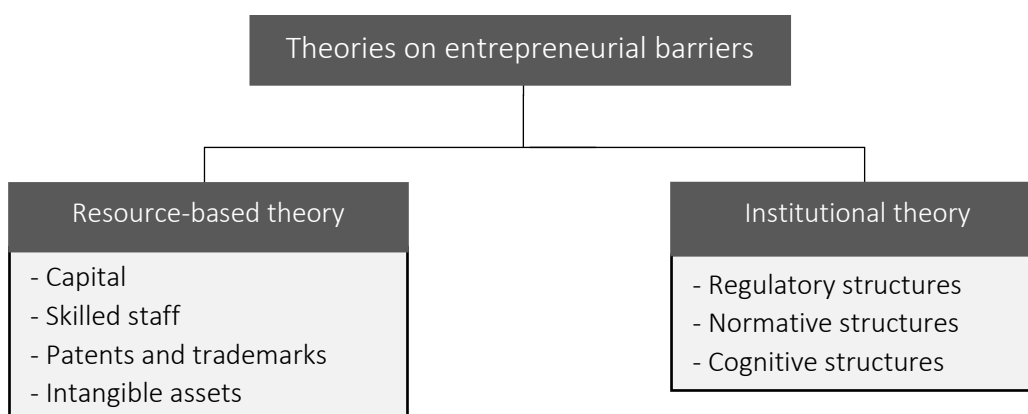


Figure 4 - Key Theories and Frameworks of Entrepreneurial Barriers and Challenges

2.3.1. Resource-based theory

The resource-based theory of the firm (Barney, 1991) has been a key concept in entrepreneurship literature in relation to entrepreneurial challenges (Esteve-Pérez & Man˜ez-Castillejo, 2008). It is an interdisciplinary approach (Fahy & Smithee, 1999), which suggests that resources are vital to the survival and success of a firm (Bhidé, 2000). Resources include tangible assets like capital, raw materials, inventory, patents, and trademarks (Andriessen, 2004) and intangible assets, like knowledge, experience, culture, social capital, and goodwill (Lev, 2001).

Broadly, the lack of financial resources, business knowledge, skills and experience have been identified in the literature as the key resources acting as barriers to entrepreneurship (Giacomin, Janssen, Pruett, Shinnar, Llopis, & Toney, 2011; Iakovleva, Kolvereid, Gorgievski & Sørhaug, 2014; Staniewski & Awruk, 2015).

However, this theory is criticised for ignoring external environmental factors such as the legal environment, industry sectors, economic incentives and societal culture (Baumol, Litan, & Schramm, 2009). The gaps in this theory are addressed by the institutional theory (Bruton, Ahlstorm, & Li, 2010), which is detailed in the next section.

In New Zealand, the lack of capital, financial pressures, and skilled labours shortages are among major challenges for New Zealand migrants in establishing and growing their businesses (de Vries, 2007; Cruickshank, 2010; Boyd & Cleland, 2018; NZIER, 2017; ANZ, 2018a; 2018b).

2.3.2 Institutional theory

Institutional theory suggests that institutional conditions impact the entrepreneurial prospects in an economy (Fogel, Hawk, Morck, & Yeung, 2009) by constraining the behaviour of individuals and organisations (DiMaggio & Powell, 1983, North, 1990, Jepperson, 1991). It broadly classifies institutional norms as regulative, normative and cognitive structures (Scott, 1995).

The international literature identifies various institutional barriers to entrepreneurship. For instance, in Norway, the Netherlands, Russia, and Romania, regulatory and cognitive conditions, such as, lack of access to funding, and lack of skills were found to be the highest ranked barriers (Iakovleva et al., 2014), whereas studies in Portugal (Banha, Almeida, Rebelo, & Ramos, 2017) and Lithuania (Bobera, Lekovic, & Berber, 2014) identified funding issues, taxes and staffing expenses as the key barriers to entrepreneurship.

In New Zealand, prior research has identified several entrepreneurial barriers and challenges for businesses. Examples include government regulation (Kidd, 2008), culture (de Vries, 2012), lack of capital, lack of market knowledge and networks, lack of skilled staff (Cruickshank, 2010), compliance costs, and bureaucratic requirements (North & Trlin, 2004). Further examples are listed in Figure 5 below.

Regulatory barriers (economic-political)	Normative barriers (socio-cultural)	Cognitive barriers (personal)
Government legislation - <i>Taxation policy</i> - <i>Immigration policy</i> - <i>Compliance issues</i> - <i>Availability of grants/ subsidies</i> Market barriers - <i>Competition</i> Infrastructural barriers - <i>Lack of financial services</i> - <i>Lack of business infrastructure</i>	Culture - <i>Low risk tolerance</i> - <i>Lack of information exchange</i> - <i>Low change acceptance</i> - <i>Norms</i> - <i>Stereotyping</i>	- <i>Lack of knowledge</i> - <i>Assumptions and beliefs</i> - <i>Lack of skills and knowledge</i> - <i>Lack of relevant experience</i>

Adapted from North (1990), Aidis (2005), Fogel et al. (2008), Aidis et al. (2010), Bruton et al. (2010), and Iakovleva et al. (2014).

Figure 5 - Institutional Barriers and Challenges to Entrepreneurship

Regulatory barriers

The regulative component of institutional theory identifies that regulatory structures guide rational behaviour in individuals and businesses in an economy and may create obstacles in the creation, success, and survival of businesses. Examples of regulatory barriers include government legislation (Bruton et al., 2010), market-related barriers (Aidis et al., 2010), and a weak/unfavourable financial infrastructure (Staniewski & Awruk, 2015). More examples of regulatory barriers are listed in Figure 5 above.

New Zealand seems to rank low on regulatory barriers at a macro level, given its top global rankings in the ease of starting and doing business (World Bank, 2018) and high scores on the international benchmarks for the quality of business environment (Schwab & Sala-i-Martin, 2018).

Normative barriers

Normative barriers arise from the social obligation to conform to certain values, norms, and national culture (Iakovleva et al., 2014). A key aspect of normative barriers is culture, which can be starkly different between a migrant's home and host country, such as religion, habitation, skills, and values (Strier & Abdeen, 2009; Azmat, 2013; Weng & Chanwong, 2016). However, skilled migrants are deemed likely to take advantage of their traditional culture and skills to create professional networks and facilitate information exchange (Saxenian, 2002).

Cultural factors such as differences in business practices and lack of information exchange have been identified among the normative barriers faced by migrant businesses in prior research (de Vries, 2012; Cleland & Davey, 2014).

Cognitive barriers

Cognitive barriers usually operate at an individual level in terms of culture and language (Bruton et al., 2010). They represent models of individual behaviour based on subjective and constructed rules of appropriate beliefs and actions (Jepperson, 1991). Generally, cognitive conditions are influenced by the skills and knowledge of individuals through education and training (Iakovleva et al., 2014).

Prior research on migrant businesses in New Zealand has identified cognitive barriers, such as the lack of business networks, unfamiliarity with regulatory requirements

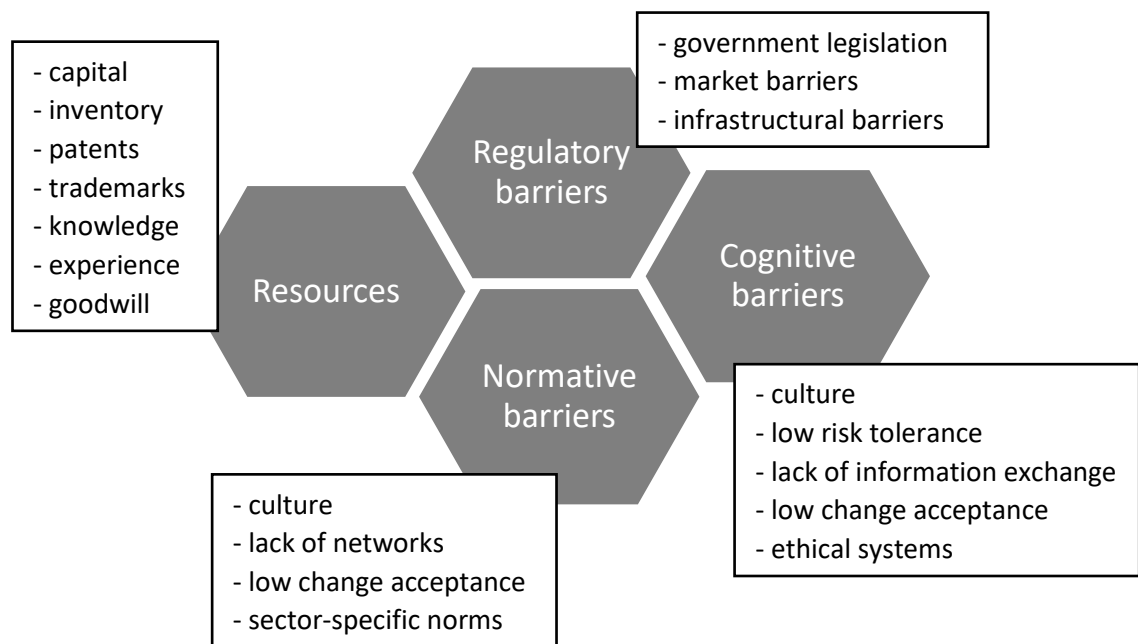
(Cleland & Davey, 2014), and lack of industry or business knowledge (NZ Herald, 2012).

The literature also suggests that among all the aforementioned barriers, cognitive barriers are likely to have the least impact on skilled migrants, because their higher levels of human and social capital increase their chances of success through the application of previous job experience, business knowledge, and reduction of transaction costs (Basu & Goswami, 1999; Weng & Chanwong, 2016).

2.3.3 Framework for this thesis

As discussed above, the resource-based theory fails to account for the impact of the external environment (Baumol, Litan, & Schramm, 2009), whereas the institutional theory fails to consider the impact of internal resources on entrepreneurial barriers. However, both these theories are prevalent in international literature, and together, they appear to cover the whole spectrum of factors that act as barriers to entrepreneurship in any economy. Therefore, this thesis uses both resource-based and institutional theories to derive an entrepreneurial barriers framework (as presented in Figure 6), to address the second research question of this thesis, which is,

What are the barriers and challenges faced by skilled migrants in the process of starting a business in the host economy?



Adapted from North (1990), Barney (1991), Scott (1995), and Bhidé (2000).

Figure 6 - Entrepreneurial Barriers Framework for this Thesis

Research questions 1 and 2

The above discussion identifies the potential entrepreneurial drivers and barriers to skilled migrants in their host economy. To better understand the entrepreneurial drivers and challenges in the New Zealand context, research questions 1 and 2 are explored further with the following sub-questions:

- 1. What drives skilled migrants to leave skilled employment and pursue entrepreneurship in New Zealand?*
- 2. What are the barriers and challenges faced by skilled migrants in the process of starting a business in New Zealand?*

2.4 Summary

The lack of research on skilled migrants in New Zealand was recognised in this chapter. This chapter began by defining a migrant entrepreneur for this thesis as a first-generation immigrant who took the initiative to leave paid employment in order to start a business, either out of economic necessity or to take advantage of a profitable business opportunity. The business undertaking involved financial risk, uncertainty, some form of innovation, and the legal right to employ other people.

A review of the key theories and frameworks on entrepreneurial drivers and barriers of migrants identified a range of internal and external push and pull factors that may drive a migrant to start their business. Similarly, a review of the literature on entrepreneurial barriers identified four key categories of challenges and barriers for new entrepreneurs, namely, resources, regulatory structures, normative barriers, and cognitive barriers.

The New Zealand literature offers mixed views on the entrepreneurial drivers and barriers of migrants. Despite the general research on migrant entrepreneurs in New Zealand, it is difficult to list or generalise the key entrepreneurial drivers and barriers, as there are significant differences in the characteristics of immigrant groups, their industry sectors, regions of operation, personal values, and beliefs (Hammarstedt, 2004; de Vries, 2007).

The next chapter reviews the literature on the contribution channels of skilled migrant entrepreneurs and employees to their host economy.

Chapter 3 - Skilled Migrant Entrepreneurs

3.1 Introduction

The previous chapter defined an immigrant entrepreneur for this thesis. It also looked at the New Zealand research on the entrepreneurial drivers and barriers of migrants, before presenting the relevant drivers and challenges frameworks for this thesis.

In order to theoretically inform this research, this chapter reviews the previous work on the contributions of skilled migrant entrepreneurs to their host economy. This chapter also reviews the literature on the contributions of skilled migrant employees to assess the economic value of skilled migrant entrepreneurship.

Therefore, the research question guiding the review of literature in this chapter is

How do skilled migrants contribute to their host economy?

Since the contributions of skilled migrants occur after their migration, the following sub-section briefly outlines the migration drivers of individuals, before exploring the theories and frameworks on the contribution channels of skilled migrants in section 2.2.

Migration drivers and benefits

As discussed in the introductory chapter, slow growth rates of the working population and the brain drain of local talent have resulted in labour market skill shortages in developed economies (Abella, 2012; International Labour Organisation, 2015).

While these economies can turn to international labour markets to fill domestic demand, supply depends on the migration decisions of labour, which are influenced by several factors, such as the rate of return on human capital, earning differentials, employment rates, migration costs, and immigration policies (Borjas, 1990; Massey et al., 1993).

Therefore, developed countries continually compete for skilled migrants (Bedford, Ho, & Goodwin, 1998; Bedford, Ho, & Lidgard, 2000; Moody, 2006; OECD, 2008) by offering better and lucrative returns for immigration. For instance, New Zealand, Australia and Canada are competitors and collaborators operating large permanent migration programs to attract skilled migrants (Hawthorne, 2011, 2014). Despite the

differences of scale, these countries continually surveil each other's policies to replicate successful strategies for attracting skilled migrants.

In addition to the above factors, the socio-political environment in the host economy also impacts the migration decisions of individuals. For instance, the outcome of the 2016 elections in the US, the withdrawal of Britain from the European Union (BREXIT) and the terrorist attacks in European countries (Bildt, 2017; Foster, 2017; Cockburn, 2018) have created unfavourable prospects for migration in the US and Europe (Irwin, 2015; Ghemawat, 2016; Wadsworth, Dhingra, Ottaviano, & Van Reenen, 2016; Zandi, Lafakis, White, & Ozimek, 2016; McKissen, 2017).

In addition to serving as a source of human capital, skilled migration makes several contributions to the host economy. It adds to the stock of human capital for future economic growth (OECD, 2014) and expands the economic scale by increasing both consumption and production functions in the host economy (Kerr 2009; Nathan, 2014). It also contributes to innovation, productivity, international business, and investment activity in the host economy (Enderwick et al., 2011; Nathan, 2014).

The next section reviews the key theories, models, and frameworks that explain the contribution channels of skilled migrants to their host economy.

3.2 Theories on the contributions of skilled migrants

This section looks at the key theories and concepts on the contributions of skilled migration to the host economy in relevance to research question 3, which is,

How do skilled migrants contribute to their host economy?

These theories and frameworks are outlined in Figure 7 below.

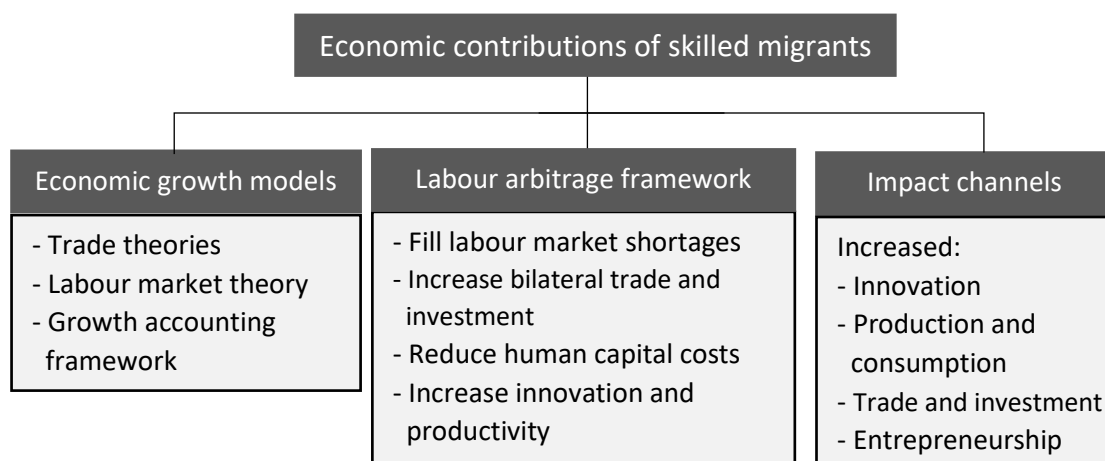


Figure 7 - Key Theories and Frameworks - Contributions of Skilled Migrants

3.2.1 Economic growth models

This sub-section presents economic models that have traditionally served as the principal frameworks for assessing the impacts of immigration on the host economy, namely trade theories, labour market theories, and the growth accounting framework.

Trade theories

The standard Heckscher-Ohlin trade model views trade and migration as substitutes (Moody, 2006). This means that resources that are not available in the domestic market can be acquired in two ways: either by importing the products from foreign markets or by sourcing the know-how/skilled labour from international markets to manufacture those goods. However, when considering other factor endowments, such as technology and business linkages, trade and migration are complementary (Markusen, 1983; Wong, 1986). Nevertheless, this theory focuses only on two components, namely trade and migration, and is therefore obsolete in today's complex and technologically advanced world.

Another popular trade theory is the Ricardian model, which assumes two-countries, two-goods, a single factor of production, general equilibrium, and perfectly competitive markets (Davis and Weinstein 2002; Steven, 2007; Suranovic, 2007). However, these assumptions are also obsolete in today's global economies, including New Zealand.

With assumptions like two factors of production, free movement of labour, and the treatment of labour mobility similar to the mobility of other factors of production

(Moody, 2006), both these models are unsuitable for this thesis. This is because New Zealand uses multiple factors of production in the production of goods and services. It also restricts the free movement/ intake of labour from international markets by using strict immigration policies.

Labour market models

An alternative view on the economic contributions of migrants comes from Borjas' (1995) labour market model of immigration surplus. It suggests that immigrants increase national income over the national cost of hiring them, resulting in surplus national income.

Focusing on skilled labour, Drinkwater, Levine, Lotti, and Pearlman (2003) surveyed the literature on theoretical models of long-run growth and identified various approaches to measuring economic growth in relevance to skilled labour.

The first approach emphasises capital accumulation as the engine of growth, where capital is broadly defined as human capital (Reichlin & Rustichini, 1998). The second approach suggests that growth is driven by the accumulation of human capital (Lucas 1988), and the third approach views innovation and technology as the drivers of economic growth (Romer, 1990). Hence, all approaches emphasise the importance of human capital accumulation as an engine of economic growth (Lucas 1988; Haque & Kim, 1994; Reichlin & Rustichini, 1998; Bretschger, 2001; Wilson 2003).

However, like trade models, labour market models based on quantitative designs fail to provide detailed insights into the entrepreneurial experience of skilled migrants.

Growth accounting framework

The growth accounting framework is not a model of economic growth but provides a means for organising ideas on how migration impacts economic growth. It suggests that migration can contribute to the growth of per capita GDP by contributing to labour productivity and labour utilisation (Moody, 2006).

Labour productivity is affected by human capital and other capital flows of migrants, whereas labour utilisation is signalled by labour force participation and unemployment rates in the host economy. The model identifies that immigrant groups with different

labour market characteristics have varying effects on labour productivity and utilisation.

However, this framework is not a complete theory of economic growth and appears to be referred to less often in New Zealand and international literature, because it can only yield results as good and as detailed as the data available (Moody, 2006). For instance, a 2006 working paper by the New Zealand Treasury used the growth accounting framework to measure the economic impact of migration on New Zealand. While the paper identified substantial impacts on labour productivity and labour utilisation, it failed to answer significant questions, such as the interlinkages between skill levels of migrants and economic growth. Another criticism of this framework is the difficulty in knowing the extent to which it can depict and predict reality, given the real world keeps changing with policy adjustments and other influences that affect the composition of migration flows (Moody, 2006).

Overall, while this framework addresses the impact questions at an aggregate level, it fails to account for the differences in migration composition and is therefore incapable of measuring the economic impacts of different migrant groups by their capital, ethnicity, and source country. The aim of this thesis is to qualitatively explore how skilled migrants contribute to the New Zealand economy. Therefore, the quantitative and macro-focussed growth accounting framework appears unsuitable for this context-specific thesis.

3.2.2 Labour arbitrage framework

The study of migration processes and impacts have traditionally been dominated by research approaches of other disciplines, especially economics and sociology.

Enderwick et al. (2011) identify that international business offers valuable insights into the migration processes and migration impacts on the host economy. Their paper presents a discussion on the myriad linkages between international labour migration and international business activity using the conceptual framework of international labour arbitrage, which refers to the opportunities for taking advantage of the differences between international labour markets.

The design of Enderwick et al.'s (2011) conceptual paper is based on the identification that the increasing co-movement of tasks and workers has created opportunities for arbitrage between national labour markets. The findings of this paper are detailed below.

Fill labour market shortages

Enderwick et al. (2011) maintain that the critical challenges of demographic ageing, occupational skill shortages, and increasing dependency ratios in wealthy countries impact their economic growth. A remedy to these issues is sourcing labour from international markets (Punch & Pearce, 2000; Samuelson & Nordhaus, 2004).

Since the late 1990s, several OECD countries including New Zealand, have updated their immigration policies to attract skilled labour from overseas markets (DOL, 2009). For instance, Australia, Canada and New Zealand offer permanent residence and work visas to attract such workers from skill-rich countries (Hawthorne, 2011, 2014).

Many other developed countries, such as the US, the UK, Canada and Australia have also been sourcing skilled labour from international markets for several decades to ensure the smooth functioning of their economies (Hawthorne, 2011, 2014).

Increase bilateral trade and investment

Migrant diasporas and their cross-country networks can present valuable insights on trade opportunities between their home and host countries (Chung & Enderwick, 2001; Enderwick et al., 2011). Previous research has found positive correlations between migration and bilateral trade (Gould 1994; Head & Ries 1998; Rauch 1999; Girma & Yu 2000; Ley & Tutchener 2001; Rauch & Trindale, 2002; Piperakis, Milner, & Wright, 2003; Rauch & Casella, 2003; Poot & Cochrane, 2004).

Migrants contribute directly to the ethnic and nostalgic trade of home country products and indirectly reduce transaction costs by using their social and cultural networks, business know-how, and knowledge of supply conditions in their home and host economies (Girma & Yu, 2000; Enderwick et al., 2011).

Migrants can also facilitate investments by signalling the performance, quality, reliability, and work attitudes of investors in their host and home countries (Enderwick et al., 2011). For instance, migrants can use their knowledge of the investment scenario in their home country to advise and reduce the risk in the investment

decisions of their acquaintances in the host country. As an investor, host countries benefit from cost reductions, access to new markets, and learning opportunities; and as a receiver, they gain resources like capital, technology, and management skills.

Reduce human capital costs

Migrants can help reduce the costs of human capital by sourcing skilled labour from their home country in two ways (Enderwick et al., 2011).

Firstly, migrant employees and entrepreneurs are aware of the opportunities for sourcing from their home countries and can therefore influence business sourcing decisions. Secondly, migrant workers in the host country can act as a guide for decision-makers concerning the potential of workers in their home country, such as work quality, productivity, commitment and initiative.

Social and other contributions

Corporate social responsibility, defined as “the responsibility of enterprises for their impacts on the society” (Moon, 2014) is an important aspect and expectation from businesses. Previous studies have found that skilled migrant entrepreneurs seek to help others in the community and are capable of utilising their local networks to increase their settlement and success rates in the host economy (Saxenian, 2002; Weng & Chanwong, 2016). They are also likely to have easier access to bank loans (Bates, 1995) and may be capable of financing and mentoring younger entrepreneurs at a later stage (Saxenian, 2002).

Migrants also contribute to the host labour market through their skills, knowledge, and diversity (Gould, 1994). For instance, employees bring knowledge of overseas markets, business environment, networks, and cultural knowledge from their home country.

Previous research suggests that migrant employees can assist in choosing apt market entry modes and strategies for tackling business environmental barriers between the home and host economies of migrant employees (Chung & Enderwick, 2001). In addition to migrant employees, the immigrant diaspora also facilitates international exchange of ideas and resources, including cultural and ethnic goods.

3.2.3 Impact channels theory

While Enderwick et al.'s (2011) paper uses an international business lens to provide a conceptual framework on the economic impacts of migration; Nathan (2014) presented a paper based on the extensive survey of theoretical and empirical literature on the economic impacts of high-skilled migration on the host country. Nathan reviewed 78 studies mainly from the US and Europe, but also from other countries, including Australia, Canada, New Zealand and Israel. He identified that the traditional analysis approaches underplay many wider economic impacts of skilled migration and outlined a simple framework, known as the impact channels theory (Nathan, 2014).

The impact channels theory suggests that skilled migrants can impact their host economy through four channels: innovation, production and consumption, trade and investment, and entrepreneurship. These channels are detailed below.

Innovation

Skilled migrants bring new ways of thinking and high work ethics, which contribute to increased innovation and productivity in the host economy (Dolado, Gorla, & Ichino, 1994; Page, 2007; Berliant & Fujita, 2009). They also bring sector expertise (Borjas 1987; Malchow-Møller et al., 2011) and add to workforce diversity, which can generate externalities contributing to knowledge generation, effective problem-solving, and new idea generation. For instance, New Zealand based migrant entrepreneurs, Jimmy Kuok, originally from Malaysia and Edward Chen, originally from China, used their cultural and sector-specific knowledge from their home countries to start businesses in New Zealand (Tan, 2018). Kuok identified that sea cucumbers are considered a valuable and nutritious delicacy in Asia but discarded in New Zealand. He used this difference as an opportunity to export them to Asia, and his sales are estimated to be worth \$81 million. Similarly, Chen identified the opportunity in online dating technology that matches Kiwi men with Asian women. He actioned his business idea and now owns a multi-million-dollar business that runs the fastest growing dating application named Hub.

However, diversity can also disadvantage a business with bad communication, trust (Alesina & Ferrara, 2005) and resource allocation decisions (Nathan, 2014);

therefore, fair balance and control is required.

Production and consumption functions

Empirical research on migrant labour has repeatedly shown that skilled migrants may play very different roles from migrants in other skill cells (Dustmann, Glitz, & Tommaso, 2008).

They can induce shifts in a firm's production function by complementing capital investment, resulting in aggregate increases in the productivity of receiving firms through knowledge spillovers and task specialisation (Paserman, 2008; Kangasniemi, Mas, Robinson, & Serrano, 2012). However, results may vary for different host economies. For instance, Paserman (2008) studied Israeli manufacturing firms in the 1990s and found positive associations between immigrant share and productivity in high-technology industries, suggesting production complementarities, whereas a similar study in New Zealand by Maré and Fabling (2011) found positive links between local area migrant share and firm productivity but did not establish causal links.

Skilled migrants can also impact the consumption function in their host economy by affecting local prices, product/service mix, and public service usage (Nathan, 2014). For instance, high levels of migration add to the population size in the host economy and raise the level of consumer demand. This results in increased competition for goods with inelastic supply, such as the housing market, resulting in increased local prices (Ottaviano & Peri, 2006; Saiz, 2007).

Trade and investment

Skilled migrants can alter the levels and patterns of international trade and investment between their home and host countries in the long term (Nathan, 2014). They facilitate trade and investment by bringing improved market knowledge, information on business and investment opportunities (Leblang, 2011; Pandya & Leblang, 2012), and better social capital and professional networks (Kugler & Rapoport, 2007; Saxenian & Sabel, 2008; Mundra, 2014). Prior research suggests that these inputs result in reduced trade frictions and better buyer-seller matching (Rauch & Trindade, 2002; Rauch & Casella, 2003; Peri & Requena, 2010).

Entrepreneurship

When skilled migrants turn to entrepreneurship, they contribute to the host economy in two ways. Firstly, they contribute their human, social and financial capital (Head & Ries, 1998), that is, knowledge, networks, intellect, abilities, skills, reputation and funds (Zhang, 2011; Nathan, 2014). Secondly, they contribute by generating jobs, helping reduce unemployment (Saxenian, 2002; World Bank, 2016), encouraging competition and innovation (Aghion, Dewatripont, Du, Harrison, & Legros, 2012), and engaging in business with the home country, such as exports and imports (Massey & North, 2007). For instance, Saxenian (2002) studied firms in America's Silicon Valley, where skilled Indian and Chinese migrants were senior executives. He identified that these immigrant-run businesses accounted for a quarter of Silicon Valley's technology businesses and collectively accounted for more than \$26.8 billion in sales and 58,282 jobs.

Similarly, Hunt (2010) performed several individual level analyses on skilled migrants and studied the 2003 US national college data. Her study identified that migrants were more likely to become entrepreneurs than natives. She also identified that immigrants entering the US on study and temporary work visas had a large advantage over natives in earning and innovation potential.

However, research has also identified salient differences among different migrant groups and host countries (Nathan, 2013). For instance, Fairlie, Zissimopoulos, & Krashinsky (2012) used census data to compare the economic outcomes for skilled Indian-origin communities in the US and the UK. They found that Indian entrepreneurs in the US earned above-average business incomes, mostly attributed to their education and business sector, whereas in the UK and Canada these entrepreneurs were more likely to hire employees. In comparison, new migrant cohorts in Australia and New Zealand were found to take a 10 to 20-year period to reach the local rates of business ownership (Schuetze & Antecol, 2007).

Although migrant entrepreneurship has been criticised for its likelihood of displacing existing firms, the net effect of skilled migrant entrepreneurship is deemed to be beneficial (Nathan, 2014). This is because as entrepreneurs, skilled migrants maintain individual contributions to the domestic consumption and production functions and are likely to make higher contributions to the gross national product of the host country.

3.3 New Zealand research

New Zealand research on the impact and contribution channels of skilled migrant entrepreneurs appears to be sparse and theoretically diverse. While there is plenty to be learnt from the international literature, New Zealand's unique features, such as its history, the changing source countries of migrants, and the volatility of migration flows, suggest that research findings from overseas may not be readily transferable to the New Zealand context (Poot et al., 2005).

The initial publications on the economic impacts of migration in New Zealand, such as Poot, Nana and Philpott (1988), Nana, Sanderson and Goodchild (2003), OECD (2003) and Longhi, Nijkamp and Poot (2005) used traditional economic growth models and large quantitative datasets focusing on migration in general. In comparison, recent research presents frameworks specific to skilled migrants, such as Enderwick et al. (2011) and Nathan (2013, 2014).

A brief outline of New Zealand research on the contributions of migrants is as follows.

Economic growth models

Based on the Borjas's (1995) model, Poot et al. (1988) calculated the immigration surplus in New Zealand at 0.16 percent of GDP over 30 years ago. They concluded that neither trade theories nor labour market models were satisfactory in explaining the relationship between migration and economic growth.

Then in 1994, a review of the literature on the economic impact of migration was conducted, where limitations of New Zealand data were identified (Chapple et al., 1994). This review was followed by another scoping paper 10 years later (in 2004) for the New Zealand Department of Labour and the New Zealand Immigration Department. It still identified gaps in the literature but acknowledged that several data gaps identified in the previous review had been addressed with new surveys and better access to data (Poot & Cochrane, 2004). For instance, the availability of unit record data through Stats NZ's data laboratory has created huge potential for in-depth research on the general population. Similarly, in respect to immigration research, the longitudinal survey of immigrants serves as a powerful source of data.

As of 2018, data sources and data availability have improved even further with more

detailed census data, new methodologies and analysis software being used. Specifically, in reference to this thesis, skilled migrant approval statistics by source country, annual small business reports, annual migration outlook reports and many other ad-hoc papers by MBIE have been very apt and useful resources. In addition, economic reports and publications like the Quarterly Survey of Business Opinion by NZIER (n.d.) and the quarterly Business Outlook Survey by ANZ (n.d.) have provided an important insight into the opinions and barriers faced by small businesses in New Zealand.

Despite all the above-mentioned improvements, the priorities and resources of government dictate the research gaps that are filled at any given time, and context-specific data required to address the objective of this thesis does not appear to be available from any secondary data sources.

Labour arbitrage and impact channels theory

While there is vast empirical literature on migration and immigrant entrepreneurship, the lack of research on skilled migrants has been widely acknowledged in global research (Nathan, 2014).

The situation is no different for New Zealand, as indicated by the lack of New Zealand based empirical examples in both Enderwick et al.'s (2011) and Nathan's (2014) research. Most of their research refers to empirical studies in the US and Europe, although both indicate positive links between immigrants, entrepreneurial inclination and entrepreneurial success (Saxenian, 2002; Anderson & Platzer, 2006; Levie, 2007; Wadhwa, Saxenian, Rissing, & Gereffi, 2008; Guerra & Patuelli, 2011; Marino, Parrotta, & Pozzoli, 2012; Nathan, 2013).

In these overseas studies, skilled migrant entrepreneurs are recognised as important players in economic growth, given their better human capital, business networks, and the ability to remodel opportunity structures (Barakat & Parhizgar, 2013). For instance, Silicon Valley is the most acknowledged example of how skilled Indian immigrants contributed to the success of the US economy (Saxenian, 2005).

Many other benefits of skilled migration have also been acknowledged in other countries (Beladi & Kar, 2015; Windsor, 2015), such as tax and social contributions that are higher than the benefits received, and the creation of businesses in a wide range of industries (OECD, 2010; 2014). Migrants in most OECD countries have also been found

to be more entrepreneurial than natives with a steady rise in the potential for employment creation (OECD, 2011).

Enderwick et al. (2011) identify the eclectic nature of the international business discipline and highlight the potential contributions it can make in studying the impacts of migration on host economies. Similarly, Nathan (2014) acknowledges the underdeveloped literature on the wider impacts of skilled migration, and simply recommends more research in all countries as a future priority.

In light of the above suggestions for future research (Nathan, 2014), the focus of this thesis (on skilled migrants in the New Zealand context) is a step in the right direction.

3.4 Framework for this thesis

As discussed above, economic models are deemed unsatisfactory in explaining the economic impacts of migration in New Zealand (Moody, 2006).

In comparison, the labour market arbitrage framework and impact channels theory have a more recent research base, specific to skilled migrants. These frameworks broadly identify tax-paying roles³ in which skilled migrants contribute to the host economy as employees, investors and entrepreneurs. These findings are seconded by OECD (2010), which states that immigrants contribute to the host economy, both as employees and as entrepreneurs.

Also, as identified in section 3.3, the priorities and resources of government dictate the research gaps that are filled at any given time. The context-specific data needed to address the objective of this thesis does not appear to be available from any secondary data sources. This lack of data and research on skilled migration has been identified by Enderwick et al. (2011) and Nathan (2014), who simply recommend more research in all countries as a future priority. Therefore, the focus of this thesis on skilled migrants in the New Zealand context is a step in the right direction.

Hence, the framework for this thesis is derived from a combination of both the labour arbitrage framework and impact channels theory.

³ Excludes voluntarily unemployed and dependent skilled migrants, their families and migrant diasporas.

Table 3 - Contribution Channels Framework

as employees (individual level contributors)	as entrepreneurs (firm-level contributors)
Fill labour market shortages	Job creation
	Increase consumption and consumer options
Innovation and knowledge diffusion	
Increase and facilitate bilateral trade, investment and outsourcing	
Increase production and consumption functions	
Social contributions	

Adapted from Enderwick et al. (2011) and Nathan (2013, 2014).

Research question 3

The above discussion identifies two key roles in which skilled migrants contribute to their host economy, that is, as employees and as entrepreneurs. Therefore, research question three is explored further with the following sub-questions:

3. How do skilled migrants contribute to the New Zealand economy?

- *How do skilled migrant employees contribute to the New Zealand economy?*
- *How do skilled migrant entrepreneurs contribute to the New Zealand economy?*

3.5 Summary

New Zealand research on the impact and contribution channels of skilled migrants appears to be sparse and theoretically diverse. Although the literature identifies a variety of traditional theories and models on the economic impacts of immigration on host economies, such as trade theories, labour models, and growth frameworks, they are all deemed unsatisfactory in explaining the link between migration and economic growth in New Zealand (Moody, 2006).

In comparison, recent frameworks, such as the labour arbitrage framework by Enderwick et al. (2011) and the impact channels theory by Nathan (2013, 2014), are specific to skilled migrants and offer the space for qualitative analysis. Hence, they serve as the basis of the contribution channels framework for this thesis, as shown in Table 3 above. This framework serves as a base of data analysis in Chapter 5.

The next chapter looks at the contextual literature on skilled migrants in New Zealand.

Chapter 4 - New Zealand Context

4.1 Introduction

Chapter 3 reviewed the theoretical and empirical literature on the contribution channels of skilled migrants to the host economy, before identifying the sparse and theoretically diverse research on skilled migrants in New Zealand.

This chapter provides context-specific grounds for this thesis by looking at New Zealand's need for skilled migrants, before exploring the entrepreneurial culture in New Zealand. The migration history and economic relationship between New Zealand and India is explored, the latter being a key source of skilled migrants to New Zealand. The chapter ends by identifying the gap in literature and refining the research questions in the context of this study in order to inform the research design in Chapter 5.

4.2 New Zealand's need for skilled labour

Skilled labour shortages are a major constraint for business expansion in many New Zealand sectors such as ICT, health, and construction (NZ now, 2017). These shortages have been the biggest concern for small businesses, which are equated with self-employment and entrepreneurial activity in New Zealand (MBIE, 2017d).

Recent research by the New Zealand Institute of Economic Research (NZIER, 2017), found that nearly half (46 percent) of New Zealand businesses across all industries struggle to find skilled workers in the domestic labour market. Similarly, the quarterly business micro scope survey by ANZ reported severe skill shortages across small businesses, especially in the construction, services, manufacturing, and retail industries (ANZ, 2018a; 2018b).

In fact, the latest (April 2018) Quarterly Survey of Business Opinion (QSBO) by NZIER (2018) suggests that acute skill shortages and rising labour costs are now turning New Zealand business towards labour-saving technology, with increased intentions to invest in plant and machinery and reduce future hiring needs.

Further, labour market forecasts suggest that skill shortages in New Zealand will continue in the long term. For instance, the Short-term Employment Forecast 2017-2020 report by MBIE forecasts the sectors of ICT, health, construction, and education as having the highest demand for skilled labour between 2017 and 2020 (MBIE, 2017b). Moreover, the annual economic survey of New Zealand by OECD (2017) has forecasted that the ongoing diffusion of digital technology will result in the displacement of workers who lack required skills over the next two decades.

4.2.1 Short skilled sectors in New Zealand

Immigration NZ regularly updates skill shortage lists, which are lists of skills that are in chronically short supply. Currently, these lists look at long term, short term, and Canterbury skill shortages across various industry sectors, as listed in Table 4 below.

Table 4 - Industries Facing Skill Shortages in New Zealand

Industries/ Sectors	Long Term Skill Shortage List	Short term Shortage list	Canterbury Skill Shortage List
Agriculture and forestry	✓	✓	
Construction	✓	✓	✓
Education		✓	
Engineering	✓	✓	✓
Finance/business	✓		
Health and social services	✓	✓	
ICT and electronics	✓		✓
Oil and gas		✓	
Recreation, hospitality & tourism	✓	✓	
Science	✓	✓	
Trades	✓	✓	✓
Transport	✓		✓

Source: NZ now (2018b).

A focus on Health, ICT and Hospitality sectors

New Zealand is primarily a service-based economy, where the service sector contributes to over two-thirds of the national GDP (Stats NZ, 2018). This is a vast change over the last 50 years, when New Zealand's economy was heavily reliant on the agrarian and manufacturing sectors (Stats NZ, 2012). This pattern matches other OECD nations, who have also turned from primary to service economies.

An analysis of New Zealand's immigration statistics over the past decade identifies that 10 occupation groups accounted for 63 percent of the total skilled (principal) migration approvals to New Zealand. A majority of them belong to the service sector, as shown in Tables 5 and 6 below.

Table 5 - Top 10 Sub-Major Occupation Groups Filled by Skilled Migrants; 2007 - 2017

Rank	Top 10 (ANZSCO ¹) Sub-Major Occupation Groups ²	Skilled migration %	
1	Health Professionals	9%	63%
2	ICT Professionals	8%	
3	Hospitality, Retail and Service Managers	8%	
4	Food Trades Workers	7%	
5	Engineering, ICT and Science Technicians	6%	
6	Design, Engineering Science and Transport Professionals	6%	
7	Business, Human Resource and Marketing Professionals	5%	
8	Specialist Managers	5%	
9	Education Professionals	4%	
10	Automotive and Engineering Trades Workers	4%	

1. ANZSCO stands for Australia and New Zealand Standard Classification of Occupations. It is the official classification of occupations used by the Australian Bureau of Statistics (ABS) and Stats NZ (ABS, 2013). Refer to Appendix D for the ANZSCO classification list.
2. ANZSCO has different levels of classifications and the hierarchy of these levels is major group, sub-major group, minor group, unit group, and occupation. An example of this hierarchy is Professionals (major) > Health professionals (sub-major) > Midwifery and nursing professionals (minor), Registered nurses (unit) > Registered nurse: critical care and emergency (occupation).

Source: Immigration NZ (2017); Data July 2007 - June 2017.

Table 6 - Occupational Breakdown of Top 5 Sub-Major Occupations Filled by Skilled Migrants in New Zealand; 2007 - 2017

Rank	Sub-major Occupations (ANZSCO)	%	Minor Occupation Groups ¹	% ¹	Dominant Sector ³ (ANZSIC ²)
1	Health Professionals	9%	Medical Practitioners	2%	Health
			Midwifery and Nursing Professionals	6%	
			Health Therapy, Diagnostic and Promotion Professionals	1%	
2	ICT Professionals	8%	Business and Systems Analysts, and Programmers	5%	ICT
			Database and Systems Administrators, and ICT Security Specialists	2%	
			ICT Network and Support Professionals	1%	
3	Hospitality, Retail & Service Managers	8%	Accommodation and Hospitality Managers	4%	Hospitality
			Misc. Hospitality, Retail and Service Managers	3%	
			Retail Managers	1%	
4	Food Trades Workers ⁴	7%	Bakers and Pastry Cooks	1%	Hospitality
			Chefs	5%	
			Cooks, Butchers and Smallgoods Makers	1%	
5	Engineering, ICT & Science Technicians	6%	Agricultural, Medical and Science Technicians	1%	Agriculture, Construction, Health, and ICT
			Building and Engineering Technicians	2%	
			ICT and Telecommunications Technicians	3%	
Total Top 5		38%			

1. The sum of minor and sub-major groups may differ by 1 percent (rounded to the nearest decimal).
2. ANZSIC stands for Australia and New Zealand Standard Industry Classification. It is the official classification of industries used by the ABS and Stats NZ (ABS, 2008). Refer to Appendix D for the complete ANZSIC classification list.
3. This table manually matches occupations to industry sectors as there appears to be no official ANSCO-ANZSIC match.
4. The breakdown for the Food Trades Workers sub-major occupation group is provided at a lower (unit group) level, because it does not have a sub-major classification.

Source: Immigration NZ (2017); Data July 2007 - June 2017.

Further, an occupational dissection of the top five sub-major occupation groups (in Table 6 above) identifies that the majority of approvals for skilled migrants were in the minor occupational groups of Midwifery and Nursing Professionals, Accommodation, Hospitality and Retail Managers, ICT Professionals, and Chefs, which broadly translates to Health, ICT and Hospitality sectors.

Overview of sectors

An overview of New Zealand's short skilled sectors that receive the majority of skilled migrant approvals (as identified in Table 6) is presented below.

Health

The health sector includes a variety of services, including hospitals, nursing homes, rehabilitation centres, diagnostic laboratories, pharmaceuticals, biotechnology and medical equipment (Mahmud & Parkhurst, 2007).

In New Zealand, this sector is identified under the ANZSIC *Division Q: Healthcare and Social Assistance*, which covers hospitals, medical and other healthcare services, including residential care, dentistry, optometry, diagnostic and ambulance services (ABS, 2015a).

Therefore, this sector includes occupations such as doctors, nurses, dentists, physiotherapists, chemists, radiologists, therapists, homeopaths and medical equipment technicians.

The health sector is predicted to remain one of New Zealand's most short skilled sectors until 2020 (MBIE, 2017b). Health care plays an important role in the economic development of a nation (Baldacci, Cui, Clements, & Gupta, 2004; Bloom, Canning, & Sevilla, 2005). New Zealand's health sector accounts for nearly 10 percent of total GDP (NZ now, 2017). The sector has high service standards and offers a wide range of work opportunities for healthcare professionals from different disciplines. According to the findings of The New Zealand Medical Workforce 2016 survey, overseas professionals account for over 40 percent of the health sector in New Zealand, (Medical Council of New Zealand, 2018). These professionals belong to various ethnic groups, including European, Asian and African, but those from North Africa and the Middle East, Sub-Saharan Africa, and Asia have the highest retention rates in New Zealand.

Skill shortages in New Zealand's health sector, especially for nurses, mental health experts, and support workers have been long identified. According to the World Health Organisation, New Zealand is very reliant on migrant doctors and nurses, compared to other OECD countries (Ministry of Health, 2014). The New Zealand Institute of Economic Research (2004) published a report about demand projections and implications for the health and disability services from 2001-2021. The report identified that without any action the health sector is forecast to have labour demand and supply differentials of up to 42 percent by 2021. And as of 2017, this sector continues to face skill shortages, despite continued migration, mainly because of growing and ageing population (*NZ Herald*, 2017; Ministry of Health, 2018). Furthermore, the demand for healthcare professionals is estimated to require around 400 extra specialists annually and around 25,000 more nurses by 2030 (NZ now, 2017).

Information and communications technology (ICT)

OECD (2007) defines information and communications technology (ICT) as involving ICT manufacturing, telecommunications, and information technology services.

In New Zealand, this sector is identified under the ANZSIC *Division J: Information Media and Telecommunications*, which covers internet service providers, software publishing, internet publishing and broadcasting, web hosting, and information storage services (ABS, 2015b).

Therefore, this sector includes occupations such as information technology professionals, business and systems analysts, programmers, and database administrators.

The ICT sector is crucial to all segments of society - businesses, households and organisations around the globe (OECD, 2010; MBIE, 2015c). It is essential for innovation, productivity growth, communication and international connectivity.

Globally, this sector has been witnessing inadequate skilled labour supply since the late 1990's (Benson-Rea, Haworth, & Rawlison, 1998). Despite the challenge of skill shortages, this sector continued to grow at the rate of over 1.2 percent in the early 2000s. It also had the highest levels of employment and recovery from the

recession in the 2008 global economic crisis. In 2009, ICT workers represented more than three percent of the total employment in OECD countries (OECD, 2010).

In New Zealand, the ICT sector is an important source of national income (NZTE, 2011; MBIE, 2017c). With more than 11,000 businesses employing around 70,000 employees; a compound annual growth rate of four percent since 2009, and holding over six percent of New Zealand's stock market cap, this vibrant and fast-growing sector plays an important role in the economic growth of New Zealand (MBIE, 2015c, 2017c). This explains the high demand for skilled ICT personnel across various sectors in New Zealand (OECD, 2010).

Hospitality and retail

In New Zealand, the hospitality sector is identified under ANZSIC *Division H: Accommodation and Food Services*, which includes accommodation, cafes, restaurants, and casinos (ABS, 2004).

The retail sector is identified under *Division G: Retail Trade*, which covers vehicle, food, fuel, store-based and non-store buying and selling (ABS, 2015c).

Hospitality and retail sectors therefore include occupations like accommodation, hospitality and retail managers, chefs, bakers, and cooks.

Globally, the hospitality industry has seen rapid growth. It is the most dynamic sector in New Zealand, contributing around five percent to the national GDP (Westpac, 2016). Skill shortages have hindered the growth potential of this sector for over two decades.

In 2013, a survey of hospitality employers by the Restaurant Association of New Zealand (RSA), highlighted the difficulty in filling management roles. This difficulty was attributed to hospitality being a very labour-intensive industry with high operating costs, resulting in businesses struggling to afford higher pay rates for skilled labour (Williamson, Neill, Kruesi & Waldren, 2013).

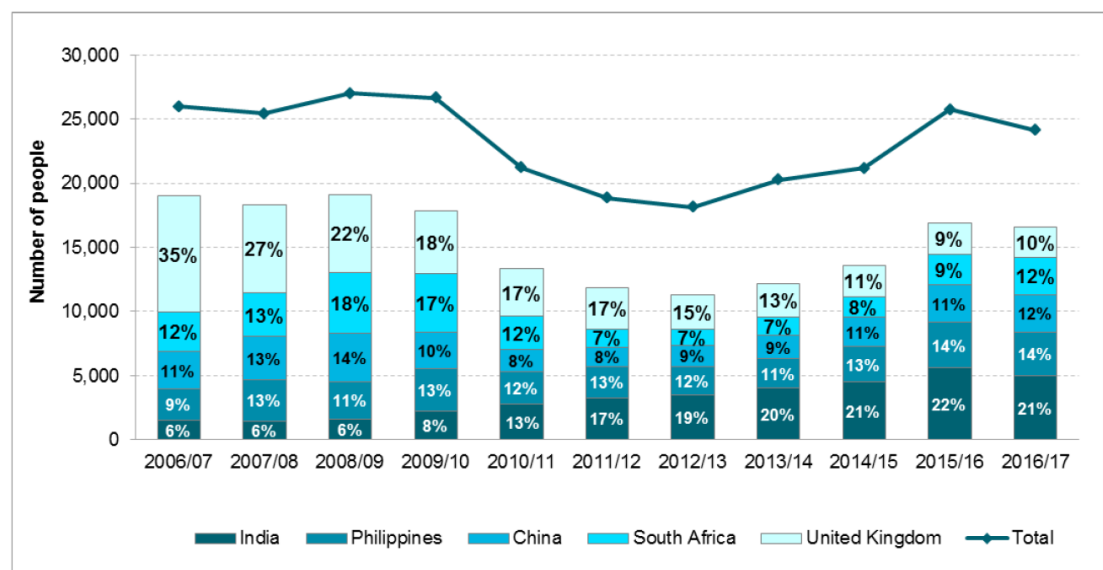
MBIE statistics show that at this time, skilled vacancies in this sector were increasing consistently, especially for café and restaurant managers (Williamson et al., 2013; MBIE, 2015b). In 2004, a report by Business and Economic Research Limited (BERL) had

already highlighted this forthcoming shortage as a threat for New Zealand’s hospitality sector. This is the case today, as reflected in reports from organisations like the Rotorua Restaurant Association, Toi Ohmai Institute of Technology, and the Rotorua Hospitality Board, whose recent forecast for this sector now estimates that the skilled labour shortages will reach 40 percent by 2025 (Guy, 2017).

Like the hospitality sector, the retail sector has also faced shortages of skilled personnel in the past, not only for retail managers, buyers, and supervisors, but for entry-level roles as well (Harris, 2017).

4.2.2 Key source countries of skilled labour to New Zealand

The key sources of skilled labour to New Zealand are India, the Philippines, China, the UK, and South Africa (MBIE, 2018). The number of migrant approvals from all these countries, except the UK have grown strongly in recent years, as reflected by skilled migration approval statistics as shown in Figure 8 below.



Source: MBIE (2018); reproduced from the Migration Trends 2016/17 report (p. 53) without alteration under Crown copyright Act, 2016.

Figure 8 - Skilled Migration by Top Five Source Countries; 2006/2007 - 2016/17

India became the top source of skilled migrants for New Zealand after overtaking the UK in the year ended 2012. It has since stayed at the top rank, and risen steadily, accounting for a quarter of New Zealand’s skilled principal migrant approvals in 2016/17.

4.3 Skilled migration from India

This section looks at the history of migration from India to New Zealand, before reviewing the 10-year (2007-2017) aggregate statistics on short skilled occupations in New Zealand and the contributions of skilled labour from India to these occupations.

4.3.1. History of migration from India to New Zealand

The first Indian arrivals in New Zealand were as British sepoy and ship crew in the early 18th century, and then as sojourners in later years (Swarbrick, 2015). Settlers started arriving in the 19th century (McKinnon, 1996; Leckie, 2007). Starting with a small number, the proportion of New Zealand population with Indian ethnicity has risen over the years, specifically in the last decade.

Table 7 - Population Change 1986 - 2038; Indian Ethnicity in New Zealand

Census year	Indian ethnic Population in New Zealand	Proportion of Indian ethnic population in New Zealand	% increase in Indian ethnic population in New Zealand	New Zealand population born in India	% of New Zealand population born in India
1986	15,810	0.5%	35%	-	-
1991	30,609	0.9%	94%	-	-
1996	42,408	1.2%	39%	-	-
2001	62,187	1.7%	47%	20,892	34%
2006	104,583	2.7%	68%	43,344	41%
2013	155,178	3.9%	48%	67,176	43%
2038 ^{1,2}	411,800	7.1%	265%	-	-

1. Population projections for 2038 are based on different combinations of fertility, mortality, migration, and inter-ethnic mobility assumptions (Stats NZ, n.d.).
2. Data for the 2018 Census is not available at the time of thesis submission (Stats NZ, 2018).
Adapted from Chou (2000), Swarbrick (2015), and Stats NZ (2002, 2014, 2017b).

India is New Zealand's third most common source of immigrants after China and the UK (Stats NZ, 2014), making Indians the fastest growing ethnic group from the Asian sub-continent in New Zealand (Stats NZ, 2016).

Skilled migration from India

Beyond these statistics, skilled labour migration from India has been a very valuable input for New Zealand in recent years (MBIE, 2018). It has been the top source of skilled (principal) migrants to New Zealand since 2012 (MBIE, 2018).

In fact, a review of the various NZ Inc strategies (MFAT, n.d.) identifies that India is the

only country for which New Zealand has a strategic goal of attracting and retaining skilled migrants to meet labour market needs.

Table 8 - Top 3 Short Skilled Occupations in New Zealand; 2012-2017

Major Occupation Groups	Top 5 source countries	% sourced from India
Professionals	India, UK, Philippines, China, South Africa	19%
Technicians & Trade Workers	India, China, Philippines, UK, South Africa	24%
Managers	India, UK, China, South Africa, Philippines	36%
Total	India; UK, China, Philippines, South Africa	22%

Source: Immigration NZ (2017); Data July 2007 - June 2017.

India also holds the top ranks for various other migration categories in New Zealand (MBIE, 2016b; 2018). For instance, India has been the largest source of temporary workers to New Zealand since 2016, mainly to the hospitality sector in the occupations of retail managers, chefs, and retail supervisors (MBIE, 2018).

4.3.2 Short skilled occupations filled by skilled Indian migrants

This section reviews the statistics on the short skilled occupations in New Zealand and the contribution of skilled labour from India in filling these shortages.

Statistics

As shown in Table 9 below, 10 occupation groups accounted for 63 percent of the total skilled (principal) migrant approvals in New Zealand between July 2007 and June 2017. Approximately 21 percent of this labour intake was sourced from India.

Table 9 - Top 10 Sub-Major Occupation Groups of Skilled (Principal) Migrants in New Zealand; 2007 - 2017

Rank	Top 10 Sub-major Occupation Groups (ANZSCO classification)	% of total skilled migration	% from India
1	Health Professionals	9%	63%
2	ICT Professionals	8%	
3	Hospitality, Retail and Service Managers	8%	
4	Food Trades Workers	7%	
5	Engineering, ICT and Science Technicians	6%	
6	Design, Engineering, Science and Transport Professionals	6%	
7	Business, Human Resource and Marketing Professionals	5%	
8	Specialist Managers	5%	
9	Education Professionals	4%	
10	Automotive and Engineering Trades Workers	4%	
Others		17%	9%

Source: Immigration NZ (2017); Data July 2007 - June 2017

Further, a dissection of the top five occupation groups identified above and the respective labour contribution from India is presented in Table 10 below. It shows that between 2007 and 2017, the majority of migration approvals were in the occupational groups of Midwifery and Nursing Professionals, Accommodation and Hospitality Managers, Retail Managers, ICT Professionals, and Chefs.

Table 10 - Occupational Breakdown of Top 5 Sub-Major Occupation Groups of Skilled (Principal) Migrant Approvals in New Zealand; 2007 – 2017

Rank	Sector	Sub-major Occupations	Minor Occupation Groups ¹	%	Proportion from India
1	Health	Health Professionals	Medical Practitioners	9%	33%
			Midwifery and Nursing Professionals		
			Health Therapy, Diagnostic and Promotion Professionals		
2	ICT	ICT Professionals	Business and Systems Analysts and Programmers	8%	25%
			Database & Systems Administrators, and ICT Security Specialists		
			ICT Network and Support Professionals		
3	Hospitality ¹	Hospitality, Retail and Service Managers	Accommodation and Hospitality Managers	8%	27%
			Misc. Hospitality, Retail and Service Managers		
			Retail Managers		
4	Hospitality	Food Trades Workers ²	Bakers and Pastry cooks	7%	29%
			Chefs		
			Cooks, Butchers and Smallgoods Makers		
5	Agriculture, Construction, Health & ICT	Engineering, ICT and Science Technicians	Agricultural, Medical and Science Technicians	6%	25%
			Building and Engineering Technicians		
			ICT and Telecommunications Technicians		
Total Top 5				38%	28%

1. In New Zealand, the hospitality industry is described as the ANZSIC classification Division H: Accommodation and Food services, which covers accommodation, cafes, restaurants, and casinos (ABS, 2004).
2. The breakdown for Food Trades Workers sub-major occupation group is provided at a lower (unit group) level, as the minor and sub-major levels for this occupation group are the same.

Source: Immigration NZ (2017); Data July 2007 - June 2017.

Statistics on skilled migrants from India

Specifically, the top 10 unit-level occupations for skilled migration approvals from India were for registered nurses; ICT support technicians, engineers and analysts; retail, café, and restaurant managers; chefs, cooks, and bakers; and software and application programmers.

Table 11 - Top 10 (Unit-group) Occupations Filled by SIMs from India; 2007 - 2017

Rank	Top 10 Unit Occupation groups filled by Skilled migrants from India (ANZSCO classification)	% by occupation	
1	Registered Nurses	11%	57%
2	ICT Support Technicians	9%	
3	Retail Managers	9%	
4	Cafe and Restaurant Managers	7%	
5	Chefs	7%	
6	Software and Applications Programmers	6%	
7	Cooks	2%	
8	Bakers and Pastrycooks	2%	
9	ICT Support and Test Engineers	2%	
10	ICT Business and Systems Analysts	2%	
Others		43%	

Source: Immigration NZ (2017); Data July 2007 - June 2017 (Zealand 2017)

Having reviewed the key sources of skilled migrants and the key sectors they contribute to in the New Zealand labour market, the next section looks at the entrepreneurial culture in New Zealand.

4.4 The entrepreneurial culture in New Zealand

New Zealand has a strong entrepreneurial spirit (Kidd, 2008), which is largely associated with the small business sector (de Vries, 2007) to the extent of being referred to as the backbone of the New Zealand economy (Nash, 2018).

In New Zealand, entrepreneurship is generally seen in a positive light for its contributions, such as creating new jobs, developing innovative products, and generating benefits (Carton, Hofer, & Meeks, 1998). For instance, a study by Frederick (2004) found that New Zealand has one the highest levels of entrepreneurial activity across the globe, with nearly one entrepreneur for every seven individuals.

GDP is a commonly used measure for assessing the contribution of any sector or

business form. Between 1995 and 2001, small and medium enterprises (SMEs) in New Zealand created over 156,000 jobs, while large enterprises reduced their business by 36,000 jobs (Ministry of Economic Development, 2006). In 2011, SMEs contributed 40 percent to the total value-added output (Ministry of Economic Development, 2011). On average, small businesses (with less than 20 employees) employed a third of all workers and contributed 28 percent to the national GDP every year (MBIE, 2014; 2015a; 2016a; 2017a). The majority of these small businesses (70 percent) had zero employees, and those with employees only made up a third of all enterprises in New Zealand.

Table 12 - Contribution of Small and Medium Enterprises to GDP and Employment

Year	2013/14	2014/15	2015/16	2016/17
SMEs without employees as percentage of all New Zealand	69%	69%	70%	70%
SMEs with employees as percentage of all New Zealand businesses	28%	28%	27%	27%
Total employment generated by SME enterprises	30%	30%	29%	29%
Percentage contribution of all SMEs to national GDP	28%	27%	26%	28%

1. *Small enterprises are defined by the employee size group of 0-19 employees.*
2. *The year is not reflective of data from the mentioned year as the MBIE small business factsheets use data from other sources.*

Source: MBIE (2014, 2015a, 2016a, 2017a).

The strength of New Zealand's entrepreneurial and innovative culture is also reflected in the various incubator and accelerator projects encouraged and funded by the government, such as Creative HQ (2015), Callaghan innovation (2018a; 2018b), Kiwi landing pad (n.d.), and Lightning lab (n.d.).

While popular entrepreneurs may at times be subject to public criticism known as the 'tall poppy syndrome' (Young, 2009), such as Ewan Wilson of the non-operating New Zealand Airline KiwiAir and Susan Paul of the bankrupt Rawaka venture (Reed, 2006); entrepreneurship is generally considered as 'doing good' in the New Zealand society. This is because it encourages the well-being of people through several means, including job creation, innovation, and increased production and consumption (de Vries, 2007).

Migrant entrepreneurship in New Zealand

Generally, immigrants are deemed more likely than natives to pursue entrepreneurship (Fernandez & Kim, 1998). Various studies across the globe, such as Borjas (1987), Poot (1993), Lofstrom (2002), Schuetze and Antecol (2007), Fairlie et al. (2010), Haltiwanger, Jarmin, & Miranda (2010), and Hunt (2010) have found immigrants to have higher rates of productivity innovation and entrepreneurship, irrespective of their education levels.

This seems to be the case in New Zealand, where both native and migrant entrepreneurship pervades the society (de Vries, 2007). Many studies have been conducted on the role and prevalence of migrant entrepreneurship in New Zealand, where the benefits and contributions of entrepreneurial business to the New Zealand economy have been acknowledged. For instance, Crothers (2002) examined⁴ the business environment and role of immigrant entrepreneurship in Auckland and identified that immigrant entrepreneurs have the advantage of understanding co-ethnic tastes and preferences.

Their international ties help them to start businesses that serve niche markets by introducing new products and services which ultimately contributes to economic development (Harkess, Hodgson, Merwood, Quazi, Stock, Tausi, & Zhao., 2008).

4.5 Indian migrant entrepreneurs

Globally, different rates of entrepreneurship have been observed among immigrant groups from different cultures, ethnicities, generations, business sectors (Ram, 1997), and backgrounds (Collins, 2003; Hammarstedt, 2004).

Indian migrants hail from ethnically, linguistically, and religiously diverse backgrounds (Aptekar, 2009) and have intra-group differences such as language ability (Fernandez & Kim, 1998) and values (Wilson, 1980). For instance, in India, material wealth is interconnected with spirituality and hence considered a life value. However, there is also a belief in simple living and hard work (Tiwari, 1980) being the route to happiness (Banerjee, 2008).

⁴ Crothers used multiple data sources, including the 2001 Census and a City Council survey in Auckland.

Despite their social and cultural diversity, Indians have some unified elements, such as religious faith and spirituality (Wilson, 1980). From a societal perspective, many Indians see entrepreneurship as a desirable and high-esteem occupation (Pio 2014). For instance, earlier migration to New Zealand saw patterns in certain trades, including, Chinese in vegetable markets and Indians in dairy shops (Pio, 2007). However, today, potential migrants are familiar with global professional environments and come from cosmopolitan cities such as Mumbai and Shanghai with high skill levels (Pio, 2005). This is reflected in the employment statistics on Indian migrants, which identify that 72 percent of the Indian ethnic population in New Zealand were in the labour force, mostly working as professionals and managers (Stats NZ, n.d.-a).

Other factors deemed to impact the entrepreneurial decisions of individuals include education and previous entrepreneurial experience. Indian migrants are usually highly educated (Bates, 1995; Aptekar, 2009; Min & Kim, 2009), and higher education has been linked to their employment attraction. Similarly, Clark and Drinkwater (2010) suggest that education opens professional opportunities, which reduces the propensity for business ownership. Therefore, some authors suggest that venture creation is often the last option for Indian migrants after exploring employment opportunities (Rai, 2008).

Although the above view is not universal, it coincides with the official statistics on Indian entrepreneurship in New Zealand. According to the 2013 Census, only 4.1 percent of the Indian population in New Zealand were business owners with employees compared with 85.5 percent in paid employment (Stats NZ, 2014; n.d.-a). This compares to the national averages of 7.4 and 78 percent respectively.

Empirical research in New Zealand

De Vries (2012) studied Indian migrant entrepreneurs in New Zealand and found that most of his research participants depended on their family and friends for raising institutional capital. This is because half of his research participants experienced difficulty in dealing with banks due to a lack of understanding of the New Zealand institutional context and the English language. However, language is unlikely to be an issue for skilled Indian migrants in New Zealand, given it is a key requirement for migration to New Zealand, although accent may be an issue (Spoonley & Trlin, 2012).

The dependence on family and friends for raising capital has been observed to be a common finding among studies on Indian migrants across the globe (Basu, 1998; Dunstan, Boyd, & Crichton, 2004).

The study by de Vries (2007) also identified the key traits of Indian immigrant entrepreneurs in New Zealand as adaptability, strong work ethic, a predisposition for employment, lack of enclaves, different business drivers, and a market orientation that matches the New Zealand context.

Another New Zealand based study by Pio (2014) on the entrepreneurial drivers of Indian immigrants hailing from various countries, such as Fiji, India, and South Africa, identified multiple entrepreneurial drivers, including the need for higher income/wealth; financial security for family; building a business for inheritance of future generations; continuing family tradition; and filling a gap in the market. On an individualistic level, drivers also included the desire to have a challenge; personal growth and learning; need for achievement, recognition, status, power to influence, leadership, and innovation; flexible work-life balance and freedom of workstyle.

Similarly, Maritz (2004) focused on necessity Indian entrepreneurs, that is, those who choose entrepreneurship out of necessity, resulting from the lack of other income options, such as unemployment. Pio (2007) also identified necessity resulting from unemployment and underemployment as the driving forces towards entrepreneurship for Indian migrants in New Zealand.

A more specific and relevant study on skilled Indian migrants in New Zealand was conducted by Paulose (2011). His qualitative study identified that both positive and negative factors influence the entrepreneurial decision of skilled Indian migrants in New Zealand. The pull factors identified in the study were 'identifying an opportunity', that is, a gap in the market, and 'the need to do something new and different', that is, be self-employed. In contrast, whereas the push factors identified were 'the need for more money', 'flexible working hours and holidays', 'need for change', 'making a living', and 'negative experiences in the labour market', such as job dissatisfaction, difficulty in finding employment, racism, and accent discrimination. The detailed reasons included

underutilised skills, growth stagnation, racism, and accent issues. Interestingly, having a negative experience in the labour market was the most cited reason.

However, not all participants in Paulose's (2011) research were in skilled employment in New Zealand; the occupations of research participants, such as such as a cleaner, a fast food attendant, gas station attendants, a call centre worker, dairy shop and taxi business owners are not skilled occupations as per Immigration NZ' definition.

Similarly, the focus population of other studies cited in this section, namely Maritz (2004), de Vries (2012) and Pio (2014), were Indian ethnic entrepreneurs in general, which included migrants hailing from different source countries and belonging to different skill cells. Also, while most of the aforementioned studies explored the entrepreneurial drivers of Indian migrants, only a few looked at their entrepreneurial challenges and contribution channels.

Therefore, this study uses Immigration NZ's (2018b) definition of skilled employment and focuses only on skilled Indian migrants who have previously worked in skilled jobs in New Zealand. This is a very important consideration in reference to the research gap and research rationale of this study, because when migrants leave their skilled jobs, they recreate the labour market supply gap, which they originally filled. However, when skilled migrants leave their unskilled jobs, they do not create a skill gap.

Also, as identified in Chapter 3, skilled migrants continue to contribute to their host economy when they leave paid employment to pursue entrepreneurship. In fact, as entrepreneurs they have the potential of making higher economic and social contributions to their host economy through job creation, innovation, and increased trade and investment (Enderwick et al., 2011; Nathan, 2014).

Therefore, in addition to the important consideration of labour market skill gaps, this research aims to explore and present the entrepreneurial barriers and contribution channels of skilled Indian employees turned entrepreneurs to the New Zealand economy. These findings will not only address the research gap on Indian skilled migrant entrepreneurs in New Zealand, but also the wider literature on skilled migrants.

4.6 The gap in literature

As identified in the above discussion and previous chapters, the past decades have witnessed increased studies and literature on migrant self-employment and entrepreneurship among various ethnicities in New Zealand, including studies on Indian migrants, such as de Vries (2007), Pio (2007, 2014), Maritz (2010), and Spoonley and Bedford (2012).

However, these studies have used varying parameters for defining migrants. For instance, most studies have focussed on participant ethnicity rather than nationality (the home countries) and have predominantly focussed on diversity and other social facets.

Similarly, most studies have used the wider parameter of self-employment synonymously with entrepreneurship, despite the differences identified in these terms (see Chapter 3). For instance, most of the aforementioned studies on Indian migrants included self-employed migrants, such as taxi drivers, dairy shop owners and franchises in their research criteria.

Therefore, despite all the research on migrant entrepreneurship in New Zealand, the specific context of skilled migrant entrepreneurs and their entrepreneurial drivers, barriers, and contribution channels to New Zealand remain unexplored.

Also, as identified in the previous chapters, the literature acknowledges the lack of research on skilled migrant entrepreneurs (Nathan, 2014), while suggesting that skilled migrants are likely to have an advantage in pursuing entrepreneurial ventures in comparison to unskilled migrants (Duleep, Jaeger, & Regets, 2012; Hunt, 2011, 2013).

Further, as identified previously, research needs to be specific to migrant groups and their host and home economies, because migrants from different backgrounds who are residing in different host environments have been found to show different entrepreneurial outcomes (Basu & Altinay, 2002).

Therefore, this study uses New Zealand's top source country, India, to conduct a context and culture/background specific research in New Zealand.

4.7 Refining the research questions

Following the gaps identified above, this research aims to address the research objective of *“exploring why skilled migrants leave paid work to pursue entrepreneurship; the barriers and challenges they face in the process; and how they contribute to the New Zealand economy as a new firm owner”*, with the following context-specific research questions and sub-questions:

1. What drives skilled Indian migrants to leave skilled employment and pursue entrepreneurship in New Zealand?
 - What is the employment experience of skilled Indian migrants in New Zealand?
 - What motivates skilled Indian migrants to start a business in New Zealand?
2. What are the barriers and challenges faced by skilled Indian migrants Indian migrants in the process of starting a business in New Zealand?
3. How do skilled Indian migrants contribute to the New Zealand economy?
 - How do skilled Indian migrant employees contribute to the New Zealand economy?
 - How do skilled Indian migrant entrepreneurs contribute to the New Zealand economy?

4.8 Summary

In New Zealand, the shortage of skilled labour is a major constraint for business expansion in many sectors, such as ICT, health, and construction (NZ now, 2017). According to Immigration NZ's (2017) skilled migrant approval residence statistics, the majority of skilled (principal) migration approvals over the last decade has been in the sub-major occupation groups belonging to the health, ICT, hospitality, and retail sectors, as shown in Table 6 on page 49. And India has been the top source of skilled labour to New Zealand, followed by the Philippines, China, the UK and South Africa (MBIE, 2018).

While New Zealand has an explicit need for skilled labour, it has a strong entrepreneurial culture as well (Frederick, 2004). Both native and migrant entrepreneurship pervades the New Zealand society (de Vries, 2007). Indian migrant business owners are common in the New Zealand society, such as taxi drivers and dairy

shop owners; however, but statistics indicate that the incidence of skilled Indian migrant employee turned entrepreneurs may be low.

While there has been some New Zealand based research on Indian immigrants from the social perspectives of ethnic minority, gender diversity, and socio-cultural values (e.g. Maritz, 2004; Pio, 2007, 2014; de Vries, 2012), research on skilled migrants and skilled migrant entrepreneurs appears to be negligible.

Therefore, this thesis uses New Zealand's top source country, India to conduct a context and culture/background specific research on skilled migrant entrepreneurs in New Zealand. This chapter therefore lists the research questions on the entrepreneurial drivers, barriers and contribution channels of skilled Indian migrants to the New Zealand economy, specific to labour market experiences, entrepreneurial motivations, hurdles, and the contribution channels of skilled Indian migrants in the roles of an employee and an entrepreneur.

These research questions guide the research design of this study, which is discussed in the next chapter.

Chapter 5 - Research Design

5.1 Introduction

The previous chapters introduced the significance of research on skilled migrant entrepreneurs, with Chapter 4 presenting the gaps in literature in the New Zealand context before outlining the research questions to address that gap.

In order to address these research questions, this chapter looks at the research design of this thesis. According to Gunaratne (2008), the selection of an effective research design is dependent on the researcher's knowledge of paradigms and their underlying ontology, epistemology, and methodology (Lincoln & Guba, 1994).

Hence, this chapter starts by describing the research philosophy and paradigm underpinning this thesis, before introducing the data collection and analysis methods used in this study. A review of ethics, confidentiality, reliability, and validity issues concludes the chapter.

5.2 Research paradigm

Lincoln and Guba (1994) explain the term paradigm as *"a worldview that defines for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts"* (p. 107). Paradigms are basic belief systems, which are essential to conducting scientific inquiry (Kuhn, 1962) and examining social phenomena (Saunders, Lewis, & Thornhill, 2009). These belief systems are based on the ontological and epistemological assumptions of researchers (Gray, 2014). Ontology refers to an individual's beliefs about the nature of reality, while epistemology refers to an individual's belief about what constitutes acceptable knowledge in a field of study (Saunders et al., 2009).

The literature broadly identifies two contrasting ontologies of realism and relativism (Burr, 2003). While realists believe that reality exists independent of the human mind, relativists believe that reality is understood through human perception, thoughts, and interpretations (Blaikie, 2007; Saunders et al., 2009). Since epistemology depends on ontology, realists believe that knowledge is objective, whereas relativists believe that knowledge is internally constructed and completely subjective (Zimmerman, 2007).

There is a third epistemological perspective called constructivism, which suggests that knowledge about the human world is different from the natural world and it is constructed through proactive and purposive interaction with the world (Morcol, 2001).

Based on the ontological and epistemological views identified above, paradigms can broadly be classified as positivist, post-positivist, interpretive, transformative and pragmatic (Mackenzie & Knipe, 2006; Creswell, 2018).

The positivist view believes in a single reality that can be measured and predicted using precise measures (McGrath & Johnson, 2003), such as testing hypotheses and conducting experiments (Lincoln and Guba, 1985). It assumes a value-free world, where researchers stay objective and independent from their research objects (Ritchie & Lewis, 2003). In the positivist view, social phenomena can be scientifically explained through cause and effect relationships (Mertens, 2005).

The interpretive paradigm sits at the opposite end of the spectrum to the positivist paradigm. It was developed from the philosophy of phenomenology and hermeneutics (Mertens, 2005) as a critique of positivism (Cohen & Crabtree, 2006). Interpretivism suggests that realities are multiple and co-constructed through the lived experiences and interactions of people (Creswell, 2013) and these (sometimes conflicting) social realities are the products of human intellects (Lincoln & Guba, 1994). It assumes that reality is subjective (Easterby-Smith, Thorpe, & Lowe, 1991), socially constructed (Mertens, 2005), between the researcher and participants, and is researched inductively, resulting in new theories (Creswell, 2009). Interpretivists are value-bound researchers who interact with their research subjects (Grant & Giddings, 2002; Cohen & Crabtree, 2006) and co-construct reality (Creswell, 2013).

Post-positivism emerged as a criticism of the basic beliefs of positivism. Many researchers suggest that post-positivism has elements of both positivism and interpretivism.

O'Leary (2004), defines post-positivism as an intuitive, holistic, and exploratory paradigm with findings of qualitative nature. This view is not unanimously accepted as many authors seat post-positivism closely with positivism due to the shared belief in

objective realities (Denzin & Lincoln, 2000; Grant & Giddings, 2002; Mertens, 2005; Mackenzie & Knipe, 2006; Creswell, 2013). However, unlike positivists, post-positivists believe in multiple views of reality (Guba, 1990; Grant & Giddings, 2002; Trochim, 2006; Creswell, 2018) and probable inferences, rather than strict cause and effect linkages (Creswell, 2018).

Lincoln and Guba (1994) suggest that post-positivism is based on a critical realism philosophy, whereby reality can only be approximated through research (Creswell, 2018) because of the “flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena” (Lincoln & Guba, 1994, p. 110). Also, unlike positivists, post-positivists believe that complete objectivity cannot be obtained by value-bound researchers (Racher & Robinson, 2003) who interact with research participants to better understand their experiences (Guba, 1990).

The transformative paradigm was developed to go beyond the sociological and psychological theories behind previous paradigms (Mackenzie & Knipe, 2006). For instance, critical inquiry aims to go beyond the illusions of a given social setting to represent specific perspectives, such as feminist, political, race specific, and Freirean (MacKenzie & Knipe, 2006). Transformative views are aimed at critique, transformation and emancipation through research (Lincoln & Guba, 1994).

Pragmatic paradigms are not committed to any one philosophy of reality and believe that reality is what is useful and practical (Creswell, 2009, 2013), particularly in promoting equity, freedom, and justice (Gray, 2014). It places the research question at the centre and applies all approaches deemed fit to understand the problem. Pragmatists believe that reality is everchanging based on human actions and is determined by its ability to solve human problems (Rorty, 1993; Stich, 1990).

This research intends to identify and present the entrepreneurial drivers, challenges, and contribution channels of first-generation skilled Indian migrants in New Zealand and is not aimed at transformation, emancipation, or practical solutions. Therefore, this research follows the tenets of post-positivism, which acknowledges that researchers are value-bound, believe in multiple views of reality, and use rigorous

methods of qualitative data collection and analysis (Lincoln & Guba, 1994; Grant & Giddings, 2002; Trochim, 2006; Creswell, 2018).

Candy (1989) states that paradigms are theoretical artefacts with muddled boundaries; and open to varied interpretations (Lincoln & Guba, 1985). Hence, for specification, this study follows the tenets of post-positivism listed below:

Table 13 - Philosophical Beliefs of Post-positivism

Ontology	Multiple views of reality exist.
Epistemology	Reality can only be approximated (through research).
Axiology	Researcher is value-bound, and researcher bias needs to be controlled.
Methodology	Logical approach to inquiry based on a priori theories.

Adapted from Lincoln and Guba (1994) and Creswell (2013).

It is necessary to acknowledge that the researcher understands the prevalence of the interpretivist paradigm in ethnic research; however, this study uses the post-positivist paradigm, because the researcher's worldview identifies with the post-positivist ontology and epistemology, as presented in Table 13 above.

The interpretive paradigm believes that reality is a product of human intellect (Lincoln & Guba, 1994; Mertens, 1999), whereas the researcher believes that human intellectual mechanisms can be flawed by several factors, such as bias and cognitive errors (Lincoln & Guba, 1994). While post-positivism also uses the human-instrument, it acknowledges that this instrument is subject to bias and hence reality can only be approximated. At the same time, post-positivism is not rigid like positivism and acknowledges that there are multiple views of reality, which can only be approximated (Lincoln & Guba, 1985).

5.3 Research approach

The literature uses the term 'research approach' at various levels. It may refer to the nature of the study, the research methods used, or the reasoning process applied to the study. Figure 9 outlines the various interpretations and uses of the term 'research approach' in the literature.

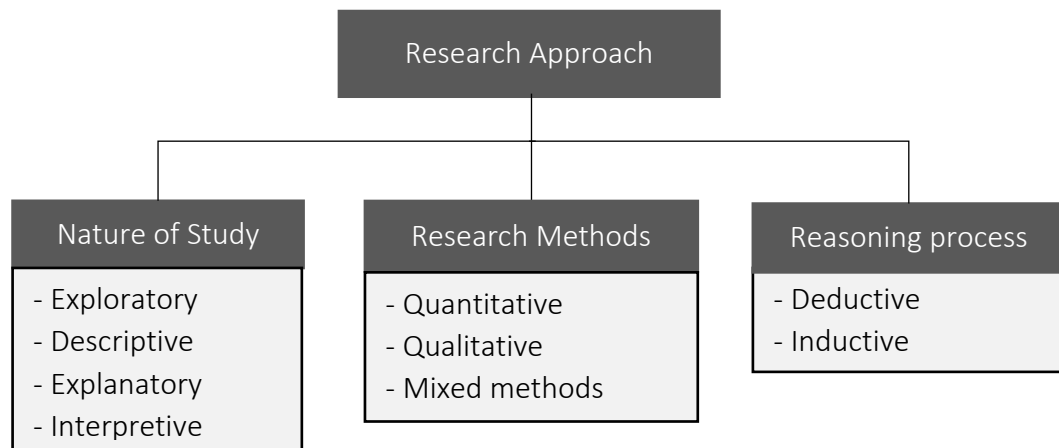


Figure 9- Various Interpretations and Uses of the Term ‘Research Approach’ in literature

Exploratory nature of the study

At the highest level, the research approach may refer to the nature of a study, guided by its research purpose (Gray, 2014), namely, exploratory, descriptive, explanatory (Robson, 2002), or interpretive (Maxwell, 1996).

Exploratory studies explore what is happening and are useful when there is little or no previous knowledge about a phenomenon (Hussey & Hussey, 1997; Gray, 2014).

Descriptive studies provide a picture of a situation, person or phenomenon as it naturally occurs (Hedrick, Bickman, & Rog, 1993; Rubin & Babbie, 1997). Explanatory studies explain and account for descriptive information and can be correlative in nature, whereas interpretive studies explore and interpret people’s experiences and views of those experiences (Gray, 2014).

Robson (2002) suggests that exploratory studies are appropriate in finding what is happening and assessing phenomena in new contexts. They are flexible, adaptable to change (Saunders et al., 2009), and appropriate when little is known about the research issue (Hussey & Hussey, 1997). Although there is some New Zealand based research on Indian entrepreneurs in general (Maritz, 2004; de Vries, 2007; Pio, 2007, 2014; Kirkwood, 2009; Paulose, 2011), research on the skilled Indian migrant entrepreneurs and their entrepreneurial experience in New Zealand seems lacking.

Therefore, this research seeks to explore the gaps in the literature, and hence is exploratory in nature.

Qualitative methods

The literature broadly classifies research methods into three types, namely, quantitative, qualitative and mixed methods (MacKenzie & Knipe, 2006; Creswell, 2013; Gray, 2018).

Traditionally, there has been a great divide between quantitative and qualitative research as both have been viewed synonymously with objective and subjective studies (Crotty, 1998). This contradiction led to a new approach known as mixed methods which combines qualitative and quantitative methods. However, its pragmatic stance is still challenged by researchers from other worldviews (Gray, 2018).

While the argument and contradictions about appropriate approaches continue, some authors have suggested that all three approaches can be used appropriately with any research paradigm (Lincoln & Guba, 1994; Ford-Gilboe, Campbell & Berman, 1995; Crotty, 1998; Racher & Robinson, 2002; MacKenzie & Knipe, 2006) depending on the research purpose (Sandelowski, 2000; Trochim, 2006).

The purpose of this research is to identify and present why skilled Indian migrants in New Zealand leave paid employment and pursue entrepreneurship, what barriers they face in the process, and how they contribute to the New Zealand economy in their new role as a firm. Since entrepreneurial motives and decisions are personal, dynamic, and complex social phenomena (Kloosterman, Van der Leun & Rath, 1999), a quantitative checklist approach cannot capture their complexity⁵ (Stevenson, 1990). In comparison, qualitative methods allow researchers to gain an understanding of complex social phenomena in context-specific settings (Gray, 2018).

Pio (2007) suggests that entrepreneurship research is contextual in nature and hence predisposed to more qualitative approaches. This is because qualitative approaches help researchers to understand the context in which decisions and actions take place, usually by talking to people who have experienced those decisions and actions (Myers, 2009). Hence, this research uses a qualitative approach, that involves participant interviews and document analysis as the key methods of data collection and analysis.

⁵ Lincoln and Guba (1985) argue that the real world is too complex, diverse and interdependent to be studied outside its natural settings.

Deductive reasoning

From a logic and reasoning viewpoint, the research approach is broadly classified as deductive, inductive or a combination of both (Trochim, 2006; Creswell, 2009; Gray, 2014).

Deductive reasoning starts with theories and seeks to find if these theories apply to specific instances, whereas inductive reasoning starts by observing specific instances to establish theories (Hyde, 2000; Trochim, 2006). The traditional view holds that qualitative research generally adopts an inductive approach and quantitative research adopts a deductive approach. However, in practice, either approach can be used in both qualitative and quantitative studies (Hyde, 2000; Patton, 2002).

Hyde (2000) and Trochim (2006) maintain that most social researchers demonstrate both deductive and inductive processes somewhere in the research process but fail to recognise them.

Parke (1993) states that a balance of deduction and induction is required in all research, because extreme induction can remove useful theoretical and conceptual perspectives that guide the exploration of a phenomenon, whereas extreme deduction can preclude the development of a new theory. However, in inductive reasoning, the results of qualitative enquiry often remain untested, whereas in deductive reasoning, increased conviction in findings is possible (Yin, 1994; Hyde, 2000).

Therefore, this research primarily adopts a deductive approach, working from general to specific (Trochim, 2006), by seeing if the general theories and concepts about entrepreneurial motivation, barriers, and contribution channels apply in the specific context (Hyde, 2000) of skilled Indian migrants in New Zealand. This thesis therefore reviews the international and New Zealand literature to shape the frameworks for this thesis, which guide the data collection and analysis processes.

Data collected from primary and secondary sources will be analysed and the findings will be compared to the literature to identify the similarities and differences with the general theories (Lincoln & Guba, 1985; Hyde, 2000). Findings that align with theories will enhance confidence in the validity of concepts, whereas disconfirming evidence will provide the opportunity to refine theory (Yin, 2014).

5.4 Research methods

Carter and Little (2007) suggest that research methods concern how and what kind of data the researcher wants to collect. In qualitative research, case studies are a common way of conducting an inquiry (Stake, 1994). They are deemed suitable for exploratory research, that is, where there is limited research on a given phenomenon or context (Hussey & Hussey, 1997; Berg, 2007).

Given the qualitative and exploratory nature of this study, the choice and justification for case study design in this thesis is discussed below after reviewing the types and rationale of various case study designs.

5.4.1 Case study methodology

Myers (2009) suggests that case studies make original contributions to research by using empirical proof from the real world. They are appropriate where a contemporary phenomenon needs to be investigated in-depth, as they allow the researcher to develop a thorough understanding of the research context (Yin, 2014). Specifically, case studies allow the researcher to address how and why questions (Gray, 2014; Yin, 2014).

Yin (2014) broadly classifies case studies into single and multiple case designs with holistic or embedded units of analysis (Yin, 2014). Single case designs are deemed suitable for cases that are unique, prototypical, salient, revelatory (Scholz & Tietje, 2002), or longitudinal (Yin, 2014). In comparison, multiple case designs are appropriate for exploring contexts or phenomena in different settings as they allow for better analysis of the research context through cross-case analysis (Yin, 2014).

The literal or theoretical replication of multiple cases allows for more compelling evidence and increases confidence in the robustness of the overall research (Herriott & Firestone, 1983). In terms of the units of analysis, holistic designs focus on single units or levels of analysis, whereas embedded designs involve units of analysis at more than one level.

Further, the use of multiple data sources enhances the idea of representativeness, again implying increased confidence in research findings, when different types of

evidence point in the same direction (Patton, 1990; Creswell, 2013; Miles & Huberman, 2014). Such use of multiple sources of data is called triangulation⁶, which is a process in the search for and resolution of omissions, inconsistencies and misrepresentations (Sayer, 1992) to achieve increased confidence in data (Llewellyn & Northcott, 2007).

Therefore, in light of the limited research on skilled Indian migrant entrepreneurs, this research aims to study various aspects of their entrepreneurial decision. As these migrants have different educational, work, and family backgrounds and operate entrepreneurial ventures in different industries, this research uses a multiple case study design, where the research participants are the basic entities of each case and their entrepreneurial drivers, barriers, and contribution channels are the embedded units of analysis.

Pilot case study

Yin (2014) recommends conducting a pilot case study to refine data collection plans for both the content and the data collection procedures. He emphasises that a pilot case study is not a pre-test but rather a formative step that assists in the development of relevant lines of inquiry and clarity in the research design. Pilot cases can be selected based on researcher convenience and geographic proximity. This research used four pilot cases based on geographic proximity, that is four participants located in Auckland. The results and inputs from the pilot study are discussed in the next sub-section, interviews.

5.4.2 Data collection

The choice of data collection methods in case study research depends on the nature of the study (Scholz & Tietje, 2002; Silverman, 2000). Marshall and Rossman (2011) suggest that qualitative researchers typically use documents, interviews, and observations as the key methods of data collection. Stake (1994) also recommends these methods in qualitative case study research because they are appropriate for an in-depth understanding of experience and portrayal of multiple views. Also, using multiple data sources helps with data verification (Denzin & Lincoln, 2000; Myers, 2009) and adds confidence to the emerging findings (Miles & Huberman, 2014).

⁶ Refer to Appendix F - Triangulation Table to see how triangulation is applied in this thesis.

Interviews

Denzin & Lincoln (2000) suggest that interviews are powerful instruments commonly used for understanding humans, as they enable an in-depth, reflective description of participant experiences. Interviews with individuals can be broadly classified as structured, unstructured, or semi-structured (Cohen & Crabtree, 2006). Structured interviews are recommended when literature in a topical area is highly developed, whereas unstructured interviews are recommended where the researcher's understanding is still evolving (Cohen & Crabtree, 2006). Semi-structured interviews are recommended where research concepts are relatively well-understood (Ayres, 2012), and some structure along with flexibility for improvisation during the interview is desired (Patton, 1990; Fontana & Frey, 2000).

Irrespective of the above recommendations, using a pre-determined list of questions in structured interviews (Bailey, 2007) can restrict the researcher and bias data collection, whereas unstructured interviews can result in the interviews going off-track, resulting in the collection of information that deviates from the research aim (Patton, 1990). In comparison, semi-structured interviews facilitate the collection of rich data, while ensuring that information is collected in a manner consistent with the research aim (Patton, 1990).

Therefore, semi-structured interviews using an interview guide (Bryman & Bell, 2007) with open-ended questions were conducted to collect reliable and comparable qualitative data (Cohen & Crabtree, 2006) from 10 skilled Indian migrant entrepreneurs across New Zealand (refer to Appendix I for the interview guide). The interview questions were guided by the research aim and were broadly divided into three categories. The first set of questions were primarily demographic, such as the education, work experience, and business sector of research participants. The second set of questions explored the entrepreneurial drivers and barriers of research participants, including their labour market experiences and the challenges faced in setting up a business. The final set of questions asked the participants about their contributions to determine their contribution channels in New Zealand, firstly in the role of employees and later as entrepreneurs, especially in reference to facilitating international business with India. The intention of the interview guide design was to

enable consistency and cross-case comparison while allowing flexibility to address different experiences. The guide incorporated background research and allowed the participants to raise relevant questions. All participants happily shared their experience and passionately described their entrepreneurial journey.

The researcher conducted face-to-face and phone interviews with participants in Auckland, Palmerston North, Nelson, and Christchurch. Face to face interviews were conducted at the participants' business premises or public places, such as cafés. On-site interviews facilitated participant contribution and allowed the researcher to ascertain the credibility of information sources. Interviews were conducted over a seven-month period to accommodate the availability and convenience of research participants. Four interviews were conducted in Auckland between October 2017 and February 2018 to form the basis of a pilot study, which was used to refine the interview guide and develop relevant lines of questions (Yin, 2014). The pilot cases identified the lack of specificity in certain questions and the need for exploring entrepreneurial barriers in more depth. These identifications were used to refine the interview guide.

After the pilot study, eight more interviews were conducted with 10 business owners (including joint owners) across New Zealand over a period of three months. The interviews were conducted in English and audio recorded using a secure smartphone. The interview audio files were saved on the AUT secure drive, before being transcribed for analysis. Most interviews lasted between 40 - 60 minutes. All interviews were transcribed within five days of recording to ensure exact documentation of data (Robson, 1993; Healey & Rawlinson, 1994).

Field notes

Information collected in interviews was supplemented with field notes from observations and non-verbal communication with participants. Morse and Richards (2002) suggest that observation can be applied to any research method that uses interviews. Observing and communicating with research participants before, during, and after interviews allowed the researcher to gain a view of insider perspectives. It also presented an opportunity to take account of the non-verbal messages and thus to

enhance the examination of the research phenomenon in this study (Hycner, 1985). The participants were informed about the possibility of field notes from observation in the participant information sheet (refer to Appendix G). No covert observations were recorded in line with ethical values. This research used field notes as a supplement to interviews and the extant literature.

Documentation

Yin (2014) identifies documentation as a commonly used source of evidence in case studies, along with interviews, direct observations, participant observations, and physical artefacts. Myers (2009) suggests documents, such as emails, webpages, news articles, photographs, and videos are also valid sources of data collection. In addition to the above, archival records, such as census and immigration statistics and organisational records are also sources of secondary data and information (Yin, 2014).

While documents can assist the researcher in building a richer picture than interviews and fieldnotes alone (Myers, 2009), the researcher should be aware of the possibility of inaccuracies, omissions, and bias (Yin, 2014). In case study research, documents, and archival records are useful for corroborating and augmenting evidence from other sources; however, if documentary evidence is contradictory, further inquiry into the topic is required (Yin, 2014).

This research used secondary data from government websites, official reports, news articles, and theoretical and empirical literature from books, journals, and academic articles. Some examples of secondary data used in this research include skilled migration statistics from MBIE; New Zealand's economic, entrepreneurial, and business rankings from the World Bank and OECD; news articles on immigration and skilled immigrants and government policy on immigration. The data collected from these sources enabled the researcher to cross-check the reliability of primary data.

Sampling

Creswell (2013) emphasises the need for a suitable sampling strategy in qualitative research. Informed sampling decisions are critical to the quality of research synthesis (Suri, 2011) and should be guided by the research aims, questions, and resources available for the study (Emmel, 2013). This research aims to explore the

entrepreneurial experiences of skilled Indian migrant entrepreneurs who migrated to New Zealand from India, have a skilled qualification from India and elsewhere, and/or skilled work experience in New Zealand (Immigration NZ, 2018a, 2018b), and now operate their own (Schumpeter, 1934) business venture with employees in New Zealand (Wayland, 2011), involving risk and uncertainty (Knight, 1921; Neville, 2014).

Purposive sampling

Denscombe (1998) suggests that purposive sampling is suitable when contacting a sample is difficult because of the lack of knowledge about the population being studied. The researcher searched official websites and contacted Indian and ethnic organisations, but no official or unofficial lists of people meeting the research criteria were identified to enable random sampling. These websites and organisations include the Ministry of Business, Innovation, and Employment (MBIE), New Zealand Trade & Enterprise (NZTE); India New Zealand Business Council (INZBC), Asia NZ Foundation (ASIANZ), NZ Asian Leaders (NZAL), the Office of Ethnic Communities (OEC), Aotearoa Ethnic Network (AEN) and others. While three organisations offered to advertise the research invitation only the INZBC advertised the research invitation in their newsletter, where two participants were identified. ASIANZ assisted by emailing the researcher their publications containing a few profiles of Indian entrepreneurs; however, none of them met the research criteria completely. Hence, in the absence of a population register meeting the research criteria, the researcher was unable to implement random sampling.

In addition, Saunders et al. (2009) suggest that purposive sampling allows the researcher to select participants who are best able to answer the research questions. Specifically, where cases meeting a predetermined criterion need to be studied, criterion sampling is recommended (Patton, 2002; Creswell, 2013) because it facilitates research synthesis with the purposeful selection, review, analysis, and synthesis of primary research on a research topic (Suri, 2011) and assures data quality (Creswell, 2013). Therefore, criterion sampling was used in this research, along with snowball sampling (Goodman, 1961), as snowball sampling helps identify potential participants (Hussey & Hussey, 1997), especially in the case of very specific research criteria.

Participant selection

Taylor and Bogdan (1998) suggest that in order to give better information in interviews and contribute to the research, research participants should have experienced the phenomenon under inquiry. They should also be comfortable and available to share their experience and should not be known to the researcher to minimise bias.

To identify individuals that met the research criteria and were unknown to the researcher, a research invitation was advertised on community boards, with business councils, and in public domains (email to company/business websites). The invitation listed the research aim, participation criteria and expected time required for conducting an interview. The snowballing technique was also used by asking current participants for potential participant recommendations and by asking friends to forward the research advertisement to their acquaintances and friends.

Three participants, whose email addresses were available in the public domain, responded to the research invitations emailed to their business. Seven participants were identified through recommendations from initial respondents. No participants were recommended by friends and acquaintances despite their efforts, because of a very specific research criteria.

Sample size

There are no standard guidelines on the sample size in purposive sampling (Saunders et al., 2009). According to Patton (1990), qualitative inquiry typically focuses on a small number of information-rich cases, which are selected purposefully to gain in-depth insights (Bryman & Bell, 2007). Malterud, Siersma, and Guassora (2015) identify that qualitative studies use the concept of data saturation for determining sample size; however, the term is used inconsistently in literature. Hence, they propose the concept of 'information power' to guide adequate sample size in qualitative studies. The concept suggests that an information-rich and context relevant sample reduces the number of participants required. The evaluation of information power depends on the research aim, sample specificity, use of established theory, quality of interview dialogue, and the analysis strategy used by the researcher (Malterud et al., 2015).

Gubrium and Holstien (2002) also suggest that the focus of researchers conducting in-depth interviews is on the richness of information rather than counting the cases.

Eisenhardt (1989) suggests 4 to 10 cases are usually enough for patterns to emerge. Where the research intends to conduct cross-case analysis, usually a larger sample size is recommended; however, if the cases are information-rich, small samples will suffice (Malterud et al., 2015). Guest, Bunce, and Johnson (2006) suggest that around 12 in-depth interviews are sufficient to understand a homogenous group, whereas Kvale (2008) suggest 15 - 25 interviews, in light of the research resources and the law of diminishing returns.

Given the above guidelines on sample size along with the limited resources and timelines for this research, 10-20 interviews were decided on. After extensive advertising on ethically approved mediums, 10 participants were identified from Auckland, Palmerston North, Nelson and Christchurch, and interviewed in the timelines and resources of this research.

Most of the participants were identified from Auckland, which is the biggest city, with the highest concentration of immigrants and businesses in New Zealand (Stats NZ, 2013).

Ethics and confidentiality

De Vaus (2002) identifies that researchers have ethical responsibilities towards everyone that may be affected by the research processes and research findings. The researcher is also responsible for ensuring the confidentiality (Gubrium & Holstein, 2002) and safety of research participants (McCracken, 1998).

Ethics approval was obtained from the AUT Ethics Committee (AUTEC) before data collection.⁷

The participants were given a copy of the participant sheet by email, after they accepted the research invitation. For those who preferred phone contact, a hard copy of the information sheet was provided before the interview. Before starting the interviews, informed consent was obtained in writing from all participants (refer to

⁷ Refer to Appendix A for AUT Ethics approval.

Appendix H). Participant rights to confidentiality and withdrawal from the research without being disadvantaged in any manner were reiterated.

All interviews adopted recommended practices for conducting interviews (Patton, 1990), starting with a brief introduction of the researcher, the research objective, and explanations for the kind of questions to be asked (Patton, 1990). Myers and Newman's (2007) dramaturgical model was used to ensure that important aspects, such as behaviour, rapport, and trust were duly considered (Hill, Thompson, & Williams, 1997).

The principles of partnership, participation, and protection were implemented by engaging in an open environment that allowed the participants to ask questions and discuss their views and full disclosure of the research procedures was presented in the participant information sheet (refer to Appendix G).

Information was only collected on a need to know basis. Any risk to participant confidentiality was minimised through participant anonymity, such that participants or their business names were not identified and any unique identifiers (information unique to a given person/business) were also not published. Data was securely stored on AUT secure drive, and hard copies were safe kept in the primary supervisor's office. The data will be destroyed after six years as per AUT guidelines.

5.4.3 Data analysis

Data analysis involves the categorisation, ordering, manipulation, and summarisation of data to enable the drawing of meaningful conclusions (Brink, 1996). Yin (2014) highlights the difficulty in analysing case studies due to the lack of well-defined analysis techniques. Further, qualitative research generally results in a huge and cumbersome database, given its dependence on text and words from interview transcripts and field notes (Creswell, 2009). Therefore, a suitable analysis strategy and technique was required to analyse qualitative data, which is discussed below.

Analysis technique

A good analytic strategy links case study data to a number of concepts of interest in order to guide the researcher in the analysis of collected data (Yin, 2014). A starting

point is playing with data, searching for patterns and concepts (Miles & Huberman, 1994), and then coding the data by organising it into segments of text to enable the identification of meaning (Rossman & Rallis, 2003). In qualitative research, thematic content analysis is widely used for the systematic organisation and analysis of data in order to establish themes and patterns (Hycner, 1985). It is a reliable approach where the specific characteristics of messages, including the latent content can be identified (Holsti, 1969), especially when data is rich, detailed, and complex (Braun & Clarke, 2006).

Within content analysis, the thematic coding process (Silverman, 2013) allows for the organisation of field data into themes, which can be linked to theoretical concepts used in a study. While in theoretical analysis, themes emerge from the theoretical interest of the researcher, in inductive analysis, themes are purely driven by data (Braun & Clarke, 2006). This thesis adopts the theoretical approach, as it aims to compare the findings from primary data with the general theories and frameworks identified in the literature review.

The organisation of raw data starts with open coding (Strauss & Corbin, 1998), where themes emerge from repetitive perspectives as well as differing viewpoints. The data collected in this thesis is primarily coded into themes identified in the three frameworks presented in the literature review. The transcripts were reviewed repetitively to ensure a meticulous and thorough analysis of data from various angles, such as internal and external motivations, personal traits, legislative environment, availability of resources, and industry sectors.

The field notes were used as a supplement rather than a substitute to interview transcripts, such that the interview transcripts focused on verbal communication, whereas the field notes recorded non-verbal data, impressions, and gestures. The transcripts were then printed and manually coded to establish the key and ordinary themes across interviews. These themes were signposted, which allowed the researcher to interpret and determine the core themes from data, as shown in Appendix E.

Each interview was systematically coded to a core theme as a result of deductive comparison with the frameworks used in this study. These core themes were then

refined into more detailed codes as a result of constant comparison. Relevant literature was referred to in any new themes identified in the primary data and these new themes were then incorporated into the coding process (Refer to Appendix E for detailed examples of data coding and analysis).

After coding the primary data, case summaries were prepared using a consistent format. For instance, uniform case summary headings served as a useful tool for cataloguing and comparing data, as highlighted in Table 14. Section 6.2 (page 87) and Appendix J present case summaries of participants in this thesis.

Table 14 - Categorisation of Case Summaries

Categorisation of case summaries	Key themes
Entrepreneurial drivers framework (Adapted from Dawson and Henley, 2012)	<ul style="list-style-type: none"> - Internal and external push factors - Internal and external pull factors - Demographics
Entrepreneurial barriers framework (Adapted from Barney, 1991; Bhidé, 2000; North, 1990; Scott, 1995; Azmat, 2013; Weng & Chanwong, 2016).	<ul style="list-style-type: none"> - Resources - Regulative barriers - Cognitive barriers - Normative barriers
Economic contributions framework (Adapted from Enderwick et al., 2011 and Nathan, 2013, 2014).	<ul style="list-style-type: none"> - Fill labour market shortages - Job creation - Innovation and productivity - Increase production and consumption - Increase trade and investment - Social contributions

As discussed previously, the key themes identified in this study are the result of both within-case analysis of individual cases, as well as cross-case analysis of all the cases in this study. The findings from both kinds of analysis are detailed in Chapter 6.

5.5 Reliability and validity

The credibility of qualitative research is signalled by its reliability and validity. Reliability refers to the ability of a research method to yield the same results consistently over repeated testing periods, whereas validity is concerned with the accuracy and truthfulness of the research findings (Le Compte & Goetz, 1982) and their applicability in real-world situations.

Validity is further classified as internal, external or construct validity (Campbell & Stanley, 1963; Riege, 2003). Internal validity refers to the extent to which research findings are a true reflection or representation of reality rather than being the effects of extraneous variables, and external validity reflects the applicability of research findings outside the setting of the immediate study (Denzin, 1970). Construct validity assesses the extent to which the research measures the events it intends to measure.

Several authors suggest strategies for enhancing the reliability and validity of qualitative research (Chenitz & Swanson, 1986; Strauss & Corbin, 1998), for instance, the use of multiple data sources for the triangulation, use of replication logic in multiple cases, pattern matching, and explanation building. The strategies used in this thesis are detailed below.

Triangulation

Post-positivist researchers believe that all observation is fallible and biased by their cultural experiences and worldviews, and hence emphasise the need for data triangulation from multiple data sources (Trochim, 2006).

Triangulation is a process that searches for inconsistencies and omissions in data (Sayer, 1992) by seeking convergence, corroboration and correspondence of results from multiple data sources or collection tools (Gray, 2018). Multiple data sources and analysis methods increase the descriptive precision of observed reality (Lincoln & Guba, 1985), assist with data verification (Myers, 2009), and increase confidence in overall research (Patton, 1990; Creswell, 2013).

This research implements triangulation (Gray, 2018) by collecting data from multiple data sources, namely interviews, field notes, documents and archival records to ensure the richness, rigour, and validity of data (Creswell, 2013; Silverman, 2013). While primary data is mainly collected through interviews with research participants, there are several sources of secondary data, such as news articles, economic reports and publications, official statistics and formal email correspondence with government and other organisations.

Examples of secondary data sources used in this study are listed in Table 15 below.

Table 15 - Examples of Secondary Data Sources Used in this Study

Data type	Data sources
News articles	<ul style="list-style-type: none"> - BBC news - NZ Herald - Radio NZ - Stuff
Documentation <ul style="list-style-type: none"> - academic articles - economic reports and publications - industry reports - official statistics - information under the Official Information Act, 1983 	<ul style="list-style-type: none"> - ANZ - IRD - MBIE - MFAT - Ministry of Health - Stats NZ - The Treasury - NZIER - OECD

Establishing a chain of evidence

Interviews were conducted with individuals from various regions, industry sectors, and business sizes to ensure variety and to help build a chain of evidence from different respondents. A range of cases also allowed for overlapping the collection, coding, and data analysis processes, which facilitated flexibility within the systematic data collection and analysis processes (Glaser & Strauss, 1967).

Replication of multiple case studies

In addition to data triangulation, external validity and reliability in this thesis was established by using multiple (10) cases meeting the same participant selection criteria (Eisenhardt, 1989). Although participants from three key sectors and four different regions were used, the research context and criteria required such specification, especially in the context of the top short skilled occupations in New Zealand over the past decade.

Pattern matching

In case study research, internal validity seeks to establish relationships that help address the why and how questions (Yin, 2014). Internal validity is achieved by establishing patterns and ensuring consistency in data gathered from a range of data sources (Creswell, 2013). It is also achieved by assessing data collection tools, such as questionnaires, for their ability to address the research question.

In this thesis, internal validity was ensured by conducting a pilot study with five firms to help guide and refine data collection. Also, a conscious effort was made to limit personal bias and make reasonable allowance for participant bias during data analysis (Creswell, 2013).

5.6 Summary

This chapter presented the research paradigm underpinning this thesis, namely the post-positivist paradigm, which acknowledges that there are multiple views of reality that are studied by a value bound researcher (Lincoln & Guba, 1985; Creswell, 2013; Miles & Huberman, 2014).

A qualitative exploratory approach (Lincoln & Guba, 1985) and case study methodology were used to address the research questions (Yin, 2014). Using multiple data sources, namely interviews, field notes, documents, and archival records, allowed for data triangulation, which adds confidence and trustworthiness to the results (Perren & Ram, 2004; Miles & Huberman, 2014).

Purposive sampling was used from a combination of criteria and snowball sampling techniques, to select and interview 10 skilled Indian migrant entrepreneurs from various New Zealand regions who belonged to the health, hospitality, and ICT sectors. The justification for thematic content analysis in qualitative research was presented, given its ability to establish research validity (Anderson, 2007).

Ethics approval was taken before commencing this research to ensure the privacy, security, and confidentiality of participant information. Ethics were specifically considered in respect to informed written consent and the principles of partnership, participation, and protection of research participants.

The next chapter presents the findings from data collected from primary and secondary sources.

Chapter 6 - Findings

6.1 Introduction

The previous chapter presented the research design of this thesis. This chapter presents the findings from in-depth, semi-structured interviews conducted with research participants.

The chapter begins by outlining participant and business profiles, before comparing the data within and across cases. The findings are presented on three key themes derived from the research questions, namely, entrepreneurial drivers, barriers and contribution channels. A discussion and analysis of these findings is presented in Chapter 7.

6.2 Case profiles

This section presents the demographics and characteristics of the entrepreneurs interviewed in this thesis, such as their age, year of migration, business sector and business size. Tables 16 and 17 present the personal and business profiles of cases studied during and after the pilot study.

Personal characteristics

Starting with the basics of gender, age, and qualifications, most participants were males, aged 31 to 55 years, mostly with professional or management qualifications⁸ relevant to their job sector. One participant came for their undergraduate qualification in New Zealand at the time of initial migration to New Zealand. Two participants had high school qualification and over five years of trade-related work experience from India in the same field as their short skilled employment in New Zealand. All participants had dependent family in New Zealand which included their partner and/or children.

In reference to the migration decision, most migrants met the immigration criteria with a skilled job offer, but quoted various reasons for choosing New Zealand, such as the quality of life, New Zealand beauty, career change and further study. In total, 6 of the 10 participants migrated to New Zealand after 2003, which is when New Zealand

⁸ Refer to individual case profiles in section 6.3 and Appendix J for specifics of educational qualifications.

introduced the Skilled Migrant Category, while others migrated under the General Skills Category (Hawthorne, 2011; Immigration NZ, 2018c).

- P2 *"I came in June 2002. I was looking for a beautiful destination to move to. I was pretty much done with the rat race in Mumbai, so wanted to go find a place where I could settle into and have a decent life. I was looking over the map and saw a poster of Inter Islander. I was sold from that point onwards."*
- P3 *"I moved here in 2005 to study. I had options of going to the States or Australia, but at the time I figured physiotherapy was one of the key courses in New Zealand."*

Most participants had over five years of skilled work experience in the New Zealand labour market before they started their own business in the same or related industry as their employment.

Business characteristics

Majority of the participants had started their business within the last decade (after the introduction of the Skilled Migrant category in 2003), while their respective occupations continued to remain short skilled in New Zealand (Benson-Rea, Haworth & Rawlison, 1998; Williamson et al., 2013; Ministry of Health, 2014).

- P6 *"My job was a technical business analyst, and I stayed in the job for a year. It was a means for satisfying my S49 condition⁹ that Immigration New Zealand requires. I founded the business in 2014. That's what I do, that's what I love."*
- P8 *"Started the business in 2017. Being immigrants, we don't have families to support us, and being nurses, we have to do shift work....For family-work harmony, I gave up nursing to look after my baby."*

Most of these businesses count as small and medium enterprises as per the New Zealand definition of business size by employee count. Businesses with 1 to 19 employees are classified as small, those 20 to 40 employees as medium, and the those with more than 40 employees as large (Ministry of Economic Development, 2011).

While the majority of the participants had only one registered business in New Zealand and employed staff from the domestic labour market, some businesses employed ethnic staff and sourced staff and services from India. This was due to the lack of cultural knowledge, skills, and cost-effectiveness in the domestic labour market.

⁹ Refer to Appendix K - Glossary for a description of S49 conditions.

- P1 *“I prefer Indian origin people, not because of any other issue, but only because I have to work in a cultural context. So, my designing, my events, for example, I am designing a brochure for Diwali, I cannot sit and explain to a person what Diwali means to us, what are the colours...because mine is a creative industry and I work very closely with my community.”*
- P4 *“Staffing is always the biggest challenge in software. We don’t have that talent, you only get migrant talent, which is risky because they use it as a stepping stone and there is no longevity. As soon as they get residency or even \$5,000 extra, they will move on... and you can’t afford Kiwis because all the good ones are already taken by Xero, by Orion, all the good companies at big fat salaries.”*

Geographically, the sampled businesses were split between the North and South Islands, with the majority based in Auckland, which is the economic hub of New Zealand (OECD, 2017). Auckland and Christchurch are also the two largest cities in New Zealand by population (Stats NZ, 2013). Most of the studied businesses had an open market focus, which included both the local and ethnic population. Most businesses identified that their products and services defined their consumer base. Only 2 of 10 participants identified that they started the business to cater to the ethnic market after having identified a market gap.

Other factors

While the number of participants was equally split on prior entrepreneurial experience/influence from family and friends, all of the participants stated an intent to continue and grow their business and had no intent to re-migrate to their home or another country in the near future (2-5 years).

Similarly, 8 out of the 10 participants had no intent to return to paid employment, while 2 participants – P2 and P8 – were considering paid employment at the time of the interviews.

P2 was considering paid employment to take a break from the responsibilities and demands of business ownership and management in order to have more family time. He also highlighted that his creative nature and need for continuous learning was a key driver in his work decisions, and therefore he would keep looking for entrepreneurial opportunities.

“...yeah that’s where I left it at. Now it’s still running on its own, but I have moved on and I am looking at other opportunities, I am looking at other ideas....

I mean I am looking for work, at this point but later I will have a look for more entrepreneurial opportunities...Yeah, yes, paid work at this time, because I am, I've had my fill for running start-ups <laughs> and I want to sit back and be a more family-oriented guy while I am still the shareholder in all the other companies. So, I am pretty much literally there without being there. So, I don't have to worry about running a company, I can go home and look after my family. So, for some time I am off the entrepreneurial front, but it works for me, yeah.... I am keeping my options open and I am not completely fixated on which direction I want to go, so yeah...."

P8 was considering casual employment with the local District Health Board in order to keep his nursing registration. He intended to oversee and grow his business at the same time. P8's desire to keep his nursing registration was understandable, given it was a stable source of income and a profession which involves years of learning and hard work.

P8 *"I would also like to keep my nursing registration as well because I am trying to pick up some casual shifts to keep my registration, that is my profession. But, I would also like to aggressively grow this (restaurant) business."*

Despite considering paid employment, both P2 and P8 intended to continue their involvement in their businesses as directors or shareholders.

In terms of the perceived acceptance of migrant businesses in New Zealand, participants had varying views, and acknowledged that their opinion was largely relevant to their respective business sectors only.

Tables 16 and 17 present the case profiles of research participants from and after the pilot study.

Table 16 - Case Profiles from Pilot Study

Participant		P1	P2	P3	P4	P5
PERSONAL CHARACTERISTICS	Gender	Male	Male	Female	Male	Male
	Age	35-49	40-44	30-34	45-49	40-44
	Migration year	2010	2002	2005	1992	2009
	Migration reason	Family/career	Quality of life	Study	Job offer	Job offer
	Migration basis/criteria	Job offer	Permanent Residence	Job offer	Job offer	Job offer
	Highest qualification/experience at migration	Masters	Bachelors	Post-matric	Masters	Masters
	Employment sector in New Zealand	Media	ICT	Health	ICT	ICT
	Years of employment in New Zealand	6	10	3	11	5
	Dependent family in New Zealand	Yes	Yes	No	Yes	Yes
	New Zealand city of residence	Auckland	Auckland	Auckland	Auckland	Palmerston Nth
BUSINESS CHARACTERISTICS	Year first business established (now closed/sold)	-	2006	-	-	-
	Year current business established	2015	2009	2012	2004	2013
	Business sector	ICT	ICT	Health	ICT	Hospitality
	Business size (staff) ¹	2	1- 40	7-9	10-19	2-3
	Total (registered) businesses in New Zealand ²	1	3	1	3	1
	Overseas businesses/branches	0	-	0	2	1
	Ethnic market focus in New Zealand	Yes	No	Yes	No	Mixed
OTHER FACTORS	Previous entrepreneurial experience/ influence	Yes	No	Yes	No	Yes
	Intention to continue business/(s)	Yes	Yes	Yes	Yes	Yes
	Re-considering paid employment	No	Yes	No	No	No
	Considering re-migration	No	No	No	No	No
	Perceived acceptance of migrant businesses	Low	Subjective ³	Low	Subjective ³	High

1. Includes full-time, part-time, temporary and contract employees and consultants.

2. Based on the count of currently registered businesses in the New Zealand Companies Office business register.

3. Depends on product/service, target market demographics, and industry sector.

Source: Immigration NZ (2017)

Table 17 - Case Profiles after Pilot Study

Participant		P6	P7	P8	P9	P10
PERSONAL CHARACTERISTICS	Gender	Male	Male	Male	Male	Male
	Age	45-49	50-54	30-34	35-39	40-44
	Migration year	2013	1986	2012	2006	2002
	Migration reason	Quality of life	Visit/explore	Study	Earning potential	Quality of life
	Migration basis/criteria	Job offer	General skills	Job offer	Job offer	Job offer
	Highest qualification/experience at migration	Masters	Masters	Bachelors	Work experience	Work experience
	Most relevant employment sector in New Zealand	ICT	Health	Health	Hospitality	Agriculture
	Years of employment in New Zealand	1	30	4	8	5
	Dependent family in New Zealand	Yes	Yes	Yes	Yes	Yes
	New Zealand city of residence	Christchurch	Auckland	Blenheim	Christchurch	Christchurch
BUSINESS CHARACTERISTICS	Year first business established (now closed/sold)	-	-	-	-	2006
	Year current business established	2013	2006	2017	2014	2018
	Business sector	ICT	Health/ICT	Hospitality	Hospitality	Hospitality
	Business size (staff) ¹	11-50	16	6	3-6	?
	Total (registered) businesses in New Zealand ²	1	4	1	1	3
	Overseas businesses/branches	5	0	0	0	0
	Ethnic market focus in New Zealand	No	No	No	Mixed	Mixed
OTHER FACTORS	Previous entrepreneurial experience/ influence	Yes	No	No	No	Yes
	Intention to continue business/(s)	Yes	Yes	Yes	Yes	Yes
	Re-considering paid employment	No	No	Yes	No	No
	Considering re-migration	No	No	No	Maybe (long-term)	No
	Perceived acceptance of migrant businesses	Low	Subjective ³	High	Subjective ³	High

1. Includes full-time, part-time, temporary and contract employees and consultants.

2. Based on the count of currently registered businesses in the New Zealand Companies Office business register.

3. Depends on product/service, target market demographics, and industry sector.

Source: Immigration NZ (2017)

6.3 Within-case analysis

This section presents three exemplar cases from this research, which serve as examples of the entrepreneurial drivers, challenges, and contribution channels of skilled Indian migrants who moved from short skilled occupations to entrepreneurship in New Zealand.

These participants left employment in occupations under New Zealand's three short skilled sectors of Health, Hospitality, and ICT over the last decade. The summaries of the remaining seven cases are presented in Appendix J - Case summaries of the remaining seven cases.

6.3.1 P5 - Hospitality

Participant 5 (P5) owns a young tourism business, which he started with his wife in 2014, after leaving his well-paying IT job as a project manager in a large New Zealand firm. The couple came to New Zealand in 2009 with their young children, following P5's job offers in the aforementioned short skilled role.

His educational background includes a Bachelors in (Electronics and Communications) and several professional certifications, including Microsoft, Cisco, and project management from India as well as an Executive MBA from Massey University. He had 10 years of work experience in the information technology sector (including seven years as an IT project manager) in India before migrating to New Zealand.

6.3.1.1 Entrepreneurial drivers

Entrepreneurial drivers are factors that motivate an individual to start a business rather than pursuing other career opportunities (Naffziger et al., 1994; Hessels et al., 2008). These drivers can stem from pull factors, such as passion and the desire for independence, or push factors, such as job dissatisfaction and family considerations.

Knowing whether an individual is motivated by push or pull factors helps determine whether their human capital and personal resources and the host economy environment are conducive or detrimental to entrepreneurial activity, and hence important for this study, which aims to identify the entrepreneurial drivers of an ethnic migrant group with similar characteristics.

Passion

The key motivation for P5 to leave his skilled job and pursue entrepreneurship was to follow his passion for travel.

"In 2013, I was sort of at cross-roads on whether to grow vertically into IT or to grow horizontally into management. So, at the time you know introspectively I thought, ok I should be pursuing my passion which is travel, people, and you know, learning different cultures. So, I had a chat with Uma (P5's wife) that this is what I want to do, and she was also on the same wavelength and we decided, ok let us start this company."

"I think it had been a subconscious decision when I was in high school. I used to do guiding for visitors, Americans visiting the local Rotary club. I have always enjoyed that, so I think it was always somewhere in my makeup."

Opportunity

P5 also saw the opportunity to showcase the real New Zealand and India to the world and to provide an authentic travel experience. For instance, P5 wanted to offer travel services to the interiors of destination countries with experienced guides, who were culturally and geographically aware of these countries.

"Why we started this particular company is because people have preconceived notions about India.... We wanted to showcase the real country, to people, to international visitors. On the same line, when international visitors come to New Zealand, they go to the main centres like Auckland, Rotorua, Queenstown so we wanted to showcase much more than those popular centres and give them the authentic Kiwi experience. And gradually we started expanding and we started doing tours to Sri Lanka, Australia, and a couple of years ago we started going to South America. But the core philosophy of the business is the same, providing authentic experiences, not just the popular monuments and must-dos."

Personal satisfaction

P5 was happy and satisfied with his paid job, which offered good money, work-life balance and opportunities for holidays and travel.

"Nothing to do with financial ambitions, it was more about satisfaction personal satisfaction. See, if that was the criteria, I would have stuck to my IT work because when I quit my full-time job, my salary was already a six-figure plus a healthy bonus. Now, financially I am not at the same stage, but satisfaction is very high. So, it's a matter of what drives you really."

Entrepreneurial Traits

P5's personal traits as perceived by him and his wife were risk-taking, and showed adaptability, focus, perseverance, integrity, with high-expectations of work quality.

"I should have a safety net because I tend to take really high-stake risks. When I say high stake, it's not that I am borrowing a lot of money, I am in debt, not that sort of risk but there is not enough savings in case of an emergency, for instance. That is something I need to work on."

"When he fixes his mind in a particular thing at any cost he will get it. He won't be hesitant to take risks. At any cost he will execute, even take risks, but he won't take a back step." – P5's wife.

6.3.1.2 Entrepreneurial barriers

Entrepreneurial barriers are factors that acts as hindrances in an individual's business endeavours such as culture and norms in the host country, market entry barriers, regulatory environment and lack of relevant skills and knowledge.

Lack of business and industry knowledge

The key entrepreneurial barriers faced by P5 were the lack of knowledge about the tourism industry and running a business.

"Lack of knowledge in the industry to begin with. Lack of understanding of some of the things that happened in the industry, for example, how a group tour is done. What do the what do other travel companies do to negotiate better rates from hotels, for instance, to be competitive in the market. Some of those lack of understanding were the barriers."

Received more support than barriers

P5 did not face any resourcing or regulatory barriers, such as finances, staffing, or legislative barriers. Instead, he acknowledged the great support he received from government agencies like CEDA and Tourism New Zealand, both financially in the form of grants and intellectually with business advice and assistance.

"When we speak about barriers, we have to speak about the other side also, the support from the community, that was phenomenal, so the support structure was fantastic.... When I made the presentation to the Central Economic Development Agency in Manawatu that I have this idea, they immediately started connecting me with the right people, including Tourism New Zealand, so that way I think we feel blessed."

“No staffing issues at this stage but when we start growing we have to assess this.”

6.3.1.3 Contribution channels as an employee

Migrants can contribute to the host economy in various roles, including their role as an employee. They bring human, social, and financial capital to their host country and can benefit their employer by using their networks that include cultural and business links.

Fill labour market shortages

As an employee, P5 helped to remedy the labour market shortage in the skilled area he was hired for.

“It so happened one of my acquaintances who was working for ABC Limited, when they advertised for a group IT manager position, nobody applied or nobody appropriate applied, so he asked me, why don’t you apply? And I just did it and within two months we were here (New Zealand).”

Facilitate skill sourcing

P5 also helped his employer’s business by sourcing skilled individuals from India. He did this by talking to his professional connections in India to identify potential applicants with the required skills and qualifications who would be willing and able to migrate to New Zealand to take up a potential role in his employer’s organisation.

“I helped hiring I think three employees from India through my professional connections.”

6.3.1.4 Contribution channels as an entrepreneur

While migrants can make considerable contributions to the host economy in the role of an employee, their contribution increases significantly as an entrepreneur because then they play the role of a new firm owner. They create jobs, increase innovation and add to increased production and consumption in the host economy, and also make social contributions to the host economy.

Job creation

As an entrepreneur and firm owner, P5 had contributed to job creation in New Zealand and India.

“Then there is the South America tour – we have Erica, as an ad-hoc employee. Then we have an office in India. We have one full-time employee there who heads the operations and we have a couple of ad-hoc employees in India.”

Contribute to international business

P5's business is contributed to international business through exports and imports of tourism services, including leisure travel, education tours, and cricket tours. At an individual level, P5 and his family bought ethnic Indian goods in New Zealand, again contributing to imports of overseas products.

"We do leisure travel, we do education tours to India. We bring in Indian cricket academies to New Zealand, we do a whole gamut of activities, offer a wide variety of services. We are bringing a lot of visitors into New Zealand, to the regions. That is very important so that directly contributes to the growth of the region, exactly when that region is not in one of the main city hubs."

"Our food habit is still Indian, so obviously we need to buy grocery from an Indian shop."

Facilitate international investment

P5's friend, a lighting designer and a big business owner in Dubai, was considering New Zealand as a potential investment and immigration destination. P5 introduced him to the Central Economic Development Agency (CEDA) and eventually he immigrated to New Zealand under the business stream and invested in a business in New Zealand, which was running successfully.

"I have a friend who was a lighting designer, living in Dubai for 20 years. He was looking at New Zealand as a potential destination to immigrate and invest. When he came to just explore, I introduced him to our Central Economic Development Agency, and he finally ended up immigrating to New Zealand four years back (2014) and he is running a successful business here."

Social contributions

Contribution to the social well-being of people in a society is seen as a key part of the corporate social responsibility of a business. As a firm owner, P5's business was supporting young people through a charity.

P5 also highlighted the freedom and ability to make decisions, including in the area of charitable causes, which contrasted with his decision-making power as an employee.

"The one thing we are doing in a small way is contributing to the community as a business. I can make a decision on which charities we can support. For example, a

couple of years ago, we supported a small organisation called Passion Art that uses art to streamline wavered young people to feed their creative intuition and bring them into the mainstream of life. So, we help them, do some of the activities by fundraising for them. But when I was an employee, I could only make recommendations, I couldn't make those decisions."

6.3.2 P7 - Health and ICT

Participant 7 (P7) is the owner of an e-health business, a specialised consulting organisation with more than 10 years of work in e-mental health and addiction remedies across several countries, including Australia, Canada, Hong Kong, New Zealand, the UK, and the US. The business offers services in e-mental health consulting, application development, digital services, and electronic health tools, such as information provision, patient engagement, treatment, self-help, self-management, and social support solutions. The business works with several public health organisations, including the New Zealand Ministry of Health, the Mental Health Commission of Canada, and the National Mental Health Commission of Australia.

P7 initially came to New Zealand in 1986 as a visitor and eventually transitioned to skilled employment as a scuba instructor and later as a community support worker. He left paid employment in 2001 to start his clinical practice in Auckland, before starting his current business in 2006.

6.3.2.1 Entrepreneurial drivers

Passion

The key motivation for P7 to leave his skilled job and pursue entrepreneurship was to follow his passion for mental health. He recognised his ability in leadership roles and liked the freedom of decision making that came with that.

"I think passion is the sole driver! There is a part of independence, there is a part of job satisfaction, when you follow your passion. Necessity, economic factors, maybe the regards, because when you feel the larger community good, the human factor and of course creativity. What I am basically talking about is digital technology. In 2005/06 is when I used to talk about it and people still don't get it in 2018. In those days, people thought I was an alien, that's how bad it was. But to be a domain leader, you need to be so ahead of times. So, when I started taking the leadership role and taking the training programs as well, I was the boss, so I could make the decisions."

Labour market experience, money, and family considerations had no role in P7's entrepreneurial decision. He reiterated that his journey was about experimenting, taking risks, and following his passion, be it scuba diving, community services, or mental health.

"I didn't want to do a normal job. I didn't want to become an engineer, a doctor, just wanted to pursue something. My journey was more experimenting and taking risks, a journey of passion and purpose. I just followed my passion. If I had focussed on money, I would have never taken a community support worker role. Money was never the driver in my life."

Personal traits

P7's personal traits as identified from his entrepreneurial journey included high-tolerance for risk, leadership, and perseverance. He perceived his personal traits as passionate, focused, and risk-tolerant.

"I was never meant to be an employee. The biggest challenge humans have is fear, fear of survival, running around after money, paying the mortgage, social status, that's the fear. I had nothing, I was happy to be a beggar."

6.3.2.2 Entrepreneurial barriers

Cognitive barriers

P7 did not face any market-related barriers except the public sector-specific norm of long procurement times. This factor was therefore acknowledged as a cognitive barrier, resulting from the lack of knowledge on the procurement process and long wait times with public sector customers and the resulting cost of sale. At the time, he had rectified the lack of capital by taking a bank loan against his house.

"Sometimes we can be naïve about our product without understanding the procurement department. Even if we have an agreement, it can take three years to sell. 99 percent of my clients are government departments, so the minimum cost for me, I may need to carry the cost for three years. Barriers are cost of sale, people underestimate the capital required, doesn't matter how good you are, or your product is, people underestimate the cost of sale."

Competition was not a barrier for P7 at all, who identified his business as the key player in the New Zealand market offering e-mental health ICT services to government departments.

"I was then and now the only person doing this, so no issues (competition)."

Normative barriers

P7 did not identify any resourcing or normative barriers but acknowledged the possibility of cultural influences on his success in New Zealand, such that he could have been even more successful if he belonged to the ethnic majority group in New Zealand.

“Mine is a specialised sector, it is mostly word of mouth, people approach me more than I can employ. There is a shortage nationwide, but not for me. I think it’s my reputation which helps.”

“I am sure there is something but have not faced anything (discrimination) because of my personal links to people. But I often wonder if the amount of success that I have achieved in this country, what if I was blonde and blue-eyed? Where would I be? That is the only thing I only question mark.”

6.3.2.3 Contribution channels as an employee

Innovation

As an employee, P7’s contribution channels included increased innovation and productivity as well as fulfilling his legal responsibilities.

“Innovation by way of implementing different ways of thinking and doing, understanding vocational rehab facilities as proper revenue making cost centres, where we didn’t pay people \$2 an hour, but paid minimum wage to promote equity, so all those things. So, this involved thinking out of the square but also applying innovation.”

6.3.2.4 Contribution channels as an entrepreneur

As an entrepreneur and firm owner, P7 contributed to job creation in New Zealand. His business has contributed to innovation; international business and skill sourcing from India; the export of health care service and technology products to several countries; and various social contributions to the New Zealand economy. At an individual level, P7 and his family bought ethnic Indian goods in New Zealand, again contributing to imports of overseas products.

Innovation

“I was then and now the only person doing this... I think the biggest thing will be New Zealand will be seen as a domain leading in digital know how and how they work, and I think I have played a very big role in it. So how do you develop a global brand for a country which is so small? Innovation just does not happen by itself, it happens by someone who believes in the vision. So, I had a vision, I didn’t know how to get there, I just followed it. There is a cost of whatever you do.”

International business

"We don't sell anything to India, it is more a provider of services, depending on which initiatives, countries, and projects. Good chunk of revenue goes there."

"We are on a huge expansion trajectory right now. 2018 is a big year, we have software development facilities in India at three places. Before we used to get a lot of software developers locally now we have close to 430 people in India. We need to be able to ramp up the programs on demand basis and we can't find that skill set here. It will be all deal with my company. 80 percent of software engineering will come from India, but all the quality control will be here in Auckland. We might take clients to onsite visits to India, these are boutique operations, highly specialised. We call it a hybrid onshore off shore."

Social contributions

"I am an AUT adjunct professor, which gave me the leadership role. We are contributing hugely in healthcare and software export and the domain about the service provider across the country."

6.3.3 P8 - Hospitality

P8 owns a very young restaurant business, which offers authentic south-Indian cuisine with a semi-fine dining experience. He started the business in 2017, after leaving his skilled job as a nurse with the Marlborough DHB. While P8 wanted to continue and grow his business, he was also considering casual paid employment to keep his nursing registration, while aggressively growing his business. He migrated to New Zealand in 2013.

"Will also like to keep my nursing registration as well because I am trying to pick up some casual shifts to keep up my registration, that is my profession, so yeah. But I would also like to aggressively grow this business."

6.3.3.1 Entrepreneurial drivers

The key motivations for P8 to leave his skilled job and pursue entrepreneurship were family-life balance, following the birth of his child, following his passion for food and his desire for independence. Specifically, P8 saw the opportunity to pursue his love for food and serving authentic South Indian cuisine to the locals, with fresh local produce and authentic recipes. Hence, family considerations and passion were the two key drivers for P8's move to entrepreneurship.

Family considerations

"For the family-work harmony, I gave up nursing to look after my baby."

Passion

"Myself and my wife, we were very foody people. When we were in Mangalore, we used to go to all restaurants to try food. After coming to New Zealand, we have been to different places, but we couldn't get that authenticity. When we travelled around India, we used to taste different foods, different flavours, authenticity was there, but after coming here, they add a lot of sugar, lot of colour. When you buy any curries, they add a lot of colour. So, all those things, you know didn't make us happy. So, we started cooking from home, so I started this as a home kitchen. I went to City Council and then I started cooking from home. I purely focused on authenticity and flavour. I got opinion from people in the workplace, because I was working in a big workplace. So, that is how this idea came about the South Indian restaurant. So here I can say that all the flavours are authentic, we don't add any artificial things."

Desire for independence

"I am always an ambitious person, like to be an entrepreneur or have this ambition. Even though we don't have a family background, I was always thinking, so I like to be my own boss."

Labour market experience and financial considerations had some role in P8's entrepreneurial decision, as he was satisfied with his job, despite the long work hours, stress, and often having to work (unpaid) overtime. P8 also acknowledged the hard work and unsafe staffing issues in his job as a nurse.

"In nursing, we face a lot of problems like unsafe work and unsafe staffing and pay and things like that. So, there is a pressure there as well, especially in winter and night shifts and sometimes we cannot do justice to the patient because of our workload.... But I am trying to catch some casual shifts because I want to keep my registration."

P8 described his personal traits as ambitious and a good leader. An overview of his entrepreneurial journey reveals the additional characteristics of good planning and organising.

6.3.3.2 Entrepreneurial barriers

Resourcing, normative and cognitive barriers

The key entrepreneurial barriers faced by P8 were finding skilled staff, lack of knowledge about the restaurant business and industry, and cultural stereotyping barriers. He did not experience any regulatory barriers.

"Finding the right staff, I did, because I always thought that I need to support local... so I was concentrating on getting somebody locally. So, I advertised through

Trade Me and newspapers and Facebook page, but did not get a response. There was no experienced staff that I could get, so because, maybe they know that it is a new place, job security can be a reason.”

“And secondly, my lack of knowledge about business and in a new country, like who to approach and what to expect.”

6.3.3.3 Contribution channels as an employee

As an employee, P8’s contributions included filling the labour market shortage in the health sector.

“Nurses are in great demand here, once we are competent we find a job.”

6.3.3.4 Contribution channels as an entrepreneur

As an entrepreneur and firm owner, P8 contributed to job creation in New Zealand. His business contributed to the local economy by purchasing local produce and brands.

Job creation

“I always wanted to support the local people and that is why I try to recruit staff from here. It is not that I could not get Indian ethnic people to work, but it is always local people I wanted to support because that was my plan.”

Social contributions

“I try to buy local stuff from here, like onions, seasonal things, to support the local people. So, I buy herbs and things like thyme and curry leaves locally. Then the wine is sourced locally, and we are going to go with local beer as well which is produced here. We try to cook our food with local ingredients too, except the spices that come from India, everything else we try and buy locally.”

6.4 Cross-case analysis

This section presents a comparative analysis of the key findings across the 10 cases studied in this thesis. The analysis looks at the specific entrepreneurial drivers, barriers and contribution channels of research participants.

It also identifies industry-specific factors and why some participants changed industries between paid employment and entrepreneurship. The participant perceptions on the link between education, experience and entrepreneurship; the acceptance of migrant businesses in New Zealand; and their opinion on the New Zealand economy are also presented.

6.4.1 Entrepreneurial drivers

Pull factors like opportunity recognition, passion, and the desire for independence were the most common entrepreneurial drivers for the participants in this study. Push factors, such as job dissatisfaction, family considerations and financial needs were also identified as entrepreneurial drivers by some participants.

From the perspective of external and internal motivations, internal factors appeared to be the more common drivers behind the entrepreneurial decision of most participants as shown in Table 18 below.

Table 18 - Entrepreneurial Drivers Experienced by Research Participants

Entrepreneurial drivers	Number of participants that experienced the respective drivers
Job dissatisfaction	4
Opportunity	6
Financial considerations	2
Family considerations	3
Desire for independence	5
Passion	5
Self-actualisation	4

A dissection of participant's entrepreneurial drivers is presented in Table 19 below.

Table 19 - Entrepreneurial Sub-drivers of Research Participants

Entrepreneurial drivers	Sub-drivers	Number of participants driven by each factor
Job dissatisfaction	Lack of growth opportunities	4
	Lack of variety in work	1
	Lack of work continuity	1
	Lack of opportunity to experiment	3
	Underpaid	1
	Overworked	2
	Lack of recognition	1
	Hierarchy	1
Opportunity recognition	Identifying a market gap/potential	6
	Utilising one's skills and abilities	2
	Opportunity for innovation	2
Financial goals	Fair earning for the amount of effort	1
	Potential for higher earnings	1
Family considerations	Work-life balance	2
	Building an inheritance	1
Desire for independence	Being my own boss	4
	Independence in decision making	2
Passion	Love for work/product/service	5
Self-actualisation	Personal satisfaction/ purpose	4

6.4.1.1 Job dissatisfaction

Job dissatisfaction is a common motivation for individuals to pursue entrepreneurship (Cromie, 1987; Marlow, 1997; DeMartino & Barbato, 2003). Prior research suggests that skilled migrants in New Zealand have very high employment and job satisfaction levels (MBIE, 2012a, 2012b). However, research on migrants in general has previously identified low salary, lack of pay rise, and lack of challenges in the job as the key reasons for job dissatisfaction (MBIE, 2012a).

An analysis of labour market experiences of skilled Indian migrants in this thesis identifies that most of the participants were satisfied with their paid employment.

P5 *"I was most certainly satisfied with my paid employment. I never had an incidence of a biased decision by management. I think it was based on merit, so if you perform well, it is acknowledged."*

P10 *"The job conditions were pretty good, they never forced me to do anything, gave me my breaks and did all the normal things you would expect."*

Those who experienced job dissatisfaction quoted the lack of growth opportunities, freedom to experiment, and being overworked as the most common push factors.

P3 *"I was doing crazy hours. I was working almost 50-60 hours a week and as a new graduate, I almost felt like it was great for the company, but I wasn't getting acknowledged or there were no benefits as such."*

P4 *"You hit a glass ceiling, you are limited by the structure of the role."*

6.4.1.2 Opportunity

Recognising a market gap, an opportunity for innovation, or better utilisation of one's skills are all examples of opportunity recognition (Hakim, 1989; Kim, 1996; Borooah et al., 1997). In addition to the above, favourable regulatory and legislative environments are examples of indirect opportunity, in favour of entrepreneurial decisions in an economy.

In New Zealand, over 10 percent of the working population is considered opportunity entrepreneurs (Frederick, 2004). Also, New Zealand is the easiest place in the world to start a business, and the second-best country in the world for doing business (World Bank, 2016).

Opportunity recognition was the second most common reason for participants to pursue entrepreneurship, where 6 out of 10 participants identified opportunity as one of their entrepreneurial drivers. The opportunities cited by participants in this research included the identification of a market gap for a product or service, the opportunity to utilise one's knowledge and skills, and the opportunity for innovation.

- P2 *"So I told them (popular news channel), why don't we develop an app for them? ... So, I developed the app and launched a photo submission feature on the app where people could submit photos and that was the exact time when the Christchurch earthquakes took place and as soon as the app got released, it was obviously number one. It was number one on the app store as well."*
- P3 *"And while I was practising, I did end up seeing a lot of Indian women, who would come in just because of that comfort and because they could trust, as I was from the same culture. The cultural gap could be easily filled, and I almost felt like I could use that. I hate to put it that way, but I almost wanted to use that gap in the market. I found a niche and I wanted to use it."*

6.4.1.3 Financial goals

Money is the basic reason why people work (Vroom, 1995). It is an important consideration (Alstete, 2002), given that profit maximisation is a key aspect of entrepreneurship (Kihlstrom & Laffont, 1979; Day & Sunder, 1996).

However, prior research suggests that immigrants in New Zealand value quality of life more than monetary gain (Poot, 1993; de Vries, 2007).

In line with the above finding, the majority of the participants in this research were not motivated by financial goals. In fact, many accepted the prospect of lower earnings in comparison to their paid employment, because they were pulled into entrepreneurship by other internal pull factors, such as passion, a desire for independence and the need for achievement.

- P5 *"Nothing to do with financial ambitions, it was more about satisfaction personal satisfaction. See, if that was the criteria, I would have stuck to my IT work because when I quit my full-time job, my salary was already a six-figure plus a healthy bonus."*
- P7 *"If I had focussed on money, I would have never taken a community support worker role. Money was never the driver in my life."*

Only 2 out of 10 participants in this research cited financial goals as a motivation for their entrepreneurial decision. One of these participants was pulled by the goal of higher earnings and the other participant was motivated by the prospect of fair pay for the amount of effort and time they put into their employer's business.

P3 *"I felt I was underpaid for the amount of business I got the company. I was doing crazy hours. I as working almost 50 – 60 hours a week and for a new graduate, I almost felt like it was great for the company, but I wasn't getting acknowledged, there were no benefits as such."*

P9 *"Firstly because we would have better income. Rather than doing it for someone else, when you have the skills and knowledge, then you can do it for yourself. You can decide how to invest your money, you can make your own profit, and be your own boss."*

6.4.1.4 Family considerations

Family obligations and commitments (Greenfield & Nayak, 1992; DeMartino & Barbato, 2003), family security (Robichaud, McGraw & Roger, 2001), and the desire for work-family life balance (Jennings & McDougald, 2007; Kirkwood & Tootell, 2008) are important drivers towards entrepreneurship (Kirkwood, 2009).

Research in New Zealand has found a strong family focus and family involvement in business across immigrant groups (North & Trlin, 2004; Hunter, 2007; de Vries, 2007).

Only 3 out of 10 participants in this study identified family considerations as their entrepreneurial drivers. Out of these 3, only 1 participant ranked family-work life balance as their top driver.

P6 *"I certainly intend to build an inheritance for my kids."*

P8 *"For the family-work harmony. I gave up nursing to look after my baby."*

The majority of the participants acknowledged the support and encouragement from their family before and after starting their business.

6.4.1.5 Passion

The literature identifies passion as a central component of entrepreneurial motivation (Schumpeter, 1951; Bird, 1988; Smilor, 1997; Cardon et al., 2009; Conner, 2009).

Three of the participants in this research cited passion as their top entrepreneurial driver and three more identified it as their secondary entrepreneurial driver.

- P5 *"I thought, okay, I should be pursuing my passion, which is travel, people and you know learning different cultures. We wanted to showcase the real country to international visitors, providing authentic experiences, not just the popular monuments and must do's."*
- P7 *"My journey was more experimenting and taking risks, but a journey of passion and purpose. There is a part of independence and job satisfaction when you follow your passion".*

6.4.1.6 Desire for independence

The need for independence is cited as a common motivation for entrepreneurship (Borooah et al., 1997; Alstete, 2003; Cassar, 2007; Kirkwood, 2009) and has been recognised as a key entrepreneurial driver in the New Zealand context (North & Trlin, 2004; de Vries, 2007; Pio, 2014).

In total, 4 of 10 participants identified a desire for independence as one of their entrepreneurial drivers.

- P9 *"Rather than doing it for someone else, when you have the skills and knowledge, you should do it for yourself. You can decide how to invest your money, you can make your own profit and be your own boss".*

6.4.1.7 Self-actualisation

Realising one's potential (Čížek, 2012), pursuing one's life purpose, making an impact on the world (Martell, n.d.), philanthropy, innovation, and creativity (Castillo, n.d.) are all forms of self-actualisation. A recent study on migrant entrepreneurs in New Zealand found that self-actualisation was a prominent entrepreneurial driver (de Vries, 2007).

Only one participant directly identified self-actualisation as an entrepreneurial driver, while 3 other participants indirectly indicated this driver when discussing the need to follow their life purpose.

- P4 *"You need that process of self-actualisation and that comes by entrepreneurship, so its engrained in a lot of migrant cultures I would say".*
- P7 *"I want to contribute back to India. For me it's a purpose I connect with, and to do something for people in distress."*

6.4.2 Entrepreneurial traits

Most participants in this research perceived themselves as innovative/creative, risk-takers, ambitious, perseverant and leaders. These traits were evident in the analysis of in-depth interviews with these participants.

Specifically, tolerance for risk and ambiguity and the need for achievement were the most common entrepreneurial traits of participants in this thesis.

Table 20 - Entrepreneurial Traits of Research Participants

Entrepreneurial traits	Number of participants with the respective entrepreneurial traits
Tolerance for risk and ambiguity	7
Need for achievement	5
Creative/Innovative	3
Leadership	3
Perseverance/ Drive	5
Organised	3

Tolerance for risk and ambiguity

The literature identifies the ability to take and tolerance risks and uncertainty as a key characteristic of entrepreneurs (Knight, 1921, Long, 1983). Usually, risks are measured in financial terms, but they may also relate to goodwill, family relations, change acceptance and legal issues. Majority of the participants in this thesis identified and exhibited a very high tolerance for risk and ambiguity.

P2 *“I had a stable job. I didn’t know if I wanted to start from zero and start from scratch, but I bit the bullet.... I said, let me try, what’s the worst that can happen? I can learn at most and I can get out of it and get a stable job.”*

Need for achievement

Need for achievement is described as the need for setting challenging goals and solving problems by one’s own (McClelland, 1967). Half the participants in this study identified the need for achievement as their key personality trait.

P1 *“The companies are so small in New Zealand, not one company could satisfy my requirements, whether it is monetary or aspiration-wise.... I just need some new big project to keep going on.”*

Other traits

Other entrepreneurial traits identified by some participants in this thesis were leadership, perseverance, and drive, creativity and being organised.

P2 “I love leading, especially when I know something has got legs to stand on, it’s got a firm foundation. I like collaborating.... I don’t like managing people, it’s just not my persona. I like letting them flourish and seeing what ideas they come out with.”

P5.2¹⁰ “At any cost, he will execute, even take risks, but he won’t take a step back (perseverance). At any cost, he finishes it.

6.4.3 Entrepreneurial barriers

Analysis of participant interviews identified resource, normative and market barriers as the most common entrepreneurial hinderances for participants in this study.

Resource barriers such as staffing and capital, normative barriers such as low change acceptance and sectoral norms, cognitive barriers, such as lack of industry/business knowledge, and market barriers such as competition and small target market were identified in this thesis. Tables 21 and 22 list and detail these barriers and challenges.

Table 21 - Entrepreneurial Barriers and Challenges to Research Participants

Entrepreneurial barriers and challenges	Number of participants facing respective barriers
Resource barriers	6
Regulatory barriers	4
Normative barriers	5
Cognitive barriers	5

6.4.3.1 Resource barriers

The literature identifies the lack of finances, business knowledge, skills, and experience as the key internal resources that can act as barriers to entrepreneurship (Iakovleva et al., 2014; Staniewski & Awruk, 2015). The lack of financial resources and skilled staff has also been acknowledged as entrepreneurial barriers in prior New Zealand research (North & Trlin, 2004; de Vries, 2007).

¹⁰ P5.2 refers to the second/ non-dominant business owner.

More than half of the participants in this thesis experienced resource barriers in arranging capital and finding skilled staff for their business.

P4 *“In NZ its harder to get a bank loan or near impossible to get a bank loan for a business. You will get a bank loan only based on mortgage.... based on collateral as having a real estate as an asset, you don’t get bank loan on a project plan”.*

P6 *“The banks here have a short-sightedness and so with a business which is approaching a million dollar in turnover year over year, they still find it difficult to approve even a business overdraft of say \$50,000.... so that’s a big barrier”.*

Table 22 - Entrepreneurial Sub-barriers and Challenges of Research Participants

Entrepreneurial barriers		Sub- barriers	Number of participants facing each barrier
Resource barriers		Arranging capital/ finance	4
		Lack of skilled staff	4
Regulatory barriers	Legislative	Taxation policy	1
		Immigration policy	2
		Compliance costs	2
		Competition	2
	Market	Competition	2
Normative barriers		Cultural barriers	2
		Low change acceptance	3
		Sector-specific norms	3
		Lack of information exchange	1
Cognitive barriers		Lack of knowledge about business and industry	4
		Unrealistic expectations/lack of knowledge among consumers	2
		Lack of networks	2
Other barriers		Lack of emotional support/family availability	2

6.4.3.2 Regulatory barriers

Regulatory barriers include legislative, market and infrastructural barriers. Some participants in this study faced legislative and market-related barriers only.

Legislative barriers

Strict government legislation can act as a big barrier to entrepreneurship (Krasniqi, 2007; Staniewski & Awruk, 2015). Taxation policy, monetary policy, property rights, size of the public sector and government spending on business grants are examples of legislative barriers to entrepreneurship (Aidas et al., 2012). New Zealand scores high

on international benchmarks for the quality of business environment (Schwab & Sala-i-Martin, 2018) as reflected by its top world rankings in the ease of starting and doing business (World Bank, 2018).

The majority of the participants did not face any legislative barriers. In fact, many participants acknowledged the support they received from government grants as well as the guidance from government agencies like the Central Economic Development Agency (CEDA), New Zealand Trade and Enterprise (NZTE), and Callaghan Innovation.

P4 *“In fact, it’s easier in New Zealand to get grants than loans, so for the course of this business over the last 11 years, I have raised about \$800,000 as grants, so that’s not small money and that has helped us kick off our R&D department project.... I mean the Callaghan grants is a bright scheme.... without which I wouldn’t have gone to the Middle East, without which we wouldn’t have afforded to take the risk of appointing an in-market rep, which is half funded by the government.”*

P6 *“My company benefitted from Callaghan Innovation. So, they have been the believers in what I was trying to say, they understood the value of business intelligence, artificial intelligence. Three years ago, when many people would not have even heard about those things, Callaghan has been an earlier adopter of innovation and they are still leading. They funded two of my product developments for a grant. So, it was very helpful”.*

In total, 3 participants, all from the hospitality sector cited immigration policy as a challenge in getting the right number of skilled staff in their business at the right time.

P8 *“I always thought that I need to support the locals, so I was concentrating on getting somebody locally. So, I advertised through Trade Me and newspapers and Facebook page but didn’t get a response. There was no experienced staff that I could get...*

Immigration-wise it took its own time, but we cannot blame them because they don’t know the difference between North Indian and South Indian chefs. See for my part, I was in need of a chef very urgently, immigration took its time, but we managed....

I applied for a visa for a chef I interviewed in India but it was a slow process. So, then I finally gave up my nursing job to work in the kitchen.”

P9 *“In the beginning there were no problems, but when we opened a new restaurant, we had a lot of problem in recruiting staff. We did advertisements, but no one applied... I involved myself in the kitchen and worked there for about 20-30 days as a cook. It took a month to find staff and about 3-4 months for the application with immigration. We are always short on staff, we have to work*

long hours to cover the shortage. Long working hours mean we cannot get enough rest. I remain tired, stressed, have back pain, and have become anaemic now because I have to manage both home and business. We cannot give enough time to our child and cannot plan long holidays.”

Only 1 participant stated taxation policy as a key legislative barrier for them.

P2 *“For start-up businesses, government should give big tax breaks. it’s really really hard for start-up businesses to flourish in New Zealand, at least to a point where they are successful or breaking even. I think tax breaks are an absolute essential if they want to encourage more innovation.”*

Market barriers

Factors such as entry barriers, high competition, lack of knowledge, and difficulty in discovering information about markets, products and prices are examples of market-related barriers to entrepreneurship (Jokela et al., 2014; Staniewski & Awruk, 2015).

There is little evidence on barriers to market entry for new firms in New Zealand (Global Entrepreneurship Monitor, 2005; Mok et al., 2012).

In total, 2 out of 10 research participants cited competition as their key market barrier.

P9 *“A lot of competition. Everybody wants to do their own business now, they don’t care that two to three businesses are already running in the same place”.*

6.4.3.3 Normative barriers

The literature indicates mixed impacts of normative factors on entrepreneurship in different societies. Developed countries are usually ranked higher in entrepreneurial attitudes, openness to new technology, income equality and opportunities for entrepreneurs (Coduras et al., 2010; Cornell University et al., 2017). In New Zealand, studies have found factors like culture, language and business networks as the key normative barriers to migrant entrepreneurship.

For half of the participants in this research, low change acceptance and sector-specific norms were the key normative barriers. Cultural barriers, lack of networks and lack of information exchange were also faced by some participants.

P4 *“The technology business has different barriers. I mean obviously the lack of being networked in the old boys’ club, you know that matters in New Zealand and whatever you may say, you have to tap shoulders to actually get capital or get access to knowhow. And all of that is a hard yard for a migrant.”*

P6 *“What I felt here is that people here did not want innovation, they did not want the latest technology... there was not a desire in Kiwi businessmen to let the business grow... and if a business did not see the value, then you just can’t sell to them.”*

“People’s perception, they don’t think what you are telling them is useful to them. They will give you all the time in the world and listen to your solution, but nothing is coming out of it.”

P8 *“Suppliers are not willing to help us because they think this is just another restaurant... they said, they (popular wine brand) cannot give me because this is just another Indian restaurant”.*

6.4.3.4 Cognitive barriers

Skilled migrants are likely to have higher education and skills in comparison to unskilled migrants (Head & Ries, 1998). Education is also linked to better cognitive ability through enhanced human capital and confidence (Shane & Venkataraman, 2000; Coduras et al., 2010). In New Zealand, factors such as lack of language proficiency and relevant qualifications have been identified as barriers to entrepreneurship (NZ Herald, 2012; Cleland & Davey, 2014).

This study found the lack of knowledge about business and industry and the unrealistic expectations of consumers were the key cognitive barriers for research participants.

P5 *“Lack of knowledge in the industry to begin with. For example, how a group tour is done, what do the other travel companies do to negotiate better rates from hotels, for instance to be competitive in the market”.*

P8 *“People don’t know about the difference in Indian food which was the biggest barrier that I had, like that North and South Indian food is different. Secondly, my knowledge about business and in a new country like who to approach and what to expect. Then the other thing is we don’t know how a business is done here, like finding a place. We can go to agents, but again we don’t know where to look for.”*

6.4.4 Contribution channels as employees

Table 23 presents the key contribution channels of participants in this research when they were in paid employment.

Table 23 - Contribution Channels of Research Participants as Employees

Contribution channels as employees	Number of participants who contributed to the New Zealand economy as employees
Fill labour market shortages	7
Increase international trade/investment	0
Reduce human capital costs	1
Innovation and/or increased productivity	3

6.4.4.1 Fill labour market shortage

Most participants contributed to the New Zealand economy by filling labour market shortages when they were in paid employment. This is evident from their migration reasons and migration criteria, as reflected in Tables 16, 17, where 7 out of 10 participants came to New Zealand on a skilled job offer. All these job offers were in short skilled occupations over the last decade.

P3 *“Well, it was in the long-term skills shortage list, physio, physiotherapy was one of those occupations. It was quite easy because I had a full-time job”.*

While taking up short skilled employment is a direct contribution to filling the labour market gap, 1 participant also indicated an indirect contribution to filling labour market shortages in their organisation.

P8 *“I worked in a hospital, healthcare so lot of service as well. I was going beyond the hours, sometimes working overtime, even without pay. Nurses are doing that because they got that strict thing that if they overpay, they will have to pay a lot of money. But sometimes, by keeping that in our mind, we go and come back maybe an hour or an hour and a half later from work. We are doing notes in our own time. In all the DHBs there are staff shortages... When its regular patients, it is fine, but when the patients get aggressive, they need one-on-one watch, so, one person watching that means one staff short. If there is two or three confused persons, two or three people are watching. So that means, that all the load is on the other nurses... So, we don't have enough funding for safe staffing.”*

6.4.4.2 Increase international business /investment

None of the research participants contributed to international trade as employees. All participants stated that the nature of their role did not necessitate this task.

P5 *“No, my role did not necessitate that requirement.”*

However, 1 participant acknowledged that they were presented with the opportunity to take a New Zealand business franchise to India; however, the model was deemed unsuitable to the Indian market and was also perceived as unethical by the participant.

P3 *"I actually got offered the opportunity to take the business model overseas. They were really keen and wanted to start a franchise back home (India). I told them you are trying to replicate a model that works here and take it to India with the same price range. Nobody is going to come to a physio and pay 1500 rupees for a session unless you keep it only for the niche. I couldn't see the feasibility of the business."*

"Understanding the nature of how things roll, I just couldn't see myself driving people like this, you know doing the shady stuff. The whole model just did not work with me and my ethics. If it didn't have a crazy franchise tagged to it and had genuine prices, I would have accepted."

6.4.4.3 Sourcing human capital

Only 1 participant assisted their employer in sourcing human capital from India.

P5 *"I helped hiring I think three employees from India through my professional connections."*

6.4.4.4 Innovation and increased productivity

Only 3 participants used innovation and productivity as a contribution channel in their role as an employee.

P6 *"I was working as a Technical Business Analyst. There were a couple of things that I brought to the table and the company is still using it. There was an innovation because that was a process improvement that I initiated."*

6.4.5 Contribution channels as entrepreneurs

Table 24 presents the key contribution channels of participants in this study after they transitioned to entrepreneurship.

Table 24 - Contributions of Research Participants as Entrepreneurs

Contribution channels as entrepreneurs	Number of participants who contributed to the economy as entrepreneurs
Job creation	10
Increased international business/investment	5
Innovation and increased productivity	4
Social contributions	4

6.4.5.1 Job creation

All the participants in this research contributed to job creation, which was expected given that the criteria of this research only involved entrepreneurs who employed other people in their businesses.

- P4 *"And of course creating jobs, keeping people employed, giving income sustenance and that's a huge contribution."*

6.4.5.2 Increase international business and/or investment

Five out of the 10 participants in this research facilitated international business with India and the US in their role as an entrepreneur.

- P5 *"See tourism in itself is import and export, when we send people from here to India or South America. We regularly do study tours to India. We bring in Indian cricket academies to New Zealand."*

"Our food habit is still Indian so we obviously need to buy grocery from an Indian shop and other ethnic Indian goods."

- P6 *"It's a big dollar earner. So out of a million dollars, I would say a good \$900,000 comes from overseas. My New Zealand business, which is an export company, exports to my Swiss company, it exports to my US company and at the same time to deliver some of the services, my Indian entity exports to my New Zealand business."*

Some failed efforts at international business were also acknowledged in the study.

- P4 *"I had a strategic alliance with Airtel (Indian telecommunication company) but that failed for many reasons, so that was a lot of effort. I still have a small office in Mumbai, three, well two staff. We had a large contract with Energy Rajasthan, so that was about three years. Once that contract finished, we couldn't win some of the business at the right price because the vehicle tracking market then became big in India and became commoditised. There were a lot of other players we couldn't compete with. So that's where I pulled out of the Indian market as such."*

Two participants also identified their role in facilitating investments to and from New Zealand.

- P10 *"I have recommended my acquaintances looking for investment avenues to invest in New Zealand, because you can't go wrong. There is one recently who invested 3-4 million in the construction business.... I mean this was just one, but over time, so many."*

6.4.5.3 Increased consumption and consumer options

As new firm owners, skilled migrants contribute to the consumption function by means of increased competition, therefore affecting local prices and product / service mix available to consumers (Nathan, 2014).

Majority of the participants in this study identified with the contribution of increased competition in their business sector.

P1 *“We keep costs low but give good value, which they expect from an agency environment. So, the level and quality of work we do, I would say would be as equal as a good agency.”*

6.4.5.4 Innovation and increased productivity

New Zealand has a strong entrepreneurial and innovative culture (Frederick, 2004).

Skilled migrants bring new ways of thinking and high work ethics to the host economy, and thereby contribute to increased innovation and productivity in the host economy (Dolado et al., 1994; Page, 2007; Berliant & Fujita, 2009). They also contribute to knowledge generation and diffusion by reducing communication costs through migrant networks (Nathan, 2014).

Specifically, prior research suggests that skilled migrants make significant contributions to the host economy through increased innovation, entrepreneurship, and productivity (Saxenian, 2002; Wadhwa et al., 2008). Most participants in this research identified with contributions to innovation in the form of new products, services, or markets.

P2 *“People were like, oh my God, it’s not a flash in the pan. There was something serious happening here and that instantly put us on the map. I mean from an obscure garage basement type of a company, everyone knew us like New Zealand wide.”*

P6 *“We have four products currently. Innovative point of sale system, which is selling pretty good and we are looking at multi-buying and scaling it up. Two products were trademarked recently and the fourth one we are preparing to product, we are patenting.”*

6.4.5.5 Social contributions

In New Zealand, entrepreneurship is seen in a positive light not only for its economic contributions but also for generating social benefits (Carton, Hofer & Meeks, 1998).

Specifically, skilled migrants have been acknowledged for making higher tax and social contributions than the benefits they receive (OECD, 2014).

In total, 4 out of the 10 participants explicitly acknowledged an increase in their social contributions in the role of entrepreneurs.

- P5 *“What we are doing in a small way is contributing to the community as a business... For example, a couple of years ago we supported a small organisation called Passion Art that uses arts to streamline wavered young people to feed their creative intuition and bring them into the mainstream of life. So, we help them do some of the activities by fundraising for them.”*
- P6 *“We have initiated a financial scholarship for a girl’s high school for kids who may be financially underprivileged since the last four years. I am also a mentor in this school, educating children, mentoring their last year requirements of curriculum where they have to set up a business. I also work with Maori organisations, educating Maori kids and motivating them to acquire IT skills, generating more programming related awareness within the Maori teenage kids.”*

6.5 Field notes

Field notes on all the interviews indicate that participant responses were drawn from actual experiences. Where doubts and biases were sensed, alternative questions and rephrased checks were conducted for increased confidence in the responses. For instance, P1 was interviewed in his office, where his Bangladeshi employee was working on a design project. The office was a small space with digital and paper products, indicating the ICT and marketing service provided by the business. Similarly, Indian administrative staff and doctors were observed at the office of P3, who had mentioned that most of her staff were Indian.

6.6 Documentation

Analysis of the documental evidence from news articles on skilled Indian migrants who left paid employment and started their own business, along with empirical research on skilled migrants and Indian migrants in New Zealand was used to triangulate the findings of this study. For instance, in reference to the demographic questions, the business ownership statistics of all participants were confirmed on the Companies Office website and the respective business websites. Similarly, news articles showcasing several participants and their businesses served as secondary data sources for verifying some of the qualitative information in relation to the participants’ entrepreneurial drivers and

barriers. On a macro level, official statistics such as census, business demographic statistics, innovation, and skilled migrant surveys and reports by government organisations like MBIE, Stats NZ, and the Treasury were used to inform the big picture. These secondary data sources and their findings are discussed in detail in the next chapter.

6.7 Summary

This chapter presented the key findings from primary data, starting with demographic and background information on research participants. Then, a within-case analysis of three exemplar cases was presented before a comparative analysis of all the cases in the study was undertaken.

Analysis of participant data identified pull factors, such as opportunity, desire for independence, and passion as the most common entrepreneurial drivers of participants in this thesis. Push factors such as job satisfaction, family considerations, and financial needs were also identified as the entrepreneurial drivers of some participants. In reference to entrepreneurial traits, risk tolerance, and the need for achievement were the most common characteristics among participants in this thesis.

In reference to entrepreneurial challenges, lack of skilled staff, arranging capital, lack of networks, sector-specific norms, and lack of industry/ business knowledge were key issues identified. Many participants perceived their barriers to be industry-specific and acknowledged their lack of knowledge about barriers in other industry sectors.

Most participants felt that they were restricted by the structure of their role as employees in regards to their decision-making ability. In contrast, all the participants identified increased contributions to the New Zealand economy after they became entrepreneurs. The most common contribution channels in their role as new firm owners were job creation, increased consumer options and consumption, increased international business, innovation and social contributions.

The next chapter evaluates these research findings in reference to the theories and frameworks discussed in Chapters 2 and 3.

Chapter 7 - Discussion

7.1 Introduction

The previous chapter presented the key themes that emerged in data collected from in-depth interviews with research participants. An analysis of these themes identified that participants in this study were mainly driven by pull factors yet faced some challenges in their entrepreneurial journey. All 10 participants highlighted higher economic and social contributions, and the use of more contribution channels in the role of an entrepreneur than in the role of an employee. Two participants acknowledged lower income after the move to entrepreneurship yet highlighted that their prime motivations – passion and personal satisfaction took precedence over financial gains. Hence, money was not important to them beyond basic economic survival.

This chapter aims to discuss the entrepreneurial drivers, barriers and contributions of skilled Indian migrants in reference to the research questions and theories discussed in Chapters 2 and 3. This discussion includes findings from participant interviews as well as the additional evidence collected from secondary data sources such as academic articles, news articles, economic publications, industry reports, official statistics and information obtained under the Official Information Act, 1983 publications. Refer Table 15 on page 85 for examples of secondary data sources used in this research.

7.2 Addressing the research questions

Although there are several New Zealand based studies in the context of Indian migrants, such as those of Nandan (1994), Ram (1997), Maritz (2004), Pio (2005, 2007, 2014), and de Vries (2012), as well as in the context of skilled migrants, such as MBIE (2012a, 2012b, 2016) the literature appears to lack research on skilled Indian migrants, who leave their skilled jobs to become entrepreneurs in New Zealand.

Some academic studies, such as those of de Vries (2007) and Paulose (2011), have researched skilled Indian migrants in New Zealand; however, these studies included migrants in various skill cells and descendants of Indian migrants. Previous studies are hence not completely reflective or compatible with the research objective of this thesis, which focuses on first-generation skilled migrants from India.

Therefore, the next three sub-sections discuss the findings from participant interviews and secondary evidence from documental data in an attempt to address the overarching research question of this thesis, which is,

What are the entrepreneurial drivers, challenges, and contributions of skilled Indian migrants in New Zealand?

The following sub-questions relate to the theoretical frameworks presented in Chapters 2 and 3:

1. *What drives skilled Indian migrants to leave skilled employment and pursue entrepreneurship in New Zealand?*
 - *What is the employment experience of skilled Indian migrants in New Zealand?*
 - *What motivates skilled Indian migrants to start a business in New Zealand?*
2. *What are the barriers and challenges faced by skilled Indian migrants in the process of starting a business in New Zealand?*
3. *How do skilled Indian migrants contribute to the New Zealand economy?*
 - *How do skilled Indian migrant employees contribute to the New Zealand economy?*
 - *How do skilled Indian migrant entrepreneurs contribute to the New Zealand economy?*

7.2.1 Demographic profiles

New Zealand appears to lack statistics on the numbers and demographics of skilled migrant entrepreneurs (refer to Appendix C to view the official response to the request for business statistics of skilled migrants). Also, different source countries and immigrant groups often have different demographics of migrant groups in New Zealand. For instance, official statistics on skilled (principal) migrant demographics in 2017 showed that the median age of Chinese and Indian immigrants was 28 years, while the median age of South African immigrants was 39 years (MBIE, 2018).

This section reviews the demographic information of research participants and their businesses to provide a comparison parameter for future studies as well as to enable better interpretation of research findings in the subsequent sections.

Personal profile

Age, gender, and qualification

In total, 9 out of the 10 participants in this research were males, aged between 30 to 54 years and one female participant was in the age group of 30-34 years. The median age range for all participants was 40-45 years. Analysis of participant age at the time of business start-up indicates that most participants were aged between 30-40 years when they started their business. These numbers are within Immigration New Zealand's age range for skilled migrants (under 55 years), with higher weightage to young applicants, given the need to counter the labour market gaps created by New Zealand's ageing workforce (New Zealand Immigration Concepts, n.d.). Residence statistics on skilled Indian principal migrant approvals suggest that the overall median age of Indian migrants at the time of initial migration to New Zealand is 28 years, and with dominance by the male gender (MBIE, 2018).

On average, participants in this study took seven years from initial migration to start a business in New Zealand. A closer look indicates that participants who migrated after 2003 had smaller time periods between initial migration and business start-up compared to participants who migrated earlier. The literature identifies that immigrants take several years to settle, before starting their business (Schuetze & Antecol, 2007).

Skilled migrants are attractive to their host economies because of their skills and experience. This is because skills and experience are the source of human capital, which is an indispensable factor of production for the sustenance and growth of an economy (Mok et al., 2012). Therefore, the educational qualifications and work experience of overseas labour is a key assessment criterion of Immigration New Zealand (New Zealand Immigration Concepts, n.d.).

Most participants in this study held a minimum of (professional or management) Bachelors' qualification and/or relevant work experience at the time of migration. As expected, the qualifications and work experience of participants in this study were within the skilled migration assessment criteria used by Immigration New Zealand, which usually include a Bachelors' degree, trade certificates, and/or work experience

of 3-5 years (Immigration NZ, 2018c). They also match the top three short skilled occupation groups in New Zealand, namely, professionals, managers, and trades workers (Immigration NZ, 2017).

Migration reason and region

The most common migration reasons cited by participants in this study were the desire for a better quality of life, job offer/career, and further study in New Zealand. These findings coincide with previous studies on Indian migrants in New Zealand, that have found that Indian migrants highly value the quality of life offered by New Zealand's clean environment, transparent systems and fairer opportunities in comparison to India (Tiwari, 1980; Pio, 2005; de Vries, 2007).

Most migrants in this study were based in Auckland and Christchurch, while two participants were from Palmerston North and Nelson. A review of regional statistics on skilled principal migrant approvals (identified that most skilled Indian migrants reside in Auckland, Canterbury, Wellington and Waikato, as shown in Appendix C (Table 7 of 9). Auckland and Christchurch are also the two largest cities in New Zealand by population (Stats NZ, 2013).

Business profile

Business size, sector, and market focus

Most participants in this study were small enterprises with less than 20 employees, and two enterprises were medium-sized with 40-49 employees at peak times in business. This is reflective of most businesses in New Zealand, given that 97 percent of all New Zealand businesses are small and medium-sized enterprises (MBIE, 2017a).

More than half the research participants started their business in the same industry as their field of employment. Some participants also identified that they capitalised on the opportunity presented by the needs of the local ethnic population. For instance, participant 3 found a niche market in serving Indian and other ethnic women who preferred service from an ethnically and culturally aware physiotherapist.

This finding coincides with a recent study on Indian migrants in New Zealand by de Vries (2012), which identified that unlike other ethnic minority studies in Europe and

North (Ram, Abbas, Sanghera, & Hillin, 2000; Zhou, 2004; Chowdhury & Pedace, 2007; Warman, 2007; Piperopoulos, 2010), Indian migrant entrepreneurs in New Zealand do not operate within ethnic enclaves. De Vries (2012) attributed to several factors, including the low population density geographic dispersion of Indian migrants. The limited opportunities in contrast to larger Indian ethnic markets in countries like the US (Saxenian, 2002) and the UK (Basu, 1998) was also identified as a reason behind the lack of Indian migrant enclaves in New Zealand.

Other considerations

Future plans

All participants in this study expressed the intention to continue their business as an active director or as a passive manager, sleeping partner, or shareholder and none of them were considering re-migration to India or any other country in the immediate term. This is because the younger participants were too invested in New Zealand with their business, family, and/or school going children, while older participants considered New Zealand their permanent home.

A recent study on skilled principal migrants in New Zealand by Krassoi-Peach (2013) identified that the likelihood/intention to leave the host economy reduces with age and family characteristics of having partners and/or children, as is the case in this research. This also reflects Fletcher's (1999) argument, that successful family settlement outcomes play an important role in attracting, retaining and gaining maximum advantage from immigrant entrepreneurs. The academic literature also identifies a strong family focus across immigrant groups in New Zealand (Whybrow, 2005; de Vries, 2007; Gendall et al., 2007; Hunter, 2007; Pio, 2014).

Krassoi-Peach (2013) also found that New Zealand was more successful than OECD European member countries in retaining its migrants. For instance, according to OECD statistics on re-migration rates of migrants in Belgium, Ireland, Sweden, and the UK, 40 to 60 percent of migrants emigrated within five years of taking up permanent residence in 1998, compared to 23 percent in New Zealand (Krassoi-Peach 2013). This is an important consideration for this study because the long-term retention of skilled migrants, both as employees filling skill gaps in the labour market, and as entrepreneurs

creating more jobs, plays an important role in the economic growth of New Zealand. The importance of this consideration is also indicated by the fact that the attraction and retention of skilled migrants from India is a key strategic consideration of the New Zealand government, as reflected by goal 4 of the NZ Inc India strategy, which is, *“attract and retain skilled migrants from India who are able to make an effective contribution to New Zealand’s economic base”* (MFAT, 2011b).

Inference

The above discussion identifies that most participants in this study were males aged 30-54 years. Their median age at the time of starting their business in New Zealand was between 30 to 40 years. Participants took an average of seven years from their initial migration to the time of starting a business and most of them had a professional or management degree at the time they migrated to New Zealand. Quality of life and career were cited as the most common migration reasons by most research participants, with Auckland and Christchurch being the most common cities of residence from the time of migration.

In reference to business demographics, most participants in this study owned small enterprises with 1-19 employees and started a business in the same or related field to their New Zealand work experience. For instance, all the participants in this study who started their business in the ICT and health sectors had previous qualifications and work experience in the same sectors.

In terms of future plans, the majority of the participants had no intention of returning to paid employment and those considering paid employment intended to continue being involved in their business as directors or shareholders. Similarly, none of the participants were considering remigration in the immediate term, mainly due to family and business commitments in New Zealand.

The demographic profiles and intention of participants coincide with the wider literature from prior empirical research and statistics on skilled migrants in New Zealand. However, it is important to note that the discussion in this section is mainly aimed at adding context to the following sub-sections on the entrepreneurial drivers, barriers, and contribution channels of skilled Indian migrants in this study.

These findings do not infer any degree of correlation with official statistics because this study used purposive sampling to select participants, which is not suited for generalisations to the wider population. Although beyond the scope of this study, a quantitative survey using a random sample or analysis of unit-record longitudinal immigration data is recommended for inferences on the demographic profile of skilled Indian migrants in New Zealand.

The next sub-section presents a discussion on entrepreneurial drivers in an attempt to address research question 1.

7.2.2 Entrepreneurial drivers

Entrepreneurial drivers are factors that motivate an individual to start a business rather than pursuing other career possibilities (Naffziger et al., 1994; Hessels et al., 2008; Jokela et al., 2014). They are broadly classified as push and pull factors. As identified in the entrepreneurial drivers framework in Chapter 2 (page 8), these factors may arise from the external environment or the internal needs and desires of an individual. Examples of external push factors include unemployment, lack of alternative opportunity, and redundancy, and those of internal push factors include job dissatisfaction, family considerations, and financial constraints. Similarly, examples of external pull factors include favourable regulatory environment and identifying a business opportunity, whereas examples of internal pull factors include an individual's need for achievement, desire for independence, passion, drive, and self-actualisation.

The following sub-section presents a discussion of the entrepreneurial drivers of skilled Indian migrants in this study in comparison to the academic literature and empirical studies on Indian migrants in New Zealand. The discussion is organised using research question 1 in light of the entrepreneurial drivers framework presented in Chapter 2 (page 8). The sub-section then concludes with an inference from this discussion.

Research question 1 - What are the entrepreneurial drivers of skilled Indian migrant employees in New Zealand?

In New Zealand, studies on skilled Indian migrants are sparse, whereas, studies on the general Indian ethnic population suggest mixed findings. The following sub-section

compares the findings of this study with academic studies, official statistics, and economic reports on skilled migrants in New Zealand, using sub-questions 1.1 and 1.2.

Research question 1.1 - What is the employment experience of skilled Indian migrants in New Zealand?

In New Zealand, official statistics and academic studies suggest that skilled migrants are valued for filling skill shortages in labour markets (Gendall et al., 2007; North 2007; MBIE, 2012a; Boyd & Cleland, 2018) and have higher job satisfaction than unskilled migrants.

However, prior studies on skilled Indian migrant entrepreneurs in New Zealand have identified job dissatisfaction as a common internal push driver for leaving employment (de Vries, 2007, 2012; Paulose, 2011). The international literature also identifies unfavourable experiences in employment, such as job dissatisfaction and lack of work-life balance, as common factors that push individuals away from paid employment (Cromie, 1987; Marlow, 1997; de Martino & Barbara, 2003).

In this study, 6 out of 10 participants had a favourable employment experience. However, the internal push factor of job dissatisfaction was identified as the most common employment-related push factor for half the participants in this study, followed by family considerations, which was the push factor for two participants. Both these findings are discussed below.

Employment experience

In total, 4 out of 6 participants in this study cited job dissatisfaction as a reason for leaving skilled employment. Out of the 4, 1 participant cited job dissatisfaction as their primary motivation to leave paid employment due to being underpaid, undervalued, and overworked. Altogether, 3 participants cited job dissatisfaction as their secondary motivation for leaving paid employment, mainly due to the lack of growth and experimentation opportunities at work.

The remaining 6 participants stated that they were satisfied with the pay and perks of their paid employment. Their reasons for leaving paid employment were more about their personal motivations and aspirations, such as following their passion, rather than unfavourable labour market job experiences.

These findings coincide with the results of the 2015/16 New Zealand National Survey of Employers, which found that one in 25 employers hired recent migrants because they were the best candidates or had the most relevant skills and qualifications (Boyd & Cleland, 2018).

In total, 93 percent of these employers were very positive about the job performance of their migrant staff.

Employment preference

The employment preference of an individual precedes their employment decision and employment experience. Therefore, this section looks at the employment preferences of Indian migrants to add context to the above discussion.

According to the 2013 census, over 80 percent of the working Indian population in New Zealand are in full-time paid employment¹¹ compared to only 4.1 percent business owners with employees (Stats NZ, n.d.) as shown in Table 25 below.

Table 25 - Employment Status of the Indian Ethnic Group in New Zealand

Employment status/ Census year	2006	2013
Paid employee (full-time + part-time)	82.9	85.5
Employer	4.5	4.1
Self-employed without employees	10.4	8.8
Unpaid family worker	2.1	1.5
Total	100	100

Source: Stats NZ (n.d.-a).

Similarly, other studies have identified parallel findings for Indian migrants. For instance, de Vries (2007) conducted a study on Indian migrants in New Zealand and identified that the overall level of entrepreneurship in the Indian community was lower than the New Zealand average. His study identified that Indians are likely to prefer employment over business ownership, as reflected in the following statement from a participant in his study.

¹¹ The census counts the employment status for the population aged over 15.

“The first goal for an Indian, even a businessman, is to see if they can be employed in some way, and so the majority of Indian entrepreneurs would have originally been employees in New Zealand.”

Rai (2008) seconds this opinion based on his study of Indian migrant entrepreneurs and suggests that Indian migrants have a predisposition for paid employment over venture creation, and business creation is often their last option. This is because Indian migrants are usually highly educated (Bates, 1995; Aptekar, 2009; Min & Kim, 2009) and higher education opens professional opportunities and reduces an individual’s propensity for business ownership (Clark & Drinkwater, 2010).

On the contrary, some studies indicate that Indians have a preference for business entrepreneurship. For instance, Volery (2007) suggests that cultural aspects are considered an important factor in the entrepreneurial decisions of Asian immigrants. Specifically, entrepreneurship is seen in a positive light by both Indians and the New Zealand society. In fact, Pio (2005) suggests that Indians are culturally inclined towards entrepreneurship.

However, it is important to note that all the studies cited in this section sampled their research participants based on ethnicity rather than skill levels and therefore included participants from various skill cells, home countries, and employment backgrounds.

Nevertheless, the above discussion suggests that skilled Indian migrants in New Zealand are more likely to leave paid employment out of choice rather than necessity.

Research question 1.2 - What motivates skilled Indian migrants (in skilled employment) in New Zealand to start a business?

Other than the employment experience, there are several factors that may attract employed individuals towards entrepreneurship, such as identifying a market opportunity, favourable regulations for business start-up, and the desire for independence in work decisions (Shane, 2003; Cassar, 2007).

In New Zealand, research on skilled migrant entrepreneurs is sparse and the literature on Indian ethnic migrants is based on focus populations that include Indian migrants from different skill cells and home countries. There are a few academic studies on skilled Indian migrants in New Zealand, such as that of Paulose (2011), who studied the entrepreneurial

drivers of 11 skilled Indian migrant entrepreneurs in Auckland, and that of de Vries (2007), who studied the entrepreneurial drivers of 21 Indian migrants (mostly skilled) in various New Zealand cities.

Both these studies found that pull factors, such as the desire for independence, financial goals, and opportunity recognition were more prominent than push drivers among their research participants. Only a few participants in these studies identified with push factors. Among the push factors identified, job dissatisfaction was the most common.

In comparison, the most common entrepreneurial drivers experienced by participants in this research were opportunity recognition, passion, and the desire for independence. Some participants also identified financial goals, self-actualisation, and family considerations. These drivers are detailed below and compared to findings from other academic studies, economic reports and publications to address research question 2.

External pull factor – Opportunity

Bratu, Cornescu, & Druica (2009) suggest that government policies in developed countries are more supportive of opportunity entrepreneurship than policies in developing countries, as their focus is on innovation and technology commercialisation projects. A recent GEM (2018) survey of fifty-four world economies, covering 67.8% of the world's population and 86% of the world's GDP, most entrepreneurs start businesses out of opportunity, not necessity.

In this study, opportunity was the most common entrepreneurial driver, cited by 6 out of 10 participants. All participants were driven by the opportunity to cater to a market gap. Out of the 10 participants, 2 were also driven by the opportunity to use their skills and another 2 (in the ICT sector) acknowledged their additional motivation as the opportunity to innovate. This finding is similar to other New Zealand-based empirical studies on skilled Indian migrants, such as the studies of de Vries (2007) and (Paulose, 2011), which identify opportunity recognition as a key entrepreneurial driver arising from the external environment.

This is evident from New Zealand's regulatory environment, which offers a favourable environment for entrepreneurship, as reflected in its top (number 1) global ranking in the ease of starting and doing business in New Zealand (World Bank, 2018). Another

reflection of the entrepreneurial culture in New Zealand is its business demographics. In total, 97 percent of all businesses in New Zealand are small and medium enterprises, which equates with entrepreneurial activity in New Zealand (Hawthorne, 2011; Nash, 2018).

Internal pull factor – Passion

The literature identifies passion as a central component of entrepreneurial motivation (Schumpeter, 1951; Bird, 1988; Smilor, 1997; Cardon et al., 2009). Simply put, passion is the love for ones' work, products, services and/or the outcome and impact of these on the society.

Half the participants in this study named passion as their primary driver towards entrepreneurship, citing the love for their work and the resulting products and service.

Passion has been acknowledged as a key driver by many successful native and migrant entrepreneurs in New Zealand. For instance, Phillip Mills, a pioneer in the international fitness industry who created the unique Les Mills brand of exercise-to-music systems followed his passion for health and fitness (Noted, 2012; Pure Advantage, 2012). Ranjana Patel, the owner of well-known and award-winning East Tamaki Healthcare Group of companies, married her business interests with her passion for the community and social issues (Office of Ethnic Communities, 2016). First-generation skilled Indian migrant, Anil Thapliyal, the owner of Health TRX Global, a specialised consulting organisation for e-mental health and addictions across public health ministries and boards in Australia, Canada, Hong Kong, New Zealand, the UK, and the US, followed his passion for the use of digital technologies to improve access to care in mental health (Health TRX, n.d.-a; n.d.-b).

Interestingly, this driver does not appear to have been identified in other studies on Indian migrants in New Zealand, such as in the studies of de Vries (2007) and Paulose (2011). This can be attributed to the fact that participants in de Vries' study belonged to different skill cells and participants in both studies included individuals that were employed in unskilled jobs before starting their business.

Internal pull factor – Desire for independence

Desire for independence refers to an individual's preference for autonomy and greater control (Borooah et al., 1997; Alstete, 2003; Cassar, 2007).

In this study, desire for independence was cited as a secondary entrepreneurial driver by 5 out of 10 participants.

Prior research in New Zealand has identified the desire for independence as a key entrepreneurial driver of most migrants, including skilled and unskilled Indian migrants (de Vries, 2007; Pio, 2014). For instance, in his study on the entrepreneurial behaviours of Indian migrants in different host countries, de Vries (2012) identified that Indian migrant entrepreneurs in New Zealand have a strong desire for independence. Similarly, Pio's (2014) study on Indian migrant business owners in Christchurch identified that the desire for independence was a key entrepreneurial motivation for these migrants.

In fact, this driver appears to be a common factor among Indian migrants in different host countries (de Vries, 2007) as well as among migrants in New Zealand, as identified by other studies, such as those of North and Trlin (2004), Kirkwood (2009), Paulose (2011), and Pio (2014).

Internal pull factors – Entrepreneurial traits

From a traits perspective, the most common characteristics of participants in this thesis were risk tolerance and the need for achievement. In total, 7 out of 10 participants identified having a high tolerance for risk and uncertainty and 5 participants identified being driven by the need for achievement. Participants exhibited these traits with examples from their entrepreneurial journey, where they took risks and adapted to change and uncertainty. Verbatim examples exhibiting these behaviours have been quoted in Chapter 6 (page 87) and Appendix J (page 226).

There appear to be no studies specific to the entrepreneurial traits of skilled migrants in New Zealand. However, the general literature identifies risk-tolerance and need for achievement among the key traits of immigrant entrepreneurs in New Zealand. For instance, de Vries (2007) identified the entrepreneurial traits of internal locus of control, a strong need for achievement, and risk-taking¹² as the key traits of immigrant entrepreneurs in his study.

¹² Risk-taking was identified as an implied aspect in immigrant's actions rather being directly identified by immigrants in their interview responses during the research.

Internal pull factor – Self-actualisation

Realizing one's potential (Čížek, 2012) pursuing one's life purpose, making an impact on the world (Martell, n.d.) philanthropy, innovation, and creativity (Castillo, n.d.) are all forms of self-actualisation.

Self-actualisation resulting from the pursuit of one's purpose and personal satisfaction was identified as an entrepreneurial driver by 4 participants in this research. These 4 participants also cited passion, personal satisfaction and the desire for independence in relation to the entrepreneurial driver of self-actualisation.

Prior New Zealand research on skilled Indian migrants does not appear to identify this as a key entrepreneurial driver, except for de Vries (2007), who identified self-actualisation as a prominent entrepreneurial driver for immigrant entrepreneurs in his study, with a strong reference to the desire for independence and quality of life.

Internal pull factor – Financial goals

According to Poot (1993), immigrants in New Zealand value quality of life more than monetary gain. Poot's view is seconded by the findings of de Vries' (2007) study on Dutch, Chinese, Indian and Pacific immigrant entrepreneurs. His study found that although financial security was a significant entrepreneurial driver among immigrants, personal wealth beyond financial security was not an entrepreneurial driver.

The findings of this study resonate with the above views, where most of the participants did not identify money as an entrepreneurial driver beyond economic survival.

Only 2 participants identified the motivation to generate higher income and build an inheritance as their key drivers to pursue entrepreneurship. A further 2 other participants acknowledged that they had identified the possibility of higher earnings if they started their own business; however, their key motivation was to work to their highest potential and earn a commensurate income.

The remaining 6 participants identified being driven by non-monetary goals, such as passion, and highlighted the fact that money was not their driver.

Internal push factor – Family considerations

Fletcher (1999) identified that for New Zealand to attract, retain and gain maximum advantage from immigrant entrepreneurs, successful settlement outcomes for their families play an important role. This finding is seconded by the findings of a recent study by Tausi (2015) which identified that family support is associated with the retention of skilled migrants in New Zealand.

While all 10 participants in this study identified the importance and support of family in their entrepreneurial decision, only 3 participants cited it as their key entrepreneurial driver. In total, 2 of the participants were motivated by the need for work-life balance and only 1 had the aim of building an inheritance for his children.

Yet, as discussed in the demographic findings section above, 9 out of 10 participants had dependent family in New Zealand, and 8 of them identified that the needs and wellbeing of their family was the prime focus, before considering other economic opportunities.

This finding resonates with other studies in New Zealand, such as those of de Vries (2007), Hunter (2007) and North and Trlin (2007), which found a strong family focus and family involvement in business across immigrant groups.

The findings of this study also coincide with those of Poot (1993), who suggests that the motives of immigrants in New Zealand are driven by the perceived benefits for their children rather than for themselves; however, business succession is not expected from children. This is reflected by the fact that all participants in this study were cognisant of looking after the needs and wellbeing of their children and partners. In reference to business succession, only 1 participant identified the need to build an inheritance for his children as one of his entrepreneurial drivers.

All other participants identified that their businesses were the result of their personal needs and goals, and their children were not expected to carry the business forward.

Overall, in light of the primary findings of this study and the review of the relevant theoretical literature and empirical studies, the above discussion in sub-question 1.2 suggests that skilled Indian migrants in skilled employment in New Zealand are likely to be pulled into entrepreneurship, by opportunity rather than necessity (Gilad & Levine, 1986).

Inference

An overview of figure 10 below easily identifies that skilled Indian migrant entrepreneurs in this study were driven by both push and pull factors; however, pull drivers were more prominent than push factors. Specifically, internal pull factors were the most likely drivers, followed by external pull factors and internal push factors. External push factors did not impact skilled migrants in this study, who had other avenues for professional employment (Clark & Drinkwater, 2010) but chose not to pursue them. In reference to these findings, it is important to note that nearly all participants in this study were reasonably if not well-integrated in the New Zealand society before starting their business (as identified earlier in section 6.2 - Case profiles on page 87).

External push factors		Internal push factors	✓
Labour market experience		Job dissatisfaction	✓
- Lack of alternative opportunity		Family considerations	✓
- Redundancy		Financial constraints	
- Lack of resources			
DEMOGRAPHICS			
External pull factors	✓	Internal pull factors	✓
Opportunity	✓	Financial goals	✓
- Market Opportunity	✓	Desire for independence	✓
- Innovation	✓	Passion	✓
- Favourable regulations	✓	Self-actualisation	✓
- Resources/ Assets		Entrepreneurial traits	✓
		- Need for achievement	✓
		- Risk-tolerance	✓
		- Drive	

Figure 10 - Entrepreneurial Drivers of SIMs in New Zealand

The literature suggests that individuals who are attracted to entrepreneurship by choice, such as the identification of a business opportunity are known as opportunity entrepreneurs, whereas, individuals who are forced into entrepreneurship by necessities like labour market disadvantages, lack of resources, and family constraints are known as necessity entrepreneurs (Reynolds, Camp, Bygrave, & Hay, 2001; Hechavarria & Reynolds, 2009; Dawson & Henley, 2012; Rasel, 2014).

As the skilled Indian migrants in this study were mostly motivated by pull factors, this research identifies them as opportunity entrepreneurs. These findings are in line with the academic literature, which suggests that migrants with higher human and social capital are better integrated¹³ in the host economy and are more likely to pursue entrepreneurship by choice than poorly integrated migrants (Rasel, 2014). Rasel (2014) suggests that the difference between highly-integrated and poorly-integrated immigrants can be broadly distinguished by three factors – professional employment experience, local language fluency, and period of residence in the host country, where poorly-integrated migrants lack any or all of these characteristics.

Therefore, in addressing research questions 1.1 (What motivates skilled Indian migrants to leave paid employment?) and 1.2 (What motivates skilled Indian migrants in skilled employment to start a business?), the above discussion suggests that skilled Indian migrants in New Zealand are likely to be opportunity entrepreneurs, that is, individuals who are pulled into entrepreneurship by choice rather than necessity.

7.2.3 Entrepreneurial barriers and challenges

Entrepreneurial barriers and challenges are factors that prevent or hinder a person from starting a business (Bates, 1995; Lien et al., 2002; Schindehutte et al., 2009; Jokela et al., 2013). As identified in the entrepreneurial barriers framework in Chapter 2 (page 8), these barriers and challenges can arise from a lack of resources, such as capital and skilled staff, cognitive barriers, such as the lack of business or industry knowledge, or be imposed by the regulations and norms of the external environment.

This section compares the barriers and challenges to participants who took part in this study with previous studies in light of research question 2 and the entrepreneurial barriers framework. The section concludes with the inference from this discussion.

Research question 2 - What barriers and challenges do skilled Indian migrants face in their move to entrepreneurship in New Zealand?

The international literature suggests that skilled migrants are better equipped to face and resolve entrepreneurial challenges and barriers than are migrants in other skill cells

¹³ Refer to Appendix K - Glossary for the meaning of migrant integration.

because of their higher levels of human and social capital (Head & Ries, 1998; Weng & Chanwong, 2016). However, it is difficult to ascertain this claim in non-uniform focus populations, because there are several factors at play, such as different industries, regions and host countries. For instance, participants in this study highlighted the difficulty in obtaining bank loans in New Zealand due to unfavourable and strict lending policies, in comparison to countries like India and the US.

In this study, most participants faced some form of resource, regulatory, normative, and cognitive barriers and challenges in the process of starting their business. Within these, the lack of finance/capital, skilled staff, and business knowledge were the most commonly cited barriers and challenges faced by research participants.

The following section presents a detailed discussion on each of the entrepreneurial barriers and challenges faced by skilled migrants in this study in comparison to findings from other empirical studies and theoretical literature.

Resource barriers

Resources like financial capital and skilled staff are the most basic and vital resources in a firm both during the gestation and growth phases of business (Bhidé, 2000; Giacomini et al., 2011; Iakovleva et al., 2014; Staniewski & Awruk, 2015). Finance is essential for start-up and survival activities, such as compliance costs, marketing, hiring staff and purchasing raw material. Staff are necessary for managing other resources and for the efficient production of goods and services. Eventually, resources like trademarks, patents, and goodwill add to the value of a business and increase its long-term growth prospects in the face of competition and continuously improving technology (Lev, 2001; Andriessen, 2004).

In total, 6 out of 10 participants in this study faced difficulty in arranging capital and hiring skilled staff. Specifically, participants highlighted the difficulty in obtaining bank loans due to strict and unfavourable lending policies, and the inability and challenges in attracting and retaining skilled staff. The inability to find suitable staff was attributed to several reasons, including the lack of skilled staff in the domestic market, lengthy immigration procedures due to Immigration NZ's lack of business specific knowledge (such as the difference between South-Indian and North-Indian chefs), and the inability to afford and retain good skilled staff in the face of competition from global giants.

These barriers continue to be identified by several official and economic reports and studies in New Zealand. For instance, in his New Zealand- based study on migrant entrepreneurs, de Vries (2007) identified the lack of capital and financial pressures as the major entrepreneurial challenges for Indian migrants. Similarly, a study by IRD identified insufficient capital as a key challenge for migrant businesses in New Zealand. The international literature also acknowledges the barriers posed by a lack of financial capital and difficulty in obtaining banking finance for migrant businesses (Apitzsch, 2003; Smallbone, Deakins, & Ram, 2003).

In reference to staffing challenges, recent research by the New Zealand Institute of Economic Research (NZIER, 2017), found that 46 percent of New Zealand businesses across all industries struggle to find skilled workers in the domestic labour market (MBIE, 2017d). Similarly, ANZ's quarterly business microscope survey reported severe skill shortages across several sectors in small businesses (ANZ, 2018a, 2018b).

Several industry reports and news articles have also hinted at immigration policy in reference to the staffing challenges of small businesses. For instance, a recent news article reported that a fast food outlet in Wanganui had to close its restaurant due to the lack of staff to cover shifts (Harris, 2017).

Similarly, retail businesses have also reported their struggle to find staff for both supervisory and entry-level roles, as reflected in a 30 percent rise in retail and hospitality jobs advertised on the Trade Me website between 2016 and 2017 (Harris, 2017; Cropp, 2018). However, this shortage can be partly attributed to the perception of poor pay and long work hours in these industries. Without any action, the hospitality sector estimates its skill shortages will reach 40 percent by 2025 (Guy, 2017).

Regulatory barriers

New Zealand seems to rank low on regulatory barriers at a macro level, given its top global rankings in the ease of starting and doing business (World Bank, 2018), high scores on the international benchmarks for the quality of the business environment (Schwab & Sala-i-Martin, 2018) and little evidence of barriers to entry for new firms in New Zealand markets (Reynolds et al., 2004; 2005; Mok et al., 2012).

In total, 4 out of 10 participants in this study faced regulatory barriers, mostly in relation to compliance costs, competition, and immigration policy. For instance, participants 2, 9, and 10 pointed out the challenges posed by high compliance costs in New Zealand, while participants 8 and 9 highlighted their struggles in finding local skilled staff and the long immigration process involved in getting skilled staff from overseas. Further, participant 9 highlighted how several businesses opening up in close proximity create more competition.

Prior research has already identified these factors as challenges for start-up businesses in New Zealand. For instance, in their study of immigrant businesses, North and Trlin (2004) identified that compliance costs are a key challenge faced by New Zealand entrepreneurs. In reference to competition, new and small businesses always feel that their survival is challenged in the face of established businesses and general competition. In New Zealand, the level of market competition is partially reflected by the fact that small and medium businesses, which are equated to business ownership in New Zealand, make up 97 percent of the total businesses in New Zealand (MBIE, 2017a).

Normative and cognitive barriers

Normative barriers usually arise from different cultural norms between a migrant's home and host country, such as religion, habitation, skills, and values (Strier & Abdeen, 2009; Azmat, 2013; Weng & Chanwong, 2016). In comparison, cognitive conditioning of a migrant is generally influenced by their skills and knowledge through education and training (Iakovleva et al., 2014).

Normative and cognitive factors are usually seen as points of difference that create integration and acceptance challenges for migrants. However, some prior research on skilled migrants suggests that they are likely to take advantage of their traditional culture and skills to their benefit, such as creating professional networks, facilitating information exchange, and reducing transaction costs (Basu & Goswami, 1999; Saxenian, 2002; Weng & Chanwong, 2016).

Half the participants in this study faced normative barriers, such as low change acceptance from the society and customers, sector-specific norms, cultural barriers, and lack of information exchange. Participants who did not experience normative barriers

faced cognitive barriers and one participant faced both cognitive and normative barriers. The key cognitive barriers faced by participants in this study were a lack of business and industry knowledge and unrealistic expectations of customers. For instance, participant 8 highlighted the fact that his business faced a cultural barrier in being denied a supply of a certain alcohol brand because his business was stereotyped as “just another Indian restaurant”, despite providing semi-fine dining and South-Indian speciality cuisine. This also resulted from the cognitive barriers of Immigration NZ and the aforementioned supplier, who lacked knowledge on the difference between North-Indian and South-Indian food and failed to identify the fact that P8’s business was a semi fine-dining restaurant, not just a takeaway or regular restaurant. Similarly, participant 6 identified that New Zealand consumers have unrealistic expectations of the quality and functionality of products for a below-par price, which makes it difficult to get business from them and affects business growth.

Prior research on migrant businesses in New Zealand has also identified normative and cognitive barriers. For instance, IRD conducted a study on the barriers faced by migrant business in New Zealand. The study surveyed 400 migrant business owners from Britain, Australia, China, and India (Cleland & Davey, 2014) and identified six challenges for Asian migrants, namely, insufficient capital, cultural differences in business practices, unfamiliarity with regulatory requirements, lack of business networks and English proficiency, unemployment, and underemployment.

Other studies in New Zealand have also identified normative factors such as culture (de Vries, 2012; NBR Contributor, 2017) and cognitive factors such as language and education (NZ Herald, 2012) as the barriers to migrant entrepreneurship in New Zealand.

Language and education did not present barriers for migrant in this study, given they all had relevant qualifications and/or work experience and English language ability which facilitated their integration in the New Zealand society. In reference to normative barriers, culture was a barrier for some participants who were focusing on the native market. For instance, participant 8 highlighted the cultural barrier in being denied the supply of a certain alcohol brand because his business was stereotyped as “*just another Indian restaurant*”, whereas, participant 4 acknowledged the use of European distribution channels to market services in the South Island, because according to P4, in the transport

industry, Kiwi truck drivers in their mid-50s, would not buy from his business – *“white European New Zealanders wouldn’t buy from an Indian.”*

Other barriers

Out of the 10 participants in this research, only 2 identified the psychological challenge posed by lack of emotional support and family availability, and its physical manifestations, which was not identified in the initial review of the literature. For instance, P3 came to New Zealand as a student and highlighted the lack of emotional support and trustworthy input in business matters as a result of the physical absence of family and friends, which resulted in several stressful responsibilities. In comparison, P9, who was well integrated in New Zealand at the time of opening his business, also identified with the lack of family availability to assist with household duties and child-rearing responsibilities, while working with acute staff shortages resulting in long hours at work.

A closer analysis identifies that this barrier relates closely to both cultural differences and regulatory factors in New Zealand. Culturally, this factor can be explained by the difference in India being a collectivist society and New Zealand being an individualistic society (Hofstede, n.d.). Individuals born and raised in collectivist societies are integrated into strong and cohesive groups, including immediate and extended families, whereas, individuals in individualistic societies tend to look after themselves and their immediate family only (Hofstede, 2011; n.d.). This difference in upbringing and way of life is likely to create the expectation and need for family support amongst Indian migrants because migrant groups tend to carry and practice their values and beliefs long after they have moved out of the home country (de Vries, 2007).

Inference

In reference to research question 2, Figure 11 below summarises the entrepreneurial barriers and challenges faced by skilled Indian migrants in New Zealand, as identified from the above discussion.

An overview of this diagram easily identifies that skilled Indian migrant entrepreneurs in this study faced all forms of barriers – resourcing, regulations, norms, and cognition. Specifically, lack of capital and skilled staff, compliance costs, immigration policy,

competition, sector-specific norms, and lack of business/industry knowledge were the most commonly cited challenges for skilled migrants in this study.

Prior research on Indian migrants in New Zealand has identified similar barriers and challenges to entrepreneurship (de Vries, 2012; Cleland & Davey, 2014; NBR Contributor, 2017).

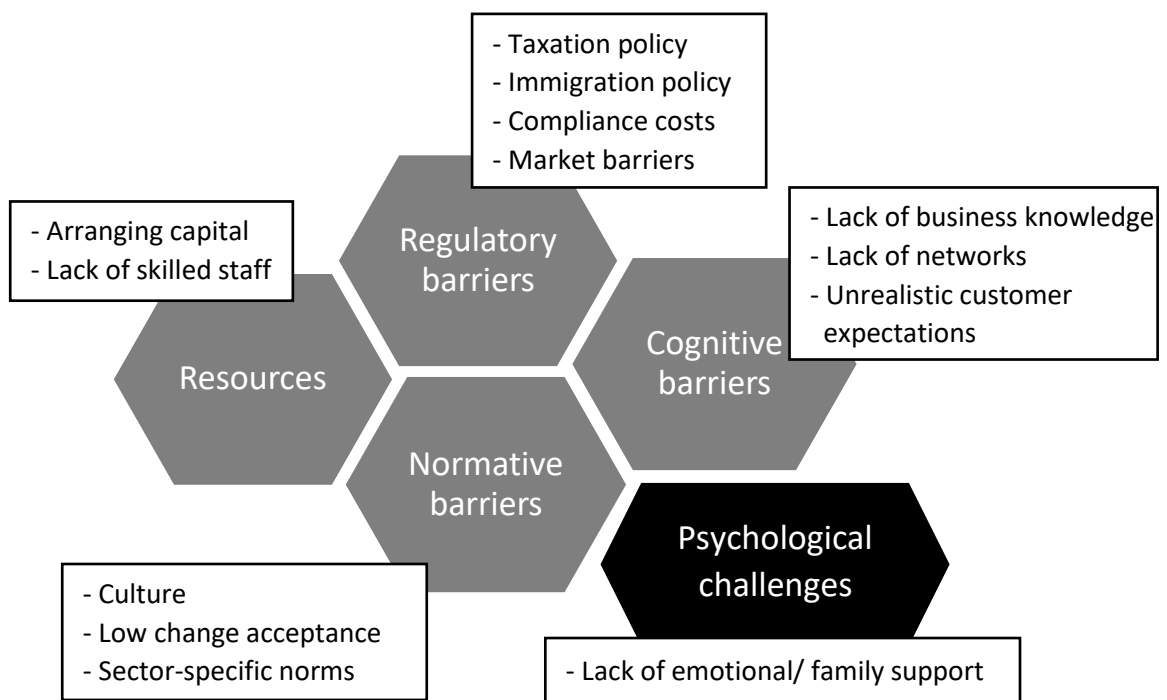


Figure 11 - Entrepreneurial barriers and challenges to SIMs in New Zealand

7.2.4 Contribution channels

Entrepreneurial contributions broadly refer to the impacts of immigration on the host economy and contribution channels refer to the ways in which migrants contribute to their host economy. Examples of these contribution channels include filling labour market shortages, facilitation of international trade and investment between the home and host countries, increased innovation and productivity, increased production and consumption functions, and knowledge diffusion.

The literature identifies that migrants can contribute to their host country in various roles; however, the key contributions occur in their roles of paid employees and entrepreneurs (Enderwick et al., 2011; Nathan, 2014).

This section presents a discussion of the contribution channels of skilled Indian migrants in this study in comparison to the theoretical literature and other empirical studies on skilled migrants. The discussion is conducted in light of research question 3 and the contribution channels framework presented in Chapter 3 (page 32). The section concludes with an inference from the findings and discussion.

Research question 3 - *How do skilled Indian migrant entrepreneurs contribute to the New Zealand economy?*

The international literature identifies skilled migrants as important players in economic growth, given their better human capital, business networks, and the ability to remodel opportunity structures (Barakat & Parhizgar, 2013). For instance, Silicon Valley is the most acknowledged example of how Indian skilled migrant entrepreneurs contributed to the success of the US economy through innovation (Saxenian, 2005). Other contribution channels of skilled migrants acknowledged in the international literature include higher tax and social contributions than benefits received (Beladi & Kar, 2015; Windsor, 2015), and the creation of businesses in a wide range of industries (OECD, 2010, 2014).

While there is plenty to be learnt from the international literature, New Zealand's unique features, such as its history, changing source countries of migrants, and the volatility of migration flows, suggest that research findings from overseas may not be readily transferable to the New Zealand context (Poot & Cochrane, 2004). To this aspect, Enderwick et al. (2011)'s labour arbitrage framework presents a means for studying the impacts of migration on host economies. This conceptual framework suggests that skilled migrants make several contributions to their host economy in the role of employees and entrepreneurs, such as filling labour market shortages, increased innovation and productivity, and facilitation of bilateral trade, investment and human capital sourcing.

Similarly, Nathan (2014) acknowledged the underdeveloped literature on the wider impacts of skilled migration and presented the impact channels theory for studying the channels through which skilled migration impacts host economies. This theory was derived from a review of 78 international studies on the economic impacts of high-skilled migration on the host country. This theory identifies innovation, trade, production and consumption functions, and entrepreneurship as the key channels through which skilled migrants contribute to their host economy.

Participants in this study identified with the use of several impact channels to contribute to the New Zealand economy. As employees, the most common contribution channels were filling labour market skill shortages and increased productivity, whereas, as entrepreneurs, the key contribution channels of the research participants were job creation, increased international business, investment, and competition.

A key reminder in reference to research question 3 (as already indicated in Chapter 3) is that this study focuses on the 'how' rather than the 'what' of the contributions of skilled Indian migrants. This is an important point because the 'how' and 'what' questions measure two very different aspects of contributions and being an exploratory qualitative study, this research is not suited to the measurement of contributions of skilled migrants. However, in favour of achieving triangulation, the Companies Office business register and publicly available annual statements of participant businesses were reviewed in this study to ensure the trustworthiness of primary data (all of which was confirmed correct).

Another key point (from Chapter 3) to re-emphasise here is that while the focus of this study is on the contributions of skilled migrant entrepreneurs, this section also discusses the impact channels of skilled migrant employees. This is because these channels serve as a comparison parameter without which the solo study of skilled migrant entrepreneurs cannot provide any context to their contribution channels. Secondly, the comparison of contribution channels of the same participants in the role of employees versus entrepreneurs is indirectly linked to their entrepreneurial drivers and barriers. For instance, participants who identified with the entrepreneurial driver of desire for independence also identified with the lack of experimentation and decision-making opportunities at work, as identified in section 7.3.1 on page 151.

Therefore, the following sub-questions address research question 3 at length. Sub-question 3.1 focuses on the contribution channels of skilled Indian migrants in the role of employees and sub-question 3.2 focuses on their contribution channels as entrepreneurs.

3.1 How do skilled Indian migrant employees contribute to the New Zealand economy?

The literature identifies several channels of contribution to the host economy for skilled migrant workers. The most basic contribution channel is filling skill gaps in the host country by taking up employment in short skilled sectors (Enderwick et al., 2011). Other

contribution channels include increased innovation, productivity, and international business at their workplace. These contribution channels are discussed in detail below.

Filling labour market shortages

New Zealand faces skill shortages from dropping birth-rates, rising retirement-rates (Hope, 2016; NZAMI, 2016), and brain-drain to larger economies like Australia, the UK and the US (World Bank, 2012; Groysberg & Bell, 2013). Despite some return-migration in recent years (Stats NZ, 2016; Radio NZ, 2017), the critical challenges of demographic ageing, occupational skill shortages, and increasing dependency ratios are adversely impacting New Zealand's economic growth (Enderwick et al., 2011). Therefore, New Zealand has been sourcing skilled labour from several countries including China, India, the Philippines and the UK to fill its labour market gaps for over two decades (MBIE, 2018).

In this research, 7 participants came to New Zealand on a skilled job offer. Only 1 found skilled employment after arriving in New Zealand as a permanent resident and 1 found skilled employment immediately after finishing study in New Zealand. All the participants highlighted that their skills from relevant education and work experience and ability to fill short skilled occupations in New Zealand were the key assessment criteria of Immigration New Zealand for granting them permanent residence.

These findings are in line with the New Zealand literature on the contributions of skilled migrants. According to the Migration Trends and Outlook 2016/17 report by the MBIE (2018), 95 percent of principal skilled migrants under the skilled migrant category had a skilled job or job offer at the time of application for residence under the skilled migrant category. This reflects that most of the skilled migrants who apply for permanent residence are capable of filling labour market gaps in New Zealand.

Increased innovation and productivity

The international literature suggests that migrants add to workforce diversity and knowledge diffusion at their workplace, which can contribute to innovation and productivity in their employer's firm (Dolado et al., 1994; Page, 2007; Berliant & Fujita, 2009). Nathan (2014) identifies innovation as a key impact channel of skilled migrants for the host economies.

In this study, 3 out of 10 participants identified with facilitating or increasing innovation and productivity at their workplace. Most other migrants suggested that their role did not necessitate or allow the freedom to experiment and innovate. Hence as an employee, most participants did not use the innovation channel to contribute to the New Zealand economy.

Previous New Zealand-based studies on the impact of skilled migrant employees on innovation indicate mixed findings. For instance, a study by Kerr, Kerr and Lincoln (2014) found a 10 percent increase in skilled migrant employment by was linked to a two percent increase in firm patenting. Another study by Maré, Fabling and Stillman (2014) on the link between immigration and innovation in New Zealand found a relationship between the migrant share of an area and firm-level innovation, when controls like firm age, research and development, investment, and regional employment levels were not used. However, these studies used different assumptions and focus sample sizes, which does not offer a fair comparison to studies with different focus populations and assumptions, as is the case in this thesis where the focus is on skilled migrants from India. Hence, this discussion highlights the need for more research on the link between skilled migrant labour and innovation in the host economy.

Other contributions

The literature suggests that migrant employees can assist in choosing apt market entry modes and strategies for tackling business environmental barriers between the home and host economies of migrant employees (Chung & Enderwick, 2001).

Only 1 participant in this study contributed to their employer's business by helping source efficient and trustworthy skilled labour from India through his acquaintances. A further 2 participants had the opportunity to use their cultural knowledge, skills, and networks to gain business for their New Zealand employer, but the first participant's project failed after trial in India, and the second participant received an international franchise offer from their employer; however, the offer was rejected by the participant, because her employer was unwilling to adapt his business and pricing model to the Indian market.

On a social front, 2 participants contributed to the community in their role as employees by supporting other small businesses and community organisations. All other participants

identified the lack of choice and power to make these decisions in their role as employees.

The next sub-section discusses how skilled Indian migrant entrepreneurs contribute to the New Zealand economy.

3.2 How do skilled Indian migrant entrepreneurs contribute to the New Zealand economy?

Other than the pre-requisite of employment generation, most participants in this thesis identified that they contributed to the New Zealand economy by facilitating or increasing international business and investment, innovation and productivity, consumption and consumer options, and by making social contributions. All of these contribution channels are discussed below.

Job creation

The literature suggests that entrepreneurship is generally considered as “doing good” in the New Zealand society because it encourages the economic and social well-being of people through job creation and innovation (de Vries, 2007).

All the participants in this research identified employment creation as their key channel of contribution to the New Zealand economy. Although this is expected given that the scope of this research is limited to business owners who employ other people, other New Zealand – based studies and reports also identify this impact channel. For instance, the Small Business Report by the MBIE shows that around a third of New Zealand businesses are small and medium enterprises with employees (MBIE, 2016a, 2017a).

Increased international business and investment

Migrant diasporas and their cross-country networks can present valuable insights on trade opportunities between their home and host countries (Chung & Enderwick, 2001; Enderwick et al., 2011). Migrants can also facilitate investments by signalling the performance, quality, reliability, and work attitudes of investors in their host and home countries (Enderwick et al., 2011).

In total, 5 out of 10 participants in this study identified international business and investment as a channel of their economic contributions to New Zealand. Of these 5, 2 participants identified with facilitating international business with India and the US and 2

identified with facilitating both inward and outward investments to New Zealand as entrepreneurs.

Previous research in New Zealand has found positive correlations between migration and bilateral trade (Head & Ries 1998; Girma & Yu 2000; Poot & Cochrane, 2004).

Increased innovation and productivity

Prior research has identified that skilled migrants bring new ways of thinking, high work ethics, and sector expertise which contribute to increased innovation and productivity in their host economy (Dolado et al., 1994; Page, 2007; Berliant & Fujita, 2009). These benefits can manifest in any role of the skilled migrant, including the role of an entrepreneur.

Innovation was a popular contribution channel identified by most participants in this research, mainly through the creation of new products, services, and markets. This was more obvious and measurable for participants in the ICT sector, who had patented and trademarked their products and services. However, participants from the hospitality sector also identified their new services and selling concepts, which were mainly adapted from the formats in their home country, India. This adaptation helped the participants' business, by creating nostalgia in ethnic customers and by providing new concepts for natives.

Many participants in the ICT sector also highly appreciated the financial support and guidance from local government-funded organisations and private industry associations for activities like research and development, foreign market entry, and domestic market penetration. Callaghan Innovation was the most commonly cited organisation, followed by New Zealand Trade and Enterprise (NZTE) and the Central Economic Development Board (CEDA).

Increased consumption and consumer options

Skilled migrants can impact the consumption function in their host economy by affecting local prices, product/service mix, and public service usage (Nathan, 2014). They also encourage competition and innovation by starting their own business in the host economy (Aghion et al., 2012).

The majority of the participants in this study felt that they added to the consumption and consumer options in their business sector or geographic region, while 1 participant regarded their ICT business as a pioneer in New Zealand.

Social contributions

The literature suggests that skilled migrant entrepreneurs are capable of helping others in the community and utilising their local networks to increase their settlement and success rates in the host economy (Saxenian, 2002; Weng & Chanwong, 2016). They are also likely to have easier access to bank loans (Bates, 1995) and may be capable of financing and mentoring younger entrepreneurs at a later stage (Saxenian, 2002).

In total, 4 out of 10 participants explicitly acknowledged an increase in their social contributions in the role of entrepreneurs in comparison to their role as employees. These contributions were made through several channels, such as supporting charities and scholarships, serving as business mentors to students in various schools and universities, and knowledge sharing and educating ethnic and socially disadvantaged populations.

This finding is in line with the Indian value of charity and social contributions as a path to self-actualisation through a purposeful and meaningful life (Dana, 2010). The New Zealand society also perceives entrepreneurship as “doing good” in the society and hence businesses are expected to do more than sheer profit making (de Vries, 2007).

Inference

Table 26 below summarises the contributions of skilled Indian migrants in the role of employees and entrepreneurs in New Zealand, as identified from the above discussion.

An overview of the table easily identifies that skilled Indian migrant entrepreneurs in this study contributed to the New Zealand economy through various channels. It also highlights the higher number of contribution channels used by participants in their role as entrepreneurs versus employees.

Most participants attributed this difference to the freedom in decision-making and creative experimentation in their own business, because as employees, they were restricted by the structure of their role.

Table 26 - Contributions of SIM employees versus entrepreneurs

As employees (individual level contributors)	As entrepreneurs (firm-level contributors)
Fill labour market shortages	Job creation
	Increase consumption and consumer options
	Innovation and knowledge diffusion
Increase consumption and consumer options	
Increase and facilitate bilateral trade, investment and outsourcing	
Increase production and consumption functions	
Social contributions	

Overall, in reference to research question 3, this study identified that skilled Indian migrants contribute to the New Zealand economy through various contribution channels, including innovation, bilateral trade and investment, increased production and consumption functions, and social contributions. Out of the ten participants, eight identified that they used more contribution channels and made higher economic contributions as entrepreneurs than as employees.

7.3 Implications for key theories and frameworks

The above findings have several implications for the application of key theories and frameworks identified in Chapters 2 and 3 in the context of skilled migrants. This section discusses the relevance of the following theories to the study of skilled migrant entrepreneurs in their host economies; entrepreneurial motivation theories, namely push and pull factors and entrepreneurial traits theories; entrepreneurial barriers theories, namely resource-based and institutional barriers theories; and contribution channels theories, namely, labour market arbitrage and immigration impacts channels theories.

7.3.1 Entrepreneurial motivation theories

Push and pull factors theory

The push and pull factors theory suggests that positive and negative motivations from the internal and external environment, such as business opportunity, favourable regulations, financial goals, family considerations, and job dissatisfaction, drive an individual towards entrepreneurship (Gilad & Levine, 1986; Basu & Goswami, 1999; Cassar, 2007; Kirkwood, 2009).

All entrepreneurial drivers identified by skilled migrants in this study, such as opportunity

recognition, passion, desire for independence, self-actualisation, financial goals, and job dissatisfaction were identified by the push and pull factors theory. Further, the classification of drivers into push and pull factors enabled the identification that most participants in this study were opportunity entrepreneurs as they were pulled into entrepreneurship by choice, rather than necessity (Gilad & Levine, 1986).

Entrepreneurial traits theory

The entrepreneurial traits theory suggests that individual traits like risk tolerance, ambition, drive, and perseverance determine the likelihood of an individual's attraction and ability to undertake entrepreneurship (Shane, 2003; Moyer, 2016).

Most personality traits suggested by the traits theory, such as risk-tolerance and the need for achievement were identified by skilled Indian migrants in this study. Participants also acknowledged that these traits kept them going in the face of several entrepreneurial challenges and barriers.

Entrepreneurial activity framework

While the push and pull factors theory accounts for internal and external motivations, it ignores the inherent motivations resulting from the personal traits of an individual. Similarly, the traits theory focuses on personality traits of entrepreneurs but ignores other external and internal environmental factors. However, together, both these theories complement each other in presenting a complete picture of entrepreneurial drivers of individuals, as reflected in Dawson and Henley's (2012) entrepreneurial activity framework. However, this framework was originally created to study gender-specific differences and therefore ignores other demographic factors.

Entrepreneurial activity framework

The drawbacks of all the aforementioned theories and frameworks are overcome in this thesis by using the entrepreneurial drivers framework, which was derived after a review of all the aforementioned theories and other relevant literature. It accounts for both push and pull factors, internal and external motivations, and demographic factors as identified in the above theories and wider literature to present a simplified framework, which encompasses all the factors identified in the study. This framework is recommended for future studies on migrants from all skill cells.

7.3.2 Entrepreneurial barriers theories

Resource-based theory

The resource-based theory suggests that internal resources are a key determinant of the survival and success of any business (Bhidé, 2000). Examples of these resources include financial capital, business knowledge, and skilled staff. Most participants in this study faced some resource barriers, mainly relating to financial capital and the attraction and retention of skilled staff.

Institutional theory

Institutional theory suggests that institutional factors from the external environment, such as regulatory, normative, and cognitive structures, impact entrepreneurial activity in the host economy. Most participants in this study experienced all types of entrepreneurial challenges identified in institutional theory. This included regulatory challenges from taxation and immigration policy, normative barriers resulting from cultural differences and industry-specific norms, and cognitive barriers, such as lack of business knowledge and unrealistic expectations of customers.

Entrepreneurial barriers framework

While the resource-based theory accounts for the internal environment in detail, it ignores challenges in the external environment. Similarly, institutional theory accounts for the external environment but ignores internal resource barriers. However, together, both these theories complement each other in covering a complete spectrum of entrepreneurial challenges faced by new businesses.

7.3.3 Contributions theories and frameworks

Labour arbitrage framework

Enderwick et al. (2011) presented the conceptual framework of labour arbitrage, which suggests that skilled migrants can contribute to their host economy in several ways, both as employees and entrepreneurs, by filling labour market gaps, creating jobs, facilitating trade, investment, and innovation, and knowledge diffusion.

Impact channels theory

Nathan (2014) identified that New Zealand lacks research on skilled migrant entrepreneurs, and most of the empirical references are only available from studies in

Europe and the US, which suggest positive links between immigrants, entrepreneurial inclination, and entrepreneurial outcomes (Saxenian, 2002; Anderson & Platzer, 2006; Levie, 2007; Wadhwa et al., 2008; Guerra & Patuelli, 2011; Hart & Acs, 2011; Marino et al., 2012; Nathan & Lee, 2013). To this aspect, Nathan's impact channels theory offers a view based on the review of 78 skilled migrant studies based in the US, Europe and other countries, including Australia, Canada, and Israel.

Contribution channels framework

As identified in Chapter 2, traditional trade and labour market theories are obsolete for understanding the economic impacts and contribution channels of migrants in New Zealand. Therefore, the contribution channels framework in this thesis was derived from both the labour market arbitrage framework and impact channels theory.

This study has added value to both these theories by serving as a testing platform for their ability to identify the contribution channels of skilled migrants. This study found that both these theories are suitable to the study of contribution channels of skilled migrants.

Inference

The use of the entrepreneurial drivers framework, the entrepreneurial barriers framework, and the contribution channels framework is recommended for context-specific research on skilled migrants in the future.

This recommendation is made with the knowledge that these frameworks encompass most of the spectrum of potential entrepreneurial drivers, barriers, and contribution channels respectively. Another benefit of these frameworks is that they offer the flexibility to be customised to the research focus and parameters of similar studies in the future.

While there are several empirical studies which have used the entrepreneurial motivation and entrepreneurial barriers theories, namely, push and pull factors theory, entrepreneurial traits theory, the resource-based theory of the firm, and institutional theory, the labour arbitrage framework and impact channels theory do not appear to have been used for empirical research yet. This thesis is a step towards the empirical application of these theories to the research gap on skilled migrant entrepreneurs in New Zealand.

7.4 Summary

All participants in this study experienced multiple entrepreneurial drivers and barriers in their move from paid employment to entrepreneurship and acknowledged several contribution channels as entrepreneurs. Most participants acknowledged that the power and freedom of decision-making in their role as entrepreneurs resulted increased their ability to contribute to the New Zealand economy, compared to their ability in their role as employees.

The findings from primary data in this study were discussed in conjunction with secondary data from official statistics and publications, economic reports, and news articles. This discussion identified that the traditional theories of push and pull factors, entrepreneurial traits, resource barriers, and institutional barriers can be applied to the study of entrepreneurial drivers and barriers faced by skilled migrant entrepreneurs in New Zealand.

In comparison, the traditional economic growth models were found unsuitable for studying the economic contributions of skilled migrants. Instead, this thesis used and identified the suitability of recent conceptual theories specific to skilled migrants, namely the labour arbitrage framework and impact channels theory.

The next chapter concludes this thesis by presenting the research findings, limitations, and areas for future research.

Chapter 8 - Conclusion

8.1 Introduction

The previous chapter discussed the findings of this study in reference to the research questions and extant literature.

This chapter concludes the thesis with the key findings and contributions of the study, before presenting the research limitations and areas for future research.

8.2 Overview of the study

This study was divided into eight chapters. The aim of Chapter 1 was to set the scene of this study. New Zealand has long sought to fill skill shortages by attracting skilled migrants across a range of sectors. Indeed, sectors such as ICT, construction, hospitality, healthcare, and horticulture employ a large percentage of skilled migrants, primarily from India, China, and the Philippines (DOL, 2009; MBIE, 2018). While these migrants make significant contributions to the New Zealand economy through paid employment, they have the potential to generate even higher contributions in the role of entrepreneurs by means of job creation, innovation, and human capital sourcing (Praag & Versloot, 2007; Enderwick et al., 2011; Kritikos, 2014; Nathan, 2014). This identification served the basis of the overarching research question of this thesis:

What are the entrepreneurial drivers, challenges, and contribution channels of skilled migrants to their host economy?

In light of this research question, Chapters 2 and 3 reviewed the traditional theories and extant literature on the entrepreneurial drivers, challenges, and contribution channels of skilled migrants in the host economy. Accordingly, this thesis employed key theories and frameworks in order to theoretically inform this research.

Chapter 4 reviewed the contextual literature on New Zealand's labour needs and identified three key sectors facing skill shortages, namely, health, hospitality, and ICT. These sectors tend to attract skilled migrants from India, which has been New Zealand's top source of skilled labour since 2012 (MBIE, 2018). This is reflective of the skill sets of the working-age population in India and their ability to meet the skill needs of New Zealand employers (MFAT, 2011a). For instance, India made huge investments in its

science and technology sector in the 1950s and is now a global hub for IT services and human capital sourcing (Aggrawal, 2007).

The chapter also identified that Indian migrants have a strong preference for paid employment (Rai, 2008; Clark & Drinkwater, 2010; de Vries, 2012). Specifically, studies on skilled migrants in New Zealand by MBIE (2012a; 2015d) have found that skilled Indian migrants have very high levels of job satisfaction. Therefore, it was quite interesting and important to determine why skilled Indian migrants in New Zealand take the risk of leaving a stable income and a good job to start their own business. This question was particularly important because among others, New Zealand's health, hospitality, and ICT sectors have a high demand for skilled migrants, as the local labour market is unable to meet the existing demand.

The literature states that skilled migrant entrepreneurs have the potential to be highly valuable assets to their host country (Saxenian, 2002; Nathan, 2014). This is because they contribute to the host economy through several channels, such as job creation, innovation, and the facilitation of international business and investment (Praag & Versloot, 2007; Enderwick et al., 2011; Kritikos, 2014). This raises a question on how skilled Indian migrant entrepreneurs contribute to the New Zealand economy and the challenges faced in their entrepreneurial transition. The extant international literature lacks research on skilled migrant entrepreneurs (Nathan, 2014), including in New Zealand. Therefore, Chapter 4 concluded by identifying the key gaps in New Zealand literature in relation to skilled migrants.

Chapter 5 presented the research design of this thesis, which identified and justified the use of a multiple embedded case study methodology (Yin, 2014). The sampling, data collection, and analysis techniques used in this thesis were discussed and justified. These were purposive (criteria and snowball) sampling (Creswell, 2013), semi-structured interviews (Patton, 2002; Creswell, 2013), and thematic content analysis (Hycner, 1985; Silverman, 2013; Miles & Huberman, 2014).

Chapter 6 presented the findings of this study and Chapter 7 discussed these findings in light of relevant theories and secondary data. Most participants in this research were found to be opportunity entrepreneurs, driven by pull factors, such as opportunity recognition, passion, and the desire for independence. These findings coincide with prior

New Zealand-based research on migrant entrepreneurs, such as the studies of de Vries (2007, 2012) and Paulose (2011). Passion appears to have not been identified as a key entrepreneurial driver in other empirical studies reviewed in relation to this research, such as Paulose (2011), and de Vries (2014) and hence this study makes an interesting contribution to the existing literature.

The key challenges faced by participants in this study were arranging capital, lack of skilled staff, the lack of business/industry knowledge, and compliance costs. All these factors have been identified in previous academic studies and economic reports on migrant businesses and entrepreneurs in New Zealand (North & Trlin, 2007; de Vries, 2012; Cleland & Davey, 2014; Pio, 2014; ANZ, 2018a, 2018b; NZIER, 2018).

However, a specific challenge identified by two of the participants, who were unique in this study was in terms of the lack of family presence and support while undergoing the tedious process of venture creation and its management thereafter. One of these participants came to New Zealand as a student and had no immediate or extended family and the other was managing extensive work hours with a five-year-old child. This is likely a reflection of the collective culture in India, where like most Eastern cultures, family is highly trusted and involved in an individual's life decisions (Hofstede, n.d.). This finding is an important contribution to the existing literature in the area of skilled migrant entrepreneurship.

A number of contribution channels were identified in the findings chapter, such as job creation, innovation, and the facilitation of international business and investment. These findings resonate with the New Zealand and international literature, which also identifies similar economic contributions of migrant entrepreneurs (Moody, 2006; Enderwick et al., 2011; Nathan, 2014). However, it is difficult to generalise these findings to skilled migrants from other source countries as migrants from different backgrounds may have different motivations and resources.

Lastly, this chapter concludes the thesis by presenting the conclusions, contributions, and limitations of this research, before recommending areas for future research.

8.3 Key findings

The key findings of this thesis as identified in Chapter 6 and discussed in Chapter 7 are presented in this section.

1. Skilled Indian migrants in skilled employment in New Zealand are more likely to be pulled than pushed into entrepreneurship.

As identified earlier, all the participants in this study left paid employment by choice in order to pursue entrepreneurship, mostly driven by internal motivations. These characteristics are reflective of opportunity rather than necessity entrepreneurs (Gilad & Levine, 1986). The empirical literature on skilled migrants in New Zealand coincides with these findings. For instance, prior studies have identified that skilled migrants are valued for filling skill shortages in the New Zealand labour market (Gendall et al., 2007; North, 2007; Boyd & Cleland, 2018) and have very high levels of job satisfaction (MBIE, 2012a).

The literature also suggests that Indian migrants prefer paid employment over venture creation (Rai, 2008; Clark & Drinkwater, 2010; de Vries, 2012), have high rates of employment, and are valued in the New Zealand labour market (North, 2007). This again suggests that skilled Indian migrant employees are less likely to be pushed into entrepreneurship by necessity or unfavourable labour market conditions.

2. Skilled Indian migrants make economic and social contributions to the New Zealand economy both as employees and as entrepreneurs.

Participants in this research identified with making a number of economic and social contributions to New Zealand, more so as entrepreneurs than as employees. As employees, their key contribution channels included filling skill gaps in the New Zealand labour market. On the other hand, their primary contributions as entrepreneurs included job creation, innovation, and the facilitation of trade with businesses in their home country, as indicated in Table 24 (page 116) in Chapter 6. Social contributions, including charity and community welfare were another key contribution channel of four participants in this study.

These findings are in line with the wider literature, which identifies that when employees move to entrepreneurship, there is a level shift in their economic contribution levels (Kerr, 2009; Nathan, 2014). They generate higher contributions by means of job creation (Saxenian, 2000; World Bank, 2016), innovation (Aghion et al., 2012), and business engagements with businesses in the home country (Massey & North, 2007; Enderwick et al., 2011).

3. The New Zealand regulatory environment encourages entrepreneurship, but complex compliance procedures and costs, lack of clear administrative processes, and incoherent information sources present entrepreneurial challenges for skilled Indian migrants.

In reference to the New Zealand business environment, this study found that the regulatory setting in New Zealand encourages entrepreneurship, but its complex and costly compliance procedures, lack of clear administrative processes, and incoherent information sources present entrepreneurial barriers and challenges for skilled Indian migrants. For instance, participants highlighted the lack of a one-stop-shop for business start-up information and the high complexity and cost of compliance in New Zealand.

This is in line with the existing academic literature and documentation on migrant businesses in New Zealand. For instance, studies by North and Trlin (2004) and Cleland and Davey (2014) identified compliance costs as a key entrepreneurial challenge for migrant businesses in New Zealand.

4. The regulatory environment in New Zealand appears to be incognisant of some industry/business-specific differences in business sectors.

This research found that regulatory policies, such as immigration policy, appear to be incognisant of some context-specific differences in industry sectors. For instance, P8 highlighted that North Indian and South Indian cuisines are very different and thus the cuisine knowledge of chefs is very specific. However, the lack of awareness about such nuances in New Zealand's immigration policy presented a challenge for timely skilled staff (South Indian chef) acquirement in P8's business.

Therefore, while New Zealand is ranked number one in the world for ease of starting and doing business (World Bank, 2018), there are aspects of doing business in New Zealand that are complicated and tedious.

8.4 Research contributions

This research makes several contributions to both theory and policy. Firstly, this research contributes to the important research gap on skilled migrant entrepreneurs in New Zealand. While international studies on skilled migrant entrepreneurs exist, they have generally focused on Europe and the US, whereas New Zealand, among other countries, has a dearth of empirical research in this field (Sequeira & Rasheed, 2006; Enderwick et al., 2011; Nathan, 2013, 2014). This thesis is a small contribution to this gap in the New Zealand literature.

Also, as emphasised by Fairlie et al. (2010), studies on migrant groups and their contributions to the host countries should be context-specific, because findings cannot be generalised from one country to the next (Koning & Verver, 2013; Ma et al., 2013). In recognition of this gap, this study specifically focused on skilled migrants from India – New Zealand's top source country for skilled labour (MBIE, 2018).

Secondly, this thesis contributes to the study of the economic impacts of skilled migration from an international business perspective. This is important because the discipline of international business offers useful pathways for exploring the multiple impacts of migration, that is, trade, tourism, investment, and knowledge exchange. Particularly, it has the potential to provide useful insights into the complex processes of migrant employment and entrepreneurship in comparison to traditional disciplines such as economics, demography, and development studies (Enderwick et al., 2011).

Thirdly, this study provides useful insights for employers and policymakers. For instance, nearly half the participants in this study identified the tedious and time-consuming process of gathering information on business compliance and administrative requirements from scattered information resources. This finding offers an opportunity to assess the scale of this issue and to design a one-stop information shop. For instance, redesigning the information website of *business.govt.nz.* to include all business start-up

and compliance procedures as well as information about all available industry-specific funding/grants would reduce the complexity of information access for migrant businesses.

This study also provides useful feedback on the positive aspects of government policy, such as the benefits, grants, and entrepreneurial support available from organisations like Callaghan Innovation, and Central Economic Development Agency.

Fourthly, the entrepreneurial drivers, barriers, and contribution channels frameworks in this thesis may be adopted in future context-specific research on skilled migrants.

Lastly, this research touched on the remigration intent of participants along with their demographic and migration profiles, which if further explored, could add context to the attractions and repulsions of the New Zealand business environment for skilled Indian migrants, as identified in this study.

8.5 Research limitations

The aim of this research was to explore and identify the entrepreneurial drivers, challenges, and contribution channels of skilled Indian migrants in New Zealand. In doing so, this study has addressed the overarching research question:

What are the entrepreneurial drivers, challenges, and contribution channels of skilled Indian migrants to New Zealand?

However, a key limitation of this thesis is its sample size. This study used a multiple embedded case study design and interviewed only 10 cases (businesses) despite extensive attempts to advertise and snowball sample potential participants through personal acquaintances and business organisations, such as the India New Zealand Business Council, Asia NZ Foundation, and the Office of Ethnic Communities amongst others.

Another limitation is that qualitative interview data is subject to participant memory-recall, self-serving responses from the participants, and varying interpretations of terms and questions (Omisakin, 2016). However, all efforts were made to ensure an accurate reflection of participant responses, such as the use of alternative questions and phrases and the reiteration of participant responses. Also, the shared cultural background of the researcher and participants was favourable from an ethical perspective, as the researcher was aware of the cultural norms and interaction protocols required with the research participants.

8.6 Areas for future research

As previously identified, the exploratory nature of this study offers several avenues for future research. Firstly, a comparative study of New Zealand's key skill source countries, such as China, the Philippines, South Africa, and the UK is recommended to paint a big picture of the entrepreneurial drivers and challenges faced by skilled migrant entrepreneurs in New Zealand. Such research could serve as a good knowledge source for informed decision making by various segments of the society, such as skilled migrant employees considering entrepreneurship, policymakers, and possibly employers. In the same vein, future research could also focus on cross-country comparisons with economies that have similar immigration policies and skill needs as that of New Zealand, such as Australia and Canada.

Secondly, this thesis looked at skilled Indian migrants from three short skilled sectors and various New Zealand cities. Future research could concentrate on individual sectors, with a focus on other parameters, such as sub-sector differences, regional differences, and gender-specific differences. For instance, a focus study on New Zealand's ICT sector could compare the differences in the entrepreneurial challenges faced by skilled migrants in the sub-sector of software solutions to that of hardware and media.

Lastly, the demographic findings of this study are relevant to goal 4 of the government's NZ Inc India strategy, which aims to attract and retain skilled migrants from India (MFAT, 2011b). For instance, this research recognised that quality of life and better career opportunities attracted the participant skilled Indian migrants to New Zealand, whereas having immediate dependent family in New Zealand was their key retention driver. These findings could be further explored for skilled migrants from other source countries.

8.7 Summary

This chapter concluded the thesis by presenting an overview of the study and outlining the multiple case study design and purposive sampling technique used in this thesis. The chapter then outlined the contributions of this research to the wider literature before identifying the key limitation of the small sample size. The chapter concluded by identifying areas for future research, such as cross-comparison studies with skilled migrants from other source countries.

References

- Abella, M. (2012). *Global competition for skilled workers*. Geneva, Switzerland: International Labour Organization.
- Advantage, P. (2012). Pure Advantage. Retrieved from <https://pureadvantage.org/phillip-mills/>
- Aggrawal, A. (2007). *India's knowledge process outsourcing (KPO) sector: Origin, current state and future directions*. Retrieved from <http://www.clubofamsterdam.com/contentarticles/48%20India/Evalueserve%20Article%20-%20India%20Knowledge%20Process%20Outsourcing%20KPO%20Sector%20Origin,%20Current%20State,%20and%20Future%20Directions%20UK%20Version%2005%20July%202007.pdf>
- Aghion, P., Dewatripont, M., Du, L., Harrison, A., & Legros, P. (2012). *Industrial policy and competition* (NBER Working Paper 18048). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w18048>
- Aidis, R. (2005). Institutional barriers to small- and medium-sized enterprise operations in transition countries. *Small Business Economics*, 25(4), 305–317.
- Aidis, R., Saul, E., & Mickiewicz, T.M. (2012). *Size matters: Entrepreneurial entry and government*. *Small Business Economics*, 39(1), 119–139.
- Aldrich, H. E., & Waldinger, R. (1990). Ethnicity and entrepreneurship. *Annual Review of Sociology*, 16(1), 111–135.
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573–596.
- Alesina, A., & Ferrara, E.L. (2005). Ethnic diversity and economic performance. *Journal of Economic Literature*, 43(3), 762–800.
- Alstete, J. W. (2002). On becoming an entrepreneur: An evolving typology. *International Journal of Entrepreneurial Behaviour and Research*, 8(4), 222–234.
- Amit, R., MacCrimmon, K.R., Zietsma, C., & Oesch, J. M. (2001). Does money matter? Wealth attainment as the motive for initiating growth-oriented technology ventures. *Journal of Business Venturing*, 16(2), 119–143. [https://doi.org/10.1016/S0883-9026\(99\)00044-00](https://doi.org/10.1016/S0883-9026(99)00044-00)
- Anderson, R. (2007). Thematic content analysis (TCA): Descriptive presentation of qualitative data (unpublished manuscript). Retrieved from September 12, 2018 from <http://rosemarieanderson.com/wp-content/uploads/2014/08/ThematicContentAnalysis.pdf>
- Anderson, S., & Platzer, M. D. (2006). *American made: The impact of immigrant entrepreneurs and professionals on U.S. competitiveness*. Arlington, VA.: National Venture Capital Association.
- Andriessen, D. (2004). *Making sense of intellectual capital: Designing a method for the valuation of intangibles*. Oxford, England: Elsevier Butterworth-Heinemann.
- Apitzsch, U., & Kontos, M. (2003). Self-employment, gender and migration. *International Review of Sociology*, 13(1), 67–76.
- Aptekar, S. (2009). Organizational life and political incorporation of two Asian immigrant groups: A case study. *Ethnic and Racial Studies*, 32(9), 1511–1533.

- Arora, A., Gambardella, A. (1990). Complementarity and external linkages: The strategies of the large firms in biotechnology. *Journal of Industrial Economics*, 38(4), 361–379. Not in thesis?
- Australia and New Zealand Banking Group. (2018a). *Face plant - ANZ business micro scope* (March quarter 2018). Retrieved from <https://www.anz.co.nz/resources/1/4/144a4a6d-ea4d-4d00-afc0-3b07aa7e0bbd/ANZ-BMS-20180126.pdf?MOD=AJPERES&CACHEID=144a4a6d-ea4d-4d00-afc0-3b07aa7e0bbd>
- Australia and New Zealand Banking Group. (2018b). *Off the floor - ANZ business micro scope* (March quarter 2018). Retrieved from <https://www.anz.co.nz/resources/a/d/adf336a5-1a6c-4652-a2ef-6c5fae213226/ANZ-BMS-20180411.pdf?MOD=AJPERES&CACHEID=adf336a5-1a6c-4652-a2ef-6c5fae213226>
- Australia and New Zealand Banking Group. (n.d.). *Business micro scope*. Retrieved June 12, 2018, from <https://www.anz.co.nz/about-us/economic-markets-research/business-micro-scope/>
- Australian Bureau of Statistics. (2004). Hospitality industries. Retrieved June 12, 2018, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DSSbyCollectionid/D793CA20B7FEF365CA256BD000277C8C?opendocument>
- Australian Bureau of Statistics. (2008). 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0). Retrieved June 12, 2018, from <http://www.abs.gov.au/ausstats/abs@.nsf/0/20C5B5A4F46DF95BCA25711F00146D75?opendocument>
- Australian Bureau of Statistics (2013). 1220.0 - ANZSCO -- Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2. Retrieved June 12, 2018, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1220.02013,%20Version%201.2?OpenDocument>
- Australian Bureau of Statistics (2015a). 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) - Division Q: Health Care and Social Assistance. Retrieved June 12, 2018, from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/9F25FC6061382290CA257B9500133B6F?opendocument>
- Australian Bureau of Statistics. (2015b). 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0): Division J – Information Media and Telecommunications. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/9F25FC6061382290CA257B9500133B6F?opendocument/>
- Australian Bureau of Statistics (2015c). 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0): Division G - Retail trade. Retrieved June 12, 2018, from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/42D687FA072ACCC6CA257B9500133B9B?opendocument>
- Ayres, L. (2012). Semi-Structured Interview. In Given, L. (Ed.), *The sage encyclopedia of qualitative research methods*. Retrieved from <http://methods.sagepub.com/base/download/ReferenceEntry/sage-encyc-qualitative-research-methods/n420.xml>

- Azmat, F. (2013). Opportunities or obstacles: Understanding the challenges faced by migrant women entrepreneurs. *International Journal of Gender and Entrepreneurship*, 5(2), 198–215.
- Bailey, C. A. (2007). *A guide to qualitative field research*. Thousand Oaks, CA: Pine Forge Press.
- Baldacci, E., Cui, L.Q., Clements, B., & Gupta, S. (2004). *Social spending, human capital, and growth in developing countries: Implications for achieving the MDGs* International Monetary Fund Working Paper 04/217). Retrieved from International Monetary Fund website: <https://www.imf.org/external/pubs/ft/wp/2004/wp04217.pdf>
- Banerjee, S. (2008). Dimensions of Indian culture, core cultural values and marketing implications: An analysis. *Cross Cultural Management: An International Journal*, 15(4), 367–378.
- Banha, F.M., Almeida, M.H., Rebelo, E.L., & Ramos, A.O. (2017). The main barriers of Portuguese entrepreneurship ecosystem: Interpretive structural modeling (ISM) approach. *Tourism & Management Studies*, 13(2), 60–70.
- Barakat, A., & Parhizgar, K.D. (2013). Highly-skilled immigrant entrepreneurs in the United States and the unique competitive advantages that they possess over their unskilled counterparts. *Competition Forum*, 11(1), 103–115.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Basu, A. (1998). An exploration of entrepreneurial activity among Asian small businesses in Britain. *Small Business Economics*, 10(4), 313–326.
- Basu, A., & Goswami, A., (1999). South Asian entrepreneurship in Great Britain: Factors influencing growth. *International Journal of Entrepreneurial Behavior & Research*, 5(5), 251–275.
- Basu, A., & Altinay, E. (2002). The interaction between culture and entrepreneurship in london's immigrant business. *International Small Business Journal*, 20(4), 371–393. doi:10.1177/0266242602204001
- Bates, T. (1995). Self-employment entry across industry groups. *Journal of Business Venturing*, 10(2), 143–156.
- Bedford, R., Ho, E., & Goodwin, J. (1998). Self-employment among Chinese immigrants in New Zealand. *Labour, Employment and Work in New Zealand* (pp. 276–286). <https://doi.org/10.26686/lew.v0i0.1024>
- Bedford, R., Ho, E., & Lidgard, J. (2000). *International migration in New Zealand: Context, components and policy issues* (Population Studies Centre discussion papers). Waikato, New Zealand: The University of Waikato.
- Begley, T. M., & Boyd, D. P. (1987). A comparison of entrepreneurs and managers of small business firms. *Journal of Management*, 13(1), 99–108.
- Beladi, H., & Kar, S. (2015). Skilled and unskilled immigrants and entrepreneurship in a developed country. *Review of Development Economics*, 19(3), 666–682.
- Belcourt, M. (1988). The family incubator model of female entrepreneurship. *Journal of Small Business and Entrepreneurship*, 5(3), 34–44.
- Benson-Rea, M., Haworth, N., & Rawlinson, S. (1998). *The integration of highly skilled migrants into the labour market: Implications for New Zealand business* (Immigration Research Programme). Auckland, New Zealand: Department of Labour, The University of Auckland.

- Benzing, C., & Chu, H. M. (2009). A comparison of the motivations of small business owners in Africa. *Journal of Small Business and Enterprise Development*, 16(1), 60–77.
- Berg, B.L. (2007). *Qualitative research methods for the social sciences*. Long Beach, CA: Pearson.
- Berliant, M., & Fujita, M. (2009). Dynamics of knowledge creation and transfer: The two person case. *International Journal of Economic Theory*, 5(2), 155–179.
- Bhidé, A. (2000). *The origin and evolution of new businesses*. New York, NY: Oxford University Press.
- Bildt, C. (2017). *The six issues that will shape the EU in 2017*. Retrieved from the World Economic Forum (WEF) website: <https://www.weforum.org/agenda/2017/01/the-six-issues-that-will-shape-the-eu-in-2017/>
- Biraglia, A., & Kadile, V. (2016). The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: Insights from American homebrewers. *Journal of Small Business Management*, 55(1), 170–188.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *The Academy of Management Review*, 13(3), 442–453.
- Blaikie, N. (2007) *Approaches to social inquiry*. Cambridge, London: Polity.
- Bloom, D. E., Canning, D., & Sevilla, J. (2004). The effect of health on economic growth: A production function approach. *World development*, 32(1), 1–13.
- Bobera, D., Lekovic, B., & Berber, N. (2014). Comparative analysis of entrepreneurship barriers: findings from Serbia and Montenegro. *Engineering Economics*, 25(2), 167–176.
- Borjas, G. J. (1987). Self-selection and the earnings of immigrants. *The American Economic Review*, 77(4), 551–553.
- Borjas, G. (1990). *Friends or strangers: The impact of immigrants on the U.S. economy*. New York, NY: Basic Books.
- Borjas, G. J. (1995). The economic benefits from immigration. *Journal of Economic Perspectives*, 9(2), 3–22.
- Borooah, V. K., Collins, G., Hart, M., & MacNabb, A. (1997). *Women in business. Small firms: Entrepreneurship in the nineties*. London, England: Paul Chapman Publishing.
- Boyd A., & Cleland, S. (2018). *National Survey of Employers 2015/16*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/employment-skills/labour-market-reports/national-survey-of-employers/nse-2015-16>
- Brännback, M., Carsrud, A., Elfving, J., & Krueger, N.K. (2006). Sex, (drugs) and entrepreneurial passion: An exploratory study (Article 5). *Frontiers of Entrepreneurship Research*, 26(6), 1–8. 1 name missing on p23
- Bratu, A., Cornescu, V., & Druica, E. (2009). The role of the necessity and the opportunity entrepreneurship in economic development. *Annals of Faculty of Economics*, 2(1), 242–245.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bretschger, L. (2001). Labor supply, migration, and long-term development. *Open Economies Review*, 12(1), 5–27. year
- Brink, H. I. (1996). *Foundations of research methodology*. Kenwyn, South Africa: Juta.

- Bruton, G. D., Ahlstrom, D., Li, H. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, 34(3), 421–440. doi:10.1111/j.1540-6520.2010.00390
- Bryman, A., & Bell, E. (2007). *Business research methods*. New York, NY: Oxford University Press.
- Burns, P. (2007). *Entrepreneurship and small business*. London, UK: Palgrave MacMillan.
- Burr, V. (2003). *Social constructionism*. New York, NY: Routledge.
- Butler, J. S., & Greene, P. (1997). *Ethnic entrepreneurship: The continuous rebirth of American enterprise*. In D. L. Sexton & R. W. Smilor (Eds.), *Entrepreneurship 2000* (pp. 267–289). Chicago, IL: Upstart Publishing Company.
- Bygrave, W. D. (1989). The entrepreneurship paradigm (I): A philosophical look at its research methodologies. *Entrepreneurship: Theory and Practice*, 14(1), 7–26. doi:10.1177/104225878901400102
- Callaghan Innovation (2018a). *Access to experts - Technology incubators*. Retrieved from <https://www.callaghaninnovation.govt.nz/access-experts/technology-incubators>
- Callaghan Innovation (2018b). *R&D grants*. Retrieved from <https://www.callaghaninnovation.govt.nz/grants/>
- Campbell, C. A. (1992). A decision theory model for entrepreneurial acts. *Entrepreneurship Theory and Practice*, 17(1), 21–27.
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), *Handbook of research on teaching* (pp. 171–246). Chicago, IL: Rand McNally.
- Candy, P. C. (1989). Alternative paradigms in educational research. *The Australian Educational Researcher*, 16(3), 1–11.
- Cantner, U., Goethner, M., & Silbereisen, R. K. (2017). Schumpeter's entrepreneur – a rare case. *Journal of Evolutionary Economics*, 27(1), 187–214.
- Cardon, M., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *The Academy of Management Review*, 34(3), 511–532. 1
- Carroll, G. R. & Mosakowski, E. (1987). The career dynamics of self-employment. *Administrative Science Quarterly*, 32(4), 570–589.
- Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research*, 17(10), 1316–1328.
- Carton, B., Hofer, C., & Meeks, M. (1998). *The entrepreneur and entrepreneurship: operational definitions of their role in society*. Paper presented at the Annual International Council for Small Business conference, Singapore. Retrieved from http://www.academia.edu/4892378/THE_ENTREPRENEUR_AND_ENTREPRENEURSHIP_OPERATIONAL_DEFINITIONS_OF THEIR_ROLE_IN_SOCIETY
- Cassar, G. (2007). Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth. *Entrepreneurship & Regional Development*, 19(1), 89–107. doi:10.1080/08985620601002246
- Casson, M. (1982). *The entrepreneur: An economic theory*. London, UK: Edward Elgar Publishing.
- Castillo, M. d. (n.d.). Business Insight and Beyond - The hierarchy of entrepreneurs' needs [Web log post]. Retrieved September 8, 2018, from <http://www.makingittv.com/The-Hierarchy-of-Entrepreneurs-Needs.htm#.W5NBkntuLIV>

- Chang, R. Y. (2001). *The Passion plan at work: Building a passion-driven organization*. New York, NY: Jogn Wiley & Sons.
- Chapple, S., Gorbey, S., Yeabsley, J., & Poot, J. (1994). *Literature review on the economic impact of immigration* (Report to the Department of Labour, Occasional Paper No 1994/1). Wellington, New Zealand: New Zealand Institute of Economic Research.
- Chavan, M. S. (2000). *Entrepreneurship development amongst the ethnic community in Australia: A model for ethnic small business creation and success* (PhD Thesis, University of Western Sydney, Nepean, Australia). Retrieved from <https://researchdirect.westernsydney.edu.au/islandora/object/uws%3A725>
- Chenitz, W.C., & Swanson, J.M. (1986). *From practice to grounded theory*. Menlo Park, CA: Addison Wesley.
- Chou, L. (2000). *Chinese immigrants in New Zealand society: A study of migrant acculturation and the effects of communication and multicultural public relations* (Master's thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <http://eds.a.ebscohost.com.ezproxy.aut.ac.nz/eds/detail/detail?vid=1&sid=0985bb8d-9650-4935-a8b3-63d3554dc817%40sessionmgr4010&bdata=JnNpdGU9ZWRzLWxpdmU%3d#AN=aut.b10357920&db=cat05020a>
- Chowdhury, M., & Pedace, R. (2007). Ethnic enclaves and labor markets: An analysis of immigrant outcomes in California. *Contemporary Economic Policy*, 25(2), 238–249.
- Chung, H. F. L., & Enderwick, P. (2001). An investigation of market entry strategy selection: Exporting vs foreign direct investment modes - A home-host country scenario. *Asia Pacific Journal of Management*, 18(4), 443–460.
- Čížek, P. (2012). *The application of Maslow's hierarchy of needs to the entrepreneur's motivation - the example from region Pardubice* (Series D, Faculty of Economics and Administration - 2012/24 Scientific papers). Retrieved from University of Pardubice website <https://dk.upce.cz/handle/10195/49516>
- Clark, K., & Drinkwater, S. (2010). Recent trends in minority ethnic entrepreneurship in Britain. *International Small Business Journal*, 28(2), 136–146.
- Cleland & Davey (2014). *Understanding migrant businesses: A baseline measure of their characteristics, compliance attitudes, behaviours and drivers* (New Zealand Inland Revenue National Research and Evaluation Unit). Retrieved from Inland Revenue website <https://www.ird.govt.nz/resources/b/b/bb75aff3-6848-477f-a886-267dcfea850b/migrant-businesses-report.pdf>
- Cockburn, P. (2018). Isis-inspired terror attacks in Europe give the impression it's still a global force. It's not. *The Independent*. Retrieved from <https://www.independent.co.uk/news/world/europe/isis-europe-terror-attacks-france-shooting-uk-france-terrorist-groups-islamist-danger-a8270941.html>
- Coduras, A., Levie, J., Kelley, D. J., Saemundsson, J. R., & Schott, T. (2010). Global Entrepreneurship Monitor special report: A global perspective on entrepreneurship education and training. Retrieved from Wellesley, MA: Global Entrepreneurship Monitor.
- Cohen, D., & Crabtree, B. (July 2006). Qualitative research guidelines project - The interpretivist paradigm. *Robert Wood Johnson Foundation*. Retrieved from <http://www.qualres.org/HomeInte-3516.html>

- Collins, C. J. (2003). Australia: Cosmopolitan capitalists down under. In R. Kloosterman, & J. Rath (Eds.). *Immigrant entrepreneurs: Venturing abroad in the age of globalization* (pp. 61–78). New York, NY: Berg Publishing.
- Collins, C. J., Hanges, P.J., & Locke, E.A. (2004). The relationship of achievement motivation to entrepreneurial behavior: a meta-analysis. *Human Performance*, 17(1), 95-117.
- Conner, A. (2009). *Think passionate*. Retrieved from Stanford Social Innovation Review website: https://ssir.org/articles/entry/research_think_passionate
- Cooper, A. C., Woo, C.Y., & Dunkelberg, W.C. (1989). Entrepreneurship and the initial size of firms. *Journal of Business Venturing*, 4(5), 317–332.
- Cornell University, INSEAD, and WIPO (2017): *The Global Innovation Index 2017: Innovation feeding the world*. Retrieved from Global innovation Index website: <https://www.globalinnovationindex.org/gii-2017-report#>
- Creative HQ. (2015). *Startup programmes and incubators for New Zealand*. Retrieved September 4, 2018, from <https://creativehq.co.nz/startup-programmes-incubators-for-nz-entrepreneurs/>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: Sage Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. London, England: Sage Publications.
- Cromie, S. (1987). Motivations of aspiring male and female entrepreneurs. *Journal of Occupational Behaviour*, 8(3), 251–261. doi:10.1002/job.4030080306
- Cropp, A. (2018). Tourism confidence strong but lack of skilled staff a major issue. *Stuff*. Retrieved from <https://www.stuff.co.nz/business/101001499/tourism-confidence-is-strong-but-lack-of-skilled-staff-a-major-issue>
- Crothers, C. (2002). *Employment and firms in the Auckland region: A report prepared for the Auckland regional economic development strategy*. Auckland, New Zealand: Auckland University of Technology report.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA, Sage Publications.
- Cruickshank, P. (2010). *Intentional immigrant entrepreneurs* (PhD thesis, Swinburne University of Technology, Melbourne, Australia). Retrieved from <https://researchbank.swinburne.edu.au/items/ae892a3c-74b8-48f5-9665-f8abff1f28af/1/>
- Dalhammar, T. (2004). *Voices of entrepreneurship and small business: Immigrant enterprises in Kista, Stockholm* (Doctoral thesis, Royal Institute of Technology, Stockholm, Sweden). Retrieved from <http://www.diva-portal.org/smash/get/diva2:7559/FULLTEXT01.pdf>
- Dana, L. (2010). *Entrepreneurship and religion*. Cheltenham, UK: Edward Elgar.
- Dann, L. (2017, October 29). Return to Oz: Is the brain drain back? *New Zealand Herald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11937541
- Davidsson, P. (1991). Continued entrepreneurship: ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405–429.

- Davidsson, P., Dahlquist, J., & Wiklund, J. (2000). Initial conditions as predictors of new venture performance: A replication and extension of Cooper et al. study. *Enterprise and Innovation Management Studies*, 1(1), 1-17.
- Davis, D. R., & Weinstein, D. E. (2002). *Technological superiority and the losses from migration* (NBER Working Paper No. 8971). Retrieved from National Bureau of Economic Research website <http://www.nber.org/papers/w8971>
- Dawson, C. & Henley, A. (2012). Push versus pull entrepreneurship: An ambiguous distinction? *International Journal of Entrepreneurial behaviour and Research*, 18(6), 697–719. <https://doi.org/10.1108/13552551211268139>
- Day, R. & Sunder, S. (1996). Ideas and work of Richard M. Cyert. *Journal of Economic Behaviour and Organisation*, 31(2), 139–148.
- de Koning, A. J. & Muzyka, D. (1999). Conceptualising opportunity recognition as a socio-cognitive process. *Centre for Advanced Studies in Leadership, Stockholm, Sweden*.
- de Raijman, R. (1996). *Pathways to self-employment and entrepreneurship in an immigrant community in Chicago*. Chicago, IL: The University of Chicago.
- De Vaus, D. A. (2002). *Surveys in social research*. London, England: Routledge.
- de Vries, H. P. (2007). *The influence of migration, settlement, cultural and business factors on immigrant entrepreneurship in New Zealand* (Doctoral thesis, University of Canterbury, Canterbury, New Zealand). Retrieved from <https://ir.canterbury.ac.nz/handle/10092/875>
- de Vries, H. P. (2012). Do Indian immigrant entrepreneurs residing in different host countries display the same behavioural patterns? *Journal of Enterprising Communities: People and Places in the Global Economy*, 6(2), 138–153.
- DeMartino, R., & Barbato, R. (2003). Differences between women and men MBA entrepreneurs: exploring family flexibility and wealth creation as career motivators. *Journal of Business Venturing*, 18(6), 815–832.
- Denscombe, M. (1998). *The good research guide: For small-scale social research projects*. Buckingham, England: Open University Press.
- Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Denzin, N.K. (1970). *Sociological methods. A sourcebook*. Chicago, IL: Aldine Publishing.
- Department of Labour. (2009). *New faces, new futures, New Zealand findings from the longitudinal immigration survey: New Zealand (LisNZ) - Wave one*. Wellington, New Zealand: Department of Labour.
- DiMaggio, P. J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Dolado, J., Goría, A., & Ichino, A. (1994). Immigration, human capital and growth in the host country: Evidence from pooled country data. *Journal of Population Economics*, 7(2), 193–215.
- Donald, A. (2016, June 1). Immigration points-based systems compared. *BBC News*. Retrieved from <https://www.bbc.com/news/uk-politics-29594642>
- Drinkwater, S., Levine, P., Lotti, E., & Pearlman J. (2003). The economic impact of migration: A survey. *International Journal for Economic Development*, 5(2), 1–29.
- Dube, A., Freeman, E. & Reich, M. (2010). *Employee replacement costs* (IRLE Working paper 201-10). Retrieved from Institute for Research on Labour and Employment website: <http://www.irle.berkeley.edu/files/2010/Employee-Replacement-Costs.pdf>

- Duleep, H. O., Jaeger, D. A., & Regets, M. (2012). *How immigration may affect US native entrepreneurship: Theoretical building blocks and preliminary results* (IZA Discussion Paper 6677). Retrieved from <http://hdl.handle.net/10419/62439/>
- Duncan, I., Bollard, A., & Yeabsley, J. (1997). *New Zealand migration: Business related flows: Their role in internationalisation*. Wellington, New Zealand: New Zealand Institute of Economic Research.
- Dunstan, S., Boyd, S., & Crichton, S. (2004). *Migrants' experiences in New Zealand: Pilot survey report*. Wellington, New Zealand: Department of Labour.
- Dustmann, C., A., & Glitz, E. A., & Tommaso, F. (2008). The labour market impact of immigration. *Oxford Review of Economic Policy*, 24(3), 477–494.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (1991). *Management research: An introduction*. London, UK: Sage Publications.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/AMR.1989.4308385>
- Emmel, N. (2013). *Sampling and choosing cases in qualitative research: A realist approach*. Los Angeles, CA: Sage Publications.
- Employment New Zealand. (n.d.). *Contractor versus employee*. Retrieved June 28, 2018, from <https://www.employment.govt.nz/starting-employment/who-is-an-employee/difference-between-a-self-employed-contractor-and-an-employee/#>
- Enderwick, P., Tung, R.L., & Chung, H.F. (2011). Immigrant effects and international business activity: An overview. *Journal of Asia Business Studies*, 5 (1), 6–22. Doi: 10.1108/15587891111100778
- Esteve-Pérez, S., & Mañez-Castillejo, J.A. (2008). The resource-based theory of the firm and firm survival. *Small Business Economics*, 30(3), 231–249.
- European Union Agency for Fundamental Rights. (2017). *Together in the EU : Promoting the participation of migrants and their descendants*. Retrieved from European Union Agency for Fundamental Rights (FRA) website: http://fra.europa.eu/sites/default/files/fra_uploads/fra-2017-together-in-the-eu_en.pdf
- Fahy, J. & Smithee, A. (1999). Strategic marketing and the resource based view of the firm. *Academy of Marketing Science Review*, 10(1), 1–21.
- Fairlie, R. W., Zissimopoulos, J., & Krashinsky, H. (2010). The international Asian business success story? A comparison of Chinese, Indian, and other Asian businesses in the United States, Canada, and the United Kingdom. In J. Lerner & A. Schoar (Eds.), *International Differences in Entrepreneurship* (pp. 179–208). Chicago, IL: University of Chicago Press.
- Fairlie, R., Zissimopoulos, J., & Krashinsky, H. (2012). Indian entrepreneurial success in the United States, Canada, and the United Kingdom. *Research in Labour Economics*, 36(1), 285–318.
- Fernandez, M., & Kim, K.C. (1998). Self-employment rates of Asian immigrant groups: An analysis of intragroup and intergroup differences. *The International Migration Review*, 32(3), 654–681.
- Finnerty, J. E., & Krzystofik, A. T. (1985). Barriers to small business formation. *Journal of Small Business Management*, 23(3), 50–58.
- Fischer, E. M., Reuber, A.R., & Dyke, L.S. (1993). A theoretical overview and extension of research on sex, gender, and entrepreneurship. *Journal of Business Venturing*, 8(2), 151–168.

- Fletcher, M. (1999). *Migrant settlement: A review of the literature and its relevance to New Zealand*. Wellington, New Zealand: Department of Labour.
- Fogel, K., Hawk, A., Morck, R., & Yeung, B. (2009). *Institutional obstacles to entrepreneurship*. In A. Basu, M. Casson, N. Wadeson, & B. Yeung (Eds.), *The Oxford Handbook of Entrepreneurship* (pp. 540–579). New York, NY: Oxford University Press.
- Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 645–672). Thousand Oaks, CA: Sage.
- Ford-Gilboe, M., Campbell, J., & Berman, H. (1995). Stories and numbers: Coexistence without compromise. *Advances in Nursing Science*, 18(1), 14–26.
- Foster, A. (2017). Terror attacks timeline: From Paris and Brussels terror to most recent attacks in Europe. *Daily Express*. Retrieved from <https://www.express.co.uk/news/world/693421/Terror-attacks-timeline-France-Brussels-Europe-ISIS-killings-Germany-dates-terrorism>
- Frederick, H. (2004). The Unitec global entrepreneurship monitor 2003/04: Toward high growth enterprise in New Zealand (Unitec New Zealand's Centre for Innovation and Entrepreneurship Research Report Series, Vol. 3, No. 1). Unitec New Zealand, Auckland, New Zealand.
- Fung, H. H., Lai, P., & Ng, R. (2001). Age differences in social preferences among Taiwanese and mainland Chinese: the role of perceived time. *Psychology and Aging*, 16(2), 351–356.
- Gacheru, E. M. (2007). *Employee transition to entrepreneurship: The influences of families and firms* (Doctoral thesis, IESE Business School, Barcelona, Spain). Retrieved from https://www.iese.edu/en/files/Mungai,%20Edward%20PhD%20thesis_tcm4-29496.pdf
- Garman, A. N., Corbett, J. Grady, J., & Benesh, J. (2005). The hidden costs of employee turnover. *Simulation And Gaming*, 36(2), 274–281. <https://doi.org/10.1177/1046878104273254>
- Gartner, W. B. (1989). Who is an entrepreneur? is the wrong question. *American Journal of Small Business Economics*, 12(4), 11–32.
- Gendall, P. J., Spoonley, P., & Trlin, A. D. (2007). *The attitudes of New Zealanders to immigrants and immigration: 2003 and 2006 compared*. (New Settlers Programme Occasional Publication). Palmerston North, New Zealand: Massey University.
- Ghemawat, P. (2016, November 11). Trump, globalization, and trade's uncertain future. *Harvard Business Review*. Retrieved from <https://hbr.org/2016/11/trump-globalization-and-trades-uncertain-future> thesis says 2016
- Giacomin, O., Janssen, F., Pruett, M., Shinnar, R.S., Francisco, L., & Toney, B. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship And Management Journal*, 7(2), 219–238.
- Gilad, B., & Levine, P. (1986). A behavioral model of entrepreneurial supply. *Journal of Small Business Management*, 24(4), 45–53.
- Gimeno, J., Folta, T.B., Cooper, A.A., & Woo, C.Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42(4), 750–783.

- Girma, S., & Yu, Z. (2000). *The link between immigration and trade: Evidence from the UK*. Nottingham, England: Centre for Research on Globalisation and Labour Markets, School of Economics, University of Nottingham.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, NY: Aldine Publishing Company.
- Global Entrepreneurship Monitor. (2005). *Country profile: New Zealand*. Retrieved from Global Entrepreneurship Monitor website:
<http://www.gemconsortium.org/country-profile/137>
- Global Entrepreneurship Monitor. (2018). *News Jan 31 - Most entrepreneurs start businesses out of opportunity not necessity* (GEM 2017-2018 Global Report). Retrieved from Global Entrepreneurship Monitor website:
<https://www.gemconsortium.org/about/news>
- Goodman, Leo A. (1961). Snowball sampling. *Annals of Mathematical Statistics*. 32(1), 148–170. doi:10.1214/aoms/1177705148.
- Gould, D. M. (1994). Immigrant links to the home country: Empirical implications for U.S. bilateral trade flows. *The Review of Economics and Statistics*, 76(2), 302–316.
- Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 13(1), 10–28.
- Gray, D. E. (2014). *Doing research in the real world*. London, UK: Sage Publications.
- Gray, D. E. (2018). *Doing research in the real world*. London, UK: Sage Publications.
- Greenfield, S., & Nayak, A.M. (1992). The management information needs of very small businesses: Gender differences. Non-Technical Summary. In R. Welford (ed.). *Economic and Social Research Council*. Bradford, England: European Research Press.
- Grieco, D. (2007). *The entrepreneurial decision : Theories, determinants and constraints* (Liuc Paper No. 207, Serie Economia e Impresa 54). Castellanza, Italy: Università Carlo Cattaneo.
- Groysberg, B. & Bell, D. (2013, December 17). What boards can do about brain drain. *Harvard Business Review*. Retrieved <https://hbr.org/2013/12/what-boards-can-do-about-brain-drain>
- Guba, E. G. (1990). *The Paradigm dialog*. Newbury Park, CA: Sage Publications.
- Gubrium, J. F., & Holstein, J. A. (2002). *Handbook of interview research*. Thousand Oaks, CA: Sage Publications.
- Guerra, G., & Patuelli, R. (2011). *The influence of role models on immigrant self-employment: A spatial analysis for Switzerland*. *International Journal of Manpower*, 35(1), 187–215.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.
- Gunaratne, K. A. (2008). *Conceptualising a model to promote post start-up small business growth in Sri Lanka* (Unpublished doctoral thesis). University of Canterbury, Christchurch, New Zealand.
- Guy, A. (2017, June 23). Shortage of skilled hospitality staff as Kiwis shun entry level jobs. *New Zealand Herald*. Retrieved from
https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11880562
- Hakim, C. (1989). New recruits to self-employment in the 1980's. *Employment Gazette*, 97, 286–297.

- Haltiwanger, J. Jarmin, R. S., & Miranda, J. (2010). *Who creates jobs? Small vs. Large vs. Young* (NBER Working Paper No. 16300). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w16300>
- Hamilton, R., Dana, L., & Benfell, C. (2008). Changing cultures: An international study of migrant entrepreneurs. *Journal of Enterprising Culture*, 16(01), 89–105. <https://doi.org/10.1142/S0218495808000053>
- Hammarstedt, M. (2004). Self-employment among immigrants in Sweden – An analysis of intragroup differences. *Small Business Economics*, 23(2), 115–126.
- Haque, N. U., & Kim, S. (1995). Human capital flight: Impact of migration on income and growth (IMF staff papers). *International Monetary Fund*, 42(3), 577–607.
- Harkess, C., Hodgson, R., Merwood, P., Quazi, A., Stock, P., Tausi, M., & Zhao, J. (2008). *Migration trends and outlook 2007/2008*. Wellington, New Zealand: Department of Labour.
- Harris, C. (2017, February 19). Shortage of retail and restaurant workers becoming acute. *Stuff*. Retrieved from <https://www.stuff.co.nz/business/better-business/89451645/Shortage-of-retail-and-restaurant-workers-becoming-acute>
- Hart, D. M., & Acs, Z. J. (2011). High-tech immigrant entrepreneurship in the United States. *Economic Development Quarterly*, 25(2), 116–129.
- Hawthorne, L. (2011). *Competing for skills: Migration policies and trends in New Zealand and Australia*. Wellington, New Zealand: Department of Labour.
- Hawthorne, L. (2014). *A comparison of skilled migration policy: Australia, Canada and New Zealand*. Retrieved from SSRN Electronic Journal website: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2808881
- Head, K., & Ries, J. (1998). Immigration and trade creation: Econometric evidence from Canada. *Canadian Journal of Economics*, 31(1), 47–62.
- Healey, M. J., & Rawlinson, M. B. (1994). Interviewing techniques in business and management research. In V. Wass & P. Wells (Eds.), *Principles and practice in business and management research*. Surrey, England: Aldershot.
- Health TRX (n.d.-a). *Finding better pathways in e-mental health and addictions*. Retrieved September 4, 2018, from <http://www.healthtrx.co.nz/>
- Health TRX. (n.d.-b). *Anil Thapliyal - CEO*. Retrieved September 4, 2018, from www.healthtrx.co.nz/team/anil-thapliyal/
- Hechavarria, D. M., & Reynolds, P.D. (2009). Cultural norms and business start-ups: The impact of national values on opportunity and necessity entrepreneurs. *International Entrepreneurship and Management Journal*, 5(4), 417–437.
- Hedrick, T. E., Bickman, L., & Rog, D. J. (1993). *Applied research design: A practical guide*. Newbury Park, CA: Sage Publications.
- Herriott, R. E., & Firestone, W. A. (1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational Researcher*, 12(2), 14–19.
- Hessels, J., van Gelderen, M., & Thurik, R. (2008). *Entrepreneurial aspirations, motivations, and their drivers*. *Small Business Economics*, 31(3), 323–339.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517–572. <http://dx.doi.org/10.1177/0011000097254001>
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Psychology and Culture*, 2(1), 1–26.
- Hofstede, G. (n.d.). *National Culture*. Retrieved September 4, 2018, from <https://www.hofstede-insights.com/models/national-culture/>

- Holsti, O.R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.
- Hope, K. (2016, October 21). NZ needs skilled migrants: Business. *New Zealand Herald*. Retrieved from <https://www.nzherald.co.nz/>
- Hope, K. (2018, April 27). New Zealand cannot afford not to innovate. *Stuff*. Retrieved from <https://www.stuff.co.nz/>
- Hunt, J. (2010). *Skilled Immigrants' Contribution to Innovation and Entrepreneurship in the US. Open for Business: Migrant Entrepreneurship in OECD Countries*. Paris, France: OECD Publishing. <http://dx.doi.org/10.1787/9789264095830-en/>
- Hunter, I. (2007). *Age of enterprise: Rediscovering the New Zealand entrepreneur, 1880-1910*. Auckland, New Zealand: Auckland University Press.
- Hussey, J., & Hussey, R. (1997). *Business Research: A practical guide for undergraduate and postgraduate students*. Basingstoke, England: Macmillan.
- Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, 8(3), 279-303.
- Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, 3(2), 82-90.
- Iakovleva, T. A., Kolvereid, L., Gorgievski, M., & Sorhaug, O. (2014). Comparison of perceived barriers to entrepreneurship in eastern and western European countries. *International Journal of Entrepreneurship and Innovation Management*, 18(2/3), 115-133.
- Iles, J. (2018, February 11). New Zealand's ageing workforce - the elephant in the room for many companies. *Stuff*. Retrieved from <https://www.stuff.co.nz/business/100998151/new-zealands-ageing-workforce--the-elephant-in-the-room-for-many-companies>
- Immigration New Zealand. (2017). Statistics: R4 Occupation and Region for SMC [CSV file, Statistics: R4 Occupation and Region for SMC]. Retrieved from: <https://www.immigration.govt.nz/about-us/research-and-statistics/statistics/>
- Immigration New Zealand. (2018a). *Skilled Migrant Category Resident Visa*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/about-visa/skilled-migrant-category-resident-visa>.
- Immigration New Zealand. (2018b). *SM6.10 Skilled Employment*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/opsmanual/#66788.htm>
- Immigration New Zealand. (2018c). *Immigration New Zealand operational manual – Appendices - Issue Date: 20 March 2018*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/opsmanual/#35439.htm>
- Immigration New Zealand. (2018d). *Silver Fern job search work visa*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/about-visa/silver-fern-job-search-work-visa>
- Immigration New Zealand, (n.d.-a). *Skill shortage review process*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/about-us/policy-and-law/how-the-immigration-system-operates/skill-shortage-lists>
- Immigration New Zealand. (n.d.-b). *Glossary: Section 49 conditions*. Retrieved September 6, 2018, from <https://www.immigration.govt.nz/about-us/site-information/glossary#section-49-conditions>
- Inland Revenue Department. (n.d.). *Employees and self-employed contractors*. Retrieved September 6, 2018, from <https://www.ird.govt.nz/payroll-employers/become-employer/ru-employer/emp-become-employer-employee-contractor.html>

- International Labour Organisation. (2015). *Global estimates of migrant workers and migrant domestic workers: Results and methodology: Special focus on migrant domestic workers*. Retrieved from https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_436343.pdf
- Irwin., G. (2015). BREXIT: The impact on the UK and the EU. *Global Counsel*. Retrieved from [https://www.global-counsel.co.uk/sites/default/files/special-reports/downloads/Global%20Counsel Impact of Brexit.pdf](https://www.global-counsel.co.uk/sites/default/files/special-reports/downloads/Global%20Counsel%20Impact%20of%20Brexit.pdf)
- Jamil, A., Omar, R., & Panatik, S. (2014). Entrepreneurial passion, achievement motivation goals and behavioural engagements in Malaysia: Are there any differences across ethnic groups? *Asian Social Science*, 10(17), 17–28.
- Jennings, J. E., & McDougald, M.S. (2007). Work-family interface experiences and coping strategies: implications for entrepreneurship research and practice. *Academy of Management Review*. 32(3), 747–760.
- Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. Powell, and P. DiMaggio (Eds.), *The New institutionalism in organizational analysis* (pp. 143–163). Chicago, IL: University of Chicago Press.
- Jokela, H., Saarela, M., Niinikoski, E., & Muhos, M. (2014). *Entrepreneurship drivers and barriers in northern sparsely populated areas*. Paper presented at the Technology, Innovation and Industrial Management conference (TIIM) 2014, May 28–30, Seoul, South Korea.
- Kangasniemi, M., Mas, M., Robinson, C., & Serrano, L. (2012). The economic impact of migration: Productivity analysis for Spain and the United Kingdom. *Journal of Productivity Analysis*, 38(3), 333–343.
- Kauffman Foundation. (n.d.). *Entrepreneur demographics*. Retrieved September 6, 2018, from <https://www.kauffman.org/key-issues/entrepreneur-demographics>.
- Kerr, S. P., Kerr, W. R., & Lincoln, W. F. (2014). *Firms and the Economics of Skilled Immigration* (NBER Working Paper No. 20069). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w20069>
- Kerr, W. (2009). *The agglomeration of US ethnic inventors* (NBER working paper series no. 15501). Stanford, CA.: National Bureau of Economic Research.
- Kidd, N. (2008). *Putting productivity first* (New Zealand Treasury Productivity Paper 08/01). Wellington, New Zealand: New Zealand Treasury.
- Kihlstrom, R., E., & Laffont, J.-J. (1979). A general equilibrium theory of firm formation based on risk aversion. *Journal of Political Economy*, 87(4), 719–748. doi:10.1086/260790
- Kirkwood, J. (2009). Motivational factors in a push-pull theory of entrepreneurship. *Gender in Management: An International Journal*, 24(5), 346–364.
- Kirkwood, J., & Tootell, B. (2008). Is entrepreneurship the answer to achieving work-family balance? *Journal of Management and Organization*, 14(3), 285–302.
- Kirzner, I. M. (1979). *Perception, opportunity, and profit: Studies in the theory of entrepreneurship*. Chicago, IL: University of Chicago Press.
- Kiwi landing pad (n.d.). *About kiwi landing pad*. Retrieved September 6, 2018, from <http://kiwilandingpad.com/about/>
- Kloosterman, R., & Rath, J. (2003). *Introduction. Immigrant entrepreneurs: Venturing abroad in the age of globalization*. Oxford, London: Berg Publications.

- Kloosterman, R., Van der Leun, J., & Rath, J. (1999). Informal economic activities and immigrant businesses in New Zealand. *International Journal of Urban and Regional Research*, 23(2), 252–266.
- Knight, F. H. (1921). *Risk, uncertainty and profit*. Boston: Houghton Mifflin Company.
- Koning, J., & Verver, M. (2013). Historicizing the 'ethnic' in ethnic entrepreneurship: The case of the ethnic Chinese in Bangkok. *Entrepreneurship & Regional Development*, 25(5-6), 325–348.
- Kopecky, J. (2017). An aging dynamo: Demographic change and the decline of entrepreneurial activity in the United States. *SSRN Electronic Journal*. doi: 10.2139/ssrn.2907198
- Krasniqi, B. (2007). Barriers to entrepreneurship and SME growth in transition: Evidence from Kosovo. *Journal of Developmental Entrepreneurship*, (12), 1, 71–94.
- Krassoi-Peach, E. (2013). *How permanent is permanent migration? - Identifying the determinants of remigration for skilled migrants in New Zealand*. Wellington, New Zealand: Ministry of Business, Innovation and Employment.
- Kritikos, A. S. (2014). *Entrepreneurs and their impact on jobs and economic growth*. Retrieved from Institute for the Study of Labor (IZA) website: <https://wol.iza.org/uploads/articles/8/pdfs/entrepreneurs-and-their-impact-on-jobs-and-economic-growth.pdf>
- Kugler, M., & Rapoport, H. (2007). International labor and capital flows: complements or substitutes? *Economic Letters*, 94(2), 155–162.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago.
- Kvale, S. (2008) *Doing Interviews*. Thousand Oaks, CA: Sage Publications.
- Le Compe, M.D., & Goetz, J.P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52 (1), 31–60.
- Leblang, D. (2011). *Another link in the chain: Migrant networks and international investment*. Paper presented at the International Conference on Diaspora and Development on July 13 - 14, 2009, Washington, DC.
- Leckie, J. (2007). *Indian settlers: The story of a New Zealand South Asian community*. Dunedin, New Zealand: Otago University Press.
- Ledezma-Haight, R., Ramos, M., Prckovska, V., Rodrigues, P. & Gallardo-Pujol, D. (2016). Wired minds: How personality traits can predict entrepreneurs' brains. *Personality and Individual Differences* 101, 493. doi: 10.1016/j.paid.2016.05.202
- Lee-Wolf, Y. H. (2014). *The average age of CEOs at startups is creeping up, so is the average age of Nobel Prize winners. Why age and wisdom still matter*. Retrieved September 12, 2018, from <https://idealog.co.nz/venture/2014/11/average-startup-founders-age-creeping-so-average-age-nobel-prize-winners-why-age-and-wisdom-still-matter>
- Leibenstein, H. (1968). Entrepreneurship and development. *American Economic Review*, 52(2), 72–83.
- Lev, B. (2001). *Intangibles management, measurement, and reporting*. Washington, D.C.: Brookings Institution Press.
- Levie, J. (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics: An Entrepreneurship Journal*, 28(2-3), 143–169.
- Ley, D., & Tutchener, J. (2001). Immigration, globalisation and house prices in Canada's gateway cities. *Housing Studies*, 16(2), 199–223.

- Li, P. S. (1997). Self-employment among visible minority immigrants, white immigrants, and native-born persons in secondary and tertiary industries of Canada. *Canadian Journal of Regional Science*, 20(1/2): 103–118.
- Lien, N. (2002). Applying theory of planned behaviour to fruit consumption of young adolescents. *American Journal of Health Promotion*, 16(4), 189–197.
- Lightning lab (n.d.). Lightning lab manufacturing - The catalyst for product innovation. Retrieved September 12, 2018, from <https://www.lightninglab.co.nz/manufacturing-wellington/?hstc=16736105.b2142f783adedbce6097e6a38e277807.1534004091008.1534004091008.1534004091008.1&hssc=16736105.1.1534004091008&hsfp=1476438118>
- Liles, P. R. (1974). *New business ventures and the entrepreneur*. Homewood, IL: Irwin.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1994). *Competing paradigms in qualitative research*. Retrieved from <https://eclass.uoa.gr/modules/document/file.php/PPP356/Guba%20%26%20Lincoln%201994.pdf>
- Litan, R., Baumol, W., & Schramm, C. (2009). *Good capitalism, bad capitalism, and the economics of growth and prosperity*. London, England: Yale University Press.
- Little, S. (2010). *role of innovation in economic growth in a New Zealand context*. Speech presented at the New Zealand Association of Scientists Annual Conference. Wellington, New Zealand: The Treasury. Retrieved from the Treasury website: <https://treasury.govt.nz/publications/speech/role-innovation-economic-growth-new-zealand-context>
- Llewellyn, S., & Northcott, D. (2007). The singular view in management case studies. *Qualitative Research in Organizations and Management: An International Journal*, 2(3), 194–207.
- Lofstrom, M. (2002). Labor market assimilation and the self-employment decision of immigrant entrepreneurs. *Journal of Population Economics*, 15(1), 83–114.
- Long, W. (1983). The meaning of entrepreneurship. *American Journal of Small Business Economics*, 8(2), 47–56.
- Longhi, S., Nijkamp, P., & Poot, J. (2004). A meta-analytic assessment of the effect of immigration on wages. *Journal of Economic Surveys*, 19 (3), 451–477.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3–42.
- Ma, Z., Zhao, S., & Wang, T., & Lee, Y. (2013). An overview of contemporary ethnic entrepreneurship studies: Themes and relationships. *International Journal of Entrepreneurial Behavior & Research*, 19(1), 32–52.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16(2), 193–205.
- Mahmud, A., & Parkhurst, M. (2007). *Role of the health care sector in expanding economic opportunity* (The corporate social responsibility initiative report No. 21). Cambridge, MA: Kennedy School of Government, Harvard University.
- Malchow-Møller, N., Munch, J. R., & Skaksen, J. R. (2011). Do foreign experts increase the productivity of domestic firms? Discussion Paper 6001. Bonn: Institute for the Study of Labor (IZA). Retrieved from <http://hdl.handle.net/10419/55048/>

- Malterud, K., Siersma, V.D., and Guassora, A.D. (2015) sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Maré, D. C., & Fabling, Z.R. (2011). *Productivity and local workforce composition* (Motu Working Paper 11-10). Wellington, New Zealand: Motu Economic and Public Policy Research.
- Maré, D. C., Fabling, R., & Stillman, S. (2014). Innovation and the local workforce. *Papers in Regional Science*, 93(1), 183–201.
- Marino, M., Parrotta, P., & Pozzoli, D. (2012). Does labor diversity promote entrepreneurship? *Economics Letters*, 116(1), 15-19.
- Maritz, A. (2004). New Zealand necessity entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 1(3-4), 255–263.
- Markusen, J. R. (1983). Factor movements and commodity trade as complements. *Journal of International Economics*, 14(3-4), 341–356.
- Marlow, S. (1997). Self-employed women: New opportunities, old challenges? *Entrepreneurship and Regional Development*, 9(3), 199–210.
- Marques, C.S., Ferreira, J.J., Gomes, D.N., & Rodrigues, R.C. (2012). Entrepreneurship education: How psychological, demographic and behavioural factors predict the entrepreneurial intention. *Education and Training*, 54(8), 657–672.
- Marshall, C., & Rossman, G. B. (2011). *Primary data collection methods designing qualitative research*. Los Angeles, CA: Sage.
- Martell, D. (n.d.). *Maslow's hierarchy of entrepreneurial needs*. Retrieved from September 6, 2018, from <https://www.danmartell.com/hierarchy-of-entrepreneurial-needs/>
- Martínez, A.C., Levie, J., Kelley, D.J., Sæmundsson, R.J., & Schøtt, T. (2010). *Special report: A global perspective on entrepreneurship education and training*. Wellesley, MA: Global Entrepreneurship Monitor.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- Massey, D. Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J.E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431–466. <https://doi.org/10.2307/2938462>
- Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications.
- McClelland, D. C. (1967). *The achieving society*. New York, NY: Free Press.
- McCracken, G. (1988). *The long interview*. Newbury Park, CA: Sage Publications.
- McGrath, J. E., & Johnson, B. A. (2003). Methodology makes meaning: How both qualitative and quantitative paradigms shape evidence and its interpretation. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp. 31–48). Washington, DC: American Psychological Association.
- McKinnon, M. (1996). *Immigrants and citizens: New Zealanders and Asian immigration in historical context*. Wellington, New Zealand: Victoria University of Wellington.
- McKissen, D. (2017, January 30). Here's the catastrophic impact Trump's immigration ban could have on the US. *CNBC News*. Retrieved from <https://www.cnn.com/2017/01/30/trump-immigration-ban-could-have-catastrophic-impact-on-us-commentary.html>
- Medical Council of New Zealand (2018). *The New Zealand medical workforce in 2016*. Retrieved from Medical Council of New Zealand website:

<https://www.mcnz.org.nz/assets/News-and-Publications/Workforce-Surveys/Workforce-Survey-Report-2016.pdf>

- Mertens, D. M. (1999). *Research methods in education and psychology: Integrating diversity with quantitative & qualitative approaches*. Thousand Oaks, CA: Sage Publications.
- Mertens, D.M. (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Miles, M. B., Huberman, A.M., & Saldana, J. (2014). *Qualitative data analysis. A methods sourcebook*. Thousand Oaks, CA: Sage Publications.
- Miller, D., & Drodge, C. (1986). Psychological and traditional determinants of structure. *Administrative Science Quarterly*, 31(4), 539–560.
- Min, P. G., & Bozorgmehr, M. (2003). United States: The entrepreneurial cutting edge. In R. Kloosterman, & J. Rath (Eds.), *Immigrant entrepreneurs: venturing abroad in the age of globalization* (pp.17-37). Oxford, London: Berg.
- Min, P. G., & Kim, Y. O. (2009). Ethnic and sub-ethnic attachments among Chinese, Korean, and Indian immigrants in New York City. *Ethnic & Racial Studies*, 32(5), 758–780.
- Minarcine, S. M., & Shaw, C. S. (2016). Motivations for entrepreneurship. *International Journal of the Academic Business World*, 10(2), 47–56.
- Ministry of Business, Innovation, and Employment. (2012a). *Employed migrants' satisfaction with their main job*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/publications-research/research/migrants---monitoring/2012-employed-migrants-satisfaction-their-main-job.pdf>
- Ministry of Business, Innovation, and Employment. (2012b). *Employed migrants whose occupations in New Zealand matched their skills and qualifications*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/publications-research/research/migrants---monitoring/2012-employed-migrants-occupations-nz-matched-skills-qualifications.pdf>
- Ministry of Business, Innovation, and Employment. (2014). *Small Business Factsheet, 2014*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/pdf-image-library/the-small-business-sector-report-and-factsheet/The%20Small%20Business%20Sector%20Report%202014.pdf>
- Ministry of Business, Innovation, and Employment. (2015a). *Small Business Factsheet, 2015*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/pdf-image-library/the-small-business-sector-report-and-factsheet/small-business-factsheet-2015.pdf>
- Ministry of Business, Innovation, and Employment. (2015b). *More skilled job vacancies available online*. Retrieved from Ministry of Business, Innovation and Employment website: www.mbie.govt.nz/about/whats-happening/news/2015/more-skilled-job-vacancies-available-online/?searchterm=hospitality%2A
- Ministry of Business, Innovation, and Employment. (2015c). *2015 Information and Communications Technology Report*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/information-and->

[communications-technology-report/?searchterm=2015%20Information%20and%20Communications%20Technology%20Report%2A](https://www.mbie.govt.nz/publications-research/research/migrants---monitoring/migrant-survey-report-2015.pdf)

- Ministry of Business, Innovation, and Employment. (2015d). Settling in New Zealand: Migrants' perceptions of their experience (2015 Migrant Survey). Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/publications-research/research/migrants---monitoring/migrant-survey-report-2015.pdf>
- Ministry of Business, Innovation, and Employment. (2016a). *Small Business Factsheet, 2016*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/the-small-business-sector-report-and-factsheet/?searchterm=small%20business%20factsheet%2A>
- Ministry of Business, Innovation, and Employment. (2016b). *Migration trends 2015/16*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/immigration/migration-research-and-evaluation/trends-and-outlook/2015-16/?searchterm=migration%20trends%2A>
- Ministry of Business, Innovation, and Employment. (2017a). *Small Business Factsheet, 2017*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/pdf-image-library/the-small-business-sector-report-and-factsheet/small-business-factsheet-2017.pdf>
- Ministry of Business, Innovation, and Employment. (2017b). *Short-term employment forecasts: 2017–2020*. Retrieved from Ministry of Business, Innovation and Employment website: www.mbie.govt.nz/info-services/employment-skills/labour-market-reports/forecasting/short-term-employment-forecasts/short-term-employment-forecasts-2017-2020-may-2017/document-image-library/short-term-employment-forecast-2017-2020-may-2017.pdf
- Ministry of Business, Innovation, and Employment. (2017c). *2017 Information and Communications Technology Report*. Retrieved from www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/pdf-image-library/information-and-communications-technology-report/2017-ict-report.pdf
- Ministry of Business, Innovation, and Employment. (2017d). *Quarterly Labour Market Report*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/info-services/employment-skills/labour-market-reports/labour-market-analysis/labour-market-report/document-image-library/quarterly-labour-market-report-november-2017.pdf>
- Ministry of Business, Innovation, and Employment. (2018). *Migration Trends 2016/17*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/publications-research/research/migrants---monitoring/migration-trends-2016-17.pdf/view?searchterm=migration%20trends%2A>
- Ministry of Economic Development. (2011). *SMEs in New Zealand: Structure and dynamics*. Wellington, New Zealand: Ministry of Economic Development.
- Ministry of Foreign Affairs and Trade. (2011a). *Opening doors to India: New Zealand's 2015 vision*. Retrieved from http://gdsindexnz.org/wp-content/uploads/2015/10/20151029-GDS074_Profile-Final-Web.pdf

- Ministry of Foreign Trade and Affairs. (2011b). *NZ Inc India strategy*. Retrieved from <https://www.mfat.govt.nz/en/trade/nz-inc-strategies/india-strategy/>
- Ministry of Foreign Affairs and Trade. (n.d.). *NZ Inc Strategies*. Retrieved June 20, 2018, from <https://www.mfat.govt.nz/en/trade/nz-inc-strategies/>
- Ministry of Health. (2014). *The role of health workforce New Zealand*. Wellington, New Zealand.
- Ministry of Health. (2018). *Health Workforce New Zealand Annual Report to the Minister of Health: 1 July 2016 to 30 June 2017*. Wellington.
- Mok, P., Mason, G., Stevens, P., & Timmins, J. (2012). *A good worker is hard to find: Skills shortages in New Zealand firms*. Wellington, New Zealand: Ministry of Economic Development.
- Moody, C. (2006). *Migration and economic growth: A 21st century perspective* (Treasury Working Paper Series 06/02). Wellington, New Zealand: New Zealand Treasury.
- Moon, J. (2014). *Corporate social responsibility: A very short introduction*. Oxford, England: Oxford University Press.
- Morcol, G. (2001). What is complexity science? Postmodernist or postpositivist? *Emergence: A Journal of Complexity Issues in Organizations and Management*, 3(1), 104–119.
- Morse, J. M., & Richards, L. (2002). *Readme first for a user's guide to qualitative methods*. London, England: Sage Publications.
- Moyer, S. (2016). *Applying trait theory to determine the causality of the entrepreneur's success (Honours thesis)*. Retrieved from <https://firescholars.seu.edu/cgi/viewcontent.cgi?article=1045&context=honors>
- Mundra, K. (2014). Immigration and trade creation for the United States: Role of immigrant occupation. *The International Trade Journal*, 28(4), 311–343.
- Myers, M. D. (2009). *Qualitative research in business & management*. Thousand Oaks, CA: Sage.
- Myers, M. D., & Newman, M. (2007). The qualitative interview in IS research: Examining the craft. *Information and Organization*, 17(1), 2–26.
- Naffziger, D. W., Hornsby, J.S., & Kuratko, D.F. (1994). A proposed research model of entrepreneurial motivation. *Entrepreneurship Theory and Practice*, 18(3), 29–42.
- Nana, G., Sanderson, K., & Goodchild, M. (2003). *The fiscal impact of migrants to New Zealand 2003*. Wellington, New Zealand: New Zealand Immigration Service.
- Nandan, R. A. (1994). *Open all hours: Indian dairy entrepreneurship in central urban Auckland*. Auckland, New Zealand: university of Auckland. Retrieved from https://www.worldcat.org/title/open-all-hours-indian-dairy-entrepreneurship-in-central-urban-auckland/oclc/154160582&referer=brief_results
- Nash, S. (2018, February 19). OECD small business conference. *Beehive New Zealand*. Retrieved from <https://www.beehive.govt.nz/release/oecd-small-business-conference>
- Nathan, M. (2013). Cultural diversity, innovation, and entrepreneurship: Firm-level evidence from London. *Economic Geography*, 89(4), 367–394.
- Nathan, M. (2014). The wider economic impacts of high-skilled migrants: A survey of the literature for receiving countries. *IZA Journal of Migration*, 3(1) 1-20.
- NBR Contributor. (2017, June 2). Cultural barriers create issues for Chinese start-ups seeking NZ backing, Zino says. Retrieved from The National Business Review website: <https://www.nbr.co.nz/article/cultural-barriers-create-issues-chinese-start-ups-seeking-nz-backing-zino-says-b-203735>

- Nestorowicz, J. (2012). Immigrant self-employment: definitions, concepts and methods. *Central and Eastern European Migration Review*, 1(1), 37–55.
- Neville, F., Orse, B., Riding, A., & Jung, O. (2014). Do young firms owned by recent immigrants outperform other young firms? *Journal of Business Venturing*, 29(1), 55–71.
- New Zealand Association for Migration and Investment (NZAMI). (2016, July 5). *NZ needs more skilled migrants to maintain growth* [Media release]. Retrieved from Business Scoop website: <http://business.scoop.co.nz/2016/07/05/nz-needs-more-skilled-migrants-to-maintain-growth/>
- New Zealand Herald. (2014, October 1). Your business: Immigrant entrepreneurs – Nats Subramanian, TakeMe2India. *New Zealand Herald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11331383
- New Zealand Herald. (2017, July 31). Healthcare sector suffering skills shortage. *New Zealand Herald*. Retrieved from https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11897160
- New Zealand Immigration Concepts (n.d.). *How many points will you get for your age?* Retrieved September 12, 2018, from <https://www.new-zealand-immigration.com/immigration-points-guide/age/>
- New Zealand institute for Migration and Investment. (2016). *NZ needs more skilled migrants to maintain growth*. Retrieved from Business Scoop website: <http://business.scoop.co.nz/2016/07/05/nz-needs-more-skilled-migrants-to-maintain-growth>
- New Zealand Institute of Economic Research. (2004). *Ageing New Zealand and health and disability services: Demand projections and workforce implications, 2001–2021* (A Ministry of Health report). Wellington, New Zealand: New Zealand Institute of Economic Research.
- New Zealand Institute of Economic Research. (2017). *NZIER's QSBO shows pre-election business confidence jitters, Quarterly Survey of Business Opinion*. Retrieved September 6, 2018, from <https://nzier.org.nz/media/nziers-qsbo-shows-pre-election-business-confidence-jitters-quarterly-survey-of-business-opinion-october-2017>
- New Zealand Institute of Economic Research. (2018). *NZIER's QSBO shows businesses gloomy as costs rise and profitability gets squeezed, Quarterly Survey of Business Opinion*. Retrieved September 6, 2018, from <https://nzier.org.nz/media/nziers-qsbo-shows-businesses-gloomy-as-costs-rise-and-profitability-gets-squeezed-quarterly-survey-of-business-opinion-april-2018>
- New Zealand Institute of Economic Research (n.d.). *About quarterly survey of business opinion*. Retrieved September 6, 2018, from <https://nzier.org.nz/ABout%20QSBO>
- New Zealand now (2017). *Healthcare Jobs*. Retrieved September 6, 2018, from <https://www.newzealandnow.govt.nz/work-in-nz/nz-jobs-industries/healthcare-jobs>
- New Zealand now (2018a). *Residence from work category*. Retrieved June 20, 2018, from <https://www.newzealandnow.govt.nz/move-to-nz/new-zealand-visa/work-visa/residence-work-visas>
- New Zealand now (2018b). *Job market & key industries*. Retrieved from <https://www.newzealandnow.govt.nz/work-in-nz/nz-jobs-industries>

- New Zealand Trade and Enterprise. (2011). *New Zealand's IT sector*. Retrieved September 6, 2018, from <https://www.nzte.govt.nz/en/news-and-media/features/infographic-new-zealands-ict-sector/>
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, England: Cambridge University Press.
- North, N. (2007). *The employment of immigrants in New Zealand: The attitudes, policies, practices and experiences of employers* (New Settlers Programme Occasional Publication number 18). Palmerston North, New Zealand: Massey University.
- North, N., & Massey, U. (2007). *The employment of immigrants in New Zealand: The attitudes, policies, practices and experiences of employers* (New Settlers Programme Occasional Publication number 18). Palmerston North, New Zealand: Massey University.
- North, N., & Trlin, A. D. (2004). *Immigrants in business: a study of self-employed immigrants and their businesses in New Zealand* (New Settlers Programme). Palmerston North, New Zealand: Massey University.
- Noted (2012). *Successful Kiwi entrepreneurs*. Retrieved, from <https://www.noted.co.nz/money/small-business/successful-kiwi-entrepreneurs/>
- O'Leary, Z. (2004). *The essential guide to doing research*. London, England: Sage.
- Oberoii, A. K. (2016). Mentoring for first-generation immigrant and refugee youth. *National Mentoring Resource Center Population Review*. Retrieved from http://nightingalementoring.org/wp-content/uploads/2017/09/ImmigrantRefugeeYouth_Population_Review.pdf
- Office of Ethnic Communities (2016). Ranjna Patel receives the prestigious Deloitte visionary award." Retrieved from <https://ethniccommunities.govt.nz/story/ranjna-patel-receives-prestigious-deloitte-visionary-award?page=4>
- Omisakin, O.M. (2016). *Exploring the migrant experience in small business activities in Auckland, New Zealand: A case study of African migrants* (Doctoral thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <http://aut.researchgateway.ac.nz/handle/10292/10489>
- Organisation for Economic Co-operation and Development. (2001). *Glossary of statistical terms: Paid employment jobs*. Retrieved from September 2, 2018, from <https://stats.oecd.org/glossary/detail.asp?ID=2000>
- Organisation for Economic Co-operation and Development. (2003). *OECD economic surveys New Zealand: The economic impact of migration* (OECD Economic Surveys Volume 2003, Supplement 3). Retrieved from https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-new-zealand-2003/the-economic-impact-of-migration_eco_surveys-nzl-2003-5-en
- Organisation for Economic Co-operation and Development (2008). *International Migration Outlook SOPEMI Annual Report*. Paris, France: OECD.
- Organisation for Economic Co-operation and Development. (2008). *The global competition for talent: Mobility of the highly skilled*. Retrieved from <http://www.oecd.org/sti/sci-tech/theglobalcompetitionfortalentmobilityofthehighlyskilled.htm>
- Organisation for Economic Co-operation and Development (2010). *OECD Information Technology Outlook 2010*. Paris, France: OECD.
- Organisation for Economic Co-operation and Development. (2010). *Skilled immigrants' contribution to innovation and entrepreneurship in the US*. Retrieved from <http://dx.doi.org/10.1787/9789264095830-en>

- Organisation for Economic Co-operation and Development (2011). *Open for business: Migrant entrepreneurship in OECD countries*. Paris, France: OECD.
- Organisation for Economic Co-operation and Development (2014). *Is migration good for the economy?* Paris, France: OECD.
- Organisation for Economic Co-operation and Development (2017). *OECD Economic Surveys New Zealand 2017*. Paris, France: OECD.
- Organisation for Economic Co-operation and Development (2018). *International Migration Outlook 2018*. Paris, France: OECD.
- Ottaviano, G. I. P., & Peri, G. (2004). *The economic value of cultural diversity: Evidence from US cities* (NBER Working Paper No. 10904). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w10904>
- Page, S. (2007). *The difference: How the power of diversity creates better groups, schools, firms, and societies*, Princeton: Princeton University Press.
- Panayiotopoulos, P. I. (2008). Turkish immigrant entrepreneurs in the European Union: A political-institutional approach. *International Journal of Entrepreneurial Behavior & Research*, 14(6), 395–413.
- Pandya, S. & Leblang, D. (2012). *Deal or no deal: Explaining the rise of international venture capital investment*. Retrieved from SSRN Electronic Journal website: <https://ssrn.com/abstract=1918360> or <http://dx.doi.org/10.2139/ssrn.1918360>
- Papademetriou, D.G., Somerville, W., & Sumtion, M.S. (2009). *The social mobility of immigrants and their children*. (Migration Policy Institute report). Washington, DC: Migration Policy Institute.
- Parke, A. (1993). Messy research, methodological predispositions, and theory development in international joint ventures. *Academy of Management Review*, 18(2), 227–268.
- Paserman, M. D. (2008). *Do high-skill immigrants raise productivity? Evidence from Israeli manufacturing firms, 1990-1999* (CEPR Discussion paper 6896). Retrieved from Centre for Economic Policy Research website: https://cepr.org/active/publications/discussion_papers/dp.php?dpno=6896
- Patton (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Paulose, A. (2011). *Motivation to become entrepreneurs: The case of Indian immigrants to New Zealand* (Master's thesis, Unitec, Auckland, New Zealand). Retrieved from <https://unitec.researchbank.ac.nz/handle/10652/1603>
- Pearce, D. L., & Aidan, P. (2000). *Europe's population and labour market beyond 2000 – Volume 2: Country case studies*. Strasbourg, France: Council of Europe Publishing.
- Peri, G., & Requena, F. (2010). The trade creation effect of immigrants: Evidence from the remarkable case of Spain. *Canadian Journal of Economics*, 43(4), 1433–1459.
- Perren, L., & Ram, M. (2004). Case-Study method in small business and entrepreneurial research. *International Small Business Journal*, 22(1), 83–101. doi:10.1177/0266242604039482
- Pfeiffer, F., & Reize, F. (2000). Business start-ups by the unemployed: An econometric analysis based on firm data. *Labour Economics, An International Journal*, 7(2000), 629–663.
- Pio, E. (2005). Standing in the foyer: Work experiences of Indian women migrants in New Zealand. *Equal Opportunities International*, 22(8), 296–314.
- Pio, E. (2007). Ethnic minority migrant women entrepreneurs and the imperial imprimatur. *Women in Management Review*, 22(8), 631–649.

- Pio, E., & Dana, L.P. (2014). An empirical study of Indian entrepreneurs in Christchurch, New Zealand. *International Journal Of Entrepreneurship And Small Business*, 22(1), 17–35.
- Piperakis, A. S., Milner, C., & Wright, P.W. (2003). Immigration, trade costs and trade: Gravity evidence for Greece. *Journal of Economic Integration*, 18(4), 750–762.
- Piperopoulos, P. (2010). Ethnic minority businesses and immigrant entrepreneurship in Greece. *Journal of Small Business and Enterprise Development*, 17(1), 139–158.
- Poot, J. (1993). Adaptation of migrants in the New Zealand labor market. *International Migration Review*, 27(1), 121–139.
- Poot, J., & Cochrane, B. (2004). *Measuring the economic impact of migration: A scoping paper*. Hamilton, New Zealand: University of Waikato.
- Poot, J., Nana, G., & Philpott, B. (1988). *International migration and the New Zealand economy: A long-run perspective*. Wellington, New Zealand: Victoria University Press.
- Portes, A., Guarnizo, L.E., & Haller, W. (2002). Transnational entrepreneurs : an alternative form of immigrant economic adaptation. *American Sociological Review*, 67(2), 278–298. <https://doi:10.2307/3088896>
- Racher, F. E., & Robinson, S. (2003). Are phenomenology and postpositivism strange bedfellows? *Western Journal of Nursing Research*, 25(5), 464–481.
- Radio New Zealand. (2017, February 27). *Migrant numbers hit new record high as NZers return*. Retrieved from www.radionz.co.nz/news/national/325421/migrant-numbers-keep-breaking-records
- Raeesi, R. D., Dastranj, M., Mohammadi, S., & Rasuli, E. (2013). Understanding the interactions among the barriers to entrepreneurship using interpretive structural modeling. *International Journal of Business and Management*, 8(13), 56–72.
- Rai, S. K. (2008). Indian entrepreneurs: An empirical investigation of entrepreneur's age and firm entry, type of ownership and risk behaviour. *Journal of Services Research*, 8(1), 213–228.
- Ram, M. (1997). Ethnic minority enterprise: an overview and research agenda. *International Journal of Entrepreneurial Behavior & Research*, 3(3), 149–156.
- Ram, M., Abbas, T., Sanghera, B., & Hillin, G. (2000). Currying favour with the locals: Balti owners and business enclaves. *International Journal of Entrepreneurial Behavior & Research*, 6(1), 41–55.
- Rasel, B. (2014). *Opportunity-driven immigrant entrepreneurship* (The Faculty of Mathematics and Natural Sciences report). Oslo, Norway: University of Oslo.
- Rath, J. (2010). *Ethnic entrepreneurship: Concept paper*. Retrieved from the University of Catania website: <http://csdle.lex.unict.it/Archive/LW/Data%20reports%20and%20studies/Reports%20and%20studies%20from%20EUROFOUND/20110530-060250 EUROFOUND Etnic entrepre Jul10pdf.pdf>
- Rauch, J. E. (1999). Networks versus markets in international trade. *Journal of International Economics*, 48(1), 7–35.
- Rauch, J. E., & Trindade, V. (2002). Ethnic Chinese Networks in International Trade. *Review of Economics and Statistics*, 84(1), 116–130.
- Rauch, J.E., & Casella, A. (2003). Overcoming informational barriers to international resource allocation: Prices and ties. *Economics Journal*, 113(484), 21–42.
- Razzak, W. A., & Timmins, J. C. (2008). A macroeconomic perspective on skill shortages and the skill premium in New Zealand. *AEPA Australian Economic Papers*, 47(1), 74–91.

- Reed, M. N. (2006). Queen of infomercials looks for next empire. *Sunday Star Times*, p. 4.
- Reichlin, P., & Rustichini, A. (1998). Diverging patterns with endogenous labor migration. *Journal of Economic Dynamics & Control*, 22(5), 703–728.
- Reynolds, P. D., Bygrave, W. D., & Autio, E. (2004). *GEM 2003 Global Report*. Retrieved from Global Entrepreneurship Monitor:
<https://www.gemconsortium.org/report/47102>
- Reynolds, P.D., Camp, M., Bygrave, W., & Hay, M. (2001). *GEM 2001 Global Report*. Wellesley, MA: Global Entrepreneurship Monitor.
- Riege, A. M. (2003). Validity and reliability tests in case study research: A literature review with “hands-on” applications for each research phase. *Qualitative Market Research: An International Journal*, 6(2), 75–86.
- Rissman, E. R. (2006). The self-employment duration of younger men over the business cycle. *Economic perspectives*, 30(3), 14–27.
- Ritchie, J., & Lewis, J. (2003). *Qualitative research practice: A guide for social science students and researchers*. Retrieved from
<https://mthoyibi.files.wordpress.com/2011/10/qualitative-research-practice-a-guide-for-social-science-students-and-researchers-jane-ritchie-and-jane-lewis-eds-20031.pdf>
- Robichaud, Y., McGraw, Y., & Roger, A. (2001). Toward the development of a measuring instrument for entrepreneurial motivation. *Journal Of Developmental Entrepreneurship*, 6(1), 189–202.
- Robson, C. (1993). *Real world research: A resource for social scientists and practitioner researchers*. Cambridge, USA: Blakewell.
- Robson, C. (2002). *Real World Research* (2nd ed). Oxford, England: Blackwell.
- Romanelli, E., & Schoonhoven, K. (2001). The local origins of new firms. In K. Schoonhoven, & E. Romanelli (Eds.), *The entrepreneurship dynamic: Origins of entrepreneurship and the evolution of industries* (pp.57–68). Stanford, CA: Stanford University Press.
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5): 71–78.
- Rorty, R. (1993). Essays on Heidegger and Others: Philosophical Papers. *Modern language Studies*, 23(2), 117–119.
- Rosa, P., & Dawson, A. (2006). Gender and the commercialization of university science: Academic founders of spinout companies. *Entrepreneurship & Regional Development*, 18(4), 341–366.
- Rossmann, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, CA: Sage.
- Rubin, A., & Babbie, E. (1997). *Research methods for social work* (3rd ed.). London, England: Pacific Grove.
- Saiz, A. (2007). Immigration and housing rents in American cities. *Journal of Urban Economics*, 61(2), 345–371.
- Sam, D. L., Vedder, P., Ward, C., & Horenczyk, G. (2006). Psychological and sociocultural adaptation of immigrant youth. In J. W. Berry, J. S. Phinney, D. L. Sam, & P. Vedder (Eds.), *Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts* (pp. 117–141). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Samuelson, P. A., & Nordhaus, W.D. (2004). *Economics*. Boston, MA: McGraw-Hill.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340.

- Saunders, M., Lewis, P., & Thornhill, A. (2009) *Research methods for business students*. New York, NY: Pearson.
- Saxenian, A. (2002). Silicon valley's new immigrant high-growth entrepreneurs. *Economic Development Quarterly*, 16(1), 20–31.
- Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development*, 40(2), 35–61.
- Saxenian, A., & Sabel, C. (2008). Venture capital in the “Periphery”: The new argonauts, global search, and local institution building. *Economic Geography*, 84(4), 379–394.
- Sayer, A. (1992). *Method in social science: A realist approach*. London, England: Routledge.
- Scase, R., & Goffee, R. (1987). *The real world of small business owner*. London, England: Routledge.
- Schere, J. L. (1982). Tolerance of ambiguity as a discriminating variable between entrepreneurs and managers. *Academy of Management Proceedings*, 1982(1), 404–408.
- Schindehutte, M., & Morris, M.H. (2009). Advancing strategic entrepreneurship research: The role of complexity science in shifting the paradigm. *Entrepreneurship Theory and Practice*, 33(1), 241–276. <https://doi.org/10.1111/j.1540-6520.2008.00288.x>
- Schjoedt, L., & Shaver, K.G. (2007). Deciding on an entrepreneurial career: A test of the pull and push hypotheses using the panel study of entrepreneurial dynamics data. *Entrepreneurship Theory and Practice*, 31(5), 733–752.
- Scholz, R. W., & Tietje, O. (2002). Types of case Studies. In R. W. Scholz, & O. Tietje (Eds.), *Embedded case study methods*. Thousand Oaks, CA: Sage Publications.
- Schuetze, H.J., & Antecol, H. (2007). Immigration, Entrepreneurship and the Venture Start-Up Process. The Life Cycle of Entrepreneurial ventures. In S. Parker (Ed.), *International handbook series on entrepreneurship* (3rd ed., pp. 107–135). New York, NY: Springer.
- Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, Mass: Harvard University Press.
- Schumpeter, J. A. (1951). *Imperialism and social classes*. New York, NY: Augustus Kelly.
- Schwab, K., & Sala-i-Martin, X. (2018). *The global competitiveness report 2017–2018*. Ottawa, ON: World Economic Forum (WEF).
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks: Sage Publications.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior and Research*, 11(1), 42–57. <https://doi.org/10.1108/13552550510580834>
- Sequeira, J. M., & Rasheed, A. A. (2006). Start-up and growth of immigrant small businesses: The impact of social and human capital. *Journal Of Developmental Entrepreneurship*, 11(4), 357–376.
- Shane, S. (2003). *A general theory of entrepreneurship*. Cheltenham, UK: Edward Elgar.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, 25(1), 217–226. Retrieved from <http://www.jstor.org/stable/259271>
- Shane, S., Locke, E.A., & Collins, C.J. (2003). Entrepreneurial motivation. Retrieved September 6, 2018, from Cornell University, ILR School website: <http://digitalcommons.ilr.cornell.edu/articles/830>
- Shinnar, R. & Young, C. A. (2008). Hispanic immigrant entrepreneurs in the Las Vegas metropolitan area: motivations for entry into and outcomes of self-employment.

- Journal of Small Business Management*, 46(2), 242–262.
<https://doi.org/10.1111/j.1540-627X.2008.00242.x>
- Silverman, D. (2000). Analyzing talk and text. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 821–834). Newbury Park, CA: Sage Publications.
- Silverman, D. (2013). *Doing qualitative research* (4th ed.). Los Angeles, CA: Sage Publications.
- Smallbone, D., Deakins, D., & Ram, M., (2003). Addressing the business support needs of ethnic minority firms in the United Kingdom. *Environment and Planning C: Politics and Space*, 21(6), 843–859. <https://doi.org/10.1068/c0305>
- Smilor, R. (1997). Entrepreneurship: Reflections on a subversive activity. *Journal of Business Venturing*, 12(5), 341–346. [https://doi.org/10.1016/S0883-9026\(97\)00008-6](https://doi.org/10.1016/S0883-9026(97)00008-6)
- Spijkers, F. E. (2011). *Mental health outcomes of immigrant and non-immigrant youth in New Zealand: Exploring the immigrant paradox* (Master's thesis, Victoria University of Wellington, Wellington, New Zealand). Retrieved from <http://researcharchive.vuw.ac.nz/handle/10063/2048>
- Spoonley, P., & Bedford, R. (2012). *Welcome to our world? Immigration and the reshaping of New Zealand*. Auckland, New Zealand: Dunmore Publishers.
- Stake, R. E. (1994). *Case Studies. Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Stangler, D., & Spulber, D.F. (2013). *The age of the entrepreneur: Demographics and entrepreneurship*. Paper presented at the i4j Summit March 2013, Menlo Park, CA. Retrieved from <http://i4j.info/wp-content/uploads/2013/05/i4jDaneStanglerDemographicsandEntrepreneurship-1.pdf>
- Staniewski, M., & Awruk, K. (2015). Motivating factors and barriers in the commencement of one's own business for potential entrepreneurs. *Economic Research-Ekonomska Istrazivanja*, 28(1), 583–592. <https://doi.org/10.1080/1331677X.2015.1083876>
- Statistics New Zealand. (2002). *2001 census of population and dwellings: Ethnic groups*. Retrieved from <http://m.stats.govt.nz/Census/2001-census-data/2001-census-of-population-and-dwellings/>
- Statistics New Zealand. (2012) *What New Zealand actually does for a living: from manufacturing to a services-oriented economy*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/economic_indicators/NationalAccounts/Contribution-to-gdp.aspx
- Statistics New Zealand. (2013). *2013 Census Usually Resident Population Counts*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/population/census_counts/2013CensusUsuallyResidentPopulationCounts_HOTP2013Census/Commentary.aspx
- Statistics New Zealand. (2014). *2013 Census quickstats about culture and identity*. Retrieved from <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity/asian.aspx>
- Statistics New Zealand. (2016). *The kiwi factor in record net migration*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/population/Migration/international-travel-and-migration-articles/kiwi-factor-migration
- Statistics New Zealand. (2017a). *Labour force will grow and age*. Retrieved June 20, 2018, from <https://www.stats.govt.nz/news/labour-force-will-grow-and-age>

- Statistics New Zealand. (2017b). *National Ethnic Population Projections: 2013(base)–2038 (update)*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/population/estimates_and_projections/NationalEthnicPopulationProjections_HOTP2013-2038/Commentary.aspx#Ind1
- Statistics New Zealand. (2017c). *Construction firms have high proportion of hard-to-fill vacancies*. Media Release. Retrieved from http://archive.stats.govt.nz/browse_for_stats/businesses/business_growth_and_innovation/BusinessOperationsSurvey_MR2016.aspx
- Statistics New Zealand. (2018a). *GDP rises on strength in services*. Retrieved from <https://www.stats.govt.nz/news/gdp-rises-on-strength-in-services>
- Statistics New Zealand. (2018b). *2018 Census: Top priority topics for census releases*. Retrieved from <https://www.stats.govt.nz/2018-census/>
- Statistics New Zealand. (2018c). *Birth rate down to record low*. Retrieved from <https://www.stats.govt.nz/news/birth-rate-down-to-record-low>
- Statistics New Zealand. (n.d.-a). *2013 Census ethnic group profiles: Indian*. Retrieved from http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24743&tabname=Labourforce
- Statistics New Zealand. (n.d.-b). *Datainfo+: Explore our metadata - National ethnic population projections*. Retrieved from http://datainfoplus.stats.govt.nz/item/nz.govt.stats/5fe08b87-2d60-4b1a-82bb-0100de46286b?_ga=2.92687002.660422034.1532401506-2129616196.1527365720
- Statistics New Zealand. (n.d.-c). *Datainfo+: Business Operations Survey*. Retrieved from http://datainfoplus.stats.govt.nz/item/nz.govt.stats/98568739-f933-4c00-8d56-d523f20e68bb?_ga=2.169298465.1000107591.1519231433-1844170498.1519231433#/nz.govt.stats/fa5d83ad-ab04-4e69-80d2-dbf63c9760eff
- Steven, S. (2007). *International trade theory and policy*. Retrieved from <http://internationalecon.com/Trade/Tch40/T40-2.php>
- Stevenson, L. (1990). Some methodological problems associated with research on women entrepreneurs. *Journal of Business Ethics*, 9(4), 439–446. <https://doi.org/10.1007/BF00380343>
- Stewart, W. H., & Roth, P.L. (2007). A meta-analysis of achievement motivation differences between entrepreneurs and managers. *Journal of Small Business Management*, 45(4), 401–421.
- Stich, S. P. (1990). *The fragmentation of reason: Preface to a pragmatic theory of cognitive valuation*. Cambridge, Massachusetts: MIT Press.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications.
- Strier, R., & Abdeen, Z. (2009). Women's experiences of micro-enterprise: Contexts and meanings. *Sex Roles, A Journal of Research*, 61(7), 566–579. <https://doi.org/10.1007/s11199-009-9642-4>
- Suranovic, S. (2007). *International trade theory and policy*. Retrieved from <http://internationalecon.com/Trade/Tch40/T40-2.php>
- Suri, H. (2011) Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11 (2), pp.63–75, <https://doi.org/10.3316/QRJ1102063>
- Swarbrick, N. (2015). *Indians: Early immigration*. Te Ara The Encyclopedia of New Zealand. Retrieved from <https://teara.govt.nz/mi/indians/print>

- Tan, L. (2018, August 7). Look for opportunities with 'migrant eyes', new arrivals urged. *New Zealand Herald*. Retrieved from https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12100632
- Tausi, M. (2015). *Labour market integration and retention of skilled migrants in New Zealand*. Retrieved from Ministry of Business, Innovation and Employment website: <https://www.mbie.govt.nz/publications-research/research/migrants---settlement/integration-retention-skilled-migrants-2015.pdf>
- Taylor, S. J., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd ed.). Hoboken, NJ: John Wiley & Sons Inc.
- The University of Auckland. (n.d.). *University of Auckland launches ventureLab incubator*. Retrieved from <http://www.cie.auckland.ac.nz/newsroom/artmid/20949/articleid/549/university-of-auckland-launches-venturelab-incubator>
- Tiwari, K. N. (1980). *Indians in New Zealand: Studies of a sub-culture*. Wellington, New Zealand: Price Milburn.
- Travis, A. (2015, August 28). Migrants, refugees and asylum seekers: What's the difference? *The Guardian*. Retrieved from <https://www.theguardian.com/world/2015/aug/28/migrants-refugees-and-asylum-seekers-whats-the-difference>
- Trochim, W. (2006). *Positivism & Post-Positivism*. Retrieved from <https://www.socialresearchmethods.net/kb/positvsm.php>
- Valliere, D., & R. Peterson (2009). Entrepreneurship and economic growth: Evidence from emerging and developed countries. *Entrepreneurship & Regional Development*, 21(5/6), 459–480.
- van Praag, C. M., & Versloot, P.H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29(4), 351–382.
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. In J. Katz (Ed.), *Advances in entrepreneurship, firm emergence, and growth* (3rd ed., pp.119–138). London, UK: Edward Elgar Publishing.
- Victoria University of Wellington. (n.d.). *Innovation incubator*. Retrieved September 12, 2018, from http://hub.vicinnovate.ac.nz/incubator_wiki/index.php/About_The_Incubator
- Viinikainen, J., Heineck, G., Bockerman, P., Hintsanen, M., Raitakari, O., & Pehkonen, J. (2017). Born entrepreneurs? Adolescents' personality characteristics and entrepreneurship in adulthood. *Journal of Business Venturing Insights*, 8, 9–12. <https://doi.org/10.1016/j.jbvi.2017.05.001>
- Volery, T. (2007). Ethnic entrepreneurship a theoretical framework. In Dana, L-P. (Ed.), *Handbook of research on ethnic minority entrepreneurship*. (pp. 30–41). Cheltenham, England: Edward Elgar.
- Vroom, V. H. (1995). *Work and motivation*. San Francisco, CA: Jossey-Bass.
- Wadhwa, V., Saxenian, A., Rissing, B., & Gereffi, G. (2008). skilled immigration and economic growth. *Applied Research in Economic Development*, 5(1), 6–14.
- Wadsworth, J., Dhingra, S., Ottaviano, G., & Van Reenen, J. (2016). *Brexit and the impact of immigration on the UK*. Retrieved from London School of Economics website: <http://cep.lse.ac.uk/pubs/download/brexit05.pdf>
- Waldinger, R. (1990). *Ethnic entrepreneurs: Immigrant business in industrial societies*. Newbury Park, CA: Sage Publications.


- Warman, C. (2007). Ethnic enclaves and immigrant earnings growth. *Canadian Journal of Economics*, 40(2), 401–422.
- Watson, R., Keasey, K., & Baker, M. (2000). Small firm financial contracting and immigrant entrepreneurship. In J. Rath (Ed.), *Immigrant businesses: The economic, political and social environment* (pp.70–89). New York, NY: Palgrave Macmillan.
- Wayland, S. (2011). *Immigrant self-employment and entrepreneurship in the GTA: Literature, data and program review*. Retrieved from Metcalf Foundation website: <https://metcalffoundation.com/stories/publications/immigrant-self-employment-and-entrepreneurship-in-the-gta/>
- Weng, H., & Chanwong, P. (2016). *Investigating the common barriers that high-skilled Asian immigrant entrepreneurs face in the western countries* (Master's thesis, Lund University, Lund, Sweden). Retrieved from <https://lup.lub.lu.se/student-papers/search/publication/8882272>
- Westpac. (2016, 28 July). *Industry Insights*. Retrieved from <https://www.westpac.co.nz/assets/Business/Economic-Updates/2016/Bulletins-2016/Industry-Insights-Horticulture-July-2016.pdf>
- Whybrow, P. C. (2005). *American mania: When more is not enough*. New York, NY: Norton.
- Williams, A. M., & Baláz, V. (2012). Migration, risk, and uncertainty: theoretical perspectives. *Population, Space and Place*, 18(2), 167–180.
<https://doi.org/10.1002/psp.663>
- Williamson, D., Neill, L., Kruesi, M., & Waldren, N. (2013). *Hospitality report: reporting on New Zealand's hospitality industry 2013*. Auckland, New Zealand: Restaurant Association of New Zealand/Auckland University of Technology.
- Wilson, J. G. (1980). The Indian mind: Essentials of Indian philosophy, religion, and culture. In Tiwari, K. (Ed.), *Indians in New Zealand: Studies of a Sub-Culture* (85–112). Wellington, New Zealand: Nelson Price Milburn.
- Wilson, P., & Fry, J. (2017) *Immigration: doing the right thing for the right reasons* (NZIER Insight 76/2017). Retrieved from New Zealand Institute of Economic Research website: https://nzier.org.nz/static/media/filer_public/99/b6/99b69d45-e87d-4b98-a026-bab59380273f/nzier_insight_76_immigration.pdf
- Wilson, S. J. (2003). A dynamic general equilibrium analysis of migration and capital formation: The case of Canada. *Review of Economic Dynamics*, 6(2), 455–481.
- Windsor, G. (2015). *Highly skilled migration and the promotion of entrepreneurship in the UK* (Doctoral thesis, Loughborough University, Leicestershire, UK). Retrieved from <https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/17423/3/Thesis-2015-Windsor.pdf>
- Wong, K. (1986). Are international trade and factor mobility substitutes? *Journal of International Economics*, 21(1-2), 25–43.
- World Bank. (2016). *Entrepreneurs and small businesses spur economic growth and create jobs*. Retrieved from www.worldbank.org/en/news/feature/2016/06/20/entrepreneurs-and-small-businesses-spur-economic-growth-and-create-jobs
- World Bank. (2018). *Doing Business*. Retrieved from www.doingbusiness.org/data/exploreeconomies/new-zealand
- Yin, R. K. (1994). *Case study research: Design and method*. Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2014). *Case study research : Design and methods*. London, UK: Sage Publications.

- Young, B. (2009, November 27). Tall Poppy Syndrome - our best invention? *New Zealand Herald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10608616
- Zaki, A. (2018, January 7). A taste of south India for Blenheim. *The Marlborough Express*. Retrieved from <https://www.stuff.co.nz/>
- Zandi, M., Lafakis, C., White, D., & Ozimek, A. (2016). *The macroeconomic consequences of Mr. Trump's economic policies*. Retrieved from Moody's Analytics website: <https://www.economy.com/mark-zandi/documents/2016-06-17-Trumps-Economic-Policies.pdf>
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of Business Venturing*, 26,(5), 521–536. <https://doi.org/10.1016/j.jbusvent.2010.04.001>
- Zhang, Y. (2011). Investigating the economic contribution of immigrants in New Zealand (Master's thesis, Auckland University of Technology, Auckland, New Zealand). Retrieved from <https://aut.researchgateway.ac.nz/bitstream/handle/10292/1394/ZhangYJ.pdf?sequence=3&isAllowed=y>
- Zhou, M. (2004). Revisiting ethnic entrepreneurship: convergences, controversies, and conceptual Advancements. *International Migration Review*, 38(3), 1040–1074.
- Zimmerman, A. (2007). The nature of belief. *Journal of Consciousness Studies*, 14(11), 61–82.

Appendices

Appendix A - Ethics approval	196
Appendix B - MFAT response on the intent to update NZ INC India strategy	198
Appendix C - MBIE response on principal skilled migrant approval statistics from source country India (2007 -2018); and statistics on the proportion operating their own business.	200
Appendix D - ANZSCO and ANZSIC lists	209
Appendix E - Coding and analysis matrix examples	211
Appendix F - Triangulation table	215
Appendix G - Participant information sheet	220
Appendix H - Participant consent form	222
Appendix I - Interview guide	223
Appendix J - Case summaries of the remaining seven cases	226
Appendix K - Glossary	241

Appendix A - Ethics approval



AUTEC Secretariat
Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

6 October 2016

Swati Nagar

Faculty of Business Economics and Law

Dear Swati

Ethics Application:16/359

Filling the gaps - the long term impact of skilled Indian labour migration on the New Zealand economy

Thank you for submitting your application for ethical review to the Auckland University of Technology Ethics Committee (AUTEC). I am pleased to confirm that your ethics application has been approved for three years until 5 October 2019.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 5 October 2019;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 5 October 2019 or on completion of the project;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

A handwritten signature in black ink, appearing to read 'K O'Connor', written in a cursive style.

Kate O'Connor

Executive Secretary

Auckland University of Technology Ethics Committee

Cc: Neharika Ahluwalia;wzm1109@aut.ac.nz

Appendix B - MFAT response on the intent to update NZ INC India strategy



New Zealand Ministry of
Foreign Affairs and Trade
Ministry Address

10 April 2018

Neharika Ahluwalia
wzm1109@aut.ac.nz

195 Lambton Quay
Private Bag 18-901
Wellington 6160
New Zealand

T +64 4 439 8000
F +64 4 472 9596

Dear Neharika Ahluwalia

I refer to your email of 7 March 2018 in which you request the following under the Official Information Act 1982 (OIA):

"I am an AUT student, conducting research on skilled Indian migrants in New Zealand. I am currently reviewing the literature on trade and skilled migration from India and am writing to request information on a couple of policies please:

*1. The 'Export markets projects [PDF 489KB]' under the Business growth Agenda (BGA) 2017 suggests the intent to update NZ Inc goalposts (please refer Trade agenda 2030: "Establish new NZ Inc positions at existing posts to protect and advance current trade access and flows"). Similar to this identification, is there an update/intent to update the NZ Inc India strategy, specifically for goal 4 - "Attract and retain skilled migrants from India who are able to make an effective contribution to New Zealand's economic base" as published on URL:
<https://www.mfat.govt.nz/en/trade/nz-inc-strategies/india-strategy/>*

*2. Are there any updates/ upcoming information on the NZ-India Free Trade agreement negotiations as published on URL:
<https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/india/>*

3. What is the last updated/publication date of the above listed (URLs) web publications?"

For ease of reference we have used the same numbers as your request.

Question 1 - I also refer to your email of 16 March 2018 in which you confirm that question 1 relates specifically to Goal 4 of the NZ Inc India Strategy.

There is an intention to update the NZ Inc India Strategy. At present, we do not have an updated version of the strategy, as policy formulation remains ongoing.

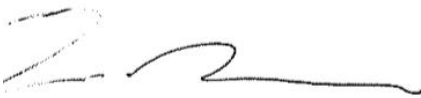
e enquiries@mfat.govt.nz
w www.mfat.govt.nz

Since then, progress will depend on what India is prepared to bring to the table, particularly with respect to the goods negotiations. There have been no formal bilateral FTA negotiating rounds held since February 2015 but the bilateral FTA remains under discussion between the two governments.

Question 3 – the web page for the New Zealand – India bilateral FTA was last updated in January 2017, reflecting that the last formal negotiating round was held in February 2015. The web page for the NZ Inc India Strategy was last updated in October 2017.

You have the right under section 28(3) of the OIA to seek a review of this response by the Ombudsman.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Wendy Adams', with a long horizontal flourish extending to the right.

Wendy Adams
for Secretary of Foreign Affairs and Trade

Appendix C - MBIE response on principal skilled migrant approval statistics from source country India (2007 -2018); and statistics on the proportion operating their own business.



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

24 May 2018

Neharika Ahluwalia
wzm1109@autuni.ac.nz

Ref: DOIA 1718-1533

Dear Ms Ahluwalia

Thank you for your email of 26 April 2018, requesting the following information under the Official Information Act 1982 (the OIA):

- Last year when the CSV file titled 'R4 Occupation and Region for SMC.xlsx' was available to public, I created aggregate tables on occupational classifications of skilled migrants from India between 2006 - 2016/17. The attached excel file has examples of those aggregate tables and details of the filters used. I need a replica of these tables from 2006 to the year ending 2017-2018 please.
- Following from the above, I also need yearly statistics from 2006-2018 on the proportion of Principal skilled migrants from India operating their own businesses with employees. (The only substitute to this request is census data, which is quite broad as it uses the criteria of ethnicity rather than nationality and hence includes skilled, unskilled, descendents and native born Indians and does not specify the proportion of business owners with employees).

Our response

- Last year when the CSV file titled 'R4 Occupation and Region for SMC.xlsx' was available to public, I created aggregate tables on occupational classifications of skilled migrants from India between 2006 - 2016/17. The attached excel file has examples of those aggregate tables and details of the filters used. I need a replica of these tables from 2006 to the year ending 2017-2018 please.

Please find attached a spreadsheet containing the information you have requested. The tables cover the financial years 2007/08 to 2017/18 (year to date up to 30 April 2018) inclusive as the CSV file from which the tables were created goes back 10 financial years.

- Following from the above, I also need yearly statistics from 2006-2018 on the proportion of Principal skilled migrants from India operating their own businesses with employees. (The only substitute to this request is census data, which is quite broad as it uses the criteria of ethnicity rather than nationality and hence includes skilled, unskilled, descendents and native born Indians and does not specify the proportion of business owners with employees).

This aspect of your request is refused under section 18(g) of the OIA as the information is not held by Immigration New Zealand (INZ). Business ownership information is not required as part of a Skilled Migrant Category (SMC) application and points for skilled employment under the SMC are not awarded where an applicant is operating or undertaking employment in their own business.

Skilled migrants are required to comply with the conditions of their residence class visa and may go on to work in self-employment after the conditions of their visa that relate to the period they must work for their employer finish. INZ does not hold information relating to the number of skilled migrants who may establish their own business or engage in self-employment.

You have the right to contest the decision to on this request by seeking an investigation and review of that decision by the Ombudsman, whose address for contact purposes is:

The Ombudsman
PO Box 10152
Wellington 6143

If you wish to discuss any aspect of your request or this response, please contact Tim Shepherd, Senior Business Advisor, Operations Support, Immigration New Zealand at timothy.shepherd@mbie.govt.nz.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'G. Scott', with a stylized flourish at the end.

Geoff Scott
Assistant General Manager – Visa Services
Immigration New Zealand
Ministry of Business, Innovation and Employment

MBIE OIA (DOIA 1718-1533) - Excel file

Table 1 of 9 – Filters

	A	B	C	D	E	F	G	H
1	DOIA 1718-1533 Neharika Ahluwalia							
2	Tables prepared using R4 - Occupation and region for SMC/General Skills principal applicants (Report date: 3 May 2018)							
3	Tables cover financial years 2007/08 to 2017/18 (YTD to 30 April 2018) inclusive							
4								
5	Application Category	(All)						
6	Application Type	Resident						
7	Application Criteria	(Multiple Items)	→	1995 General Skills				
8	Application Stream	Business / Skilled		Long Term Skill Shortage List Occupation				
9	Application Substream	(All)		Skilled Migrant				
10	Branch Location	(All)						
11	Decision Type	Approved						
12	Job Offer?	(All)						
13	Applicant Type	Principal Applicant/ Application						
14	Nationality	India						
15	Gender	(All)						
16	Labour Market Check	(All)						
17	Month Decided	(All)						
18	Financial Year Decided	(All)						
19	Region	(All)						
20								
<div> < > ⌂ Filters Major Group - Top 10 Submajor Group - Top 10 Minor Group - Top 10 ... </div>								

Table 2 of 9 - Major Group - Top 10 Occupations

	A	B
1	Major Group - Top 10	Count of Decision Type
2	Professionals	8036
3	Technicians and Trades Workers	6885
4	Managers	5302
5	Clerical and Administrative Workers	800
6	Community and Personal Service Workers	655
7	Technicians and Associate Professionals	206
8	Legislators, Administrators and Managers	161
9	Service and Sales Workers	110
10	Sales Workers	84
11	Response Outside Scope/Not Stated	78
12	Other occupations	190
13	Grand Total	22507
	<	
	Filters	Major Group - Top 10
		Submajor Group -

Table 3 of 9 - Sub-major Group - Top 10 Occupations

	A	B
1	Submajor Group - Top 10	Count of Decision Type
2	Hospitality, Retail and Service Managers	4542
3	Engineering, ICT and Science Technicians	2889
4	Health Professionals	2746
5	ICT Professionals	2687
6	Food Trades Workers	2300
7	Business, Human Resource and Marketing Professionals	974
8	Design, Engineering, Science and Transport Professionals	722
9	Specialist Managers	633
10	Office Managers and Program Administrators	623
11	Automotive and Engineering Trades Workers	537
12	Other occupations	3854
13	Grand Total	22507
	<	
	Major Group - Top 10	Submajor Group - Top 10
		Minor Group - T

Table 4 of 9 - Minor Group - Top 10 Occupations

	A	B
1	Minor Group - Top 10	Count of Decision Type
2	Midwifery and Nursing Professionals	2516
3	Food Trades Workers	2300
4	Retail Managers	2143
5	ICT and Telecommunications Technicians	2028
6	Accommodation and Hospitality Managers	2017
7	Business and Systems Analysts, and Programmers	1936
8	ICT Network and Support Professionals	546
9	Sales, Marketing and Public Relations Professionals	473
10	Building and Engineering Technicians	464
11	Electronics and Telecommunications Trades Workers	429
12	Other occupations	7655
13	Grand Total	22507

Navigation: < [] ... Minor Group - Top 10 Unit Group - Top 10 Occupations - Top 10

Table 5 of 9 - Unit Group - Top 10 Occupations

	A	B
1	Unit Group - Top 10	Count of Decision Type
2	Registered Nurses	2512
3	Retail Managers	2143
4	ICT Support Technicians	2002
5	Cafe and Restaurant Managers	1728
6	Chefs	1569
7	Software and Applications Programmers	1433
8	Bakers and Pastrycooks	476
9	Hotel Service Managers	363
10	ICT Business and Systems Analysts	362
11	Cooks	356
12	Other occupations	9563
13	Grand Total	22507

Navigation: < [] ... Minor Group - Top 10 Unit Group - Top 10 C

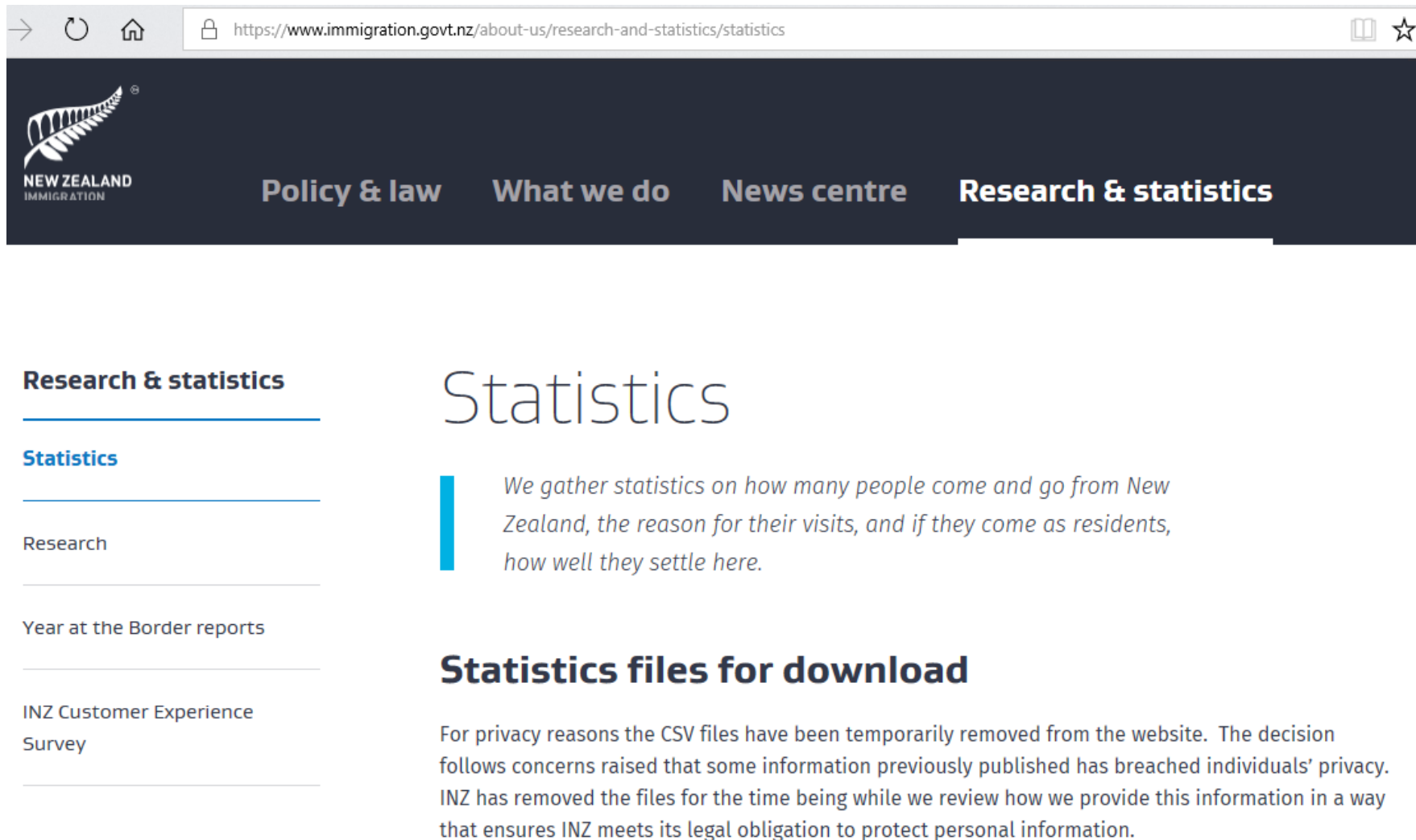
Table 6 of 9 - Top 20 Occupations

A		B
1	Occupations - Top 20	Count of Decision Type
2	Retail Manager (General)	2091
3	Cafe or Restaurant Manager	1728
4	Chef	1667
5	Registered Nurse (Aged Care)	1562
6	ICT Customer Support Officer	1137
7	ICT Support Technicians nec	664
8	Software Engineer	496
9	Baker	431
10	Registered Nurse (Medical)	416
11	Developer Programmer	372
12	Hotel Service Manager	363
13	Software Tester	352
14	Office Manager	328
15	Early Childhood (Pre-primary School) Teacher	269
16	Cook	250
17	ICT Business Analyst	238
18	Hotel or Motel Manager	211
19	Customer Service Manager	197
20	Program or Project Administrator	188
21	ICT Project Manager	186
22	Other occupations	9361
23	Grand Total	22507
<div> <div> <div><</div> <div></div> </div> <div> <div>...</div> </div> <div> <div>Occupations - Top 20</div> <div>Regional Approvals</div> <div>Approve</div> </div> </div>		

Table 7 of 9 - Regional Approvals

	A	B	C	D	E	F	G	H	I	J	K	L	M	
1	Region	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Grand Total	
2	(unknown)	147	222	261	234	176	110	194	224	437	420	301	2726	
3	Auckland	289	373	494	698	940	1200	1117	1224	1453	1237	509	9534	
4	Bay Of Plenty	22	19	43	84	85	73	151	186	215	192	124	1194	
5	Canterbury	71	53	59	72	160	96	245	241	308	300	264	1869	
6	Central Plateau	1	3	10	9	13	7	13	15	9	10	3	93	
7	Coromandel	1	1	1	4	4	9	11	8	16	13	14	82	
8	East Coast	4	2	1	4	4	9	6	6	13	7	7	63	
9	Fiordland	2			2	1					1	1	7	
10	Hawkes Bay	7	9	17	29	12	39	39	45	72	42	55	366	
11	Manawatu	28	17	28	46	37	40	47	32	52	48	54	429	
12	Marlborough	9	9	3	11	20	5	23	13	17	11	6	127	
13	Nelson	2	2	3	4	22	7	21	15	21	13	15	125	
14	Northland	6	10	29	42	48	42	55	59	83	75	63	512	
15	Otago	30	25	37	40	54	18	50	58	49	55	57	473	
16	Southland	15	7	6	10	29	7	25	23	28	29	33	212	
17	Taranaki	19	29	36	38	28	52	47	41	48	49	42	429	
18	Waikato	45	36	92	125	145	130	140	156	201	170	196	1436	
19	Wairarapa		1		6	5	7	7	8	10	7	4	55	
20	Wanganui	4	4	6	9	12	11	8	13	22	13	14	116	
21	Wellington	135	137	164	176	233	266	254	315	325	278	239	2522	
22	West Coast	5	3	1	14	16	10	17	23	15	22	11	137	
23	Grand Total	842	962	1291	1657	2044	2138	2470	2705	3394	2992	2012	22507	
<div> <div> <div>◀ ▶ ...</div> <div>Unit Group - Top 10</div> <div>Occupations - Top 20</div> <div>Regional Approvals</div> <div>Approved Male-Female Ratio</div> <div>Approved-Decline</div> </div> </div>														

Website information about the removal of csv data files



→ ↻ 🏠 🔒 https://www.immigration.govt.nz/about-us/research-and-statistics/statistics 📖 ☆

NEW ZEALAND
IMMIGRATION

Policy & law **What we do** **News centre** **Research & statistics**

Research & statistics

Statistics

Research

Year at the Border reports

INZ Customer Experience Survey

Statistics

We gather statistics on how many people come and go from New Zealand, the reason for their visits, and if they come as residents, how well they settle here.

Statistics files for download

For privacy reasons the CSV files have been temporarily removed from the website. The decision follows concerns raised that some information previously published has breached individuals' privacy. INZ has removed the files for the time being while we review how we provide this information in a way that ensures INZ meets its legal obligation to protect personal information.

Appendix D - ANZSCO and ANZSIC lists

ANZSCO - Australian and New Zealand Standard Classification of Occupations, Version 1.2

ANZSCO Version 1.2, Major and Sub-Major Groups

Major Group	Sub-Major Group
1 MANAGERS	11 Chief Executives, General Managers and Legislators 12 Farmers and Farm Managers 13 Specialist Managers 14 Hospitality, Retail and Service Managers
2 PROFESSIONALS	21 Arts and Media Professionals 22 Business, Human Resource and Marketing Professionals 23 Design, Engineering, Science and Transport Professionals 24 Education Professionals 25 Health Professionals 26 ICT Professionals 27 Legal, Social and Welfare Professionals
3 TECHNICIANS AND TRADES WORKERS	31 Engineering, ICT and Science Technicians 32 Automotive and Engineering Trades Workers 33 Construction Trades Workers 34 Electrotechnology and Telecommunications Trades Workers 35 Food Trades Workers 36 Skilled Animal and Horticultural Workers 39 Other Technicians and Trades Workers
4 COMMUNITY AND PERSONAL SERVICE WORKERS	41 Health and Welfare Support Workers 42 Carers and Aides 43 Hospitality Workers 44 Protective Service Workers 45 Sports and Personal Service Workers
5 CLERICAL AND ADMINISTRATIVE WORKERS	51 Office Managers and Program Administrators 52 Personal Assistants and Secretaries 53 General Clerical Workers 54 Inquiry Clerks and Receptionists 55 Numerical Clerks 56 Clerical and Office Support Workers 59 Other Clerical and Administrative Workers
6 SALES WORKERS	61 Sales Representatives and Agents 62 Sales Assistants and Salespersons 63 Sales Support Workers
7 MACHINERY OPERATORS AND DRIVERS	71 Machine and Stationary Plant Operators 72 Mobile Plant Operators 73 Road and Rail Drivers 74 Storepersons
8 LABOURERS	81 Cleaners and Laundry Workers 82 Construction and Mining Labourers 83 Factory Process Workers 84 Farm, Forestry and Garden Workers 85 Food Preparation Assistants 89 Other Labourers

Source: Australian Bureau of statistics (2013).

**ANZSIC - Australian and New Zealand Standard industrial Classification (2006),
Revision 1.0**

ANZSIC version 1.2, Divisions

Division

A	AGRICULTURE, FORESTRY, AND FISHING
B	MINING
C	MANUFACTURING
D	ELECTRICITY, GAS, WATER AND WASTE SERVICES
E	CONSTRUCTION
F	WHOLESALE TRADE
G	RETAIL TRADE
H	ACCOMMODATION AND FOOD SERVICES
I	TRANSPORT, POSTAL AND WAREHOUSING
J	INFORMATION, MEDIA AND TELECOMMUNICATIONS
K	FINANCIAL AND INSURANCE SERVICES
L	RENTAL HIRING AND REAL ESTATE SERVICES
M	PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
N	ADMINISTRATIVE AND SUPPORT SERVICES
O	AGRICULTURE, FORESTRY, AND FISHING
P	PUBLIC ADMINISTRATION AND SAFETY
Q	HEALTHCARE AND SOCIAL ASSISTANCE
R	ARTS AND RECREATION SERVICES
S	OTHER SERVICES

Source: Australian Bureau of statistics (2015c).

Appendix E - Coding and analysis matrix examples

Coding example - Participant 4

Transcript excerpt	Open codes	Themes
<p>Researcher: Were you satisfied with the lifestyle, pay and perks of your skilled employment in New Zealand? Why or why not?</p> <p>Participant: You <u>hit a glass ceiling</u> in the private sector, you are <u>limited by the structure of the role</u>.... I might even have earned more in a paid job, but it <u>limits you</u>...</p> <p>Researcher: When and why did you decide to start your own business?</p> <p>Participant: ...to <u>create something</u> and see the satisfaction of it being used and <u>successful</u>. <u>Initially recognition mattered</u>, we went for all the awards, but long-term it is <u>the satisfaction of creating a useful product</u></p> <p>...you still need that process of <u>self-actualisation</u>, right? And that comes by entrepreneurship. So, its engrained in a lot of migrant cultures, I would say...</p> <p>...And I had enough market knowledge. Actually, that's what drove me to do it. I knew enough of this market.</p> <p>...As an employee, I could not create jobs, I couldn't think of innovation because you are driven and <u>led by the employer's organisation structure</u>. So, you are <u>stifled in your thinking and creativity</u> because you are <u>following the path set by others</u>, whereas here you are <u>carving your own destiny</u>, whether good or bad.</p>	<p>limited opportunity for growth in paid employment</p> <p>personal satisfaction and success</p> <p>Opportunity to use one's skills and knowledge</p> <p>lack of innovation and decision-making opportunities in paid employment</p>	<p>Motivated by job dissatisfaction</p> <p>Driven by Self-actualisation</p> <p>Opportunity</p> <p>Motivated by job dissatisfaction and the desire for independence</p>

<p>Researcher: What challenges did you face when you decided to start your business?</p> <p>Participant: ... in New Zealand <u>it is nearly impossible to get a bank loan</u> for a business. You will get a bank loan only based on mortgage. You get a bank loan based on collateral, as having real estate as an asset. You don't get a bank loan on a project plan. <u>In India, you can go the bank and get finance with certain banks on a project plan, right! Whereas, here you can't.</u></p> <p>In fact, <u>it is easier in New Zealand to get grants than loans.</u> So, for the course of this business <u>in the last 11 years, I have raised</u> about eight hundred thousand dollars as grants. But fifty, fifty., so <u>400,000</u>, yeah. And that's not small money...</p> <p>And the technology business has different barriers. I mean obviously <u>the lack of being networked in the old boys' club</u>, you know that matters in New Zealand and whatever you may say, <u>one has to tap shoulders</u> to actually get access to capital, access to knowhow and all of that is a hard yard for a migrant, <u>especially tech business</u>. The fact is you face barriers, like for example eventually now we have a board right, for governance purposes. <u>In the beginning I could not attract anyone</u>, any senior New Zealanders to come on our board to become a director. So early days were challenging, yeah. Whereas if you look at the people who were born here, bred here, whatever be, be it family, whether its professional, or whether it's school days, university days, their network matters, right? So, there is that <u>collegial help which they get to a certain extent...</u></p> <p>...<u>staffing is always the biggest challenge</u> in software. <u>We don't have that talent</u>, you only get migrant talent and migrant talent is all, being, a migrant myself you know it's risky because <u>those guys are coming as a stepping stone</u>, there is no longevity. As soon as they get their residency, even for \$5,000 extra, they will move, and that is expected. I am not blaming them but to put yourself in my shoes, <u>that's a challenge, and if you can't afford</u></p>	<p>Unfavourable lending policies of New Zealand banks</p> <p>financial support from government</p> <p>lack of networks</p> <p>industry-specific norms and barriers</p> <p>Challenge of attracting and retaining skilled staff</p>	<p>Unfavourable financial infrastructure</p> <p>Favourable regulatory environment</p> <p>Normative barriers</p> <p>Normative barriers</p> <p>Resourcing (staffing) challenges</p>
---	---	--

<p><u>local kiwis because they are already taken</u>, all the good guys are taken, right, by Xero, you know by Orion, by all the good companies at big fat salaries, you know.</p>		
<p>Researcher: As an employee and an entrepreneur how do you and your business contribute to the New Zealand economy?</p> <p>Participant: Well, currently we are the fourth company which is registered for tax collection with the government. We basically collect taxes for roadside charges... <u>we are helping the government collect their taxes in an efficient way</u>. And of course, <u>creating jobs, giving income sustenance</u>, and that's a huge contribution. Our <u>business solutions</u> have a positive impact on the economy.</p> <p>I have <u>helped New Zealand companies go to India</u>, have <u>helped them hire people</u>, I have <u>helped them connect to various people from my network</u>. We attempted business with large public and private sector companies in India, however they failed, or contracts finished. But I still have a small office in Mumbai of about two staff.</p> <p>I am currently an <u>advisor to a craft beer company</u>. So, I am helping them reach out to Micro-brewery, <u>they want to try out their craft beer in India</u>, because that market is now evolving. So, you know, micro-breweries are now getting set up in Maharashtra.</p>	<p>Innovative business solutions for customers</p> <p>Job creation</p> <p>Facilitate/increase</p> <ul style="list-style-type: none"> - international business - outsourcing 	<p>Contribute to</p> <ul style="list-style-type: none"> - innovation - job creation - international business - outsourcing

Analysis matrix example - Participant 4

	Themes:	Job dissatisfaction	Opportunity	Financial goals	Family considerations	Desire for independence	Passion	Self-actualisation	E. Traits	Other/ New
1. What are the entrepreneurial drivers of Skilled Indian migrants in New Zealand?	Open codes:	limited opportunity for growth in paid employment	Opportunity to use one's skills and knowledge			lack of decision-making opportunities in paid employment		personal satisfaction and success		
		lack of innovation and decision-making opportunities in paid employment								

	Themes:	Resources	Regulatory structures	Normative barriers	Cognitive barriers	Other/New
2. What are the entrepreneurial challenges and barriers for Skilled Indian migrants in New Zealand?	Open codes:	Unfavourable lending policies of New Zealand banks	financial support from government grants	lack of networks		
		Challenge of attracting and retaining skilled staff		industry specific norms and barriers		

	Themes:	Fill labour market gaps	Job creation	Increased innovation and productivity	Increased competition/ consumer options	Increased international trade & investment	Increased production & consumption functions	Social contributions	Other/ New
3. What are the economic contributions of Skilled Indian migrant employees and entrepreneurs to the New Zealand economy?	Open codes:	Worked in a short-skilled job before starting own business	Job creation in New Zealand and India	Innovative business solutions for customers	As a entrepreneur	Facilitate/ increase international business	Both as an employee and entrepreneur	Helping smaller businesses	
						Facilitate/ increase outsourcing			

Appendix F - Triangulation table

Triangulation is the use of multiple data sources to achieve increased confidence in data (Llewellyn & Northcott, 2007). In this thesis, triangulation was achieved by collecting primary data from research participants and incorporating secondary data from academic literature, government publications, industry reports, newspaper articles and websites. Primary data was thematically coded into entrepreneurial drivers, barriers/challenges and contributions, as identified in Chapters 2 and 3 of this research.

The following table uses two interview examples for each theory to illustrate how triangulation was applied in this thesis.

Table 27 - Triangulation table

Key theories and frameworks used in this research		Primary data (in-depth participant interviews and field notes)	Secondary data (academic literature, government publications, industry reports, newspaper articles and websites)	Themes identified
Entrepreneurial drivers				
Push and pull factors theory	Labour market experience	<p><i>P5 - "...I was most certainly satisfied with my paid employment. I never had an incident of a biased decision by management. It's based on merit, so if you perform well, its acknowledged."</i></p> <p><i>P10 - "The job conditions were pretty good, they never forced me</i></p>	<p>Official statistics and academic studies in New Zealand suggest that skilled migrants are valued for filling skill shortages in labour markets (Gendall et al., 2007; North 2007; Boyd & Cleland, 2018) and have higher job satisfaction than unskilled migrants (MBIE, 2012a).</p> <p>According to the 2013 census, only 4.1 percent of the employed Indian ethnic population in New Zealand were business owners with employees; whereas, over 81 percent</p>	Less prominent push factor - job dissatisfaction

		<i>to do anything, gave me my breaks and did all the normal things you would expect."</i>	were in full-time paid employment ¹⁴ (Stats NZ, n.d.-a). Rai (2008) seconds this opinion based on his study of Indian migrant entrepreneurs and suggests that Indian migrants have a predisposition for paid employment over venture creation, and business creation is often considered as their last option.	
Push and pull factors theory	Opportunity	<p><i>P3 - "And while I was practising, I did end up seeing a lot of Indian women, who would come in just because of that comfort and because they could trust, as I was from the same culture. The cultural gap could be easily filled, and I almost felt like I could use that.</i></p> <p><i>P9 - "I thought that the population of Indians had grown three or four-fold, but the existing shops were still the same, there was still something to be done here, so I started working on it."</i></p>	<p>In New Zealand, entrepreneurship is generally considered as "doing good" in the New Zealand society, because it encourages the economic and social well-being of people through a number of channels, such as job creation, and innovation (de Vries, 2007; 2012).</p> <p>Over 10 percent of the working population in New Zealand is considered opportunity entrepreneurs (Frederick, 2004). The entrepreneurial culture in New Zealand is reflected in its business demographics, which are dominated by small and medium enterprises, that reflect high entrepreneurial activity in New Zealand (DOL, 2009, Tausi, 2015; Nash, 2018).</p> <p>The strength of New Zealand's entrepreneurial and innovative culture is also reflected in the various incubator and accelerator projects encouraged and funded by the government (Stuff, 2017), such as the Kiwi Landing Pad, (Callaghan innovation, 2018a, 2018b; Creative HQ, 2015).</p>	More prominent pull factor – opportunity

¹⁴ The census counts employment status for population aged over 15.

Entrepreneurial challenges and barriers				
Resource-based theory	Financial challenges	<p><i>P4 - "In New Zealand it is nearly impossible to get a bank loan for a business... You don't get bank loan on a project plan.</i></p> <p><i>P6 - "Arranging capital is a big, big, big problem... the banks here have a short-sightedness and so with a business which is approaching a million dollar in turnover year over year, they still find it difficult to approve even a business overdraft of say \$50,000... so that's a big barrier.</i></p>	<p>The international literature acknowledges the barriers posed by the lack of financial capital and difficulty in obtaining banking finance for migrant businesses (Apitzsch, 2003; Smallbone et al., 2003).</p> <p>Financial barriers for Indian migrants also have been identified by several official and economic studies in New Zealand, such as the studies of de Vries (2007) and Cleland and Davey (2014).</p>	Lack of financial resources and financial infrastructure
	Staffing challenges	<p><i>P9 - "I advertised through Trade Me and newspapers and Facebook page, but did not get a response. There was no experienced staff that I could get."</i></p> <p><i>"Staffing is always the biggest challenge in software. We don't have that talent, you only get migrant talent, which is risky because they use it as a stepping stone and there is no longevity... and you can't afford Kiwis because all the good ones are already taken by Xero, by Orion, all the good companies at big fat salaries."</i></p> <p><i>P9 - "It was very stressful. You have to be very careful on each and everything. Since we were</i></p>	<p>Recent research by the New Zealand Institute of Economic Research (NZIER), found that 46 percent of New Zealand businesses across all industries struggle to find skilled workers in the domestic labour market (MBIE, 2017b, 2017d; NZIER, 2017).</p> <p>Similarly, ANZ's quarterly business microscope survey reported severe skill shortages across several sectors in small businesses, especially construction, services, manufacturing and retail (ANZ, 2018a, 2018b).</p> <p>In their study of immigrant businesses in New Zealand, North and Trlin (2004) identified</p>	Staffing challenges

Institutional theory		<i>new, we did not have any guidance. We did our own research and did all that we could ... and a lot of competition. Everybody wants to do their own business. They don't care that 2-3 businesses are already running in the same place."</i>	that compliance costs are a key challenge faced by entrepreneurs in New Zealand. In reference to competition, new and small businesses continuously face threats and survival challenges from established businesses and general competition. The level of market competition is reflected by the fact that New Zealand has high levels of business births and deaths (Kidd, 2008) and 97 percent of all businesses in New Zealand are small and medium in size (MBIE, 2017a).	Legislative and market-related barriers hurdles
	Regulatory challenges	<i>P10 - "In terms of hurdles, there isn't many but yeah, compliance costs. Because there is so much compliance cost I mean and that's not fair at the start of the business ...and there is no one stop shop...you ask them, and they say this is not related to us, its related to them... it's not orderly."</i>		
	Normative and cognitive barriers	<i>P4 - "I mean obviously the lack of being networked in the old boys' club, you know that matters in New Zealand ... And all of that is a hard yard for a migrant."</i> <i>P8 - "Suppliers are not willing to help us because they think this is just another restaurant."</i> <i>P5 - "Lack of knowledge in the industry to begin with ... for example, how a group tour is done, what do other travel companies do to negotiate better rates from hotels to be competitive in the market, some of those lack of understanding were the barriers."</i>	In 2014, IRD conducted a study on the barriers faced by migrant business in New Zealand. The study surveyed 400 migrant business owners from Britain, Australia, China and India (Cleland & Davey, 2014) and identified six challenges for Asian migrants, namely, insufficient capital, cultural differences in business practices, unfamiliarity with regulatory requirements, lack of business networks and English proficiency, unemployment, and underemployment. Other studies in New Zealand have also identified normative factors like culture (de Vries, 2012; NBR, 2017) and cognitive factors like language and education (NZ Herald, 2012) as the barriers to migrant entrepreneurship in New Zealand.	Cultural and cognitive barriers

Contribution channels (verified with the Companies Office business register and annual statements)				
Labour arbitrage framework (Enderwick et al., 2011)	International trade and investment	<p><i>P5 - "We are bringing a lot of visitors into New Zealand, to the regions. That is very important so that directly contributes to the growth of the region, exactly when that region is not in one of the main city hubs."</i></p> <p><i>P7 - "We are on huge expansion trajectory right now. 2018 is a big year, we have software development facility in India at three places...we have close to 430 people in India, we need to be able to ramp up the programs on demand basis and we can't find that skill set here."</i></p>	<p>The literature identifies that skilled migrants are capable of facilitating trade and investment by bringing improved market knowledge, information on business and investment opportunities (Leblang, 2011; Pandya & Leblang, 2012), better social capital, and professional networks (Kugler & Rapoport, 2007; Saxenian & Sabel, 2008; Mundra, 2012).</p> <p>Previous research has found positive correlations between migration and bilateral trade (Gould, 1994; Head & Ries, 1998; Girma & Yu, 2000; Ley & Tutchener, 2001; Piperakis et al. 2003; Poot & Cochrane, 2004). Migrants contribute directly to the ethnic and nostalgic trade of home country products and indirectly reduce transaction costs by using their social and cultural networks, business know-how and knowledge of supply conditions in their home and host economies (Girma & Yu, 2000; Enderwick et al., 2011).</p>	Contribution to bilateral trade with India
Impact channels theory (Nathan, 2013, 2014)	Innovation and productivity	<p><i>P6 - "We have four products currently - innovative point of sale system, which is selling very good we we are preparing to protect, patent the fourth product."</i></p> <p><i>P7 - "I was then and now the only person doing this...I think the biggest thing will be New Zealand will be seen as a domain leader in digital know how and how they work and I think I have played a very big role in it. "</i></p>	<p>The international literature suggests that migrants can contribute to innovation and productivity at their workplace by adding to workforce diversity, which may result in knowledge generation (Dolado et al., 1994; Page, 2007; Berliant & Fujita, 2009). In New Zealand, a study by Kerr, Kerr and Lincoln (2014) found that an increase in skilled migrant employment by 10 percent was linked with an up to two percent increase in firm patenting. Another study by Maré et al., (2014) found a relationship between the migrant share of an area and firm-level innovation, when controls like firm age, research and development investment and regional employment levels were not used.</p>	Contribution to innovation in New Zealand

Appendix G - Participant information Sheet



Participant Information Sheet

Date Information Sheet Produced:

/ /2018

Project Title

Beyond filling the gaps – The entrepreneurial drivers, barriers and economic contributions of skilled Indian migrants in the New Zealand economy.

An Invitation

Namaste!

My name is Neharika Ahluwalia (Neha), and I am a Postgraduate Business student at AUT University. As a requirement for my coursework, I am conducting research on skilled Indian migrants in New Zealand. Participation in this research is voluntary and you are free to withdraw at any time before the completion of data collection.

What is the purpose of this research?

The aim of this research is to present the entrepreneurial drivers and contributions of skilled Indian migrants to the New Zealand economy. This is achieved by using the lens of the top 3 short skilled sectors attracting Indian migrants to New Zealand and identifying the drivers of these migrants turning from paid employment to pursue entrepreneurship. The purpose of this study is to meet the requirements my qualification - Master of Business. This research will specifically contribute to the completion of my degree by meeting the requirement of submitting a 'Thesis'. A report about my findings and reflections from this research will be emailed or posted to you on request.

How was I identified and why am I being invited to participate in this research?

You were identified and invited to participate because you accepted the invitation to participate in this research. The criteria for participation is first-generation skilled migrants; of Indian ethnicity; from India (country of birth); with skilled education and training; and with paid work experience in New Zealand; now operating their own registered business with employee(s); in the Hospitality, Information and Communications Technology (ICT), and Health sectors in New Zealand. This research excludes self-employed individuals and franchisees e.g. taxi drivers, individual contractors and dairy shop owners.

How do I agree to participate in this research?

You can agree to participate in this research by completing a consent form that is provided to you with this participant information sheet. You may return the consent form to me via email or in person. Your participation in this research is voluntary. You will have the option to withdraw from the study before the completion of data collection. Once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

If you accept this invitation for participation in research, I will conduct an interview with you via your choice of mode between a face to face, video call, and phone call interview. If the interview is conducted in person, the venue will be a public place (café) or your business premises. The interview will be audio recorded and will last no more than 60 minutes. During the interview, I may request you to provide an elaboration or clarity for your answers, to meet the needs of this research. I may take notes from observations during the interview. Your and other participant interview data will be transcribed and coded for analysis to generate themes and concepts. The data you provide will be kept safe and confidential. You may bring a friend or relative for as support person for the interview.

What are the discomforts and risks, and how will they be alleviated?

This topic relates to your everyday work and life experiences, hence recalling unpleasant experiences from the past may be a little overwhelming. You will have the choice to skip answering a particular question(s), take a break, or postpone the interview to feel uncomfortable. The interview can be conducted in the presence of a friend or relative you feel comfortable with.

The other risks involved in this research relate to privacy, security and confidentiality of your data. We ensure the safety and security of your data with diligent techniques. The risks with your data are strongly controlled with diligent practice of privacy, security and confidentiality principles.

What are the benefits?

There are many benefits of this research. It will:

1. contribute towards the completion of my Master's degree at AUT and provide me valuable experience for further research,
2. provide me with valuable experience for future research,
3. add to the academic body of knowledge about international trade and skilled Indian migrants,
4. inform employers of the inner creative/ entrepreneurial needs of skilled migrants,
5. inform the aspiring skilled migrant entrepreneurs.

How will my privacy be protected?

Your privacy and confidentiality will be ensured strictly. Your personal information will be stored securely, and the interview recordings and transcripts will be used for research purposes only. The findings of this study will be published at an aggregate level, and no identifiable information about you will be published. Data will be accessible to the researcher (me) and (my) research supervisor only.

What are the costs of participating in this research?

The costs of participating in this research mainly relate to your time, which will be no more than 60 minutes. A maximum of 40 minutes for the interview, and 20 minutes for your feedback on the interview script/ to confirm your answers. There are no financial costs of participation. You will be interviewed at a public place or your business premises at a time of your convenience.

Will you exclude me if more people than you need for the study agree to participate?

Yes, it is a possibility, and you will be courteously informed via email. I will be grateful for your time taken to volunteer for this study, and offer to send you the findings of this study via your preferred mode between email and post. The criteria for excluding volunteers will be the number of participants from different industry sectors. For example, the food (dining and catering) sector as compared with the Information technology sector.

What opportunity do I have to consider this invitation?

You will have two weeks to consider this invitation, ending ____/____/2018.

Will I receive feedback on the results of this research?

If you wish to receive a copy of the findings from this research, it will be made available to you at the contact details provided in the consent form. A copy of your interview transcript will also be provided to you when the research is complete.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr. Swati Nagar, swati.nagar@aut.ac.nz, 09 921 9999 ext. 5093.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTECH, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Neharika Ahluwalia (Neha)
wzm1109@aut.ac.nz
0211966610
C/O AUT Business School - WF Building - Level 9
City campus
42 Wakefield Street
Auckland – 1010
New Zealand.

Supervisor Contact Details:

Dr. Swati Nagar
swati.nagar@aut.ac.nz
09 921 9999 e. 5093
AUT Business School - WF Building – L9
City campus
42 Wakefield Street
Auckland – 1010
New Zealand.

Appendix H - Participant consent form



Participant Consent Form

Project title: *Beyond filling the gaps - The entrepreneurial drivers, barriers and contributions of skilled Indian migrants to the New Zealand economy.*

Project Supervisor: *Dr. Swati Nagar*

Researcher: *Neharika Ahluwalia*

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated / / 2018.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- ☐ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- ☐ I agree to take part in this research.
- ☐ I wish to receive a summary of the research findings (tick one): Yes ☐ No ☐

Participant signature :

Participant's name:

Participant's Contact Details :

Email

Phone (optional)

Other

Date:

Approved by the Auckland University of Technology Ethics Committee on 6/10/2016 AUTEK Reference number 16/359.

Note: The Participant should retain a copy of this form.

Appendix I - Interview guide

OPENING

- Introduction of the research, researcher, and interview purpose.
- Definition of skilled migrant, entrepreneur, and paid employment in this study.
- Acknowledge that questions are welcome now and during the interview as well. Also suggest that if a participant is uncomfortable with any question, it can be skipped/ interview can be stopped.
- Acknowledge that participants may find overlapping answers because certain ways of asking questions can illicit different answers by hitting perceptions and memories not invigorated by the initial choice of words.
- Date of interview _____

DEMOGRAPHIC QUESTIONS

- Interviewee details:
 - Name
 - age (five-year brackets)
 - dependent family?
 - NZ city
 - business industry sector
- When did you immigrate to NZ?
- Which city did you come from?
- Why did you come to New Zealand? (Researcher literature reference to themes identified - better opportunities, lifestyle, necessity, stayed after study, etc.)
- What visa did you come on? (Researcher literature reference – skilled migrant resident visa, work to residence, essential skills, skilled principal, skilled partner, essential skills, family, student etc.)
- What criterion did you have to meet to migrate permanently? (Researcher literature reference – age, education, work experience, English, health etc.)
- Skilled migrant criteria:
 - What qualifications do you have?
 - What is your highest skilled qualification?
 - When & where did you gain the qualification that aided skilled migration?
 - What were your fields/job titles of skilled experience in India/other?
 - How many years of skilled experience did you have in India/other?
- Before coming to NZ, what were your expectations and anticipated experience in the New Zealand society in terms of lifestyle, job and settling in?
- Did New Zealand meet your expectations?

ENTREPRENURIAL DRIVERS

- Did you easily find a skilled job/s when you came to New Zealand?
- How many years of skilled experience did you have in New Zealand?
- What were your fields/job titles of skilled experience in New Zealand?

- Were you satisfied with the lifestyle, pay, and perks of your paid (skilled) employment in New Zealand? Why? or Why not?
- When & why did you decide to pursue entrepreneurship/start a business venture? (Researcher literature reference only - need for achievement, power, independence, money, work satisfaction, use business opportunity, necessity, economic factors, rewards, support system, family, creative outlet, for purpose – e.g. helping Indian community etc.)
- Did you leave your paid employment before or after starting your business venture? If after, for how long did you continue your paid employment?
- How long has your business been operating now?
- How many businesses and employees do you have?
- Is your business/businesses in the same industry/sector as your skilled employment? If not, which industries are you in and why did you switch?
- How closely related were your skills (education and work experience) to your employments and entrepreneurial business?
- Do you intend to continue working on this business? What do you intend to do? Sell/ expand/ diversify etc.
- Are you happy with the profit/returns from your businesses?
- Would you consider going back to paid employment? Why? Why not?
- Have you considered remigration to India/other country? Why? Where to? or Why not?
- How would your personal and business acquaintances describe you? (Researcher literature reference only – adaptable, driven and committed, creativity/innovation, leader/mentor, self-reliance/ independent, patient, risk tolerant, visionary).
- Did you have any previous entrepreneurial experience/background (family/friends/city/other)?
- Did that experience influence your entrepreneurial decision?

ENTREPRENEURIAL CHALLENGES/ BARRIERS

- What barriers did you experience in your move to entrepreneurship (Researcher literature reference only – government policy, finances, staffing, market knowledge, personal, any other? “New Zealand is one of the easiest countries to start a business. Did you find it easy to get things moving?”)
- There are so many other people who fail in their first attempts. Have you failed at an entrepreneurial attempt before? If yes, why?
- What is your perceived acceptance of migrant businesses in New Zealand? What were your expectations and experience of your business acceptance in the NZ society?

ECONOMIC CONTRIBUTION CHANNELS

As an employee, how did you contribute to the New Zealand economy?

- Engage/help/encourage your employer in buying or selling products/services to India? Used your knowledge, language, networks in India to benefit business in NZ? How? (e.g., reducing transaction costs, matching buyers and sellers, dispute settlement, making aware of risk in Indian investments, etc.)
- Suggested/ outsourced BPO/KPO/ other services from India?
- Recommended Indian investments to New Zealand or invested in India;
- Influenced innovation?
- Did you buy ethnic goods?
- Anything else?

As an entrepreneur, how do you and your business contribute to the New Zealand economy?

- Does your business offer any unique services?
- As an entrepreneur, have you:
 - bought or sold products/services to India?
 - used your knowledge, language, networks in India to benefit business in NZ? How? (e.g. reducing transaction costs, matching buyers and sellers, dispute settlement, making aware of risk in Indian investments, etc.)
 - suggested/ outsourced BPO/KPO/ other services from India?
 - recommended Indian investments to New Zealand or invested in India?
 - influenced innovation?
- Does your business offer new/unique products or services?
- Does your business cater to a market/offer an existing overseas good/service in NZ for the first time?
- Does your business use a new source of supply?
- Do you buy ethnic goods?
- Anything else?
- Does your business cater to ethnic/Indian/Eastern customer needs?
- What ethnicities are your employees?
- What ethnicities are your customers?
- What is it you could not contribute as an employee that you can as an entrepreneur? (Reference to innovation, international trade/investment/outsourcing etc.)
- What ethnicity are your accountants and lawyers/ do you file taxes yourself?

CLOSING

- Any questions?

Thank the participant for their time and input.

Appendix J - Case summaries of the remaining seven cases

P1 - ICT.....	227
P2 - ICT.....	229
P3 - Health	231
P4 - ICT.....	233
P6 - ICT.....	235
P9 - Hospitality	237
P10 - Hospitality	239

P1 - ICT

Introduction

P1 started his business in 2015 after leaving his skilled job as a line producer for a film company in New Zealand. He had five years of work experience in New Zealand and 12 years of work experience in India in the film and television industry. His educational background includes a Masters in Mass Communication from India. He came to New Zealand in search of a career and lifestyle change and to be with his parents who had moved to New Zealand a couple of years earlier.

At the time of the interview, he was focusing on growing his business and values his current family - work life balance as an entrepreneur and did not intend to go back to paid employment.

Entrepreneurial drivers

The key motivation for P1 to leave his skilled employment was the lack of opportunity for career growth, work continuity and variety. He also identified a gap in the market for a one-stop shop for IT, digital media, design, and marketing services to small ethnic businesses. His third entrepreneurial driver was family and work life balance.

"So, one of the reasons was in terms of career growth itself ... I like variety and cannot sit idle and just need some new big project to keep me going ... there was a huge gap in the market to which my business caters. So we keep low costs, but give good value which they expect for an agency environment."

"Film and television is a very on and off business and once you get a project, you have to totally get involved in it and leave everything, forget your life and family and everything and get into it."

Entrepreneurial barriers

Capital, market constraints and environment were the key entrepreneurial challenges faced by P1. Lack of tax breaks and support from the government for new businesses, lack of a fair opportunity, especially when competing for government contracts and cultural hindrances, were some industry- specific challenges faced by P1.

"I don't think the government is doing enough to really promote or help migrant businesses. It can provide access to information and have fair opportunities for everyone."

... In our area of work, there are so many government contracts that come out, there are so many government...we don't even know about that. And we don't

get to know because there is a small circle of those Kiwi agencies who know about it and they apply, and they get it. So, it's a very hidden way of operating."

Contribution channels as an employee

Being the first interview in the pilot study for this thesis, the distinction between contribution channels in the role of an employee and entrepreneur had not been identified at the time of the interview. Therefore, this participant was not asked specifically about his contributions as an employee versus as an entrepreneur. Even indirectly, no significant contributions were identified by P1 in his time as an employee.

Contribution channels as an entrepreneur

P1 identified the ability to create jobs, knowledge diffusion, increased market competition, and contribution to local trade and growth as his key economic contributions in the role of an entrepreneur. Like all other participants, paying taxes and GST were among the basic contribution channels identified by P1.

"Contributing more because you are paying taxes, GST, increasing revenue for the economy, local trade ... hire a lot of students, you are training them and that is like a hidden cost to us, but it is also good for that person and good for the economy. At the end of the day, you are giving them some Kiwi experience and skills."

P2 - ICT

Introduction

P2 moved to New Zealand as a permanent resident in 2002, in search of a better quality of life. He worked in skilled ICT jobs in Auckland for a decade, before leaving paid employment to start his first business in print media, where he had identified a market gap. In 2009, he started his IT business with a group of other migrants, which was widely recognized. His educational background includes a Bachelors in Geography from and a Diploma in software development from New Zealand.

Although he was re-considering paid employment at the time of the interview, he intended to continue learning and growing in ICT and was open to new business opportunities.

Entrepreneurial drivers

P2 felt that the lack of growth opportunities and a creative outlet in his paid employment drove him towards entrepreneurship. He also wanted to learn new things in technology and experiment and grow; however, the structure of his paid employment was incapable of encompassing these needs.

"There was so only so much to grow with my current role... so much I could experiment and learn.... I moved purely for learning because I wanted to build myself up. It was nothing to do with money, pay, or lifestyle, it was all to do with how much I could learn because technology moves fast."

In his first business, P2 identified a gap for Indian news in the New Zealand and used the opportunity to fill this market gap. Similarly, in his IT business, P2 used his skills and market knowledge to work on an innovative business idea of creating mobile applications.

I realized there was a gap for Indian news in New Zealand, there was obviously a gap ... There was a paper out there, but I saw that the paper was a very poor version of a website where they just took the paper and stuck the digital copy online. And I said, I could do this myself, and thanks to the fact I had development experience, I sat and wrote the entire content management system and created something called <confidential>...which is very successful today."

"So, I told them (popular news channel), why don't we develop an app for them...as soon as the app got released, it was obviously number one. It was number one on the app store as well."

P2's personal traits of risk-taking and being proactive and innovative assisted him in creating a successful business.

"And we used to go through different start up ideas... I bit the bullet and thought what's the worst that can happen? I can learn at most and I can always get out of it and get back a stable job."

Entrepreneurial barriers

P2 felt that while it is easy to set up business in New Zealand, it is hard to get business, because of various cultural and market barriers. These barriers meant that he had to work hard on his networks and connections to promote his company. And from a regulatory point of view, P2 pointed out that it may be beneficial for small businesses to get tax breaks from the government for innovative ideas.

"New Zealand is probably the easiest place to do business but the hardest to get business ... to get out and get solutions seen by somebody and picked up is always hard... For startup businesses, government should give tax breaks, it's really hard for start-up businesses to flourish in New Zealand... I think tax breaks are an absolute essential... to encourage more innovation".

Contribution channels as an employee

Like P1, being one of the earlier pilot studies in this thesis, the distinction between contribution channels in the role of an employee and entrepreneur were not identified at the time of the interview.

Contribution channels as an entrepreneur

P2 identified innovation, increased international trade, and job creation as his key contributions to the New Zealand economy in the role of an entrepreneur.

"I got a call from New York telling me that they are looking for some really high-quality developers...and we developed the app for them and they loved it. I signed the contract which gave us almost a million dollars in revenue a year".

Being a solution-oriented individual, P2 also contributed to New Zealand by creating opportunities and assisting several small-scale businesses.

"I was getting a lot of requests from people wanting apps but they couldn't afford it because no small business wants to spend 30-40 grand for an app... So I said, why don't we take this and build this in the cloud, build the solution?"

"I realized the competitors abroad started to scale and get really big, so I said we need to increase our scale otherwise we would never be able to compete in this market."

P3 - Health

Introduction

P3 arrived in New Zealand on a student visa to pursue her Bachelors degree in Physiotherapy in 2005. She obtained her residence through an offer of skilled employment as a physiotherapist in New Zealand. She was in paid employment for three years before starting her own physiotherapy clinic in 2012. At the time of the interview, P3 intended to grow and expand the business in other cities and had no intentions of going back to paid employment.

Entrepreneurial drivers

Unlike most participants P3 was quite dissatisfied with her employer and this job dissatisfaction and need for achievement and recognition were her primary motivations to pursue entrepreneurship. Specifically, lack of recognition and appreciation and feeling underpaid in paid employment were the factors behind P3's job dissatisfaction.

"I felt I was underpaid for the amount of business I got the company. I was doing crazy hours, almost 50-60 hours a week ... I almost felt like it was great for the company, but I wasn't actually getting acknowledged, there was no benefits as such, and that's when I came to a point ... why am I doing this for someone else when I have that fan following... why not do it for yourself rather than doing it for someone else who does not give a damn... At the end of the day, you want to be recognised for what you do."

In addition to the above, P3 was always ambitious and wanted to start her own clinic. This ambition combined with identification of a market gap and her personal traits of risk-taking, perseverance, leadership, and innovation gave her the confidence and success in business, which employed up to nine staff members at the time of the interview. P3's ambition and need for achievement was also reflected in fact that she owned another clothing business, which started out of her love for clothes and colours.

"I always wanted to have my own clinic, I am ambitious that way...I found that niche and I wanted to use it. I was from the same culture... wanted to use it as a gap in the market."

"Ambitious.... workaholic.... quite confident, I do like to organize things... have been running a business for six years, so I have leadership qualities."

Entrepreneurial barriers

P2 faced several challenges when starting her business. These include lack of sufficient

capital, competition, lack of family presence and support, finding qualified staff, and lack of knowledge on starting and running a business.

"I think support system, just having the right support. I was surrounded by a lot of competitive people at the time... You don't have the experience or the knowledge of how to run a business. I feel the biggest barrier for me was not having family here, not being able to find that one person I could completely trust ... trying to play different roles."

Contribution channels as an employee

P3 felt that in addition to paying taxes as an employee, she contributed to filling the skill shortage in an occupation which was in demand, by working as a physiotherapist. P3 also identified with contributing to her employer's business by using her human and social capital, such as her home country language, and networks to attract and retain ethnic customers.

"I did speak to a lot of Indian people and I used my networking and the language that I could use ... make people comfortable".

As an employee, P3 was offered an opportunity to promote trade and investment with India. The offer was to open a franchise of the employer's physiotherapy business in India. However, P3 highlighted that she rejected the offer as the franchise model suggested was not suitable for the Indian market.

"The whole business model just did not work for me and just with my ethics I was like no I can't do that, I can't fool people."

Contribution channels as an entrepreneur

P3 recognised her ability to have more creative and decision-making freedom as an entrepreneur. She highlighted that her business had created more employment opportunities and paid more taxes than she did as an employee. Over the years, P3 had also focused on serving the wider community in order to reciprocate the respect and trust she has received, especially since becoming an entrepreneur.

"Employing other people, I am definitely paying more taxes... I was helping people but not to this degree, and I don't think I could be creative and take the decisions (as an employee) because I was not the decision maker. And again, I can explore a lot more. Like I said, I have got another business which I don't think I would have if I was just an employee."

P4 - ICT

Introduction

P4 arrived in New Zealand in 1992 on a skilled job offer to work as an ICT and Telecommunications professional. Since then, he has been operating his business since 2004 with two offshore branches. Prior to becoming an entrepreneur, he had 11 years of work experience in New Zealand and four years in the US. At the time of the interview, he had three registered businesses in New Zealand, all in the ICT and Telecom sector.

P4 was currently focused on his businesses and had no intention of going back to paid employment or migrating to another country.

Entrepreneurial drivers

P4's desire for independence and need for personal satisfaction and a creative outlet were among the key factors that motivated him to pursue entrepreneurship.

"To create something and see the satisfaction of it being used and successful products... you still need that process of self-actualisation, right, and that comes by entrepreneurship."

P4 was also driven by the need to create or do something different, to be recognised, to learn and to make the best of his market knowledge.

"And I had enough market knowledge. Actually, that's what drove me to do it. I knew enough of this market."

Entrepreneurial barriers

Resourcing barriers such as lack of capital and financial infrastructure to arrange it, lack of skilled labour, lack of networks, and intense competition in the IT sector were among the major entrepreneurial barriers faced by P4.

"The technology business is different barriers.... I mean obviously the lack of being networked in the old boys' club, that matters in New Zealand...and whatever you may say, one has to tap shoulders to actually get access to capital, access to knowhow, and all of that is a hard yet for a migrant, especially tech business".

"In New Zealand it is nearly impossible to get a bank loan for a business... You don't get a bank loan on a project plan.

"Staffing is always the biggest challenge in software. We don't have that talent, you only get migrant talent, which is risky because they use it as a stepping stone and there is no longevity... and you can't afford Kiwis because all the good ones are already taken by Xero, by Orion, all the good companies at big fat salaries."

Contribution channels as an employee

As an employee, P4 assisted in promoting international trade and business through a large telecommunication organisation in India. Paying taxes and contributing to the successful completion of many large-scale projects in New Zealand were also cited as some of his key contribution channels as an employee in New Zealand.

"We had a large contract with Energy Rajasthan so that was lucrative."

"I did my job diligently, I was involved in rolling out the whole casino project... and of course pay a lot of taxes."

"I have helped New Zealand companies go to India, I have helped them hire people, I have helped them connect to various people from my network."

Contribution channels as an entrepreneur

Generating more employment opportunities and providing unique services were the two main areas of contributions identified by P4 in his role as an entrepreneur. P4 highlighted that the freedom in decision-making as a firm owner contributed to his creative and innovative ideas. This freedom resulted in the growth and expansion of his business, thus resulting in higher economic contributions to the New Zealand economy.

"We help the government collect their tax in an efficient way, we are helping with the customer paying the tax and administer it in an efficient way.... And of course, creating jobs.... So, I think our solutions have a very positive impact on the economy."

"The technology we are building is unique because it is exportable to other countries who will slowly follow the legislation."

"As an employee, I couldn't create jobs, I couldn't think of innovation because I am led by the organisation's structure, you are stifled in your creativity and thinking...whereas here (as an entrepreneur), you are carving your own destiny, whether it be good or bad."

P6 - ICT

Introduction

P6 moved to New Zealand in 2013 in search of a better quality of life for him and his family, particularly his children. His educational background includes a Bachelors in Maths from India and a Masters in Computer Science from the US. He worked in India and the US as a software engineer before obtaining a job offer in New Zealand as a Technical Business Analyst. He worked in this job for a year before starting his own ICT business in 2014. At the time of the interview, he had one registered business in New Zealand and five registered businesses across other countries, employing a total of about 100 staff. P6 had always been interested and involved in running his own business and had no intention of going back into paid employment or to re-migrate to another country.

Entrepreneurial drivers

P6 had been involved in setting up and running his own businesses since 2002 and at the time of the interview, he had five different companies around the world. He was passionate about having his own businesses and intended to set up a business in New Zealand from the time he migrated. This explains why he only stayed in employment for a short period of one year. Unlike other participants, P6 became an entrepreneur to create an inheritance for his family.

“Employment was just a means of satisfying my S49 condition that immigration requires... I found my first IT company in 2002, and in 2008, I sold it for profit in the US. And I found another company in 2007 and that’s going pretty well in India. So that was my second company. And I found my third company in Switzerland in 2010, which I closed down in 2016. Then came my fourth company in New Zealand. Then I founded my fifth company in Switzerland in 2017. And then just last week, I founded another company in the US. So that will be my sixth company in my chain of events... That’s what I do, that’s what I love.

Entrepreneurial barriers

Like a number of other participants in this research, P6 faced issues in securing sufficient capital from the banks and found bank lending criteria quite challenging. He did not have any major issues hiring suitable staff, as he believes in hiring interns and giving them an opportunity to start their careers. While raising capital, lack of customers willing to accept new technology and lack of networks in a new country were some of the barriers he faced.

“NZ has two barriers... the perception and expectation from a brand is very high but they are not willing to pay for it. ... People here did not want innovation, they did not want the latest technology ... the local businessmen are not receptive to solutions to the problem, they take a long time in decision making.”

“Arranging capital is a big, big, big problem... The banks here have a short-sightedness and so with a business which is approaching a million dollars in turnover year over year, they still find it difficult to approve even a business overdraft of say \$50,000...so that’s a big barrier.”

“I had no connectivity, not knowing a single person when I entered.”

Despite the above barriers, P6 found extensive support and financial grants through Callaghan Innovation.

“One thing that my company benefitted from is the Callaghan Innovation. They have been believers in what I was trying to say ... they funded two of my product developments for a grant, it was very, very helpful.”

Contribution channels as an employee

P6 considered his input to process improvements and increased productivity through innovation as being his major contributions as an employee in New Zealand.

“There were a couple of things that I brought to the table and the company is still using it... There was innovation because there was process improvement that I initiated.”

Contribution channels as an entrepreneur

Both economic and social contributions were the key contribution channels for P6 as an entrepreneur. The financial success and growth of his companies was evident not only in terms of their profitability and revenue generation capability, but also through the various initiatives undertaken with other countries.

“We have four products currently - innovative point of sale system, which is selling very good and we are looking at multi-buying and scaling it up. Two products were trademarked recently and the fourth one we are preparing to protect, patent the fourth product. “I do correlate and collaborate different educational initiatives here in Christchurch as well as overseas”.

“We have initiated a financial scholarship for a girls’ high school... We also have a financial scholarship for kids who may be underprivileged, and that is given since the last four years. Additionally, I am also a mentor in this school, educating children, mentoring their last year requirements of curriculum where they have to set up a business.... I also work with Maori organisations educating the Maori kids and motivating them to acquire IT skills and basically generating more programming related awareness in teenage Maori kids... Also do voluntary work with Callaghan Innovation and the Ministry.”

P9 - Hospitality

Introduction

P9 arrived in a New Zealand on a job offer in 2006 after being influenced by the opportunity of a higher earning potential than India through his conversations with friends. His work experience earned him a skilled job offer from New Zealand. He worked in various dining establishments in India and New Zealand before establishing his own business in New Zealand in 2014. He had since been actively working along with his wife and approximately five other staff members in his business. The couple intended to stay in New Zealand and continue this business.

Entrepreneurial drivers

P9 was motivated to pursue entrepreneurship because he wanted to be independent and work for himself. He was confident that he had the required skills and knowledge to establish and run his own business successfully. He also considered that being hardworking, innovative, and adaptable had helped him in running the business successfully for nearly four years, despite the competition in this industry.

"I thought when we could do everything ourselves then we can try and run our own business."

"Very first reason was that we would have better income, you can make your own profit and be your own boss...having flexibility and independence."

"Very hard working, go-getter, very creative, gathers a lot of knowledge from others, meeting people, take new ideas."

The main barrier faced by P9 was the difficulty in finding skilled employees with sufficient experience and knowledge in the domestic labour market. Competition was another challenge that affected the potential earnings and customer base of P9's business in the local market. Compliance requirements under the food, health, and safety regulations were also quite cumbersome, stressful. and expensive when P9 started this business.

"We had a lot of problem in recruiting staff. We did advertisements, but no one applied. I (wife) involved myself in the kitchen for the first time ever and worked there for about 20-30 days as a cook. ... It took about 3-4 months for the application for skilled worker visa with immigration."

"Legal formalities and barriers were not problematic, but very stressful ... since we were new, we did not receive any guidance."

“A lot of problems with the competition, everybody wants to do their own business now, they don’t care that 2-3 businesses are already running in the same place”.

Contribution channels as an employee

No significant contributions were observed during discussions with P9, except that taxes were regularly paid, and P9 was able to assist ethnic customers by using their local language and showing cultural awareness.

“Paid taxes, using own language with customers....”

Contribution channels as an entrepreneur

On a personal level, P9 and his wife acknowledge economic improvements in their personal lives, since pursuing entrepreneurship from increased earnings. They also acknowledged contributing to the New Zealand economy with employment creation, increased competition, and supporting local businesses by purchasing from local vendors where possible.

“It is more profitable to run your own business than doing a job”.

“Our contribution in terms of introducing the country to this Indian cuisine and showcase our culture ... purchase vegetables from the locals, we also want to employ locals if they have the skills ... and paying taxes and GST.”

Despite the benefits and advantages of being a business owner, the lack of family support and skilled staff required the couple to work long hours, which was been adversely impacting the personal health and wellbeing of P9 and his wife.

“We cannot give enough time to our child, we cannot plan for holidays ... Long working hours mean we do not get enough rest. I remain tired and have become anemic because you have to manage both your home and business... My husband now suffers from diabetes for not eating properly on time, and then there is stress, back pain, etc. which all adds up in the cost.”

P10 - Hospitality

Introduction

P10 came to New Zealand in 2002 on a skilled job offer in the dairy industry based on his occupational work experience in his family's agriculture business in India. He migrated to New Zealand in search of a better quality of life. At the time of the interview, he owned three registered businesses in New Zealand – two in hospitality and one in the automotive sector.

Entrepreneurial drivers

P10 stated the he had always felt the need to be doing something different that offered variety and the opportunity for continuous growth. This explains the diversity in his employment career and now as an entrepreneur. He identified the lack of opportunities to capitalise on his personal characteristics of being ambitious, transparent, and getting things done when he was in paid employment. He started his business after identifying a market opportunity based on the increased Indian population in Christchurch following the 2011 earthquakes.

"I am the person who is never satisfied, I wanted to push the boundaries. I think it's the entrepreneurship that I had in me.... I have never stood at one step, I get bored when something goes on."

"I thought that the population of Indians had grown three or four-folds, but the existing shops were still the same, there was still something to be done here, so I started working on it."

"I don't think I can work for someone else, I find it hard for people to agree with me, so that's a big challenge for me, so I don't see myself working for someone."

Entrepreneurial challenges

P10 found complex and unorganised compliance and regulatory requirements to be a key hindrance in starting his hospitality business. He considers that the excessive regulation was costly for any new business and could act as a strong discouragement for people to start their own businesses.

"I think here it is the compliance cost which is complex ... it stops the businessman. It took me nine months to from start point to here which is a long time if you had to use your time and money So, I think the complexity of the compliance is the hardest".

Contribution channels as an employee

As an employee, P10 considered that coming to New Zealand for an occupation which at the time was on the short skills list, was a big contribution. Like other participants, he also considered paying taxes in a timely manner as a key contribution.

"Paid my tax for a start and then that skill was in shortage... We added value because Canterbury was not that developed and was not that much of a multi-cultural place at that time, so all of us people who initially started contributed."

"I recommended investment in the construction business...one friend to invest 3-4 million and over time, so many other investments."

Contribution channels as an entrepreneur

P10 considered his support of the community and the ability to serve everyone in the society as his key contribution as an entrepreneur. His contribution in increasing productivity and bilateral trade and investment with India was another contribution that P10 achieved in the role of an entrepreneur.

"Our new business will be open to everyone, I'd rather be a part of this merging society that just keeping to one side."

"Sooner or later we are going to export.... It's just we are contributing by serving them, selling commodity and the innovative ideas".

Appendix K - Glossary

Business Operations survey

The Business Operations Survey covers all New Zealand businesses that have been active for at least one year and employ six or more workers. The survey has a contestable module which studies different content each year. Skill acquisition was studied in 2013 and 2016 (Stats NZ, 2017).

Copyright

According to the MBIE (2018), *Crown copyright protected material may be reproduced free of charge in any format or media without requiring specific permission. This is subject to the material being reproduced accurately and not being used in a derogatory manner or in a misleading context. Where the material is being published or issued to others, the source and copyright status should be acknowledged.* This work also includes Inland Revenue's research and evaluation activities which are licensed by Inland Revenue for re-use under the Creative Commons Attribution 3.0 New Zealand Licence.

Descendants of migrants

Eurostat distinguishes descendants as individuals of either a mixed background or a foreign background. Descendants of a mixed background have one parent born inside the EU and the other parent born outside the EU, whereas descendants of a foreign background have both parents born outside the EU.

Gross Domestic Product

Gross Domestic Product (GDP) is an annual measure of the total market value of all goods and services produced in a country, equalling the total national value of consumption + investment + government expenditure + net exports.

Migrant integration

Integration of migrants in their host economy is measured by factors that include human and social capital of migrants, such as their education, skilled employment experience, personal and community networks, and institutional rights in the host country (Sam, Vedder, Ward, & Horenczyk (2006).

National Survey of Employers

For the 2015/16 National Survey of Employers, 1,528 employers in New Zealand were interviewed, equating to a response rate of 36 per cent. Employers operating from more than one site in New Zealand were asked to respond for their current work location. In this survey, employers cited a variety of reasons for migrants leaving their business, like finding a job with another New Zealand employer, relocation within New Zealand, return migration to home country, migration to Australia, family reasons, travel, poor performance at work, and inability to renew work visa.

NZ Inc policies

New Zealand government established several five-year plans for its economic and political growth. These plans outline long-term strategic goals for trade and investment with emerging and key partner economies (Ministry of Foreign Affairs & Trade, 2011a). Currently, there are five strategic plans in place, namely, ASEAN (Association of South East Asian Nations), Australia, China, GCC (Gulf Cooperation Council), and India.

OECD countries

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental economic organisation, which was founded in 1961 to stimulate economic progress and world trade (OECD, 2018). It has 36 member countries, namely, Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, The Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the UK, and the US (OECD, n.d.).

Paid employment

OECD (2001) defines paid employment as: *Paid employment jobs are those jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration which is not directly dependent upon the revenue of the unit for which they work. This unit can be a corporation, a non-profit institution, a government unit or a household. Persons in paid employment jobs are typically remunerated by wages and salaries, but may be paid by commission from sales, from piece- rates, bonuses or in-kind payments such as food.*

Paradigm classifications

The literature has several aliases and classifications for paradigms denoting the same philosophies and concepts. For instance, Lincoln and Guba (1994), classify paradigms as positivism, post-positivism, critical theory, and constructivism. Cohen and Crabtree (2006) use the term feminist instead of critical theory above, whereas Creswell (2009) uses the term advocacy. Similarly, Mackenzie and Knipe (2006) group critical theory and feminism as forms of the transformative paradigm. Simply put, paradigms are ways of breaking down the complexity of the real world (Patton, 1990).

Skill shortage lists

MBIE compiles three skill shortage lists annually. The Long-Term Skill Shortage list includes occupations for which there is a local and international shortage, affecting all New Zealand regions. The Short-Term Skill Shortage list includes occupations for which there is an obvious shortage of workers throughout, or in certain regions of New Zealand. The Canterbury Skill Shortage list identifies short skilled occupations critical to the rebuild of the Canterbury region (Immigration NZ, n.d.-a, n.d.-b).

Skilled Indian migrants

The term Indian in the phrase ‘skilled Indian migrants’ refers to skilled migrants from India only. It does not include their descendants in New Zealand, nor Indian ethnic migrants from other countries.

Social capital

Social capital is the sense of belonging to a group or network (Glopp, 2007). It is an asset that reduces the risks and costs of migration by connecting migrants through shared origins, kinships, and friendships (Portes, 1998).

S49 conditions

According to Immigration NZ (n.d.-b), S49 conditions are described as follows: “Sometimes visas are subject to extra conditions under section 49(1) of the Immigration Act 2009. We call these section 49 conditions. For example, if you’re granted residence under the Skilled Migrant Category a section 49 condition could be that you take up an offer of skilled employment within 3 months of arriving in New Zealand”.

Total value-added output

Total value-added output is a measure of the contribution to total output by enterprises in the economy (Ministry of Economic Development, 2011).