

**GEOGRAPHICAL DIFFERENCES IN THE EVOLUTIONARY  
PATTERN OF NEPALI NONGOVERNMENTAL  
ORGANIZATIONS AND NOT FOR  
PROFIT COMPANIES**



**A Dissertation Submitted in Partial  
Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy (Development Administration)  
School of Public Administration  
National Institute of Development Administration  
2019**

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## ABSTRACT

<b>Title of Dissertation</b>	GEOGRAPHICAL DIFFERENCES IN THE EVOLUTIONARY PATTERN OF NEPALI NONGOVERNMENTAL ORGANIZATIONS AND NOT FOR PROFIT COMPANIES
<b>Author</b>	Dipendra K C
<b>Degree</b>	Doctor of Philosophy (Development Administration)
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Nepal has a little over 54,000 registered Nongovernmental Organizations (NGOs) and a little over 1,700 registered Not for Profit Companies (NFCs). While the former types of organizations have existed a little over half a century, the later have a history of only fourteen years. The number of both types of organizations is on the rise; however, this rise is not even in the country. One in every three NGOs is registered within Kathmandu Valley and a similar trend persists among the not-for-profit companies. However, the phenomenon of organizational agglomeration is not new. The agglomeration of Not For Profit Organizations (NPOs) has been reported in Kenya, Brazil, and Bangladesh to name a few.

This dissertation is an attempt to explain the results of such agglomeration. What creates the geographic disparities in the founding pattern of NPOs? Can the dominant organizational founding theories explain the founding behavior of NPOs? Is there a difference in the founding pattern of traditional service delivery NGOs and modern entrepreneurial NPOs? What is the effect of community needs and the availability of financial resources when and where NPOs emerge? Furthermore, what is the effect of institutional factors such as the presence of conducive laws and a distinct historical time frame on where NPOs are founded?

The study sets out with the objective of illustrating the historical patterns and its associated factor of NPO population growth in Nepal. It further aims at developing and testing a model of NPO founding in Nepal. It also explains the effects of NPO population-level legitimacy, competition, institutional factors, the needs of the communities, and the availability of resources on the birth of NPOs. It further provides a comparative lens between two subcategories of NPOs: NGOs and NFCs.

This study relies on quantitative secondary data to test the hypothesis. In order to test the hypotheses empirically, the research traces the founding rates of NGOs in Nepal during the period of 1967 to 2018 at three different levels. It also traces the founding patterns of NFCs between 2012 and 2018 at the district level. It uses different negative binomial regression models to estimate the effect of density, the needs of the communities, institutional factors, and resource factors on the founding pattern of NPOs. The hypotheses are tested across both types of organizations.

This dissertation finds that NPOs in Nepal are urban phenomena. There is no fundamental difference in the founding patterns of NGOs and NFCs. Both types of organization tend to agglomerate in the capital and large cities of the country because of the well-built support systems there, and the availability of financial resources. Both NGOs and NFCs are located in well-off areas rather than where they are actually needed. It also finds that institutional factors such as the presence of NPO-friendly law and a democratic form of governance contribute positively to the growth of the NGO sector, while the institutional factors were not tested on the NFCs given the short organizational history. Furthermore, a twelve-year long armed internal insurgency also contributed to the growth of the NGO sector in Nepal.

The findings of this dissertation have multiple implications. First and foremost, density dependence theory can be easily applied in conjunction with institutional theory and available nonprofit explanations in explaining the founding patterns of NPOs. Second, theoretically, disaggregating the organization's population across geographical gradient helps to understand the local nature of the effect of legitimacy and competition on the vitality of organizations. The findings of the dissertation additionally assist with understanding what factors affect the birth of NPOs in large cities, and the findings of the study can help the government of Nepal devise better strategies to encourage NPOs to “go beyond” Kathmandu valley. Particularly, the government of Nepal should focus on creating a better institutional environment for NGOs in the far-flung areas, and coordinate with other donors and local agencies to provide financial and non-financial resources that are needed for organizational survival and growth in remote parts of the country.

## ACKNOWLEDGEMENTS

On the face, this dissertation might look like a product of my efforts, however, several seen and unseen people have contributed to where it has come today. I want to express my sincere gratitude to my advisor Professor Dr. Tippawan Lorsuwannarat, for the continuous support of my study and related research, for her patience, motivation, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor for my independent study.

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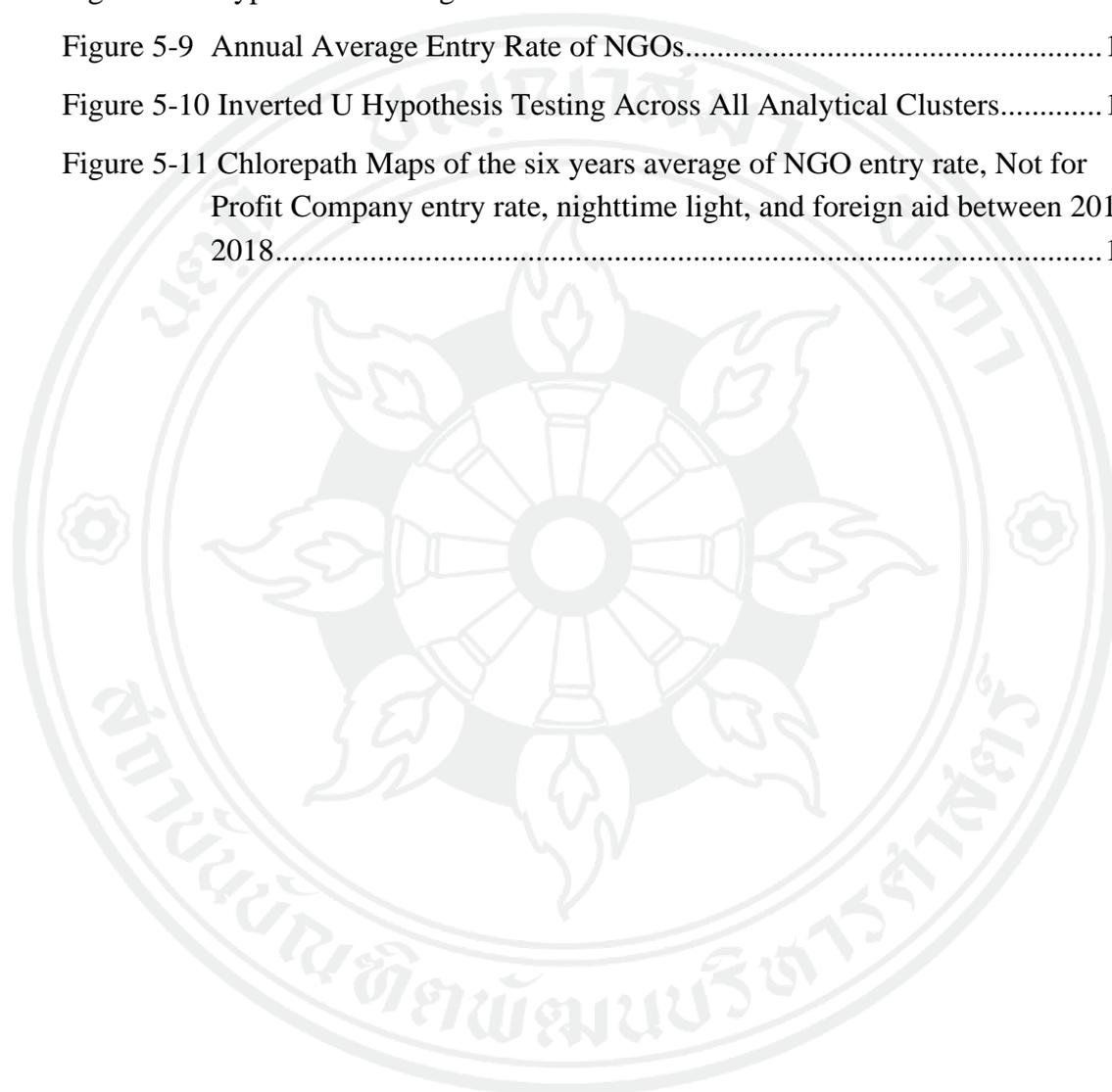
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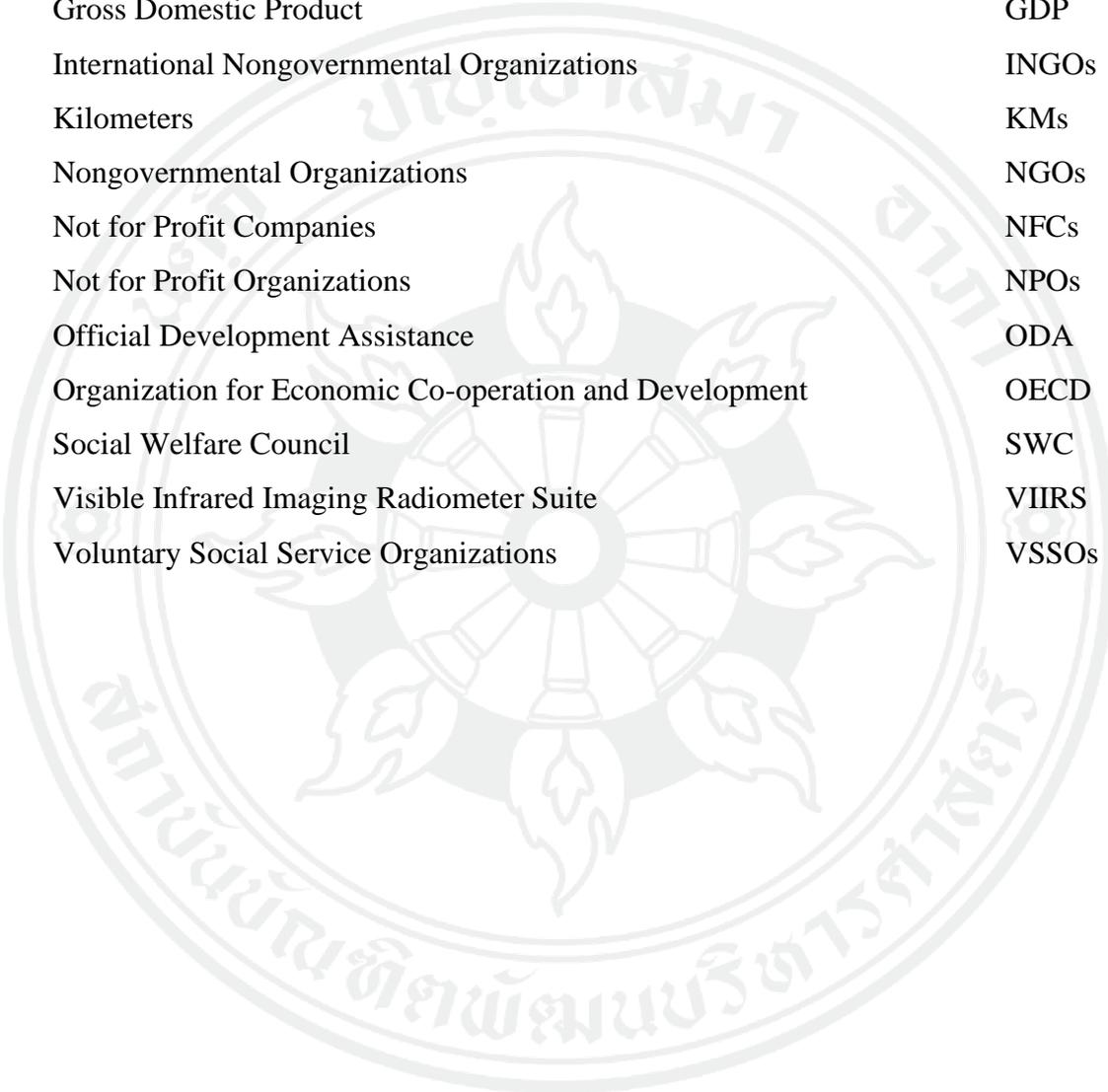
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## LIST OF ABBREVIATIONS



Development Assistance Committee	DAC
Gross Domestic Product	GDP
International Nongovernmental Organizations	INGOs
Kilometers	KMs
Nongovernmental Organizations	NGOs
Not for Profit Companies	NFCs
Not for Profit Organizations	NPOs
Official Development Assistance	ODA
Organization for Economic Co-operation and Development	OECD
Social Welfare Council	SWC
Visible Infrared Imaging Radiometer Suite	VIIRS
Voluntary Social Service Organizations	VSSOs

# CHAPTER 1

## INTRODUCTION

Nepal has a vibrant not for profit sector. The number of not for profit organizations (NPOs) is on the rise. Nepal has a little over 54,000 registered NGOs and a little over 1,700 registered not for profit companies (NFCs). While the former types of organizations have existed a little over half a century, the later have a history of fourteen years. The number of both types of organizations is on the rise; however, the distribution of these organizations is disproportionate throughout the country.

There were 314 registered NGOs in 1990, the number reached 11,843 in 2000, and by 2019 the number stood at a little over 54,000 (Social Welfare Council, 2018). For a country with 29 million people, NGOs per capita are among the highest in South Asian nations (Central Bureau of Statistics, 2014). While there has been exponential growth, the distribution has been disproportionate. One in every three NGOs is registered within Kathmandu valley<sup>1</sup> and a similar trend persists among the not-for-profit companies. As the numbers suggest, the NPO sector has grown significantly. While the number has grown, the agglomeration in the capital and large cities has opened doors for the public and media to openly criticize the NGOs for their city love. For instance, a series of newspaper articles and op-eds appeared recently criticizing the NGOs in Nepal (Bhandari, 2017; Bhandari & Onta, 2017; Kainee, 2017; Prasai, 2018; Thapa, 2018) for their urbane nature.

The agglomeration of NGOs in the cities was in fact recognized as a problem in the national policy itself. The eighth periodic plan of the country recognized the urban concentration of NGOs in Nepal as a problem and took policy initiatives to reduce the urban agglomeration (NPC, 1992). However, the agglomeration of NGOs in the capital city persists even after eighteen years. While the criticisms are escalating regarding the

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<sup>1</sup> Kathmandu Valley has three districts: Kathmandu, Bhaktapur, and Lalitpur.

agglomeration of NGOs in the country, little explanation is available as to why this is happened.

This dissertation is an attempt to explain what results in such agglomeration. What creates the geographic disparities in the founding behavior of NPOs? Can dominant organizational founding theories explain the founding behavior of not for profit organizations? Is there a difference in the founding patterns of the traditional service delivery NGOs and modern entrepreneurial NFCs? What are the effects of the communities' needs and the availability of financial resources on when and where not for profit organizations emerge? Furthermore, what is the effect of institutional factors such as the presence of conducive laws and a distinct historical time frame on where NPOs are founded?

On first glance, it might look as if the agglomeration of NGOs in the capital city is a phenomenon specific to Nepal. However, the phenomenon of NGO agglomeration in large cities has been reported extensively in the developing countries. In a study of Chinese environmental NGOs (ENGOS), F. Wu (2013) finds that the Beijing municipality has the highest number of ENGOS compared to other provinces of China. Similarly, Brass (2012) finds that the concentration of nonprofits is extremely high in Nairobi, the capital city of Kenya. Similar evidence was furnished by Costa (2016) in a study of location of Brazilian nonprofits.

While these and other studies illustrate the phenomenon of organizational concentration in primate cities, often such cities are excluded from the analysis as outliers. For instance, K C (2019) removed three cities (Kathmandu, Bhaktapur, and Lalitpur) from the capital of the country from his analysis as outliers in a study of the determinants of NGO location in Nepal. Similarly, Brass (2012) removed Nairobi, the capital city of Kenya, as an outlier in her analysis. Similar treatment was also found in a study of Brazilian nonprofits (Costa, 2016). It is evident that the concentration of NPOs in certain geographical areas is not new, yet this particular concentration phenomenon has remained ignored in the literature.

Two distinct research traditions have studied the organizational founding and agglomeration phenomenon. Studies from organizational sociology, particularly density dependence theory, explain the vitality (birth and mortality) of organizations in general. The second stream of explanation emerges from the field of nonprofit studies,

where they study focuses on the patterns of the birth and agglomeration of the not for profit organization.

Density dependence theory is used to illustrate the differences in organizational founding rate through the endogenous processes of legitimation and competition (Hannan, 1986). The theory has served as the dominant theory in explaining the phenomenon of organizational birth across different forms of organizations, from labor unions to newspapers (Carroll & Hannan, 1989a, 1989b, 1989c; Hannan, 1986; Hannan & Freeman, 1988), brewers (Box, 2017; Carroll, Preisendoerfer, Swaminathan, & Wiedenmayer, 1993; Cruz, Beck, & Wezel, 2018), insurance companies and banks (Greve, 2002a), trade associations, medical equipment manufacturers, automobile manufacturers (Wezel, 2005), hotels, railroads, sports leagues (Wade, Harrison, Dobbs, & Zhao, 2018), accounting firms (Cattani, Pennings, & Wezel, 2003), credit unions, film producers, political parties, and government departments and organizations. The theory continues to be one of the most vibrant and active research programs within the population ecology research, yet the explanation of NGO founding patterns has not been at the core. Since NGOs are different than profit oriented organizations, as Bogaert, Boone, Negro, and van Witteloostuijn (2016) suggest, there might be significant differences in how non profit and for profit organizations operate.

While the focus of density dependence theory is on the effect of the endogenous processes of legitimation and competition on the vitality of organizations, extant research on nonprofit location has primarily investigated the effect of external factors on the sector to explain the founding and agglomeration phenomena of NPOs. Within the nonprofit research tradition four dominant theories attempt to explain why some communities have more and why some communities have fewer NGOs (see Table 2.1 for a summary of the theories).

First in terms of theory, the humanitarian theory explains that nonprofits and NGOs will be in areas where the needs of the community are higher. Unlike their for-profit counterparts, nonprofits work towards making the life of people in the community easier. The theory views NGOs as benevolent agents and argues that they will be in the areas with greater demand for their services. The areas where their demands are higher are normally the areas that are deprived. The second theory, the pragmatic actor theory, envisions NGOs as organizations like any other organization and argues that these

organizations will establish themselves in areas where they can access the resources required for their survival and growth. Political engagement theory views NGOs as political actors and suggests that NGOs do not care about resources or their beneficiaries; instead they are guided by political motives and they tend to be in areas where politicians want them to be. The final dominant explanation in the studies of NGO founding is the notion of social capital theory or clustering theory, which argues that NGOs can be found in areas where there is high social capital. It argues that areas that have a high number of similar organizations will see more NGOs.

It is evident that extant studies have attempted to explain the phenomenon of organizational founding and concentration using different theoretical lenses. While each of these research trends contributes to understanding of the phenomena, crucial gaps persist in our understanding. First, neither research trends address the phenomenon of the agglomeration of NGOs in capital and large cities explicitly. Second, nonprofit research focuses extensively on exogenous factors, and density dependence theory research focuses too much on the endogenous factors. Third, nonprofit research relies extensively on cross-sectional evidence while density dependence research resorts to historical time series data. Furthermore, both studies fail to capture the diversity that lies among different NPOs, eventually, leaving some gaps in the explanation.

### **1.1 Research Questions and Objectives**

This dissertation is an attempt to answer questions such as what creates the geographic disparities in the founding behavior of NPOs? Can dominant organizational founding theories explain the founding behavior of not for profit organizations? Is there a difference in the founding pattern of traditional service delivery NGOs and modern entrepreneurial not for profit companies? What are the effects of the community needs and the availability of financial resources on when and where not for profit organizations emerge? Furthermore, what is the effect of institutional factors such as the presence of conducive laws and a distinct historical time frame on where NPOs are founded?

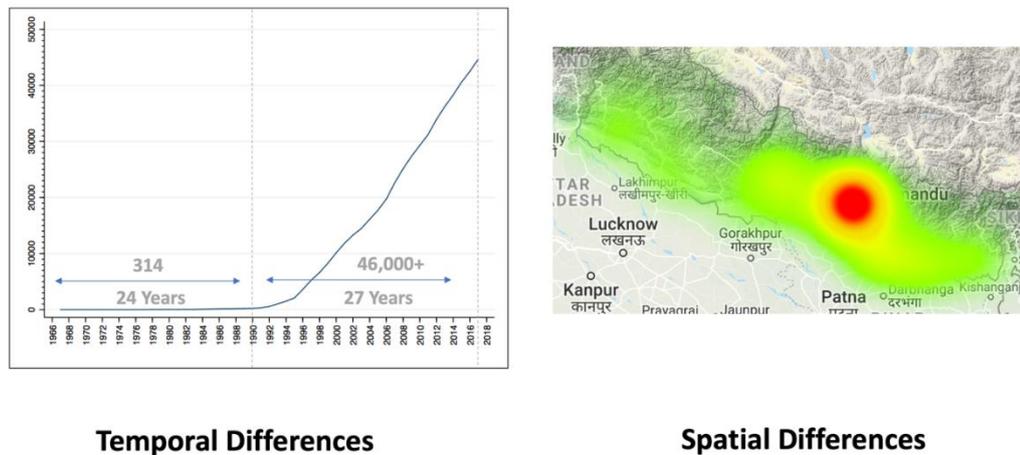


Figure 1-1 Spatial (Space) and Temporal (Time) Differences in NGO Founding Patterns in Nepal

This study is interested in the macro phenomena of organizational founding. Instead of focusing on a selected sample of a few organizations, it is interested in studying the dynamics at the organizational population level. One may wonder what an organizational population is; an organizational population or industry is an aggregate or the total of all individual organizations within the same industry. In other words, organizational population refers to all the “firms that rely on a shared set of social and material resources for survival and growth.”

This dissertation is interested in exploring how population level dynamics, i.e. the process of legitimation and competition within the NPO population, affect the founding pattern of new NGOs and NFCs. In addition to the endogenous population level factors, it is also interested in understanding how the exogenous process of legitimation, and other potential factors, influence the founding of new organizations; and it is interested in answering these questions across different geographical settings and organizational forms within the NGOs of Nepal. In short, the question pursued by the study can be summarized as follows:

1. How do population level legitimacy, competition, institutional factors, the needs of the communities, and the availability of resources influence the founding of new NGOs and NFCs?

The study has the following objectives:

1. To illustrate the historical pattern and its associated factors of NGO and NFC population growth in Nepal
2. To develop and test a model of NGO and NFC founding in Nepal
3. To explain the effects of population level legitimacy, competition, institutional factors, the needs of communities, and the availability of resources on the birth of new NGOs and NFCs

## **1.2 Significance of the Study**

One might wonder why do we even study where and when NPOs are found? What makes it an important field of study?

The study of where and when NPOs emerge has several merits. First, knowing where and when such organizations emerge help donors and policymakers working in countries with abundant NPOs in designing their strategies regarding NPOs. It helps government and policymakers identify if such organizations put the needs of communities at the core or not. This information will help them assess if NPOs are legitimate and crucial partners in eradicating poverty and meet other developmental goals. Second, the information of the founding patterns of NPOs will help donors and governments devise strategies to discourage NPO agglomeration in one geographical area and facilitate equitable access to services provided by such organizations. Third, NGOs are nonprofit organizations that have fundamental differences in motive compared to profit-oriented organizations. One would expect that the motivations of the founding of such charitable organizations might differ from those of the organizations that are fundamentally profit making in nature. Fourth, it would help potential new organizations to see the merits and demerits of founding an organization in an agglomerated area versus an area that has a sparse number of such organizations.

### **1.3 Theoretical Contributions of the Dissertation**

The contributions of this dissertation are six-fold. First, it builds on density dependence theory and expands the empirical face of the theory. Theoretically an organizational population is envisioned as a unitary concept. However, in this dissertation the author argues that an organization has sub-populations and the sub-population dynamics affect the main population. The author demonstrates this empirically by testing a set of hypotheses across three geographic sub-populations of organizations. The findings of the dissertation also support the claim of the author that the explanation power of density dependence theory varies in different geographical areas. While the dissertation finds general support for density dependence theory, the explanatory power of the theory varies when other control variables are introduced.

Second, unlike the tradition of studying the evolution of profit-oriented organizations, this dissertation studies NGOs, which are non profit oriented organizations. It argues that for profit organizations and non-profit organizations have different goals. While for profit organizations aim to maximize the wealth of their shareholders, non-profit organizations on the other hand aim to maximize the welfare of the general public. Hence, theories that help to explain the founding motives of for profit and non profit oriented organizations may vary. Furthermore, this study compares the founding pattern of NGOs with emerging not for profit companies, which often focus on economic activities to sustain their organizations, yet they do not share the dividends with the owners.

Third, existing nonprofit location studies focus extensively on a needs-based explanation using cross-sectional data, where the density of NGOs is not the major variable. Hence, this study departs from the trend of using cross-sectional evidence and resorts to a longitudinal study. By doing so, this dissertation takes a historical perspective and studies the evolution of NGOs over a long period of time.

Fourth, this study uses nighttime light data as a proxy to measure the well-being of the communities. It measures the wealth and well-being of the community using traditional measures such as GDP per capita and the Human Development Index (HDI), as well and contributes to the emerging field of measurement where nighttime light data are used as a proxy to measure the well-being of the community. Through this

dissertation, I demonstrate that nighttime light data can be a good alternative proxy in measuring the well-being and wealth of communities at the sub-national level. This is particularly important as sub-national data measuring the wealth and well-being of communities are not frequent in developing countries. Even if the data are frequent, reliability is an issue. Hence, through this thesis, it is demonstrated that nighttime data can be used in nonprofit studies as well.

Fifth, this dissertation takes the organizational population as the unit of analysis. Hence, rather than studying a small sample of organizations, it uses the total number of NGOs registered in the country. This provides for a complete understanding of the behavior of NGO founding in the context of developing countries.

Finally, it combines the tradition of studies in nonprofit studies, institutional theory, and density dependence theory, and empirically tests it. It introduces nighttime light time data in the model. Similarly, the use of comprehensive view of aid, measured using the sum total of INGO, multilateral, and bilateral aid disbursement at the sub-national level is novel in this dissertation.

#### **1.4 Scope of the Study**

The aim of the dissertation is to explain the differences in the patterns of the evolution of NGOs in Nepal as an industry. Hence, this study only focuses on studying organizations that identify themselves as NGOs and nonprofits. While there are many more NGOs registered with the District Administration Authorities, only organizations that have been affiliated with the Social Welfare Council (SWC) were considered for this study. Furthermore, only NFCs that were registered with the company registrar's office were considered for the study.

In understanding the evolution of NGOs, this study takes a time frame between 1967 and 2018, and any organizations affiliated with the SWC beyond this time frame were ignored. Similarly, the data for NFCs and foreign aid at the subnational level were taken between 2012 and 2018.

Theoretically, the dissertation focuses primarily on the density dependence theory, institutional theory, and nonprofit evolution theories. In the broad spectrum of organizational founding studies, economic theories hold a strong place. However, this

dissertation does not consider these theories. Methodologically, this study employs quantitative analysis only and bases the analysis on secondary sources of data. The ability to carry out a wide array of analyses is hence impaired due to limited data about organizations.

Geographically, the study focuses on Nepal and its third tier administrative unit, districts. Nepal has restructured its administrative structure and has a federal structure with local governments. However, this change was made only in 2017 and the available data all pertained to the old administrative structure. Hence, this study uses the old administrative structure.

### **1.5 Roadmap of the Dissertation**

This dissertation has six chapters. The first chapter introduces the research question, objectives, motivations, and theoretical contributions. The second chapter provides the contextual background of the study. The third chapter reviews the key concepts and presents a scholarly debate concerning the subject matter. Based on the review of the literature, the chapter also presents a set of hypotheses and a conceptual framework that will guide the empirical part of the dissertation. Chapter four presents the data and methods adopted for the dissertation. Chapter five presents the results of the analysis, and the final chapter provides a discussion and conclusion.

## **CHAPTER 2**

### **GENERAL CONTEXT OF NEPAL**

The purpose of this chapter is to provide the context to the current study. It begins with the country context of Nepal; it then highlights the historical development of the NPO sector foreign aid landscape, as well as the legal context for NGOs in Nepal. The first section of the chapter highlights the political and economic context of Nepal. The second section presents the social and human development status of the country, and the third section presents a brief history of Nepali NGOs in reference to the flow of foreign aid, different socio-political changes, and the regulatory framework under which NGOs operate.

#### **2.1 Political and Economic Context**

Nepal has achieved remarkable socio-political progress over the last two decades. The small Himalayan nation situated between two nuclear powers, China and India, has gone through waves of political changes. The past two decades saw major political upheavals, from the end of a twelve year-long armed insurgency to the massacre of the royal family to the establishment of the nation as a secular republic.

Nepal is currently going through a post-conflict institutional reform stage. Following the twelve year armed conflict and subsequent failed attempts to draft a new constitution, Nepal now has a new constitution, which makes the country a federal republic nation. The first election was conducted on February 2018 based on the new constitution. Nepal had its first election at the local level after two decades in 2018. The country is currently practicing a newly-formulated federal structure, which has three tiers of government: a central, provincial, and local government.

Table 2.1 GDP Per Capita (Current USD) Compared to Other South Asian Countries

Country	1990	2000	2010	2017
Maldives	964	2,227	7,100	11,151
Sri Lanka	464	869	2,808	4,074
Bhutan	558	766	2,179	3,130
India	364	439	1,346	1,942
Pakistan	372	534	1,040	1,548
Bangladesh	298	406	758	1,517
Nepal	193	231	592	849
Afghanistan			551	550

Source: World Development Indicators, World Bank (2019)

Nepal has one of the lowest GDP per capita compared to other South Asian nations. The GDP per capita was USD 849 in 2017, only above Afghanistan. Nepal's GDP growth rate declined during the conflict. However, recent figures suggest that Nepal has a growth trajectory of its annual GDP growth rate. In 2017, Nepal's GDP growth rate was the highest in South Asia (see Table 2-2 for a comparison of other South Asian countries). Nepal went through major political changes between 2000 and 2012 and was marred by political turmoil and a bad economy. The rise in the growth rate of the GDP per capita in 2017 is primarily due to the political stability country has achieved. Nepal has a government with two-third majority in the parliament and is achieving a steady growth in the GDP. Subsequently, the GDP per capita growth rate has gone up.

Table 2.2 Annual Growth Rate of GDP Per Capita in South Asia

Country Name	1990	2000	2010	2017
Afghanistan			11.19	0.14
Bangladesh	3.05	3.25	4.4	6.16
Bhutan	9.43	3.97	9.71	3.35
India	3.37	2.02	8.76	5.49
Maldives		1.66	4.32	4.81
Nepal	2.09	4.25	3.72	6.72
Pakistan	1.46	1.91	-0.48	3.66
Sri Lanka	5.06	5.36	7.36	2.15

Source: World Development Indicators, World Bank (2019)

## 2.2 Social and Human Development

Compared to other South Asian nations, 15 percent of Nepal's population is under absolute poverty (headcount measure). However, absolute poverty has declined substantially in Nepal compared to other South Asian nations over the last 17 years. Compared to 46.1 percent of the people living under poverty, today the number has declined two-fold (World Bank, 2019). In terms of the Human Development Index, Nepal has an HDI of 0.574 and ranks 149<sup>th</sup> in the world in terms of human development. Nepal has made some significant progress in achieving some of the millennium development goals. For example, it reduced the infant mortality rate per 1,000 live births to 28 compared to 60 in 2000 (UNDP, 2018).

Table 2.3 Poverty Headcount ratio in South Asia

Country	1990	2000	2010	2017
India	45.9	38.2	31.1	21.2
Nepal	61.9	46.1	15	15
Bangladesh	44.2	25.7	19.6	14.8
Pakistan	58.9	28.6	8.3	4
Bhutan		17.6	2.2	1.5
Sri Lanka	8.7	3.8	2.4	0.7
Afghanistan				
Maldives			7.3	

Source: World Development Indicators, (World Bank, 2019)

While poverty in general has declined in the country, the spatial distribution of poverty is not the same across the country. The western region of Nepal and some selected districts of the southern plains have a relatively higher number of people living in absolute poverty (see Figure 4-1).

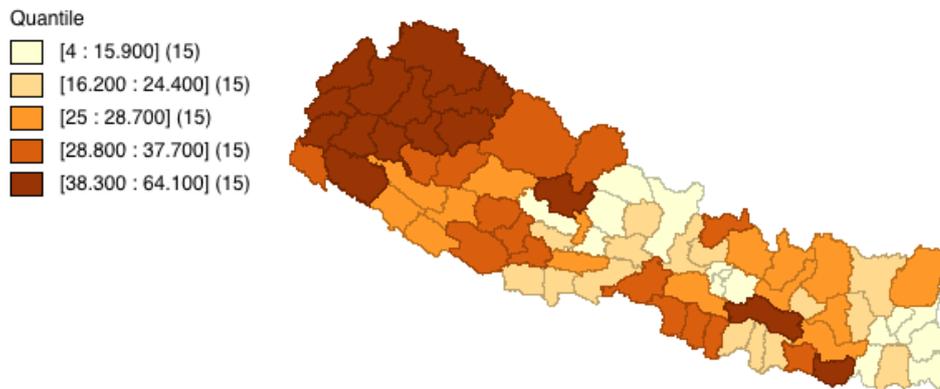


Figure 2-1 Quantile Map of Spatial Distribution of Percentage of Population Under Poverty Line.

Source: K C (2018)

### 2.3 An abridged history of Nepali NGOs

Today, Nepal is home to some 29 million people and a little over 49,000 officially registered NGOs (Social Welfare Council, 2018). Some unofficial sources claim that the number of NGOs in Nepal may be a little over 83,000 (ICNL, 2017), while a more conservative number suggests the number to be somewhat around 6,000 (NGO Federation of Nepal, 2019). There is no one credible centralized record of the total number of NGOs in the country. Despite the confusion over the exact number of NGOs, NGOs are well-established institutions in the Nepalese society.

This dissertation bases its analysis on the database of the Social Welfare Council of Nepal. Hence, the numbers used after this section should be understood as the data from the Social Welfare Council until and unless stated otherwise.

Figure 4-2 depicts the growth trajectory of NGOs in Nepal. It took twenty-four years to have the first three hundred fourteen NGOs, while the remaining NGOs were established within a matter of the last twenty-eight years. The NGOs in Nepal are clearly a post-democracy phenomenon in Nepal. There was an explosion in the number of NGOs after the demise of the totalitarian *Panchyat* regime of the country.

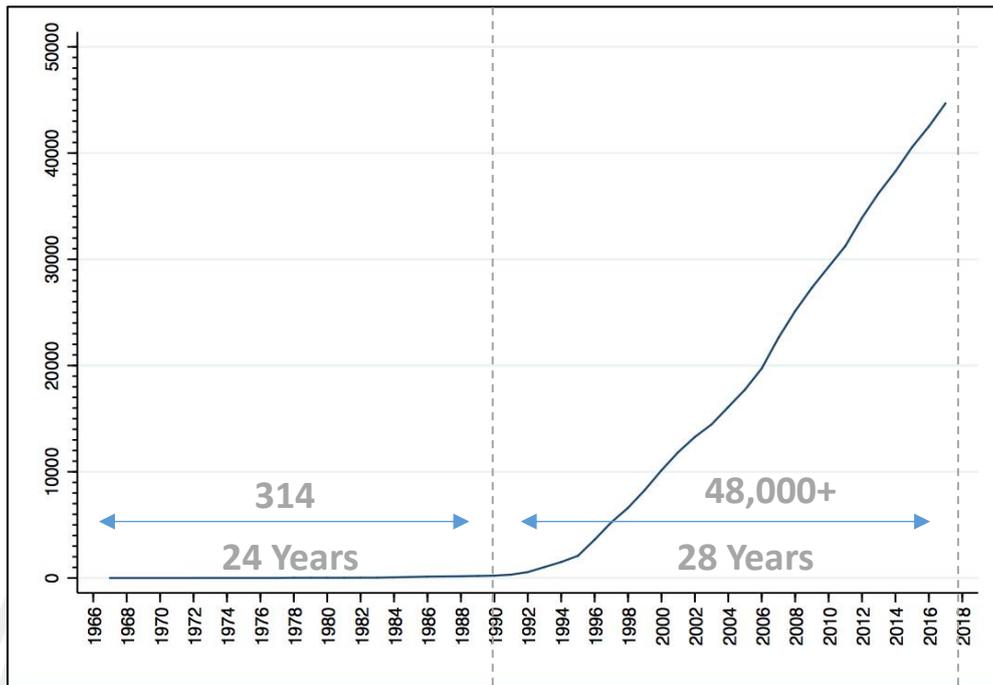


Figure 2-2 Growth Rate of Total Number of NGOs in Nepal

Source: Social Welfare Council (2019) ; author-generated chart

If we look at the spatial distribution of NGOs per 10,000 residents in Nepal, clearly the concentration of these organizations is in the capital city and its vicinity. The northern regions of western Nepal and the vicinity of the capital have the highest density of NGOs in Nepal.

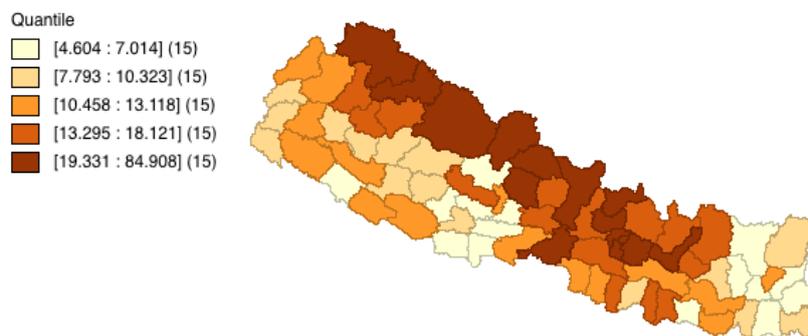


Figure 2-3 Quantile Map of Spatial Distribution of NGOs per 10,000 Residents in Nepal

Source: K C (2018)

Figure 2-4 portrays the sectoral distribution of NGOs in Nepal. More than sixty-four percent of the registered NGOs indicated that they were working for the community and rural development. Twelve percent of the organizations reported youth services as their preferred sector of work. Seven percent of NGOs reported providing services to women or representing their rights. Four percent of organizations were registered to work on moral development. These numbers were followed by three percent of organizations working in environment protection. Other sectors such as child welfare, health services, disability, education, and HIV and AIDS control had less than two percent of registered NGOs.

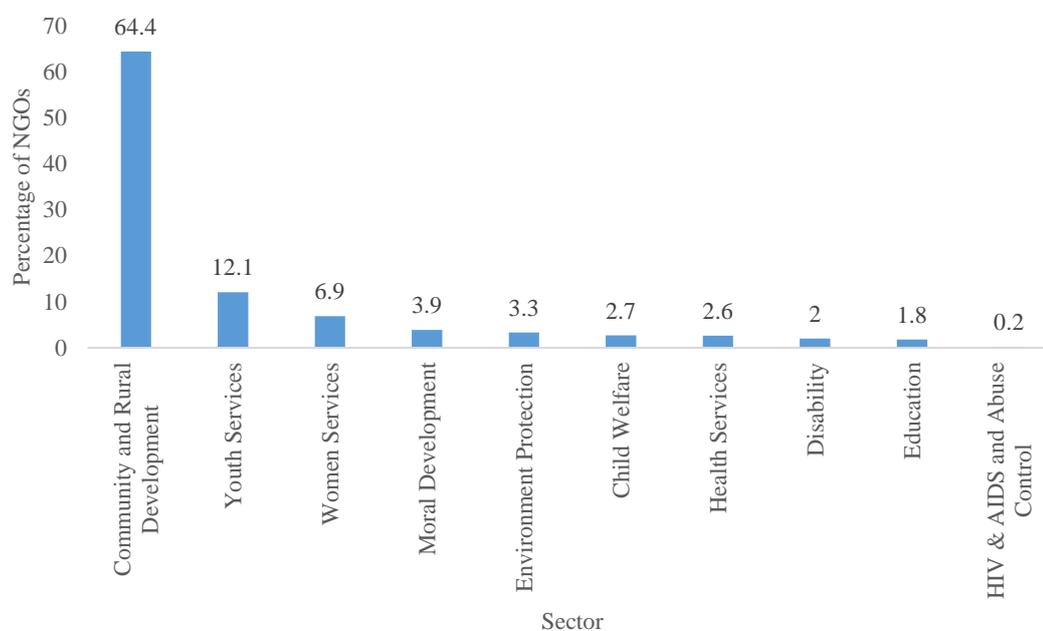


Figure 2-4 Functional distribution of NGOs in Nepal

Source: Social Welfare Council (2019) ; author-generated chart

### 2.3.1 Flow of Foreign Aid in Nepal

Nepal has steadily received foreign aid from different OECD countries. The net ODA received surged after the end of the armed conflict in Nepal. Source: World Bank (2019)

presents the trend of ODA Nepal received since 1960. Nepal received USD 16 as foreign aid per capita per year at the beginning of this century, as of 2016, the country received USD 45.55 per capita (World Bank, 2019).

Table 2.4 Net ODA received per capita (current US\$) compared with other South Asian countries.

Country Name	1990	2000	2010	2017
Bhutan	86.66	90.34	191.65	158.99
Afghanistan	9.81	6.55	221.70	104.80
Maldives	93.48	68.54	305.30	84.39
Nepal	22.37	16.14	30.15	45.55
Bangladesh	20.28	9.20	9.52	23.42
Sri Lanka	42.04	14.83	28.61	13.85
Pakistan	10.47	4.96	16.84	10.98
India	1.60	1.31	2.29	2.31

Source: World Bank (2019)

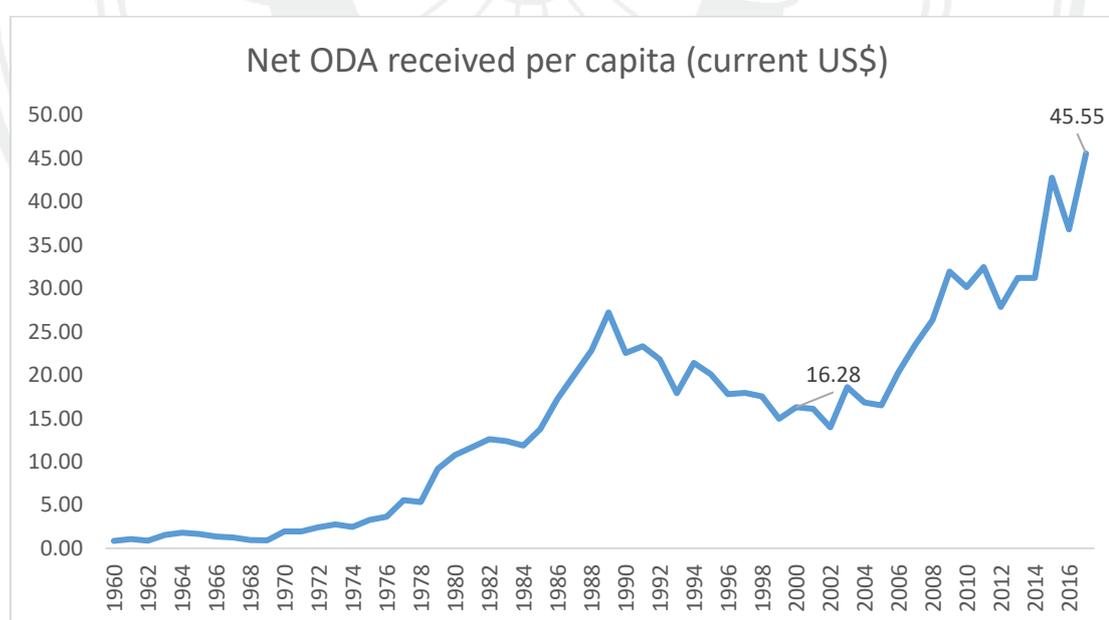


Figure 2-5 Annual Net ODA Received

Source: World Bank (2019) ; author-generated chart

As shown in Figure 2-6, on average between 2011 and 2017, foreign aid has contributed roughly around six percent to the total GDP of the country. The contribution has remained between five to eight percent of the GDP since the beginning of this decade.

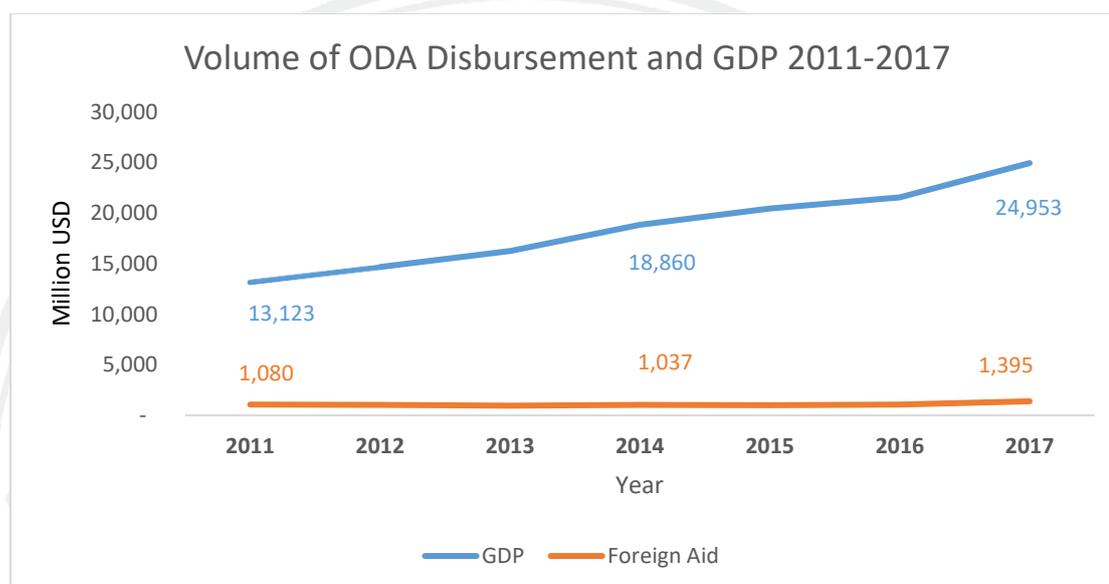


Figure 2-6 Volume of Foreign Aid and Contribution to GDP

Source: World Bank (2019); author-generated chart

### 2.3.1.1 Subnational Flow of Aid

As portrayed in Figure 2-7, Figure 2-8, and Figure 2-9 there is significant variation in the aid allocation across different parts of the country by different types of aid. However, Kathmandu valley has received a significantly higher amount of aid compared to other parts of the country. The average foreign aid flow into Kathmandu valley was almost seven times higher compared to the average aid flow outside Kathmandu valley between 2010 and 2017. An average of USD 669,534 was allocated inside Kathmandu valley, while it was only USD 95,687 outside Kathmandu valley (Ministry of Finance, 2012, 2016, 2017a). For a comprehensive review of aid allocation patterns by different donors, see K C (2018).

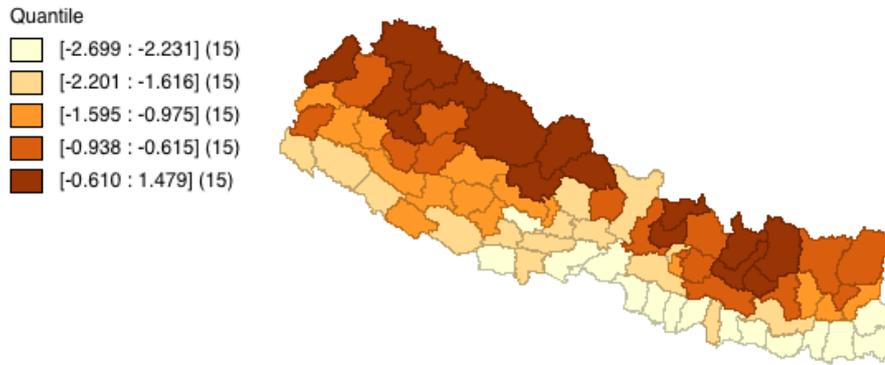


Figure 2-7 Subnational Allocation of Multilateral and Bilateral Aid (2011-2017)

Source: K C (2018)

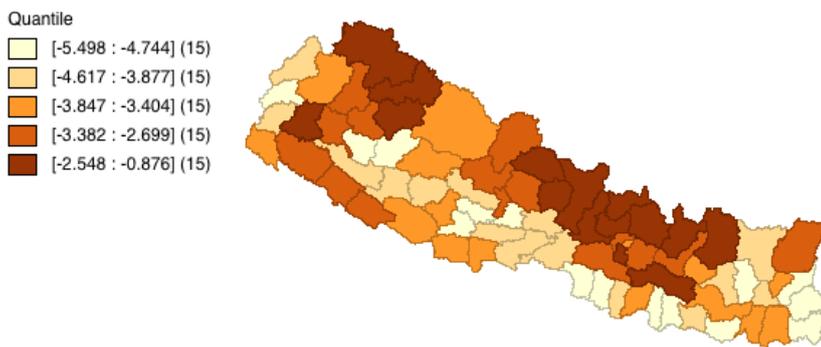


Figure 2-8 Subnational Allocation of INGO Aid (2013-2017)

Source: K C (2018)

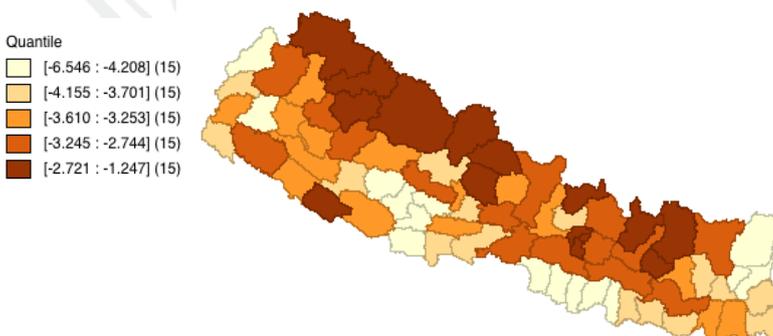


Figure 2-9 Subnational Allocation of NGO Aid (2014)

Source: K C (2018)

In Figure 2-10, the left axis shows the per capita ODA disbursement to seven provinces of Nepal. The right axis shows the Human Development Index for each province. As depicted in the figure, there is an uneven distribution of aid in the provinces. Province three has a 0.51 HDI, indicating a relatively better condition of human development compared to province seven, which has an HDI of 0.42. However, province three received almost three times higher aid per capita of USD 64 during 2011-2017 compared to province seven, which received only USD 24 (Ministry of Finance, 2012, 2013, 2014, 2015, 2016, 2017b, 2018).

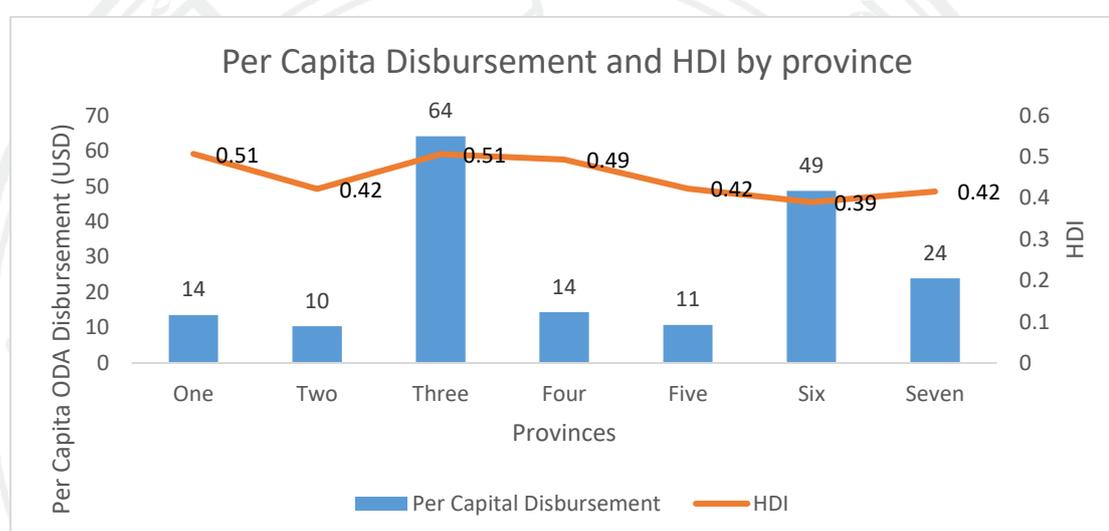


Figure 2-10 Per Capita ODA Disbursement and HDI by Province

Source: IECCD (2018); author generated chart

### 2.3.2 Socio-Political Changes and NGOs

Figure 2-11 highlights the major political changes and the annual NGO entry rate of Nepali NGOs. The number of Nepali NGOs picked up with the restoration of multi-party democracy in Nepal. The entry rate of NGOs shoot up at major political events in the country. At the national level, the NGO registration can be divided distinctly in two waves (see

Figure 2-12 ). The first wave of Nepali NGO registration began in 1990 and continued upwards until the beginning of this century. The second big wave of NGO birth began in 2002 when the armed conflict was escalating with fragile domestic politics. The upward trend in annual registration continued in the following years. The

year 2006 saw the peak of NGO registration in the country. This was the time when the armed conflict ended, and when the power of the monarchs was curbed significantly.

A bird's eye view of the registration trend and political changes clearly demonstrates that NGOs see the moments of political turmoil as an opportunity for them. Political turmoil often leaves deep scars in the society. The ruling elites often forget the pain and needs of the citizens and focus on securing their power, and while they do this, the citizens are often deprived of basic services. As a result, this creates an opportunity for NGOs to act as legitimate actors in fulfilling these needs.

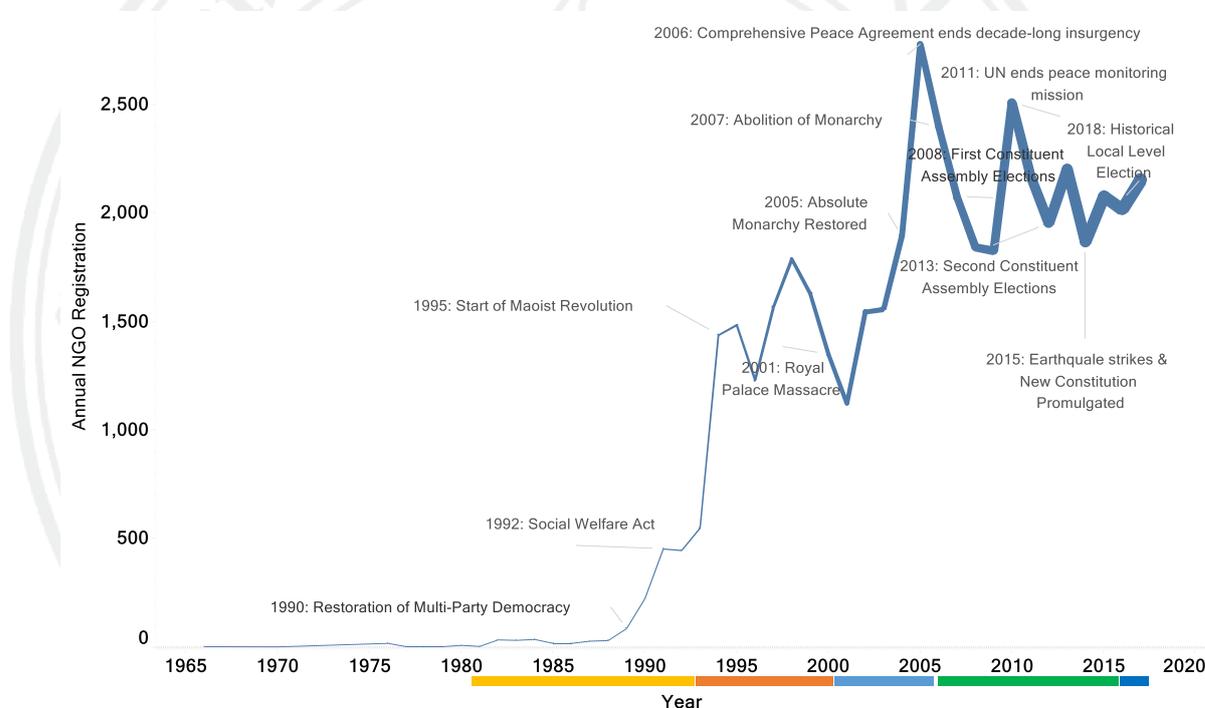


Figure 2-11 Major Political Changes and Annual NGO Entry Rate 1967 - 2018

Source: Social Welfare Council (2018); author generated chart

The thickness of the line in Figure 2-11 represents the overall density of NGOs and the color in the X-axis represents the time frame of political developments in Nepal.

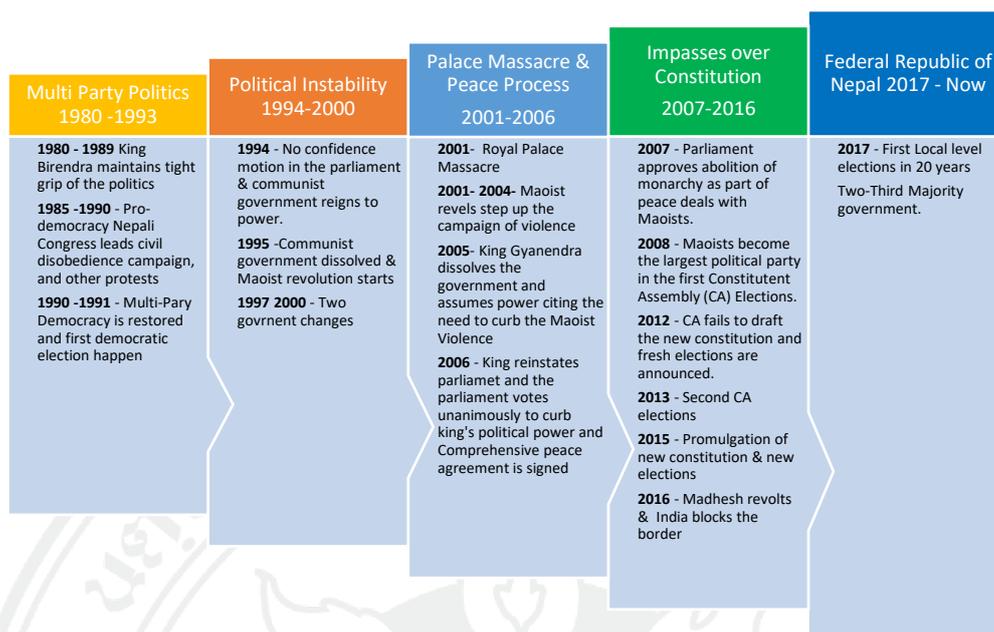


Figure 2-12 Major Political Development Timeline 1980-2018

### 2.3.3 National Laws and Regulations Affecting Sector

#### 2.3.3.1 Constitutional Framework

The constitution guarantees considerably freedom and rights to its citizens. For instance, articles 16, 20, and 43 relate to various individual freedoms, including civil rights such as the right to life, dignity, equality and freedom, the right to information, the right to justice, the right to social security, etc. The constitution also further safeguards political rights such as the right to association, expression, and exchange of ideas, participation in the state system, etc. Furthermore, articles 17, 25, 29,33, and 34 stipulate the economic rights of the citizens, while articles 31, 35, 38, 39, 40 guarantee the right to education, health, the rights of children, women, and the scheduled castes. It also further guarantees religious freedom and safeguards its citizens' right to practice their own religion without affecting others.

The constitution of the country also sets an enabling environment for civil society by ensuring the freedom of opinion and expression, the right to assemble peacefully without arms, to form unions and associations, and freedom of mobility within the country as well as the liberty to engage in a profession of their choice. These freedoms are stipulated in the third part of the constitution.

The constitution, particularly article 51, states that the government should promote and pursue social justice and principles of inclusion. It states that the government will adopt policies “involving NGOs and INGOs only in the areas of national needs and priority, by adopting a one-door policy for the establishment, endorsement, engagement, regulation and management of such organizations, and by making the investment and role of such organizations accountable and transparent.”

#### 2.3.3.2 National Laws and Regulations Affecting Sector

Nepal is going through huge legal reforms due to its new federal structure. These are the current legal instruments that guide the registration and operation of NGOs. However, the Nepali government is drafting a new Social Organization Act, 2075, an umbrella law which would regulate nearly every form of association. This law would replace the Association Registration Act, 1977, the National Directorate Act, 2018, and the Social Welfare Act, 2049. This draft law is being reviewed and redrafted by multiple ministries. There are several issues in the bill that are under discussion.

First, the draft clearly envisions NGOs as service providers that would operate within a certain geographical area engaged in one type of activity. For instance, the draft law proposes that an organization identify its work only in one category among thirteen functional categories of work. It is practically impossible to demarcate the boundaries of the proposed functional categories. For instance, raising awareness is one category and the second category is the advocacy and promotion of rights. The proposed bill is geared towards discouraging NGOs from engaging in more than one functional area with the provision of additional fees for those declaring more than one functional area of their work.

Second, the bill envisions a central registrar’s office for the registration, operation, and regulation of organizations that operate nationwide or that have work areas in more than two provinces, professional associations, INGOs, and NGOs that register in Nepal but that want to operate internationally. This proposed body is somehow identical to the existing Social Welfare Council. In the meantime, it also envisions a provincial and local registrar’s office for organizations operating province-wide or at more than two local levels. Furthermore, the proposed bill is ambiguous in

determining the standard process for the renewal process. It gives power to the local level in determining the requirements for the renewal of such organizations. While the idea of empowering the local level is encouraging, having a clear standard nationwide for organization renewal would avoid confusion among organizations.

**The Association Registration Act, 1977:** All of the NGOs in Nepal are registered under the association registration act of 1977. This act serves as the primary legal instrument that guides the registration and functioning of NGOs and other civil society organizations in the country. The act defines "association" as an "association, institution, club, circle, council, study center, etc. established for the purpose of developing and extending social, religious, literary, cultural, scientific, educational, intellectual, philosophical, physical, economical, vocational, and philanthropic activities. It also includes friendship associations."

**The National Directorate Act, 1961:** Professional associations and organizations that are involved in the development of their members as well as the broader members of the community are registered under this act. Professional associations such as the Nepal Bar Association, the Nepal Press Council, the Teachers Union of Nepal, the Nepal Federation of Journalist Associations, and the NGO Federation of Nepal are registered under this act. Associations are either formed by the government or need the approval from cabinet meetings through the relevant line ministry or be established or envisioned in the law.

**The Social Welfare Act, 1992:** This act was introduced by the government to govern and coordinate the provision of "social welfare" activities and "social service" activities. Any CSO willing to receive funding from the government or foreign entities must be affiliated with the Social Welfare Council established by the law and obtain prior approval to receive the funding. This dissertation uses the dataset of the NGOs that are affiliated with Social Welfare Council.

**The Company Act, 2006:** Articles 166 and 167 of the company act provide the legal basis for the registration of non-profit distributing companies. Registration requires at least five citizens coming together to promote any professional, business, intellectual, educational, social, charity, or welfare activities with a non-profit intent. According to the company registrar's database, since the promulgation of the law, a total of 1,782 entities have registered as non-profit distributing companies.

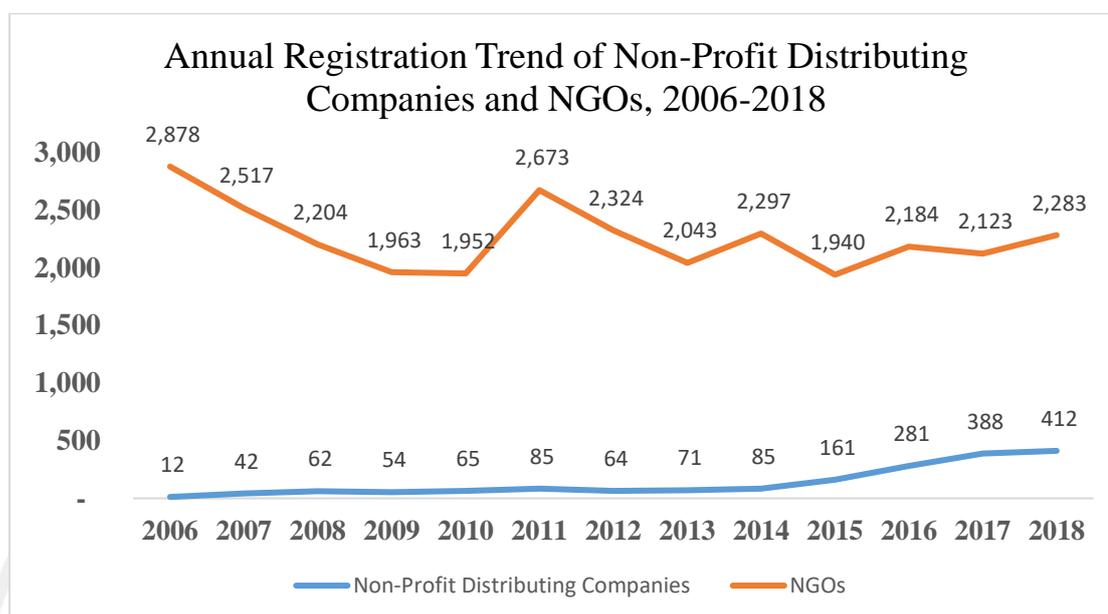


Figure 2-13 Annual Registration Trend of Non Profit Distributing Companies and NGOs

Source: Company Registrar’s Office & Social Welfare Council, 2018; author generated chart

Table 2.5 Summary of Laws and Policies Affecting NGOs

Year	Law/Policies	Implication for NGO
1961	National Directive Act	First modern law governing registration of social organizations.
1977	Association Registration Act	It is the primary framework law for NGOs in Nepal
1992	Social Welfare Act	Governs the provision of “social welfare” activity and “social service” activity.
2006	The Company Act	Allows for the formation of not for profit companies.

Source: ICNL (2017)

### 2.3.3.3 NGOs as actors in National Development Policies

Nepal began its planned development efforts in 1956. Since then, the country has seen fifteen periodic development plans. NGOs were included as key partners of development since the eighth (1992-1997) periodic plan. The emphasis of the eighth plan was to alleviate the poverty in the country and NGOs were considered as partners in the developmental efforts of the country. The interim government of Nepal also introduced a 13-point policy on NGOs where government agencies were encouraged to coordinate with NGOs in rendering their services to citizens and were encouraged to facilitate resources for NGOs (NPC, 1992). Furthermore, the eighth plan also clearly outlined its directive for INGOs and NGOs to make them operate in rural and underserved communities. In the meantime, INGOs were encouraged to partner with the local NGOs to execute their programs.

The national periodic plans, since the eighth plan, have seen NGOs as crucial actors of development in Nepal. The country is now on the verge of implementing its fifteenth plan and the NGO sector remains as one of the four major sectors along with the public, private, and cooperative sectors that are contributing to the development of the country (NPC, 2019, p. 52).

## **2.4 Chapter Summary**

This chapter began with a brief overview of the political and economic context of Nepal. Evidence suggests that Nepal has made remarkable progress in achieving human development and taking its citizens out of poverty over the last two decades. Furthermore, the country has made remarkable progress in the social and political arena as well. It ended its twelve year-long armed insurgency and promulgated a new constitution that made Nepal a secular, federal republic that guarantees association rights as fundamental rights of the citizens. In the second section of this chapter, the historical trajectory of NGO and NFC growth is presented, and different phases of political changes and their impact are highlighted. This chapter also presents the flow of foreign aid, which often fuels the operation of NGOs at the subnational level. The chapter ends by summarizing the legal environment in which Nepali NGOs operate.

## **CHAPTER 3**

### **LITERATURE REVIEW**

The purpose of this chapter is to review the key concepts and assumptions held by both ecologists and institutionalists. The chapter also highlights the ruptures and similarities among the theories. The chapter highlights the current trend in nonprofit founding research. The second section of this chapter elaborates on the ecological approaches to the organizations, key assumptions, key concepts of population ecology, and covers density dependence theory and related studies. The third section of this chapter explores the key assumptions and concepts of institutional theory and its explanatory power in explaining the phenomenon of organizational birth. The final section of the chapter explores the intersectionality of population ecology and institutional theory, and nonprofit research and underlying debates. Based on the literature, in the subsequent section of the chapter, the conceptual framework and hypotheses are formulated.

Conventional studies on nonprofit location have primarily investigated the exogenous factors to the sector to explain where and why organizations are founded. This study builds on studies of not for profit research tradition and organizational sociology, especially regarding population ecology and institutional literature. The dissertation follows the footsteps of organizational ecologists (Hannan & Freeman, 1977) and institutional theorists (Meyer & Rowan, 1977) to study the phenomenon of NGO population evolution. Within the population ecology research, there is a long tradition of using density dependence theory (Hannan & Freeman, 1987) to study the broader phenomenon of organizational evolution.

Density dependence in its original form argues that the density of organization population and the founding rate of new organizations in the population have a non-monotonic relationship. The theory of density dependence stipulates that the density of organizations, i.e., “the number of organizations in an organizational population is

related with the entry rate of new organizations in the population.” The theory on the first stage suggests that the density of existing organizations in an organizational population influences crucial processes of legitimation and competition. As the density rises, the legitimacy of the organization rises because of enhanced social acceptance. Density dependence theory more precisely focuses on the role of constitutive legitimation and diffuse competition. Constitutive legitimation is defined as a process by which an organizational form receives acceptance from its stakeholders and from the community. Acceptance here means that the organization form is considered as natural and receives taken-for-granted status in performing certain kinds of action. In the words of Meyer and Rowan (1977), being taken for granted means that the organizations are established as "appropriate, rational, and modern" (Meyer & Rowan, 1977, p. 349).

Meyer and Rowan (1977) postulate a powerful argument that organizations behave in a way that is defined by existing “rationalized concepts of organizational work and institutionalized in society”. In the words of DiMaggio and Powell (1983), organizations enhance their legitimacy and ensure their survival by adhering to societal and legal expectations. Hence, institutionalists explain that organizations are homogenous due to normative, coercive, and mimetic pressures.

These seemingly different yet very identical theories emerged in the late 1970s as a response to rational theories that investigated the internal functioning of organizations extensively. Interestingly, both the seminal work on population ecology (Hannan & Freeman, 1977) and institutional theory (Meyer & Rowan, 1977) were published in the same year in the same journal. Both schools of thought have entered into vociferous debates (for example Carroll and Hannan (1989c) vs. Zucker (1989).

Despite the debates, more and more studies are showing that there are significant similarities between these two schools than differences (Haveman & David, 2008; Lander & Heugens, 2017). For example, Lander and Heugens (2017) and Haveman and David (2008) cite three points of similarities between the theories.

begin

1. Conceptually both the theories resort to legitimacy and organizational form.
2. Both groups of scholars rely on longitudinal data analysis of organizations. Ecologists rely on populations while institutionalists depend on the fields.

3. Both theories emerged as a response to existing theories that investigated internal organizational functioning in the late 1970s and directed attention toward the interaction of the organization with its environment.

Despite the theoretical debates on the similarities and dissimilarities, both population ecology and institutional theories have been successful in explaining the phenomenon of organizational birth. Given the focus of the dissertation on the phenomenon of organizational birth, the remaining section of the chapter will concentrate on the phenomenon of organizational birth and entry.

The research on organizational theory has predominantly focused on for profit organizations. The traditional research on organizational founding has investigated the factors that contribute to a certain pattern of organizational founding in the profit-making organizations. Despite some early focus of some organizational theorists on the study of the nonprofit sector, the studies exploring the factors affecting organizational population birth have largely been ignored. In addition to the general dearth of such works in the non profit sector, the geographical concentration of studies on organizational theories, especially using institutional theory and population ecology, have originated primarily from the western hemisphere with a few notable exceptions from China and Japan. While the field of study is becoming mature, the evidence of the applicability of these theories in developing nations is largely unknown.

The geographical bias may stem from a wide range of factors, and the lack of access to data in studying the long organizational history in the developing countries could be one. The rapid development in the computing field and widespread availability of Internet and digital technologies have made the cumbersome work of collecting vast amounts of data for analysis much easier. Without getting much deeper into why studies have not been done, this dissertation contributes to that void of knowledge, especially in terms of NGOs.

### **3.1 Population Ecology**

One of the influential thinkers of the 20<sup>th</sup> century, Joseph Schumpeter, coined a powerful term, “creative destruction,” to make a point that new industries and organizations replace existing and old industries, technologies, and products in order to introduce new forms of organizations and products (Schumpeter, 1943). Until this date,

Schumpeter's notion of "creative destruction" is extremely influential in studying innovation. Similar kinds of questions were asked by organization ecologists some 40 years later. Ecologists were rather intrigued in knowing how these new industries and organizational forms that Schumpeter said had emerged would emerge in practice. One common element of Schumpeter's notion of creative destruction and the quest for knowing the process by which new organizational forms emerge is the Darwinian evolutionary tradition.

Following the evolutionary tradition, population ecology theorists in general have attempted to explain the composition, diversity, and relative abundance of organizations over time. They primarily have focused on the vital events. Hannan and Freeman (1977) proposed the application of population ecology theories to human social organizations. Population ecologists have attempted to answer the question "Why are there so many kinds of organizations?" (Hannan & Freeman, 1977, p. 36).

Investigators engaged in population ecology research usually begin with three key observations (Baum & Shipolov, 2013):

1. Diversity is a function of organizational population rather than individual organization.
2. Organizations are inert and often face difficulties in making swift changes to meet demands created by rapidly changing environments.
3. The population of the organization is not stable, meaning that organizations are born and disappear continually.

With these assumptions, organization ecologists use the phenomenon of organizational birth and death as the source of organizational diversity in an organization's population. Researchers using population ecology often use the population of the organization as the unit of analysis.

### **3.1.1 Organizational Population as the Unit of Analysis**

Selecting the right unit of analysis is a difficult decision for organization analysts. The ecological perspective offers three levels of analysis: individual, population, and communities. Interestingly, events occurring at one level affect another level. Aldrich and Ruef (2006) consider the organizations as the building block of society through which collective wills and actions are implemented. Hannan and Freeman (1977, 1989) see organizational form diversity as nothing else but the mere reflection of the society.

Yet, they argue that events occurring at the population level cannot be reduced to individual levels. Hence, they cite the need for considering population level analysis in order to obtain a unique macro level lens for the study of organizations. In the view of ecologists, the population of organizations refers to the aggregates of the organizations that have similar characteristics. Member organizations of the population are engaged in identical activities and have common resource utilization patterns. Organizations that share the same form or belong to the same population have identical core structures and occupy the same niche of resources within their environment (Carroll & Hannan, 2000; Hannan, 1986; Hannan & Freeman, 1989). The core structures for example can be identified as the market they serve, their stated goals, forms of authority within organizations, and organizational core technology. Organizational forms or populations are socially constructed and are often used to distinguish or denote that they are ecologically similar (Aldrich & Ruef, 2006; Carroll & Hannan, 2000; Hannan, 1986; Hannan & Freeman, 1989).

As stated earlier, ecologists define populations as organizations that are bounded together spatially and temporally with certain common identifiable characteristics and that are reliant on a common or shared set of resources from their environment. These resources can be both material and social (Carroll & Hannan, 2000). Even though populations are often equated with distinct organizational forms, there is a significant difference of opinion on the definition of organizational forms or populations for empirical testing purposes. Studies have used diverse forms of organizations as forms or populations for this purpose, for example, from labor unions to newspapers (Carroll & Hannan, 1989a, 1989b, 1989c; Hannan, 1986; Hannan & Freeman, 1988), brewers (Box, 2017; Carroll et al., 1993; Cruz et al., 2018), insurance companies and banks (Greve, 2002a), trade associations, medical equipment manufacturers, automobile manufacturers (Wezel, 2005), hotels, railroads, sports leagues (Wade et al., 2018), accounting firms (Cattani et al., 2003), credit unions, film producers, political parties, and government departments and organizations. All of these studies define a very particular group of organizations that share some core features yet may have differences in terms of peripheral characteristics, such as membership, size, and location. The aforementioned examples of populations are more “trait-based” typology. This view sees organizational forms as clusters of feature—both core and peripheral.

In addition to the trait-based approach, another dominant way of separating population is based on the identity approach. Organizational identity indicates the set of “social codes or rules” about the organizational attributes or actions that the audience of the organization expects to follow. Whether or not the audience accepts the organization actually is based on the organization’s action. It is contingent on the adherence of the organization to the default codes (Ruef, 2004). Hence, it can be argued that organizational identities have a rule-like or fact-like status. If an organization is validated as the member of an identity, it is normatively assumed that the member of the identity meets the standards set to be the member of that particular identity or category until and unless there is no evidence suggesting otherwise.

As stated earlier, there are multiple ways of looking at organizational population. Some separate populations in terms of legal form, core technology (Baum & Oliver, 1996; Ranger-Moore, Banaszak-Holl, & Hannan, 1991; Rao, 1994), customer base (Aldrich, Zimmer, Staber, & Beggs, 1994), and strategy and geographical location (Cattani et al., 2003; Greve, 2002b; Wezel, 2005). Current study follows the established notion of population and views the population of NGOs as empirically based on geographical location and using an identity-based approach.

### **3.1.2 Time Frame of Study**

Unlike most organizational research which focuses on a few organizations and studies contemporary phenomena, organizational ecologists are generally interested in studying a long period of time. Organizational ecologists believe that it is impossible to understand the factors responsible for the success or failure of firms without studying the history of the organization over a long period of time.

### **3.1.3 Levels of Study**

Contemporary ecology theory and research have focused attention primarily on four levels. The research at the first level investigates the variation, selection, and retention processes within organizations and is commonly referred to as “intra population ecology.” Studies on the second level of the research scrutinize the changes in the rates of organizational founding and failures at the organizational population level and is often termed “demography of organizations.” The third level of study is termed “population ecology of organizations,” and this strand of research focuses on

the growth and decline of populations. It further studies how the vital rate of one population is actually affected by population-level endogenous factors as well as the interactions with other populations. The final level focuses on the evolution of community structures and is labeled the “community ecology of organizations” (Baum & Shipolov, 2013; Carroll, 1984; Hannan & Freeman, 1989; Ruef, 2000). This dissertation places itself within the second and third level of analysis and is interested in understanding the role of endogenous population-level factors as well as institutional factors in the phenomenon of the growth of the organizational population.

### **3.1.4 Assumptions of Population Ecology**

Population ecology borrows the evolutionary thinking from “general evolutionary theory,” which considers variation, selection, and retention as three key processes of evolution. Furthermore, the intellectual roots of population ecology can be traced back to sociology and human ecology (Hawley, 1950), and the theories stem from open system thinking in organization theory (Scott & Davis, 2017) Sociological neo-institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Meyer & Scott, 1983), resource dependence theory (Pfeffer & Salancik, 2003), and organizational ecologists have a similar ancestry and believe in the external control of organizations and argue that the environment influences organizations.

#### **3.1.4.1 Environment is Dynamic and Uncertain**

Organizational ecologists assume that the environment is dynamic and changing constantly. The rate of change in the environment is extremely high and the environment in which organizations operate is extremely uncertain. This ever-changing organizational environment creates uncertainty for the organization.

#### **3.1.4.2 Organizations are Inert**

Organization ecologists believe that individual organizations cannot keep up with the pace of the changes occurring in their environment. They do not disregard the ability of organizations to change; however, their argument is that the rate of changes in organizations is always slower than the one its environment demands. Despite their limited ability to cope up with changes, organizations are often affected by the rapid changes occurring in their environment. Hence, among other assumptions, the assumption that organizations are comparatively inert to changes that occur in the organizational landscape remains the key assumption. Furthermore, it is assumed that

these large-scale changes that occur in the organizational landscape are in fact steered by evolutionary selection rather than the mere adaptive efforts of individual organizations (Hannan & Freeman, 1977).

Due to organizational inertia, the demands exerted by the changing environment are not met by the individual organizations. Hence, the gap between the organization's characteristics and the demands made by the environment are essentially met by a selection and retention process at the level of the organizational population. This forces organizations that do not fit the environment to find a way out of the population. By exiting the population, unfit organizations actually free up space for organizations that fit the conditions laid out by the dynamic environment (Carroll & Hannan, 2000; Hannan & Freeman, 1977, 1989).

### **3.2 Density Dependence Theory**

As discussed in the preceding section, population ecology in general attempts to explain the evolutionary dynamics of industries with an emphasis on the emergence, growth, and demise of organizational population (Carroll & Hannan, 2000). The focus of the explanation of population ecology in general is inspired by Darwinian logic and argues that changes in an organizational domain occur because some forms of organizations fall under selection. It can be clearly witnessed that the focus here is rather on explaining the selection model at the organizational population level rather than on how one or a few organizations successfully adapt.

Density dependence in its original form argues that the density of organization population and the founding rate of new organizations in the population have a non-monotonic relationship. The theory of density dependence stipulates that the density of organizations, that is, "the number of organizations in an organizational population, is related with the entry rate of new organizations in the population." The theory on the first stage suggests that the density of existing organizations in an organizational population influences crucial processes of legitimation and competition. As the density rises, the legitimacy of the organization rises because of enhanced social acceptance. The density dependence theory more precisely focuses on the role of constitutive legitimation and diffuse competition. Constitutive legitimation is defined as a process by which an organizational form receives acceptance from its stakeholders and from

the community. Acceptance here means that the organizational form is considered as natural and receives a taken-for-granted status in performing certain kinds of action. In the words of Meyer and Rowan (1977), being taken for granted means that the organizations are established as "appropriate, rational, and modern" (Meyer & Rowan, 1977, p. 349).

We can illustrate the above-mentioned phenomenon with an example: when a new kind of organizational form appears for the first time, people do not trust the organization easily. As a result, the first organization has to overcome resistance from society. However, as the number of similar organizations begin to appear, the difficulty in gaining trust or being "legitimate" in the society is not as difficult as it was for the first organization. We can think of the natural difficulties that pioneering organizations such as the first commercial bank in a society or the first nonprofit in a community had in legitimizing themselves.

### **3.2.1 Caveats of Density Dependence Theory and Extension of Theory**

Despite a burgeoning body of empirical evidence supporting density dependence theory (for a comprehensive review see Baum and Shipolov (2013)), density dependency theory is not immune to criticism. Critics have flagged the theory for two primary reasons: first concerns the unit of analysis for studying the ecological process (Singh, 1993; Zucker, 1989) and second is the lack of evidence supporting the micro behavior that contributes to the legitimation process of new organizational forms. Classic density measures the number of organizations operating in an industry/population and postulates that each of those member organizations contributes equally to the legitimation of the new organization's form.

It is because of this criticism that a growing body of studies focus on the degree of heterogeneity as a precondition for the emergence of new organizational form. It is in this context that studies with spatial considerations argue strongly to account for the role of geography in organizational founding (Greve & Rao, 2012; Lomi, 2000; Sorenson & Audia, 2000), as geography also conditions the founding of organizations (Cattani et al., 2003; Greve & Rao, 2012). These studies have emerged as a response to the limitations of population ecology, especially regarding density dependence theory (Hannan & Carroll, 1992) in explaining the phenomenon of organizational vitality.

Greve and Rao (2012) studied organizational founding as a source of the institutional legacy of mutualism in Norwegian community organizations and found that communities that saw the establishment of community organization early in the history tended to see more organizations established later. These findings support the logic of density dependence. They explicitly incorporate the density and density squared effect in their model to study the effects of legitimation and competition processes on the founding of new organizations. Similarly, in an earlier work, Greve (2002a) used the theory of spatial contagion, competition, and density dependence to study the patterns of the interaction and density dependence phenomenon in the neighboring subpopulations of the banking industry in Tokyo. He found that organizational populations in fact interact locally and with neighboring subpopulations and that the legitimation and competition act differently across different geographical units.

In the similar vein, Wezel (2005) expanded the classical density dependence model by incorporating the heterogeneity in geography. In his study of the evolution of motorcycle industry in the United Kingdom between 1895 and 1993, he found that the geographical configuration of organizational populations is very important for understanding the evolution of an organizational population. While they expanded the theory, they found support for classic density dependence logic. Cattani et al. (2003) also expanded classical density dependence theory by considering spatial heterogeneity in their study. They studied the founding patterns in the Dutch accounting industry between 1880 and 1986 and found that the effect of legitimation and competition on the founding rate differed geographically. They also suggested that the effect of local density-dependence remains highly significant.

Despite a large body evidence supporting the explanatory power of the density dependent theory, as demonstrated earlier, several studies point to the limitations of the empirical model and have attempted to expand it. See Table 2.3 for some extensions of the basic density dependence model.

Table 3.1 Empirical Works on Organizational Founding using Density Dependence Theory and the Relationship of Linear and Quadratic Term with the Founding Rate, 1986-2018

<b>Population</b>	<b>Industry</b>	<b>Density &amp; Density Sq.</b>	<b>Country</b>	<b>References</b>	<b>Year</b>
<b>Franconian microbrewery industry in Northern Bavaria, Germany, 1989-2012</b>	Brewery	+/-	Germany	(Cruz et al., 2018)	2018
<b>Swedish Brewing Industry, 1830-2012</b>	Brewery	na	Sweden	(Box, 2017)	2017
<b>US Biotechnology Patents, 1967-2003</b>	Biotechnology	+/-	United States	(van den Oord & van Witteloostuijn, 2017)	2017
<b>Emergence of craft breweries in Ontario, 1800-2001</b>	Brewery	+/-	Canada	(Lamertz, Foster, Coraiola, & Kroezen, 2016)	2016
<b>19th and 20th Century Norwegian Nonprofit Organizations</b>	Nonprofit Organizations	+/-	Norway	(Greve & Rao, 2012)	2012
<b>Global Fashion Design Industry, 1891-2005</b>	Fashion Industry	+/+	Global	(Wenting & Frenken, 2011)	2011
<b>Nonprofit Organizations in Florida State, 1994-2007</b>	Nonprofit Organizations	-/+	United States	(Ahn, 2010)	2010
<b>Dutch Accounting, 1884-1939</b>	Accounting Firms	+	Netherlands	(Bogaert, Boone, & Carroll, 2010)	2010
<b>Transgender Interest Groups in the United States, 1964–2005</b>	Interest Group	-	United States	(Nownes, 2010)	2010
<b>Foreign Banks in Shanghai, 1847–1935</b>	Banks	-/+	China	(Kuilman & Li, 2009)	2009
<b>Industrial Jewelry District, 1947-2001</b>	Jewelry	+/-	Italy	(Lazzeretti, 2006)	2006

<b>Population</b>	<b>Industry</b>	<b>Density &amp; Density Sq.</b>	<b>Country</b>	<b>References</b>	<b>Year</b>
<b>Founding Rates in the United Kingdom Motorcycle Industry, 1895-1993</b>	Automobile	-/+	United Kingdom	(Wezel, 2005)	2005
<b>Gay and Lesbian Rights Group in United States, 1950-1998</b>	Interest Group Formation	+/-	United States	(Nownes, 2004)	2004
<b>Founding of Dutch Accounting Industry, 1880-1986</b>	Accounting Firms	-	Netherlands	(Cattani et al., 2003)	2003
<b>Founding of Kibbutz Community in Israel, 1910-1997</b>	Kibbutz Community	+/-	Israel	(Simons & Ingram, 2003)	2003
<b>Illinois Banks, 1900-1993</b>	Banks	+/-	United States	(Barnett, 2002)	2002
<b>Founding of Political and Commercial Newspapers, 1773-1900</b>	Newspaper	+/-	United States	(Blau & Elman, 2002)	2002
<b>Banking in Tokyo, 1894-1936</b>	Banks	+/-	Japan	(Greve, 2002a)	2002
<b>Bulgarian Newspapers, 1846-1992</b>	Newspaper	+/-	Bulgaria	(Dobrev, 2001)	2001
<b>US Wine Industry, 1941-1990</b>	Wine Industry	+/-	United States	(Swaminathan, 2001)	2001
<b>US Specialist Feature Film Producers, 1912-1929</b>	Film	+/0	United States	(Mezias & Mezias, 2000)	2000
<b>Egyptian Investment Firms, 1974-1989</b>	Investment Firm	+	Egypt	(Messallam, 1998)	1998
<b>US Breweries, 1845-1918</b>	Brewery	+	United States	(Wade, Swaminathan, & Saxon, 1998)	1998
<b>Pennsylvania Telephone Cos., 1879-1934</b>	Telephone	+	United States	(Barnett, 1997)	1997
<b>Finnish Newspapers, 1771-1963</b>	Newspaper	+	Finland	(Dacin, 1997)	1997

<b>Population</b>	<b>Industry</b>	<b>Density &amp; Density Sq.</b>	<b>Country</b>	<b>References</b>	<b>Year</b>
<b>Massachusetts Railroads, 1826–1922</b>	Railroad	+	United States	(Dobbin & Dowd, 1997)	1997
<b>Niagara Falls Hotels, 1885–1991</b>	Hotel	–/+	Canada	(Ingram & Inman, 1996)	1996
<b>Manhattan Fax Transmission Cos., 1965–1992</b>	Telephone	–/+	United States	(Baum, Korn, & Kotha, 1995)	1995
<b>Founding and Failure of Facsimile Transmission Service Organizations, 1965–1992</b>	Telephone	+/0	United States	(Baum et al., 1995)	1995
<b>Belgian Automobile Manufacturers, 1885–1981</b>	Automobile	+/0	Belgium	(Hannan, Carroll, Dundon, & Torres, 1995)	1995
<b>British Automobile Manufacturers, 1885–1981</b>	Automobile	+/0	United Kingdom	(Hannan et al., 1995)	1995
<b>French Automobile Manufacturers, 1885–1981</b>	Automobile	+/0	France	(Hannan et al., 1995)	1995
<b>Italian Automobile Manufacturers, 1885–1981</b>	Automobile	–	Italy	(Hannan et al., 1995)	1995
<b>Italian US Immigrant Newspapers, 1877–1914</b>	Newspaper	–	Italy	(Hannan et al., 1995)	1995
<b>Polish US Immigrant Newspapers, 1877–1914</b>	Newspaper	–	Poland	(West, 1995)	1995
<b>NY State Life Insurance Cos., 1842–1904</b>	Insurance	–/0	United States	(Budros, 1993, 1994)	1994
<b>German Breweries, 1861–1988</b>	Brewery	+	Germany	(Carroll et al., 1993)	1993
<b>Metro Toronto Day Care Centers, 1971–1989</b>	Day Care Centre	+/–	Canada	(Baum & Oliver, 1992)	1992

<b>Population</b>	<b>Industry</b>	<b>Density &amp; Density Sq.</b>	<b>Country</b>	<b>References</b>	<b>Year</b>
<b>US State Life Insurance Cos., 1759–1937</b>	Insurance	+/-	United States	(Ranger-Moore et al., 1991)	1991
<b>US Brewers, 1633–1988</b>	Brewery	-/+	United States	(Hannan, 1986; Hannan & Freeman, 1989)	1989
<b>Argentina Newspapers, 1800–1900</b>	Newspaper	+/-	Argentina	(Hannan, 1986; Hannan & Freeman, 1989)	1989
<b>US Labor Unions, 1836–1985</b>	Labor Union	+/-	United States	(Hannan, 1986; Hannan & Freeman, 1989)	1989
<b>Ireland Newspapers, 1800–1975</b>	Newspaper	0/+	Ireland	(Hannan, 1986; Hannan & Freeman, 1989)	1989
<b>Springfield Newspapers, 1835–1975</b>	Newspaper	+/0	United States	(Hannan, 1986; Hannan & Freeman, 1989)	1989
<b>Elmira Newspapers, 1815–1975</b>	Newspaper	+/0	United States	(Hannan, 1986; Hannan & Freeman, 1989)	1989



Table 3.2 Extension of Basic Density Dependence Models

<b>Model</b>	<b>Key Variables</b>	<b>Nature of Elaboration</b>	<b>References</b>
<b>Density Delay</b>	Population Density at Founding	Adds an imprinting effect of density at founding to the original formulation. Helps to explain the commonly observed decline in population density in an older population.	(Carroll & Hannan, 1989a; Greve & Rao, 2012; Hannan & Carroll, 1992)
<b>Institutional Embeddedness</b>	Relational Density (number of linkages between a population and the institutional environment)	Studies the legitimation of organizational forms in terms of endorsements	(Baum & Oliver, 1992)
<b>Non-Density based measures of legitimacy</b>	Certification contests and media-based content measures	Models legitimation effects with non-density-based measures of institutionalization	(Lamertz & Baum, 2009; Rao, 1994)
<b>Level of Analysis</b>	Density at various levels of geographic aggregation (e.g. city, state, national)	Attempts to identify best level of analysis to study density-dependent process	(Greve & Rao, 2012; Wezel, 2005)
<b>Localized Competition</b>	Population Density Weighted by the size of differences across various organizational features (e.g. size, price, location)	Clarifies further the intense nature of competition across similar organizations	(Greve, 2002a)
<b>Organizational Niche Overlaps</b>	Population density weighted by non/overlap in resources needs of organizations	Mutualistic components using information on the overlap and non-overlap of resource requirements of population members	
<b>Mass Dependence</b>	Population density weighted by organizational size	Highlights the effect of large organizations in generating stronger competition	

<b>Model</b>	<b>Key Variables</b>	<b>Nature of Elaboration</b>	<b>References</b>
<b>Changing Basis of Competition</b>	Population age * population density <sup>2</sup> , population mass, size similarity, and concentration	Change in the basis of competition alters the process of competition across mass and agglomeration.	
<b>Competitive Intensity</b>	Organization age X size, average historical density	Organizations exposed to greater competition over their lifetimes generate strongest competition.	
<b>Coupled Clocks</b>	Population age * population density and density <sup>2</sup>	As the population becomes older, density becomes decoupled from legitimacy and competition.	
<b>Dynamic Selection</b>	Mean of the log size distribution, organizational size * population density	The size of an organization has a positive relationship with coping competition.	
<b>Fuzzy Density</b>	Simplicity of Goals, Tangibility of Offerings	Contribution by the members of the organizational population to the legitimacy of the organizational form is contingent on the grade of membership.	(Bogaert et al., 2010; Hannan, Polos, & Carroll, 2007; Kuilman & Li, 2009; Nagy, 2018)



### 3.2.2 Revised Density Dependence Theory

The measurement of legitimation and competition indirectly through density has been one of the major critiques of the density dependence theory. Researchers have questioned the reliability of simple numbers of organizations within a population to measure and reflect the constitutive legitimation or the taken-for-granted form (Amburgey & Rao, 1996; Zucker, 1989). Similar calls have also been made to improve the measurement of diffuse competition and the call for direct measurement of competitive processes have surfaced (Nickel & Fuentes, 2004). These criticisms have in fact contributed to a very healthy discussion in the field. The fact is that the theory has been empirically tested and demonstrated time and again and it has been found that these endogenous factors are important. Ecologists in general acknowledge the need for having more direct and reliable measures of legitimacy and competition, yet they again offer criticism regarding the generalizability, cost-effectiveness, and the practicality of adopting complex measures at the population level. Ecologists argue that it is difficult to observe legitimation and competition directly and the process of counting the mere number of organizations actually offers consistency in analysis over a long period of time and across several industries (Carroll & Hannan, 2000; Hannan, 1997)

The criticism of classic density is primarily related to the assumption of organizational homogeneity, which means that organizations are treated as having unitary characteristics. This assumption has led to the notion where every member organization of an organizational population contributes equally to the legitimation of the new organizational form (Baum & Powell, 1995). In response to criticisms like this, Hannan et al. (2007) revisited the density dependence theory and introduced the concept of “fuzzy density” to replace the classic density in the model. Unlike classic density where the mere number of organizations were counted and considered to contribute equally to legitimacy, fuzzy density accounts for the perceptual ambiguity of an organizational form. That is to say that when people cannot identify the form of the organization or if they cannot understand the form of organizations, the presence of a huge number of organizations actually has a weaker impact on legitimation (Hannan et al., 2007).

Hannan et al. (2007) clarified the concept of legitimation and diffuse competition further and suggested that diffuse competition might differ for individual organizations because of their differences in their grade of membership. In clarifying the measure of the density of the population, unlike the classical density-dependent theory where density was computed based on a one-for-one count of organizations, fuzzy density assumes that density can be computed by summing the grades of the membership of the organizations in the schemata that audience members attach to a label (Hannan et al., 2007, p. 98).

Table 3.3 Differences in the Measurements of Legitimacy in Density Dependence and Fuzzy Density Dependence Theory

Density Dependence Theory	Fuzzy Density Theory
<b>Each member of the population contributes to the legitimacy of the organizational form (population) equally. Hence, legitimacy is equal to existing numbers of organizations in the population (<math>N</math>)</b>	The contribution towards the legitimacy of the organizational form (population) is contingent on the grade of the membership of the individual organization. Organizations with higher grades of membership contribute more to the legitimation.

Similarly, the measure of legitimation also changes in revised density dependence reasoning. It is proposed that legitimation increases with the level of the consensus within the audience concerning the meaning of the label. This implies that the higher is the consensus among the members of an audience about the meaning of a label, the higher is the legitimation of the organization belonging to that schema. There is a significant gap in the empirical validation of these amendments. Only four empirical published works have attempted to validate those arguments (Bogaert et al., 2010; Bogaert et al., 2016; Kuilman & Li, 2009; Nagy, 2018).

As discussed earlier, grade of membership takes a value between 0 and 1, which is estimated according to the extent that the organization fits into the audience's schemata regarding the category (Van Wart, 2013). This also means that the boundaries

of populations are fuzzy and are set by the audience, being the opposite of the definition of classical theory. For measuring fuzziness of populations, the authors defined contrast, which is the average grade of membership of organizations within the category. It follows that categories with high contrast have “crisp” boundaries and similar members (crisp categories), while populations with low contrast have fuzzy boundaries and relatively different members (lenient categories).

In order to overcome the limitations of density dependence, the contrast dependence theory offers two alternative models (Bogaert et al., 2010): fuzzy density dependence and contrast dependence. Both theories assume that density by itself does not increase the legitimation of the population. In fact, the fuzziness of populations or categories plays a more important role. While high contrast increases legitimation, low contrast hampers it, regardless of the density level. This also explains the paradox of the late lifetime of organizational populations. As these periods are typically characterized by low GoM members, legitimation of the category is low, which does not attract new entrants.

The difference between the two models lies in the calculation. First, in the fuzzy density dependence model, legitimation increases monotonically with the GoM-weighted density (equals the sum of the GoM of organizations). Secondly, in the contrast dependence approach, it is driven by the contrast of the population (equals the average GoM of the members). Bogaert et al. (2010) investigated Dutch accounting firms' form emergence in the period 1884 to 1939 using the revised theory of organizational evolution to interpret and re-specify the legitimation part of the density dependence model. Specifically, they looked at the exit rate of the organizations in order to study the effects of the grade of members (Van Wart) weighted density on the exit rate of the organization; and in order to assess the measure of fuzzy density, the study constructed a variable that weighted the type of professional association of the firm's employees. Their study supported both approaches.

Nagy (2018) studied the sub-cluster dynamics of the wine producer population of Tokaj-Gegyalja, a traditional wine region in Hungary, and found evidence to support both the fuzzy density approach and the contrast dependence approach.

In a meta-analysis of organizational form emergence, Bogaert et al. (2016) assessed the breadth of ecological theory of organizational form emergence and focused on the positive density effect associated with legitimation. They formulated two ways of assessing grade-based legitimation and postulated two proxies to assess the difference in the degree of legitimation. They measured the degree of “fuzziness” using the simplicity of goals and the tangibility of offerings and considered organizations with a profit motive to have simpler goals compared to non-profit organizations, whose goals are complex. In addition to the simplicity of goals, they also measured the tangibility of offerings by measuring if the organizations produced goods or outputs that had a physical presence. Their study also found evidence to explain the revised density dependence theory.

Kuilman and Li (2009) studied how heterogeneity among subpopulations affected the degree to which organizations in the subpopulations contribute to and benefit from the overall population's legitimacy in the foreign banks in Shanghai from 1847 to 1935. They used the firm's nationality to measure fuzziness. Foreign banks were given a higher weightage compared to the local banks, and their evidence suggested that firms in subpopulations with a higher “grade of membership” contributed strongly to the legitimacy of the general population, while the firms in subpopulations with a lower grade of membership benefited most from legitimacy spillovers.

A careful analysis of the available literature suggests a gap in our empirical understanding of how the revised theory works in the context of NGOs. In particular, it is not clear in terms of the effect of fuzzy density on organizational founding across the agglomerated population or in the primate cities versus areas where the concentration of NGOs is low.

In the absence of a proper measurement suitable to measure the grade of membership in NGOs, this dissertation proposes using the membership of each individual organization with the network or umbrella organizations to differentiate the grade of membership of NGOs. If an NGO is a member of an NGO federation of Nepal, it can be considered to have a higher grade of membership than an NGO without such a membership. Organizations that are members of the NGO federation of Nepal might enjoy better legitimacy compared to organizations that do not have this membership in

the eyes of donors and government agencies. Furthermore, other members of the network might see the non-members as having an inferior grade of membership than their own membership. This measurement should be understood as a proxy for measuring the concept of fuzziness in studying legitimacy. However, this dissertation does not use the concept of fuzzy density.



Table 3.4 Summary of Recent Empirical Works Using Revised Density Dependence Theory and Variables Used to Measure the Concept of Fuzzy Density

<b>Population</b>	<b>Variables to Measure Fuzzy Density</b>	<b>Industry</b>	<b>References</b>
<b>Wine producer of Tokaj-Gegyalja, Hungary</b>	Values that are perceived by the audience	Wine Producer	(Nagy, 2018)
<b>Meta-Analysis of Organizational Form Emergence</b>	Simplicity of Goals Tangibility of Offerings	NA	(Bogaert et al., 2016)
<b>Dutch accounting firms' form emergence, 1884-1939</b>	Type of professional association of the firm's employees	Accounting Firm	(Bogaert et al., 2010)
<b>Foreign Banks in Shanghai, 1847-1935</b>	Firm's nationality	Banking	(Kuilman & Li, 2009)

### 3.3 Institutional Theory

Institutional theory at its core focuses on the process of institutionalization and the associated legitimacy that organizations receive for adhering to institutionalized concepts in the society. Institutional thinkers are rather concerned with the socially constructed beliefs and cognitions that are widely held in society and are reinforced by different actors that affect the organizations. Institutionalists' focus is on how rationalized myths shape the organizations. It is argued that powerful institutionalized rules in fact prevail in societies as rationalized myths. Particularly, institutionalized products, services, techniques, policies, and programs serve as strong myths, and organizations tend to adopt them ceremonially. These rationalized myths create sociocultural pressure on organizations to conform to the rules. Institutional theorists argue that it is these sociocultural pressures that affect organizations more than the technical demands of the organizations (Meyer & Rowan, 1977).

In their seminal work, Meyer and Rowan (1977) postulated a powerful argument—that organizations behave in a way that is defined by existing rationalized concepts of organizational work and that are institutionalized in society. They argue that organizations increase their legitimacy and eventually their chances of survival by behaving and incorporating the practices and procedures defined by the prevailing rationalized concepts. In the words of DiMaggio and Powell (1983), organizations enhance their legitimacy and ensure their survival by adhering to societal and legal expectations. They contend that organizations are more and more similar rather than different. They are interested in answering why there is homogeneity of organizational forms and practices. The attempt here is to explain the reasons behind the similarities among organizations.

Institutionalists explain the process through which institutional isomorphism occurs. They believe that the forces of organizational homogeneity stem primarily from three different sources: coercive isomorphism, mimetic isomorphism, and normative isomorphism (DiMaggio & Powell, 1983).

Coercive isomorphism occurs from both formal and informal pressures exerted on organizations by other organizations on which they are dependent. Such forces may come to being in different forms. They may be exerted on the organizations in the form of force, persuasion, or in the form of invitation to join the collusion. Coercive isomorphism also has varying degrees of strength. Some forces are more direct and explicit while some are subtler. For example, some changes emancipate because of the direct pressure from the government—which are more explicit and direct. Having a law that binds the activities of organizations is very direct and is binding in nature. This form of pressure forces organizations to accept the law. Their legitimacy is put at stake if they defy the law in the community. However, not every coercive isomorphic pressure is direct. There are subtle yet powerful coercive pressures. For example, some organizations are expected to have a certain kind of organizational hierarchy to access funding from more hierarchical organizations. In the former example, the force is direct; however, the latter example illustrates the indirect pressure that organizations face (DiMaggio & Powell, 1983).

Not all institutional isomorphism stems from coercion. Uncertainty forces organizations to mimic organizations. This phenomenon occurs particularly when the organizational form is new and there are uncertainties regarding the technology and goals. Organizations tend to mimic other organizations that exist in the organizational form to reduce uncertainty. As a result, more and more organizations are homogenous. In the same way, many organizations like to copy the way in which successful organizations operate, their structure, and many other things. Furthermore, the culture of “best practices” also leads to increased homogeneity of organizations. When organizations feel and take something as the “right” way of doing things following other organizations, it leads to greater homogenization of the organizations and eventually the whole organizational field.

In addition to the coercive force and mimetic forces, normative expectations and pressure are the third source of increased homogenization of organizations. The pressure and expectations of professionalization force the organization and people to behave in a certain way. For example, university degrees prepare almost all the graduates or recipients of the certain degree to behave in a certain way. There is a certain normative expectation regarding what a university graduate is capable of doing

or how the graduate should behave. In addition to universities, professional associations such as the medical councils or bar associations also serve as a pressure for their members to behave in a certain fashion (DiMaggio & Powell, 1983). If we look at this from an organizational perspective, the members of a certain organizational network behave in a prescribed manner or portray similar behavior and characteristics. All ISO-certified organizations look and feel the same and the reason why this happens can be explained by institutional thinking.

Table 3.5 Summary of Measurement of Institutionalization in Organizational Founding Studies

Measurement of Institutionalization	References
<b>Institutional Era</b>	(Box, 2017; Cruz et al., 2018; Dobrev, 2001; Lazeretti, 2006; Nownes, 2004, 2010; Singh, Tucker, & Meinhard, 1991; Tucker, Singh, & Meinhard, 1990; Wezel, 2005)
<b>War</b>	(Bogaert et al., 2010; Bogaert et al., 2016; Cattani et al., 2003; Dobrev, 2001; Greve & Rao, 2012; Kuilman & Li, 2009)
<b>Law</b>	(Bogaert et al., 2010; Greve & Rao, 2012; Nownes, 2004, 2010)

### **Institutionalization in the Study of Organizational Founding**

The institutionalization process and the conception of historical time have been consistently studied in the field of organizational founding. Different studies have conceptualized the institutionalization process differently. Different socio-political changes occurring at different instances of history have been an interest in the earlier studies.

### 3.4 Combining Population Ecology and Institutional Theory: From Foe to Friends?

Since the publication of foundational articles in the same year in the same journal (Hannan & Freeman, 1977; Meyer & Rowan, 1977), institutionalists and ecologists have entered into vociferous debates (Carroll & Hannan, 1989c; Zucker, 1989). Given the time frame of the origin and nature of explanation, there are arguments on both fronts of the debate. While some believe it can be integrated (Tucker et al., 1990), some do not (Zucker, 1989). Several articles and book chapters have spent scores of pages explaining the differences and similarities among the theories (Haveman & David, 2008; Lander & Heugens, 2017).

A decade ago, Haveman and David (2008) asked if ecological and institutionalist perspectives were friends or foes. Ten years later, we may have an answer to the question. More and more empirical work is suggesting that there are more similarities than differences between these perspectives (Lander & Heugens, 2017). In this dissertation, it is contended that there are more similarities than differences between these perspectives. It is argued here that the silo approach of either the ecological or institutional perspective excludes important explanatory factors affecting organizational vitality.

There are at least three overlaps in both research traditions (Haveman & David, 2008; Lander & Heugens, 2017):

1. **Constitutive Legitimacy and Socio-Political Legitimacy:** Both theories use the concept of legitimation. Ecologists use constitutive legitimation to explain organizational founding, institutionalists use socio-political legitimation. The former type of legitimacy means gaining acceptance from its stakeholders and community, the latter means gaining that acceptance by adhering to the norms, laws, and expectations of the stakeholders. Despite the differences in the way they explain, at the end both traditions feel that legitimacy is the key to organizational survival.
2. **Field Thinking and Population Thinking:** While institutional theories employ field thinking, ecologists argue for population thinking. Both

population and field refer to all the firms that are dependent on a common set of social and material resources for survival and growth.

3. **Longitudinal Data Collection:** Both sets of scholars employ original data collection—population in the case of ecologists, field in the case of institutionalists. Generally, both sets of observation require longitudinal data collection.

Based on the review of existing literature on population ecology and institutional theory, this dissertation moves further by combining both theoretical notions to explain the differences in the patterns of organizational founding in Nepal. Figure 2.1 presents the conceptual framework, which was drawn from the review of relevant literature.

The dissertation uses the term endogenous factors to denote the phenomenon of legitimacy and competition which population ecology attempts to explain, while the term institutional factors is used to denote the factors that are beyond the scope of the explanation of population ecology theory. Particularly, this dissertation uses the explanans from institutional theory and refers as institutional factors.

### **3.5 Nonprofit Founding Research**

Studies in the nonprofit sector have attempted to explain the founding patterns of new nonprofits. However, most of the existing studies have studied the number of organizations at one point of time rather than looking at it over a long period of time. For example, in a study of the founding of NGOs in Nepal, K C (2019) studied the total number of NGOs as of 2014 in each district of Nepal. In a similar vein, Brass (2012) used Kenya as a case study to study the geographical location of the founding of 4,210 NGOs in 70 districts in the country in 2010. In another example, Yan, Guo, and Paarlberg (2014) performed a spatial analysis of nonprofit organizations of the greater Hartford region of Connecticut in the United States.

Nonprofit research has primarily investigated institutional factors in the sector to explain where and why organizations are founded. Four dominant nonprofit theories have attempted to explain why some communities have more and why some communities have a lot fewer organizations (see

Table 3.6 for a summary of the theories).

### **3.5.1 Community Need**

Community needs theory explains that nonprofits and NGOs will be in areas where the needs of the community are higher. Unlike their for-profit counterparts, nonprofits work towards making the life of people in the community easier. The theory views NGOs as benevolent agents and argues that they will be in the areas with greater demand for their services. The areas where their demands are higher are normally the areas that are deprived and far-flung from urban areas (Bielefeld & Murdoch, 2004; Brass, 2012; Grønbjerg & Paarlberg, 2001; Kim, 2015; Yan et al., 2014). However, the evidence is mixed.

Brass (2012), in a study of the density of NGOs in Kenya, measured the needs of the community using HIV prevalence rate, adult illiteracy rate, and the percentage of the population without access to clean water and healthcare as proxies for the needs of the communities. The study found that HIV prevalence and districts with higher proportions of people without access to health care saw a greater number of NGOs compared to other districts. Similarly, Costa (2016) studied the predictors of NPO location in 5,562 municipalities in Brazil and found that poverty rate, inequality, and unemployment rate predicted where the NPOs were created. Similar findings were reported when the needs of the community were measured using illiteracy rate and infant mortality rate in Nepal (K C, 2019). Similar findings were also reported by Lecy and Van Slyke (2012) and Grønbjerg and Paarlberg (2001) explore the geographic disparities in the density of American NPOs, and their findings suggested that NPOs in fact are in the areas with higher needs.

However, Fruttero and Gauri (2005) studied the location of NGO programs instead of the number of NGOs in Bangladesh and did not find any statistically significant relationship between poverty, per capita consumption, and percentage of the landless on where NGO programs were implemented. Similarly, in a study of the local philanthropic efforts of the community foundations in the United States, V. C.-S. Wu (2019) found that community foundations were missing in communities with a high

poverty rate and other need-related predictors. These findings indicate that when making location decisions, NPOs do not necessarily focus on the level of poverty.

While there is consistency in the usage of measures such as the adult illiteracy rate, infant mortality rate, poverty rate, and inequality in the literature, often access to such data on a time series is problematic in the context of developing countries. Evidence and the author's own experience have clearly shown that access to official economic statistics is either non-existent, or if available, it is not disaggregated at the sub-national level and is often produced every five years or in ten-year intervals. Even if the information is available, its quality is often questionable. A growing number of studies suggest the use of night time illumination data as a proxy to accurately measure and reduce bias in coefficient estimates when using observed gross domestic product (GDP) measures (Briggs, 2018; Chen, 2016; Weidmann & Schutte, 2017).

In their analysis, Weidmann and Schutte (2017) found night lights to be good predictors of wealth at the local level. Across the countries they analyzed, the correlation between night light emissions and wealth was on average 0.73, and as high as 0.87. They tested these relationships within the country: given a training set with data on wealth and night lights for several locations in a country. They found that the predictive performance was very high, indicating that the data from night lights have great potential for subnational analyses. Their analysis compared the correlations between night lights and demographic health survey-based estimates of wealth and found that the correlation was 0.77, indicating a high correlation between the observed phenomenon.

Similarly, in my own analysis of the poverty headcount ratio and nighttime illumination, a statistically significant correlation was found. There was a negative association between the poverty headcount ratio and nighttime illumination, indicating that areas with high numbers of people under the poverty line were emitting relatively less nighttime light. The coefficient was 0.53 for the poverty headcount ratio and 0.48 for the Human Development Index measured by the 2011 census. Hence, it is safe to assume that nighttime illumination is a reliable proxy for measuring human development at the subnational level of Nepal.

Furthermore, Bruederle and Hodler (2018) suggested that nighttime lights go beyond capturing the economic wealth of communities. Their findings demonstrate that nighttime lights are relatively intense and are indicative of a relatively wealthy, well-educated, and healthy local population. It is evident that nighttime lights go beyond revealing the differences in economic activity; they also portray the differences in the level of human development of the local population at the sub-national level.

The use of night lights as a proxy for economic variables typically assumes that nighttime illumination corresponds to wealth through one of at least three channels. First, access to the power grid (or a power generator) requires financial investment, which is likely to be made by people with the necessary resources. Second, night lights indicate economic activity, which can lead to higher levels of wealth for the people involved (Henderson, Storeygard, & Weil, 2011). Third, nighttime illumination (streetlamps) can be a result of preferential treatment by the state for certain societal groups (Hodler & Raschky, 2014). In this study, the needs of the community were measured using nighttime illumination as a proxy (Bruederle & Hodler, 2018).

### **3.5.2 Pragmatic Actors**

The second theory, the pragmatic actor theory, envisions NGOs as organizations like any other organization and argues that these organizations will establish themselves in areas where they can access the resources required for their survival and growth. For every organization, the availability of resources is crucial for survival. Different studies have used different measures to assess the needs of organizations.

In Kenya, Brass (2012) used population density, the density of paved roads, headquarter distance from the capital city, and the proportion of people living in an urban area as the proxy to measure the needs of organizations. Her study indicated that far-flung districts saw relatively lesser numbers of NGOs compared to districts that were closer to the capital city. The study on Brazilian NPOs found that social capital measured by the proxy percentage of rural population had a positive effect on where NPOs would emerge.

Table 3.6 Nonprofit Theories Explaining Organizational Founding—Adapted from K C (2018)

Non-Profit Theory/Explanations	Explanation	Notable Works	Empirical
Humanitarian/ Community Nonprofits as Charities	Saintly/ Needs/ Charities NGOs are more in the areas where the needs of the recipients are high.	(Bielefeld & Murdoch, 2004; Brass, 2012; Grønbjerg & Paarlberg, 2001; Kim, 2015; Yan et al., 2014)	
Resource Dependency/ Self-Serving/ Convenience/ Pragmatic Political Engagement	NGOs are more in the areas where the resource availability for them is high. NGOs are more in the areas where political engagement is high.	(Brass, 2012; Fruttero & Gauri, 2005; Pfeffer & Salancik, 2003) (Brass, 2012; Kim, 2015)	
Clustering Capital Theory/Legitimacy	/ Social NGOs are more in the areas where there are similar pre-existing organizations.	(Bae & Sohn, 2017a; Bielefeld & Murdoch, 2004; Costa, 2016)	

### 3.6 Key Concepts and Definitions

**NGO** – “Organization and institution established under the prevailing Laws in order to carry out various social welfare activities and social welfare oriented non-governmental organization or institution”. Where, “‘Social welfare’ activity means the welfare activity oriented towards the economic and social upliftment and self-reliance to the weak, helpless and disable individuals. ‘Social service’ means the social welfare activity done, personally or collectively without the purpose of profit” (Government of Nepal, 1992).

**Not for Profit Company** – Companies that are incorporated to develop and promote any profession or occupation or to protect the collective rights and interests of the persons engaged in any specific profession or occupation or to carry on any enterprise for the attainment of any scientific, academic, social, benevolent or public utility or welfare objective on the condition of not distributing dividends

**Organizational (NGO) Founding** – The act of an organization (NGO) coming into being. This dissertation considers an organization to be founded if it is legally incorporated and has registered with Social Welfare Council. In the case of NFCs, they are registered with the Company Registrar’s Office.

**Organizational Population/Field** – The population of organizations refers to the aggregates of the organizations that have similar characteristics. Member organizations of the population are engaged in identical activities and have common resource utilization patterns. Organizations that share the same form or belong to the same population have an identical core structure and share the same niche of resources within their environment (Carroll & Hannan, 2000; Hannan, 1986; Hannan & Freeman, 1989)

**Legitimacy** – “A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p. 574).

**Competition** – The interaction among organizational species, or individual organizations, that are attempting to gain a share of a limited environmental resources.

Table 3.7 Summary of Concepts, Measurement, and Relevant Studies

<b>Concept</b>	<b>Measurement</b>	<b>Relevant Studies Using the Measurement</b>
<b><u>Population Ecology</u></b>		
<b>NGO/NFC Founding:</b> The number of new NGOs entering (affiliated with SWC) the population at a specific calendar year (January 1-December 31). Population is defined as the number of existing NGOs /NFCs in a specific calendar year.	Number of NGO/NFCs registered during a calendar year	(Ahn, 2010; Box, 2017; Cattani et al., 2003; Chung, 2018; Cruz et al., 2018; Greve, 2002a; Stuart & Sorenson, 2003; Tan & Tan, 2017; Wang, Tan, & Li, 2018; Wezel, 2005)
<b>Density (legitimacy):</b> “A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions”	Density of NGO/NFCs	
<b>Competition:</b> “Interaction between organizational species, or individual organizations, that are attempting to gain a share of a limited environmental resource.”	Density of NGO/NFCs <sup>2</sup>	
<b><u>Institutional Theory</u></b>		
<b>Institutional Era:</b> “A conception of time is that of a construct capturing specific historical periods marked by unique constellations of institutional forces.”	Absolute Monarchy	(Box, 2017; Cruz et al., 2018; Dobrev, 2001; Lazzeretti, 2006; Nownes, 2004, 2010; Singh et al., 1991; Tucker et al., 1990; Wezel, 2005)
	Conflict	(Bogaert et al., 2010; Bogaert et al., 2016; Cattani et al., 2003; Dobrev, 2001; Greve & Rao, 2012; Kuilman & Li, 2009)
<b>Coercive Isomorphism:</b> “Active support organizations receive from actors in a position of authority due to their adherence to sanctioned principles, rules or standards.”	NGO Law	(Bogaert et al., 2010; Greve & Rao, 2012; Nownes, 2004, 2010)
<b><u>Non-for-Profit Theory</u></b>		

<b>Concept</b>	<b>Measurement</b>	<b>Relevant Studies Using the Measurement</b>
<p><b>Community Needs:</b> NPOs serve in the communities that have higher need demonstrated by a lower GDP Per Capita, lower annual nighttime light.</p>	<p>GDP Per Capita</p>	<p>(Box, 2017; K C, 2019; Kuilman &amp; Li, 2009; Ma &amp; Liu, 2019)</p>
	<p>Average Annual Nighttime Light</p>	<p>(Briggs, 2018; Chen, 2016; Elvidge, Baugh, Zhizhin, Hsu, &amp; Ghosh, 2017; Goodman, BenYishay, Lv, &amp; Runfola, 2019; Henderson et al., 2011)</p>
<p><b>Pragmatic Actor:</b></p>	<p>ODA Per Capita Foreign Aid</p>	<p>(K C, 2019)</p>



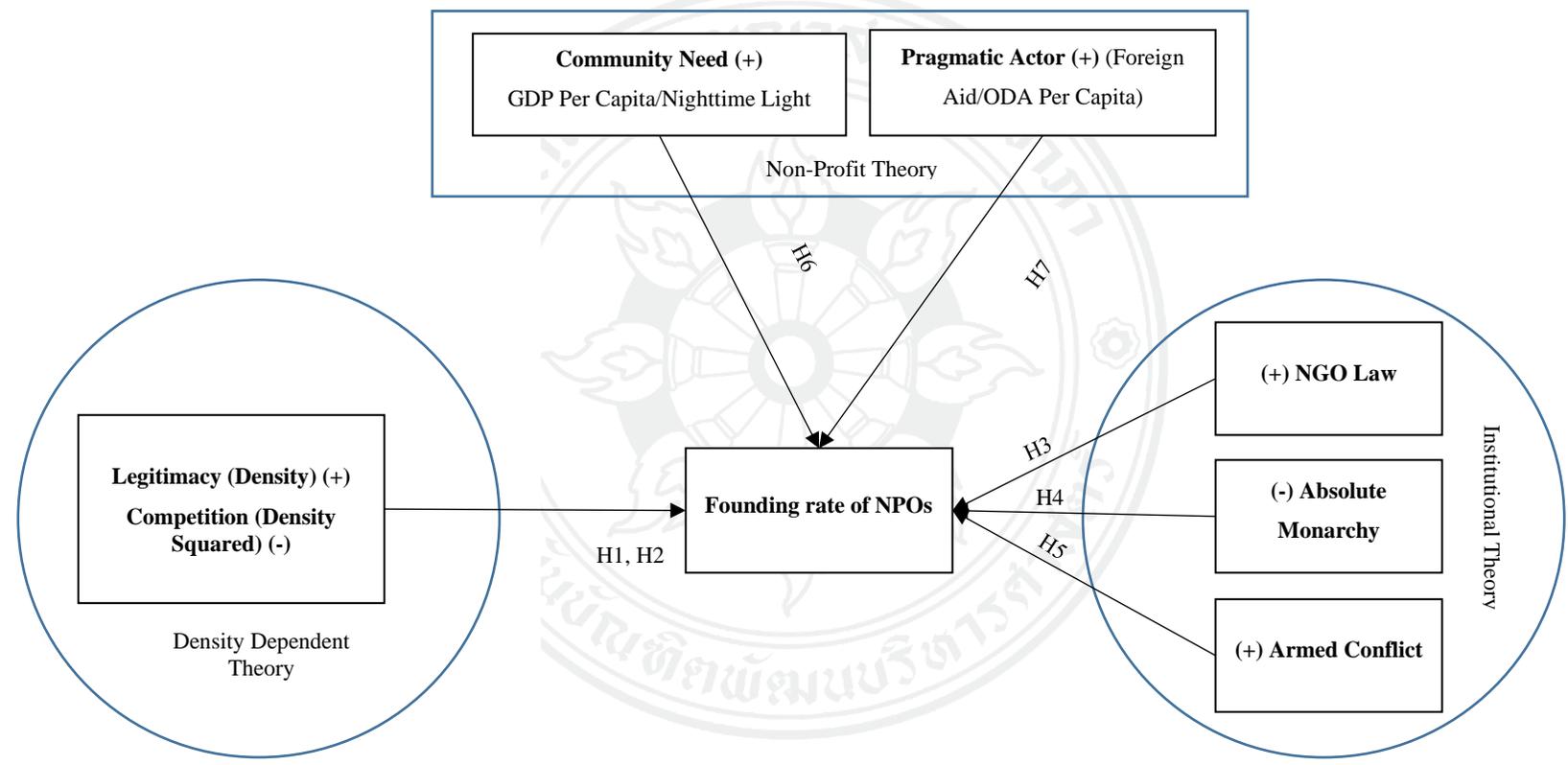


Figure 3-1 Conceptual Framework

The sign in parenthesis denotes the hypothesized relationship.

Density dependence theorists assume that endogenous processes of legitimation and competition have a more robust effect on the entry of new organizations than the changes in technological, institutional, and cultural conditions. It is also presumed that new organizational form does not have legitimacy when it begins. Therefore, there is a need to make the people and communities aware of the new organizational forms. In the case of NGOs, people in the communities need to be made aware of the activities that these organizations will carry out; it takes some time before the new organizational forms are institutionalized and become apparent. At the stage of legitimation, it is therefore argued that the addition of one new organization contributes positively to legitimization. Hence, the new organizational forms attract new entrepreneurs and reduce the risk of mortality of newcomers and the density of the organizations rises.

On the one hand, density has a positive effect on the legitimacy of the organizations, and on the other hand, density has a negative effect on competition. As more and more organizations enter an organizational population, the intensity of competition escalates. Since similar organizations rely on similar resources, the competition for resources tends to become high with increasing density. If we observe the phenomenon of legitimation and competition retrospectively, we can detect an easy-to-understand pattern. As density increases, the contribution of a new member of the population does not have as much contribution to the legitimation process as the early entrants had. If looked at from the process of competition, late additions to the population contribute more than early entrants in the population. From these points of view, we can summarize that the process of legitimation increases with density at a decreasing rate, whereas competition increases at an increasing rate. As we can clearly observe, the process of legitimation and competition has a dynamic relationship with the density of organizations. Due to this dynamic nature of interaction, when combined, it produces a non-monotonic relationship between density and entry rate, and the relationship can be graphed as an inverted U shape (Baum & Amburgey, 2017; Carroll & Hannan, 2000).

The classic density dependence theory argues that the number of organizations operating in the population—often labeled as the density of the population—is an accurate proxy measure for the constitutive legitimation of the organizational form. This also means that increasing the density in fact enhances the legitimation of the new

organizational forms, which eventually contributes positively to the entry rate of new organizations. As summarized in table 2.2, we can see that the theory has received significant support for its proposition.

Since its first introduction by Hannan (1986), density dependence theory has been widely tested and expanded. From the empirical standpoint, density dependence theory is probably one of the most empirically tested ecological theories. It has been tested across different industries, from labor unions to newspapers (Carroll & Hannan, 1989a, 1989b, 1989c; Hannan, 1986; Hannan & Freeman, 1988), brewers (Box, 2017; Carroll et al., 1993; Cruz et al., 2018), insurance, banks (Greve, 2002a), trade associations, medical equipment manufacturers, automobile manufacturers (Wezel, 2005), hotels, railroads, sports leagues (Wade et al., 2018), accounting firms (Cattani et al., 2003), credit unions, film producers, political parties, government departments and organizations. It continues to be one of the most vibrant and active research programs within the population ecology research.

Cruz et al. (2018) studied the founding patterns of beer industries in northern Bavaria, Germany and found that legitimacy had a positive effect on the entry rate of new brewers, while the competition suppressed the entry rate. Similarly, Box (2017) also studied the entry rate of new brewers in the brewing industry of Sweden between 1830 and 2012 and found that the legitimation process encouraged the new brewers to enter the market whereas competition had a suppressing effect on the entry rates. In a similar study, Swaminathan (2001) studied the role of location and identity in the evolution of the wine industry in the United States between 1941 and 1990 and found supporting evidence for the location-based resource partitioning model.

The density dependence theory has withstood scrutiny across different industries. Wenting and Frenken (2011) explained the geography and evolution of ready-to-wear fashion design in the design industry by looking at the yearly entry rates following a population ecology approach. They provided the first population ecology model in the creative industry. They also found evidence to support density dependence logic. Furthermore, in a study of unmatured industrial jewelers district of Italy between the period of 1947 and 2001, Lazzarotti (2006) found that the district was still at an age where the process of a “non-monotonic” relationship between legitimation and

competition had not begun. It also furnished evidence of the applicability of the density dependence model in explaining how new industrial districts are formed.

In addition to those industries, the theory has also been used to study interest groups and rights groups. Nownes (2004) analyzed the founding rate of homosexual rights interest groups that were active in the US for the period of 1950-98. In the study, the theory of density dependence was applied, and the study validated the non-monotonic relationship between the founding rate and the density of the existing rights group. More rights groups were established in the area where there was a trace of existing rights groups. In a study that was published six years later, Nownes (2010) employed the density dependence theory again to understand the process of transgender interest group mobilization in the United States between 1964 and 2005 and found strong support for the theory of density dependence.

Empirical testing of the theory in fact began by studying the founding patterns of newspapers in the United States. Blau and Elman (2002) studied the founding patterns of politically patronized newspapers and commercial newspapers in the United States to trace the root of political parties in the United States. Their study found support for the density dependence theory and suggested that the entry rate of organizations was positively affected by the density of existing newspapers. In the same way, Dobrev (2001) investigated the constitutive and sociopolitical legitimation of organizational forms to study the evolutionary dynamics of the Bulgarian newspaper industry. The study found that the rate of organizational founding was dependent on the strength of political turmoil. It was found that violent political conflict suppressed new founding, while institutionally mediated political activism had a positive effect on the rate of organizational entry.

Following the established density dependence theory, this dissertation hypothesizes the following:

- H1a:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs.
- H1b:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within primate cities.
- H1c:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within non-primate cities.

### Heterogeneity of Space in Organizational Founding

One of the early debates concerning density dependence concerned its assumption of organizational population as a homogenous entity and the choice of the proper level of analysis of density dependence (Singh, 1993). In its original formulation, density dependence theory assumes that the intensity of competition among organizations is equal to neighboring organizations. This thinking was challenged theoretically by Zucker (1989). In his response to Carroll and Hannan's (1989a) work, Zucker argued that the intensity of competition should be higher in smaller geographical areas than in the bigger geographical areas because organizations in smaller areas have fewer resources.

The assumption of the homogeneity of a population is gradually being challenged and it is argued that the assumption in fact undermines the effect of local spatial differences in the density and associated vital rates, which in turn leads to imprecise estimates of the effect of legitimization and competition (Lomi, 1995b). The growing body of empirical studies has begun to disaggregate the level of analysis based on geographic boundaries (spatial) and institutional processes. One early proponent of the effect of spatial component on the evolutionary dynamics of organizational population Lomi (1995b) showed evidence for the differences in the reaction to institutional and competitive forces by different clusters of rural cooperative banks in Italy, suggesting the appropriateness of ecological models at the regional level over the national level. In the same year, in a study of the evolution of the automobile industry in Europe, it was found that the legitimacy of that industry spanned beyond the national boundary, suggesting the wider effect of legitimation while the competition remained predominantly domestic (Hannan, Carroll, Dundon, & Torres, 1995). Similarly, Greve (2002b), studying the entries of banks in Tokyo, confirmed that the effect of a sub-population's density gradually weakens as the distance from that sub-population increases. As demonstrated by the evidence, it can be argued that legitimacy spills beyond local areas, while competition is largely local.

### Effect of Legitimation on Organizational Founding in Primate Cities

Several arguments have been advanced in support of the local nature of legitimation and competition. If we are to consider legitimation first, organizational

ecologists argue that cognitive legitimation constrains the action of potential entrepreneurs. In the words of Aldrich and Fiol (1994, p. 648), “cognitive legitimation refers to the spread of knowledge about a new venture.” Due to the cognitive legitimation of the new organizational form, it is taken for granted because it is visible to the new potential entrepreneurs, and because of its familiarity, there are more attempts of replicating them and the chances of the success of such replication attempts are higher. The primary notion is that as bounded rational actors, entrepreneurs seek to initiate new opportunities locally. Entrepreneurial activities are local because they entail utilizing local resources such as human and physical capital, goodwill, social capital, and normative support. These resources are often not distributed evenly across the space. Particularly, the degree of sociopolitical legitimation, that is, the “process by which key stakeholders, the general public, key opinion leaders, or government officials accept a venture as appropriate and right, given existing norms and law” (Aldrich & Fiol, 1994, p. 648) of an organizational form may vary greatly.

One way of enhancing the legitimation of new organizational form is increased cooperation and interaction with diverse individuals, groups, and organizations. Several reasons indicate that a marginal increase in density can be more effective in gaining legitimation within agglomerated populations than in more dispersed ones. Proximity in fact stimulates information exchange, and this exchange can take place through individual contacts as well as due to the localized nature of spillovers. In the case of NGOs, Fruttero and Gauri (2005) see that NGOs might concentrate in certain geographical areas partly because it is easier to demonstrate outcomes and results. Further, thinking from the perspective of donors supporting NGOs, it is easier for them to fund in small geographical areas and to demonstrate their outcomes or results of their resources than in dispersed areas with smaller numbers of NGOs.

Furthermore, primate cities also often have the agglomeration of a knowledge network. Particularly in developing countries such as, academic institutions, donor organizations, and other resources are often available in the primate cities. Furthermore, the pool of people with socio-political awareness that can start such organizations is also high.

For all of these reasons, more organizations are established in the areas with agglomeration. Sorenson and Audia (2000) have argued that agglomeration can in fact indicate a conducive institutional environment for resource mobilization. In fact, from the sociopolitical legitimation point of view, the concentration of many organizations in a smaller area can draw institutional attention. The more that institutional environment develops, the more firms will be attracted. This phenomenon occurs because the degree of “embeddedness in the relational and normative contexts influences an organization’s sociopolitical legitimacy by signaling conformity to social and institutional expectations” (Baum & Amburgey, 2017, p. 315). From this line of reasoning, this dissertation hypothesizes the following:

- H2a:** Density dependent legitimation exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate ones.

While geographical proximity has positive implications for organizational legitimacy, it has a negative implication regarding the organization’s survival. The threat of survival stems from the fact that organizations depend on the same local resource pool. In organizations like NGOs, the quest for local human resources to work in them can be intense and local in nature (K C, 2018). The intensity of the competition in fact exhausts the supplier of resources and there is the expectation that new organizations will not form in agglomerated areas. In fact, a growing body of findings supports this argument. Ahn (2010), investigating the evolution patterns of nonprofit organization location in Florida, found that virtually all of the ecological competition was contained at the local level, indicating that “new nonprofits draw primarily on locally or community-defined needs or justifications, and these effects do not extend to the more broadly configured geographic region.” Similarly, Wezel (2005), analyzing the evolution of the motorcycle industry in the United Kingdom between 1895 and 1993, found that density dependent competition had a weaker negative effect on the founding rates within agglomerated populations than in scattered ones. Furthermore, in a study of entries of Danish commercial banks at the subnational level, Lomi (2000) found that commercial banks outside the capital city were more exposed to local fluctuations than the banks in the capital city, indicating the asymmetric ecological relationship between the banks clustered in the capital city and those outside the capital city. Hence, the present argument is in line with Sorenson and Audia (2000), Cattani et al. (2003), Wezel

(2005), and Ahn (2010), and it is therefore argued that local competition rather than national competition shapes organizational founding.

#### Heterogeneity of Time in Organizational Founding

Zucker (1989, p. 544) questioned if density dependence is nothing more than a mere reflection of timing effect. In line with Zucker's criticism, ecological theories are questioned for not accounting for the historical dynamics of the organizational population. Even though the original formulation of the density dependence theory assumes the constant effect of legitimacy and competition over the time, Hannan (1997, p. 193) revised the original density dependence theory and argued that "effects of density on legitimation and competition change systematically as organizational populations age."

Density has a crucial role in the early days of a population. The theory of temporal heterogeneity, or the "resurgence hypothesis," maintains that when the population is still "infant," a marginal increase in the density of the organization can in fact escalate the entry rate of the organizations as it contributes to constitutive legitimacy. The legitimacy of the old population largely is due to the longevity of the population. As the organizational population ages, it builds stronger ties with the environment and diverse actors (Hannan, 1997). However, the effect begins to wither as the population ages. The effect of legitimation is very strong at the beginning and begins to weaken as the population matures. Particularly, the impact of competition and legitimation on entry declines relatively as time passes because the organizations differentiate themselves and the competition takes place within the social structure of roles (Box, 2017; Wezel, 2005; White, 1981).

The propositions of temporal heterogeneity have been well received in the literature. In a study of the long-term business entry in the Swedish brewing industry between 1830 and 2012, Box (2017) found support for the fact that the fall in the density of a mature population does not affect the legitimation of the population. Similarly, in a study of the founding rates of motorcycle industries in the United Kingdom, Wezel (2005) also found that the effect of density-dependent legitimation and competition on the founding rates declines as the industry ages.

Effect of competition on organizational founding on primate cities.

Zucker (1989, p. 544) questioned if density dependence is nothing more than a mere reflection of timing effect. In line with Zucker's criticism, ecological theories are questioned for not accounting for the historical dynamics of the organizational population. Even though the original formulation of the density dependence theory assumes the constant effect of legitimacy and competition over the time, Hannan (1997, p. 193) revised the original density dependence theory and argued that "effects of density on legitimation and competition change systematically as organizational populations age."

Density has a crucial role in the early days of a population. The theory of temporal heterogeneity, or the "resurgence hypothesis," maintains that when the population is still "infant," a marginal increase in the density of the organization can in fact escalate the entry rate of the organizations as it contributes to constitutive legitimacy. The legitimacy of the old population largely is due to the longevity of the population. As the organizational population ages, it builds stronger ties with the environment and diverse actors (Hannan, 1997). However, the effect begins to wither as the population ages. The effect of legitimation is very strong at the beginning and begins to weaken as the population matures. Particularly, the impact of competition and legitimation on entry declines relatively as time passes because the organizations differentiate themselves and the competition takes place within the social structure of roles (Box, 2017; Wezel, 2005; White, 1981).

The propositions of temporal heterogeneity have been well received in the literature. In a study of the long-term business entry in the Swedish brewing industry between 1830 and 2012, Box (2017) found support for the fact that the fall in the density of a mature population does not affect the legitimation of the population. Similarly, in a study of the founding rates of motorcycle industries in the United Kingdom, Wezel (2005) also found that the effect of density-dependent legitimation and competition on the founding rates declines as the industry ages.

#### Effect of competition on organizational founding in primate cities

The effects of spatial and temporal heterogeneity and their unique effects on the founding rates of NGOs were hypothesized in the earlier section of the study. In this section the focus is on the effects of combining the spatial and temporal heterogeneity on the founding pattern of NGOs. As demonstrated earlier, the process of legitimation

becomes “sticky” as the population ages due to the support system and legitimation process through which the organizational population goes. For example, NGOs are deeply rooted in the communities, as they provide services and help in the development of communities. Local people and institutions begin to accept the role of these organizations in terms of service delivery and the development of the communities. Due to this embeddedness in communities, organizations achieve strong legitimacy.

An agglomerated population exhibits stronger stickiness of legitimation compared to a non-agglomerated population. This is due to one of the fundamental characteristics of the agglomerated population. Such a population develops institutional thickness over the course of time due the existence of the network of local organizations and institutions supporting them. Thus, this kind of population experiences stronger marginal effects of legitimation compared to the non-agglomerated populations over a period of time. In the meantime, they are also less sensitive to changes in density than scattered populations.

Similar arguments have been furnished in the case of forces of competition. It is believed that the spatial configuration of a population might shape the way in which competition unfolds over time. It is often argued that entrepreneurs can estimate the likelihood of competition better in an agglomerated population than in a scattered one (Lomi, Larsen, & Freeman, 2005; Ruef, 2004). Furthermore, as the population ages in agglomerated populations, cultural homogeneity also facilitates information sharing, and builds stronger coordination among the members of the population. This eventually builds a shock absorptive capacity and the marginal effect of the competition reduces the competitive forces. Thus, agglomerated populations demonstrate a stronger decline of density-dependent competition over time compared to scattered ones. Accordingly, this study hypothesizes the following:

**H2b:** Density-dependent competition exhibits a weaker negative effect on NGO founding rates within primate cities than in non-primate cites.

#### Sociopolitical Legitimation and the Effect on Organizational Founding

As stated earlier, sociopolitical legitimation is the process by which different stakeholders in a new venture accept the new venture as “appropriate and right” within the existing norms and laws (Aldrich & Fiol, 1994). The extent to which the

government accepts the new form of venture is essential to determining whether a new type of venture will survive or not. When new types of ventures begin, existing government laws do not recognize them, and as a result the founding patterns of such organizations are low because often these organizations are not legally recognized actors. For example, many sharing economy phenomena such as Grab, Uber, Airbnb or Internet-based businesses such as Facebook and Google operate under unclear country legal apparatus governing them. New and innovative organizational forms emerge much earlier than the governments can envision laws to govern such phenomena.

One can easily measure sociopolitical legitimacy by assessing how well the public accepts the industry, and the government's willingness to see them as legitimate actors. The presence of laws affecting the organization may suppress or promote the growth of any organization. Historically, the presence of laws affecting an organization has been extensively used in the organizational founding studies (Bogaert et al., 2010; Greve & Rao, 2012; Nownes, 2004, 2010). For example, it has been found elsewhere that the presence of law impacts the vitality of organizations and this has been tested across different organizational forms such as nonprofit organizations, accounting firms, banks, accounting firms, and newspapers.

For example, in a study of the organizational demography of voluntary social service organizations (VSSOs), Tucker et al. (1990) investigated the role of the state in the institutional environment through its various agencies and programs. They studied the impact of different state-funded programs on the founding rates of VSSOs. They found that the presence of state funded programs significantly affected the founding dynamic.

Similarly, in a study of the founding patterns of Dutch accounting firms, Cattani et al. (2003) investigated the changes in regulations that affected the accounting firms. The introduction of a new law that made auditing mandatory increased the demand for auditing services, hence escalating the founding rate of Dutch accounting firms between 1880 and 1986. In a similar vein, in a study of the Swedish brewing industry from 1830 to 2012, Box (2017) found that the founding rate of breweries was much higher before the industry was regulated after 1910.

This dissertation is also interested in understanding the effect of the presence of NGO-friendly laws on the founding rates of new NGOs. One would expect that the

number of NGOs would go up in the presence of NGO-friendly laws and vice versa. Furthermore, the introduction of a new law would also mean that the state has accepted the form of organization as an appropriate and right form. In the case of Nepal, the eighth periodic plan recognizes NGOs as legitimate actors of development there. Hence, this study expects that the issuance of the Social Welfare Act of 1992 has a positive effect on the founding rates of NGOs in Nepal. However, it also expects the effects to be uneven across primate and non-primate cities. It expects the effects of the new law to be much higher in the capital city compared to the cities outside the capital due to the lack of the cognitive legitimacy of the law as well as the low institutional capacity of the state outside Kathmandu valley.

**H3:** The presence of NGO-friendly law exhibits a positive effect on NGO founding rates.

**H3a:** The presence of NGO-friendly law exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate cities.

#### Institutional Era and the Effect on Organizational Founding

In modern societies, the nation-state is a vital source of resources and coercive power (DiMaggio & Powell, 1983). The pressure emerging through the coercion of the acts of the state remains one of the forces that either suppress or encourages the growth of industries. The type of political system that a country has can hugely influence what kind of organizations flourish.

In a study of the changes in the population of voluntary and social organizations (VSSO) in the metropolitan area of Toronto, Canada during 1972-1982, Singh et al. (1991) defined institutional changes in terms of two historical events that occurred in the context of the VSSO population. They treated two periods when the government introduced policies as the source of coercive force and measured the policy implementation time frame as an institutionalization process. Introducing a policy to support or fund youth organizations may not be very powerful and direct coercion, yet, it exerts pressure on organizations to behave in a way that policy expects them to behave.

Furthermore, in a study of business entry in the Swedish brewing industry between 1830 and 2012, Box (2017) used different historical time frames as the control variables and found that these different time frames of history affected the founding

patterns differently. In a similar vein, Cruz et al. (2018) studied the founding patterns of beer industries in northern Bavaria, Germany and found that legitimacy had a positive effect on the entry rate of new brewers, while the competition suppressed the entry rate. They used different historical time frames as a proxy for measuring the institutionalization process occurring during the certain time frame. Box (2017) studied the entry rate of new brewers in the brewing industry of Sweden between 1830 and 2012 and found that the legitimation process encouraged new brewers to enter the market whereas competition had a suppressing effect on the entry rates. In their study, they found that institutional conditions and institutional change during different time frames either encouraged or discouraged the organizational entry rate in the population.

Greve and Rao (2012) studied organizational founding as sources of the institutional legacy of mutualism in Norwegian community organizations. In their study, they used the time frame of the World Wars as the historical time frame and argued that the time frame had implications on the founding of community organizations. Both World Wars have been extensively used in the literature. Bogaert et al. (2010) studied the organizational form emergence of Dutch accounting between 1884 and 1939. In addition to testing the “fuzzy” density logic, they studied the effect of World War I on the emergence of Dutch accounting. In the same way, Kuilman and Li (2009) also studied how the differences among the grade of membership affected the degree to which organizations in the subpopulation of banks in Shanghai contribute to and get advantage from the overall population’s legitimacy. In their paper, they also attempted to empirically test the newly formulated (fuzzy) density dependence theory. In addition to the ecological factors, the effect of crisis and World War I was assessed.

Nepal has its own different historical institutional eras. For a long time, Nepal was under an absolute monarchical system, which curtailed citizens’ associational rights, and the presence of an absolute monarchy is often associated with limited civic space in Nepal (Bhatta, 2012). For instance, at the beginning of this century, the king became a totalitarian ruler, limiting the freedom of expression and right to assembly of the people. This study expects that the effect of the presence of absolute monarchy would suppress organizational founding more in the primate cities than in non-primate cities. Hence, the study hypothesizes the following:

**H4:** The presence of absolute monarchy exhibits a negative effect on NGO founding rates.

**H4a:** The presence of absolute monarchy exhibits a stronger negative effect on NGO founding rates within primate cities than in non-primate cities.

In addition, another important historical period in Nepalese modern history was the twelve year-long internal armed conflict. The conflict claimed some 13,000 lives in Nepal. During it, government failure theories (Bae & Sohn, 2017b) argued that governments are not able to serve their citizens properly, and as a result NGOs often as non-governmental actors provide services such as healthcare and education that are necessary for the communities. It is expected that conflict will boost the birth of NGOs more in non-primate cities than in primate cities as primate cities often have better security arrangements and the presence of government services than non-primate cities.

Following a similar line of reasoning, this study hypothesizes the following:

**H5:** The presence of armed conflict exhibits a positive effect on NGO founding rates.

**H5a:** The presence of armed conflict exhibits a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.

#### Nonprofit Research Tradition

The first theory, the humanitarian theory, explains that nonprofits and NGOs will be in areas where the needs of the community are higher. Unlike their for-profit counterparts, nonprofits work toward making the life of the people in the community easier. The theory views NGOs as benevolent agents and argues that they will be in the areas with greater demand for their services. The areas where their demands are higher are normally the areas that are deprived and far flung from urban areas (Bielefeld & Murdoch, 2004; Brass, 2012; Grønbjerg & Paarlberg, 2001; Kim, 2015; Yan et al., 2014). Following this line of argument, this study hypothesizes the following:

**H6:** The needs of the community exhibit a positive effect on the NGO founding rate.

**H6a:** The needs of the community exhibit a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.

The second theory, the pragmatic actor theory, envisions NGOs as organizations like any other organization and argues that these organizations will establish themselves in areas where they can access the resources required for their survival and growth. For every organization, the availability of resources is crucial for survival. Hence in this study the Official Development Assistance (ODA) per capita is used as a proxy to measure the availability of resources for organizations, and so the following is hypothesized:

**H7:** The availability of resources for NGOs exhibits a positive effect on the NGO founding rate.

**H7a:** The availability of resources for NGOs exhibits a more positive effect on the NGO founding rate in primate cities than in non-primate cities.

Political engagement theory views NGOs as political actors and suggests that NGOs do not care about resources or their beneficiaries; instead, they are guided by political motives and they tend to be in areas where politicians want them to be. The final dominant explanation in the study of NGO founding is the notion of social capital theory or clustering theory. It argues that NGOs are in areas where there is high social capital, and it also argues that areas that have a high number of similar organizations will see more NGOs.

The current explanation of NGO founding and location focuses on such exogenous factors as the needs of the community or the availability of resources for the organization, or political motives and pressure on the organization. Unlike the first three explanations, the last explanation from the nonprofit literature looks at the intra-population dynamics of these organizations and argues that organizations tend to be in the areas where there are more organizations. This explanation in fact has received a number of empirical validations. For example, in his study of Brazilian nonprofits, Costa (2016) found that the density of existing nonprofits positively influences the formation of new nonprofits. In a study of Nepali NGOs, K C (2019) found that areas that had a greater number of NGOs in the past saw similar patterns in the founding at a later time. Additionally, Greve and Rao (2012) studied the Norwegian community organizations and found that areas that saw early founding of organizations in fact saw higher numbers of organizations later in time.

Similar evidence has been furnished elsewhere as well. For example, Bielefeld and Murdoch (2004) and Van Puyvelde and Brown (2016) found that having a higher density of existing nonprofits affects positively the size of the sector. However, not all findings corroborate this explanation. For example, Bae and Sohn (2017a) do not detect any significant impact of the existing number of associations on the formation of novel organizations in the same area.

Careful analysis of the nonprofit literature clearly demonstrates that it has an overarching focus on the exogenous factors regarding organizational founding and location. This study now turns to studies that have focused extensively on population dynamics to explain organizational founding. One such theoretical lens that investigates population-level dynamics is population ecology theory.

### **Summary of Hypotheses**

- H1a:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs.
- H1b:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within primate cities.
- H1c:** The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within non-primate cities.
- H2a:** Density dependent legitimation exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate ones.
- H2b:** Density-dependent competition exhibits a weaker negative effect on NGO founding rates within primate cities than in non-primate cities.
- H3:** The presence of NGO-friendly law exhibits a positive effect on NGO founding rates.
- H3a:** The presence of NGO-friendly law exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate cities.
- H4:** The presence of absolute monarchy exhibits a negative effect on NGO founding rates.
- H4a:** The presence of absolute monarchy exhibits a stronger negative effect on NGO founding rates within primate cities than in non-primate cities.
- H5:** The presence of armed conflict exhibits a positive effect on NGO founding rates.

**H5a:** The presence of armed conflict exhibits a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.

**H6:** The needs of the community exhibit a positive effect on the NGO founding rate.

**H6a:** The needs of the community exhibit a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.

**H7:** The availability of resources for NGOs exhibits a positive effect on the NGO founding rate.

**H7a:** The availability of resources for NGOs exhibits a more positive effect on the NGO founding rate in primate cities than in non-primate cities.

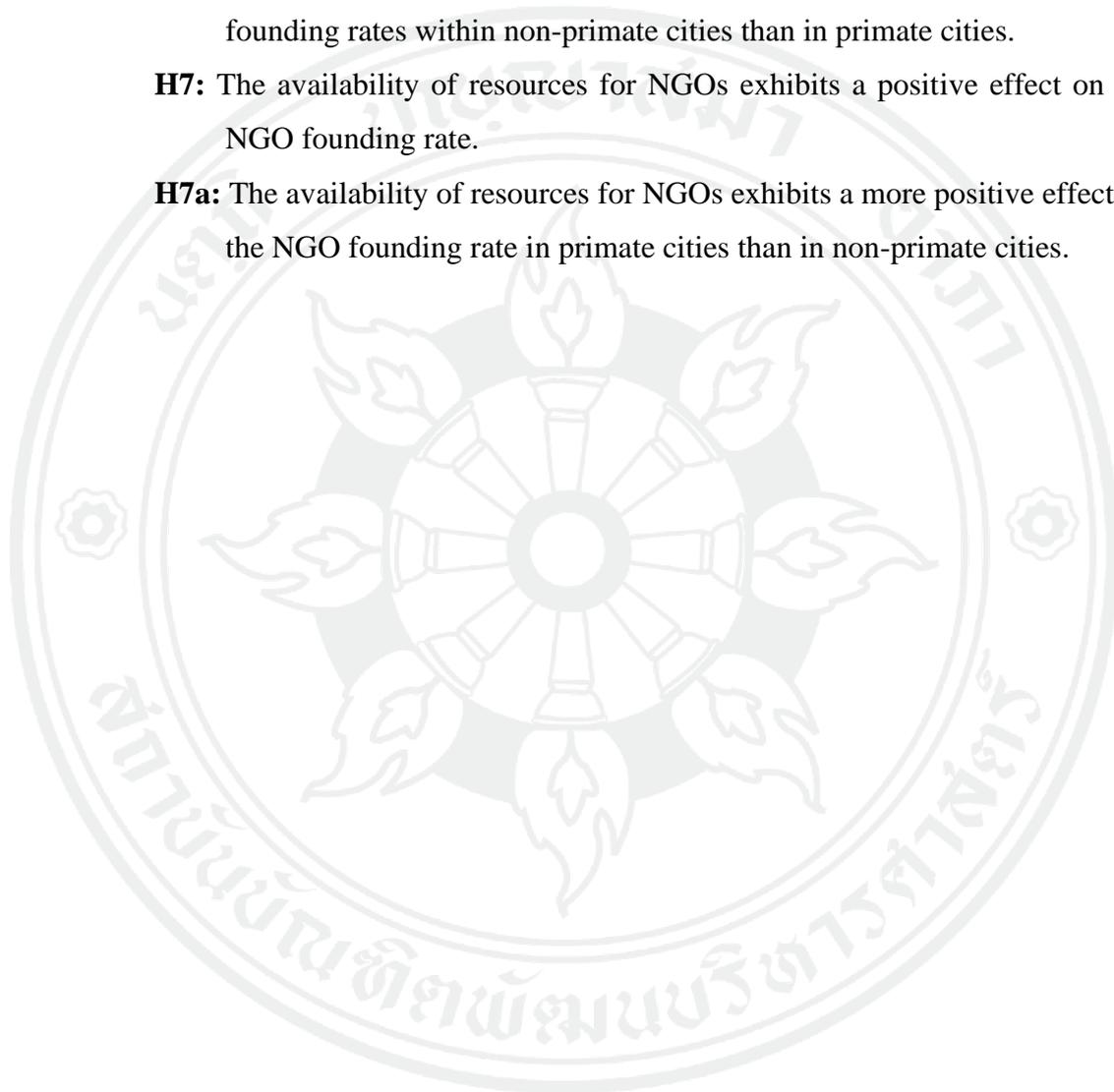


Table 3.8 Summary of Hypotheses

<b>Variable</b>	<b>NGO Founding Rate at the National Level</b>	<b>NGO Founding Rate in Primate Cities</b>	<b>NGO Founding Rate in Non- Primate Cities</b>	<b>Related Hypothesis</b>
<b>Density</b>	+	++	+	H1a, H1b,
<b>Density Squared</b>	-	--	-	H1c, H2a, H2b
<b>NGO Law</b>	+	++	+	H3, H3a
<b>Monarchy</b>	-	--	-	H4, H4a
<b>Armed Conflict</b>	+	+	++	H5, H5a
<b>Need of the Community</b>	+	+	++	H6, H6a
<b>Resources for NGOs</b>	+	++	+	H7, H7a

Note:

+ Positive Effect

- Negative Effect

++ Stronger Positive Effect

-- Stronger Negative Effect

### 3.8 Chapter Summary

This chapter provides a review of the literature related to population ecology, particularly density dependence theory, and empirical work related to that theory. Similarly, it also reviewed the institutional theory as well as empirical research that has been carried out in the nonprofit organization context. It then discussed the merit of combining different theoretical approaches in explaining the founding behavior of NGOs. It presented the conceptual framework and hypotheses derived from the literature, and it concluded by summarizing the hypothesized relationships

## CHAPTER 4

### METHODOLOGY

In this chapter, the study design, population, operationalization of the variables, analytical lenses, sources of the data, and methods adopted for the analysis are discussed.

#### 4.1 Research Design

This dissertation aims to test a set of hypotheses that were deductively derived. In order to explain the differences in the founding patterns of NGOs in Nepal it also relies heavily on quantitative data to test the hypotheses. Hence, given the nature of the questions it aimed to answer using a quantitative research design with statistical analysis to achieve the objectives. In order to test the hypotheses empirically, the research will trace the founding rates of NGOs in Nepal during the period of 1967-2018 at three different levels and the evolution of NFC between 2012 and 2018.

##### 4.1.1 Population

The population of the study is all of the NGOs registered in Nepal. As discussed in the second chapter, NGOs are required to affiliate with the Social Welfare Council (SWC) to receive foreign assistance as well as assistance from government sources. Hence, the list of NGOs affiliated with the SWC serves as the population of NGOs in Nepal. The database listed 49,230 NGOs affiliated with the SWC between 1967 and 2018 in Nepal. The number of NFCs was obtained from the office of the company registrar's office in Nepal, which maintains an annual list of all the companies registered in Nepal. The author downloaded the company registrar database and filtered only not for profit companies registered between 2012 and 2018.

This dissertation was interested in studying the phenomenon of NGO founding at the population level. Following the tradition of ecological research studying

organizational founding, the dissertation used population-level data for the analysis. Hence, there was no need for sampling.

#### **4.1.2 Source of Data**

The author filed an official application (registration number 4610) requesting the database of NGOs affiliated with Social Welfare Council (SWC) of Nepal on December 25, 2018. The SWC is the government unit under the ministry of Social Welfare that is responsible for coordinating the activities of all the social organizations in Nepal. NGOs must accept the affiliation and approval from the institution in order to receive any foreign donations or grants. Furthermore, an approval letter from the SWC is required for the renewal of the NGO. Hence, the data set from the SWC represents the most comprehensive data that are available in Nepal.

The database contains the name of the NGO, the working sector, the name of the founder, the address, and the date when the organization became affiliated with the SWC. One hundred and fifty-three NGOs were removed from the analysis because they lacked an SWC affiliation date and geographical information. Hence, only 49,077 organizations were considered for the analysis.

While the data set from Social Welfare Council is quite comprehensive, there are indications that the data are prone to some problems. First, the database lists the self-reported location of the organization at the time of registration, and the organization's registered site may be different than its place of operation. Second, once registered, the entry is not updated. Hence, it is likely that location change during the lifecycle of the organization is not recorded. Given the exploratory nature of the study, the dissertation uses the data source acknowledging the limitation it has.

#### **4.1.3 Variables and measurement**

##### **4.1.3.1 Dependent Variables**

The dissertation was interested in understanding the effects of density-dependent legitimation and competition on the entry rates of NGOs and NFCs geographically in Nepal. The study measures the entry rate of new NGOs at the national level, inside the capital city, within the radius of 100 KMs, and beyond 100 KMs of the Kathmandu valley. The choice of spatial clusters of Kathmandu valley, 100 KMs within the valley, and beyond 100 KMs, is explained below. See Table 4.1 for a summary of the variables, their measurements, and the data sources.

The evolution of NFCs was traced at the level of districts without aggregating them into different analytical clusters. The coverage of NFC data was between 2012 and 2018.

#### 4.1.3.2 Independent Variables

The study follows the established tradition of population ecology research and measures legitimation and competition as a function of the linear and quadratic yearly number of NGOs  $-N$  and  $N^2$ . It measures the legitimation and competition at three levels. The study also controls for the booms of organizational entry by creating a one-year lagged term for both the linear (Entries  $t-1$ ) and quadratic terms (Entries<sup>2</sup> $t-1$ ) of entries at time ( $t-1$ ). It also uses five dummy variables to highlight the phases of political changes and regulatory changes concerning NGOs in the country. The time frame between 1967 and 1989 was defined as the phase of absolute monarchy when people did not have the right to form associations. The years 1995 to 2006 were taken as the time frame when the country went through armed conflict. The years 2007 to 2017 were taken as the period of post conflict and the reconciliation period. In addition to these three phases of political history, one dummy variable was introduced to observe the effect of the introduction of the law affecting the entry of new NGOs. The time period before 1992 was coded as absence of law and the time period after 1992 was coded as the presence of the social welfare act. All of the independent variables were lagged one year ( $t-1$ ) in order to analyze the entry rates from a causal perspective.

Similarly, for the analysis of NFCs, a similar approach was used to measure the density of existing organizations. Both  $N$  and  $N^2$  were lagged one year.

Similarly, for the analysis of NFCs, similar approach is used to measure the density of existing organizations. Both,  $N$  and  $N^2$  are lagged one year.

#### 4.1.3.3 Time Frame of the Study

Data for both the dependent and independent variables were measured for every year. Hence the study used a longitudinal study design. The data for both the dependent and independent variables were collected annually, and the data for the dependent variable were available from 1967 to 2018. However, the data for the two independent variables (GDP per capita and ODA per capita) were available between 1960 and 2016 only.

For the comparative study of NGOs and NFCs, the recent time frame of 2012-2018 was considered to test the reliability of the historical time series data.

#### 4.1.3.4 Spatial Clusters

This study divided Nepal into three spatial clusters. Three districts from Kathmandu valley, Kathmandu, Bhaktapur, and Lalitpur were considered as one cluster and labeled as “Kathmandu Valley”; the second cluster had four adjacent districts of Kathmandu that were less than 100 KMs away from Kathmandu. This cluster was termed “within 100 KMs,” All remaining 68 districts that were beyond 100 KMs from Kathmandu were labeled as “beyond 100 KMs” (see Figure 4-1 for the visual representation of the clusters).

These spatial clusters helped to draw an arbitrary population boundary. All of the models were run across these clusters and the results section reports the results of the models. All of these clustered results were also compared with the national results. However, clustering was not done for the comparative analysis of the NGOs and NFCs.

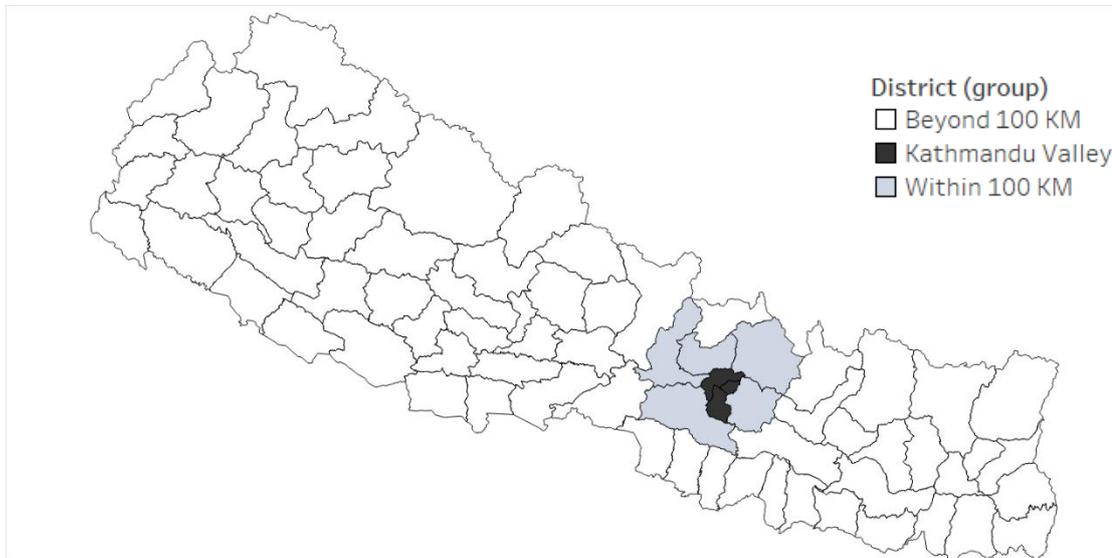


Figure 4-1 Analytical Clusters

#### 4.1.4 Operational Definition of Variables

**NGO Founding Rate:** The total count of new NGOs entering (affiliated with the SWC) in a specific calendar year (January 1 to December 31). This is a continuous variable.

**Not for Profit Company Founding Rate:** The total count of new NFCs entering (registered with the company registrar's office) in a specific calendar year (January 1 to December 31). This is a continuous variable.

**Density:** Legitimacy is measured using the density variable. Density is the sum of all the organizations registered in a geographic area since the beginning of the time frame considered for the study. For the analysis in chapter five, the time frame is between 1967 and 2018, and in chapter six, the time frame is between 2012 and 2018. This is a continuous variable.

**Density Squared:** Following the density dependence theory, competition is measured using the squared term of the density. This is a continuous variable.

**Absolute Monarchy:** The time frame when Nepal went through absolute monarchy. The year the country was under absolute monarchy is coded as 1 and other times it is coded as 0. This is a categorical variable.

**Conflict:** The time frame when Nepal went through armed insurgency. The year the country was having insurgency is coded as 1 and other times as 0. This is a categorical variable.

**NGO Law:** The time frame when Nepal introduced the Social Welfare Act, which is termed as a law that is NGO friendly. The time frame after the law was promulgated is coded as 1 and at other time periods as coded 0. It is a categorical variable.

**GDP Per Capita:** Gross domestic product per capita is used to assess the needs of the communities. GDP per capita is measured in US dollars. The coverage of this variable is at the national level between 1967 and 2018. It is a continuous variable.

**Nighttime Light:** The yearly average nighttime light was used to measure the needs of the communities. Communities that are relatively affluent would emit higher amounts of light. This study uses the Visible Infrared Imaging Radiometer Suite (VIIRS) day night band nighttime light data (without stray light correction) that is aggregated yearly from monthly data by taking maximum value. Pixels in monthly data without at least 3 cloud-free observations were omitted. The resolution was 0.0041666667 with a factor of 1.0. The coverage of this variable is at the subnational level between 2012 and 2018. It is a continuous variable.

**Official Development Assistance per capita:** Official Development Assistance—the volume of foreign aid Nepal receives from bilateral and multilateral donors at the national level was used as a proxy to measure the resources available for NGOs. Higher ODA per capita signifies a greater volume of resources available for NGOs. The coverage of this variable is at the national level of aggregation. It is a continuous variable.

**Foreign Aid:** This variable takes the sum total of bilateral, multilateral, and INGO aid at the subnational level to assess the availability of resources for NGOs at the subnational level. The coverage of this variable is between 2012 and 2018. It is a continuous variable.

## 4.2 Statistical Models and Method of Analysis

Various descriptive and inferential statistical techniques are used throughout the dissertation. The distribution of the dependent variables was checked using a histogram with the test of normality. As shown in the appendix, the count-dependent variable followed a Poisson distribution with the presence of significant zeros. Hence, a negative binomial regression model was adopted.

Descriptive statistics such as mean, median, and standard deviation are reported throughout the results section. Furthermore, an intercorrelation matrix helped to identify the potential multicollinearity of the variables. The study also makes extensive use of the choropleth map to demonstrate the spatial distribution of the values. It also uses a scatterplot to demonstrate the relationship between the two variables and line charts and bar charts throughout in order to describe the data.

The study follows the common practice in organizational founding and assumes the entries to be a realization of an arrival process. The study uses the count of organizational founding; in these cases, the Poisson regression represents the most appropriate solution for studying the dependent variables that have integer values. However, the Poisson model is inadequate for analyses of over-dispersed data; the negative binomial distribution overcomes this limitation.

First section of this study follows earlier works on organizational founding (Box, 2017; Carroll & Khessina, 2019; Cattani et al., 2003; Greve, 2002a; Greve & Rao, 2012; Hannan & Carroll, 1992; Wezel, 2005) and employs a negative binomial regression model. Accordingly, this study employs a time series negative binomial regression-based model specified as below:

$$\ln r(t) = a_0 + a_1 \text{Density}_{t-1} + a_2 \text{Density}_{t-1}^2$$

where  $r(t)$  is the founding rate at time  $t$ ,  $a_0$  is the constant,  $a_1$  is the coefficient of density, and  $a_2$  is the coefficient of  $\text{Density}^2$

The base model was tested across four geographical gradients (i.e. Kathmandu valley, within 100 KMs, beyond 100 KMs, and national) and the base model was extended to include additional variables.

The study also added other control variables in the extended model to account for the effect of the institutional and resource factors on the base model. The model with the institutional and resource factors was estimated using the following time series negative binomial regression model:

$$\ln r(t) = a_0 + a_1 \text{NationalDensity}_{t-1} + a_2 \text{NationalDensity}_{t-1}^2 + a_3 \text{NGOlaw} \\ + a_4 \text{Absolutemonarchy} + a_5 \text{Armedconflict} + a_6 \text{GDPpercapita} \\ + a_7 \text{ODApercapita}$$

where  $a_1$  is the coefficient of NGO Density,  $a_2$  is the coefficient of the squared term of NGO Density.  $a_3$  is the coefficient of NGO Law,  $a_4$  is coefficient of the measure of presence of absolute monarchy,  $a_5$  is the coefficient of the presence of armed conflict,  $a_6$  is the coefficient of GDP per capita, and  $a_7$  is the coefficient of ODA per capita.  $a_0$  is a constant term.

The second section of the results, and for comparative purposes, uses a model similar to the one specified above. However, it uses a different set of independent variables. Different models are tested in the later section of the results chapter. However, the general model is specified as below:

$$\ln r(t) = a_0 + a_1 \text{NationalDensity}_{t-1} + a_2 \text{NationalDensity}_{t-1}^2 \\ + a_3 \text{NighttimeLight} + a_4 \text{ForeignAid}$$

where  $r(t)$  is the founding rate at time  $t$ ,  $a_0$  is the constant,  $a_1$  is the coefficient of density, and  $a_2$  is the coefficient of Density<sup>2</sup>.  $a_3$  is the coefficient of night time Illumination,  $a_4$  is the coefficient of measure of availability of foreign aid. Only data between 2012 and 2018 were used to test this model.

Stata: the Software for Statistics and Data Science version 13.1 was used to analyze all of the data. Stata's built-in XTNBREG command was used to perform the analysis. Visual graphics such as charts and maps were generated using Tableau version 2019.1 and Microsoft Excel Office 365.

### 4.3 Chapter Summary

This chapter outlined the research design and presented the operational definitions of the different variables considered for the study. It defined the population of study, variables, and their measurements. It also presented the statistical models and method of analysis.



Table 4.1 Summary of Concepts, Variables, and Measurements

Concept	Measurement	Scale	Source of Data	(I/D) V
<b><u>Population Ecology</u></b>				
<b>Organizational Founding:</b> The number of new NGOs entering (affiliated with SWC) the population at a specific calendar year (January 1- December 31). Population is defined as the number of existing NGOs in a specific calendar year.	Number of NGOs registered during a calendar year	Ratio	Social Council	Welfare DV
<b>Constitutive Legitimacy:</b> “A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions”	Total number of existing NGOs	Ratio	Social Council	Welfare IV
<b>Competition:</b> “Interaction between organizational species, or individual organizations, that are attempting to gain a share of a limited environmental resource.”	Number of NGOs <sup>2</sup>	Ratio	Social Council	Welfare IV
<b><u>Institutional Theory</u></b>				
<b>Institutional Era:</b> “A conception of time is that of a construct capturing specific historical periods marked by unique constellations of institutional forces.”	Absolute Monarchy Conflict	Nominal		IV
<b>Coercive Isomorphism:</b> “active support organizations receive from actors in a position of authority due to their adherence to sanctioned principles, rules or standards.”	NGO Law	Nominal	Nepal Commission	Law IV
<b><u>Controls: Non-Profit Theory</u></b>				
<b>Need of the Community:</b> National Level	GDP Per Capita	Ratio	World Bank	IV
Subnational Level	Nighttime Light	Ratio	NASA	IV

Concept	Measurement	Scale	Source of Data	(I/D) V
<b>Resources for NGOs:</b>				
National Level	ODA Per Capita	Ratio	World Bank	IV
Subnational Level	Foreign Aid	Ratio	Ministry of Finance	IV



## CHAPTER 5

### RESULTS

This chapter furnishes the results of the quantitative analysis and hypothesis testing. Each subsection of the chapter provides the founding patterns of one geographical cluster. First, it begins with the analysis of Kathmandu Valley, followed by its neighboring districts, which will be followed by the districts that are beyond a 100 KMs radius of the valley, and the final section presents the analysis at the national level.

#### 5.1 Spatial Differences in the Historical Patterns of NGO Evolution

##### 5.1.1 Kathmandu Valley

Kathmandu valley is the economic hub of Nepal and is home to approximately 1 million people and accounts for 1/12<sup>th</sup> of the country's 29 million population. Kathmandu valley comprises three districts: Kathmandu, Bhaktapur, and Lalitpur. The valley has a population density of 20,288 per square kilometers. This density is made possible because of a rather small surface area which is approximately 50 square kilometers.

Table 5.1 Descriptive Statistics – Kathmandu Valley

VARIABLES	N	mean	SD	min	max
Year	42	1,998	12.27	1,977	2,018
Annual NGO Entry	42	460.4	388.1	1	1,071
Density	41	5,206	6,043	16	18,528
Law	41	0.634	0.488	0	1
Conflict	41	0.268	0.449	0	1
Absolute Monarchy	41	0.366	0.488	0	1
ODA Per Capita	41	19.75	8.735	1.234	42.74
GDP Per Capita	41	296.7	201.4	74.40	747.2
DensitySq	41	6.273e+07	9.811e+07	256	3.433e+08

Figure 5-1 presents the average annual NGO entry rate of the three districts of the valley between 1967 and 2018. The rate of NGO entry increased after the restoration of multi-party democracy and reached a peak when Nepal's twelve year-long armed insurgency ended. As indicated in Table 5.1, the average annual entry rate of the three districts between 1967 and 2018 was 460.4 (SD=388.1). Kathmandu district had the highest number of NGOs registered, while Bhaktapur and Lalitpur had a relatively smaller number of NGOs. A minimum of 1 and a maximum of 1071 NGOs were registered during a calendar year in those districts during the studied time period.

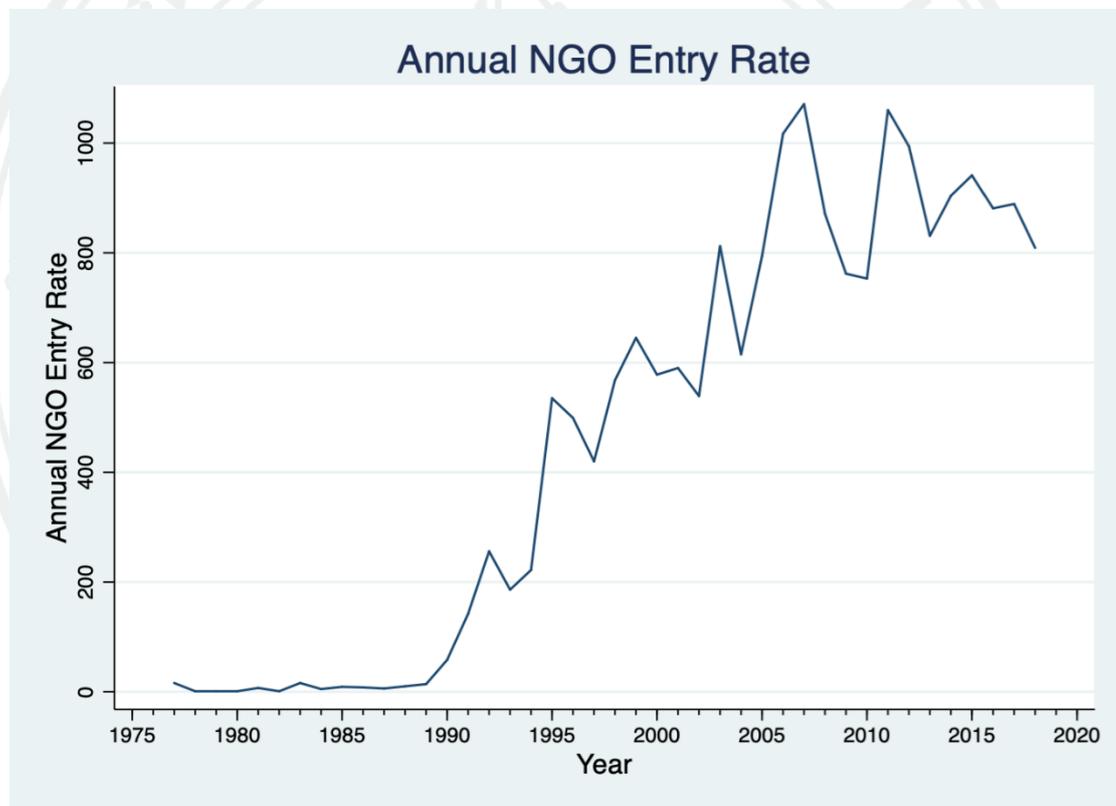


Figure 5-1 Average Annual NGO Entry Rate of NGOs in Kathmandu Valley

Effects of population level legitimacy, competition, institutional factors, needs of the communities, the availability of resources on the birth of new NGOs within Kathmandu Valley.

The results of the negative binomial regression analysis indicate that density dependent legitimation has a statistically significant positive effect on the founding

rates of NGO in Kathmandu valley. As indicated in Table 5.2, the basic model (1) and the alternative model (2) depict that the density of NGOs has a positive effect on the entry of new NGOs. In general, the density dependence theory holds true in Kathmandu valley. The effect of density dependent legitimation and competition varies when control variables are introduced in model 2.

The effect of density dependent legitimation was higher, and the effect of competition was higher, when only the base model was used compared to the model when other control variables were introduced. The effect of density dependent legitimation declined when other institutional control variables were introduced. The effect of the presence of NGO law had a significant positive effect on the founding rate of NGOs in the country. The magnitude of the effect of the presence of NGO law was highest compared to density dependent legitimation and competition.

Furthermore, institutional factors such as the presence of favorable NGO law escalated the entry rate of NGOs in Kathmandu valley. In addition, the presence of armed conflict and the availability of more foreign aid contributed positively to the entry rate of NGOs in the valley. However, the presence of absolute monarchy affected the entry rate adversely.

Table 5.2 Effect of Density Dependent Legitimacy and Competition on the Founding Rate of NGOs in Kathmandu Valley

VARIABLES	(1) Annual NGO Entry	(2) Annual NGO Entry
Lag NGO Density	0.000560*** (0.000119)	0.000219** (0.000100)
Lag NGO DensitySq	-2.50e-08*** (6.71e-09)	-1.69e-08*** (4.86e-09)
NGO Law		1.770*** (0.337)
Conflict		0.917*** (0.285)
Absolute Monarchy		-0.768*** (0.261)
ODA Per Capita		0.114*** (0.0238)
GDP Per Capita		0.00102 (0.00285)
Constant	4.311*** (0.293)	1.181** (0.599)
Inalpha	0.195 (0.200)	-1.559*** (0.260)
Observations	41	40

Standard errors in parentheses. The shades of color represent the strength of the effect; a darker color signifies a stronger effect.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

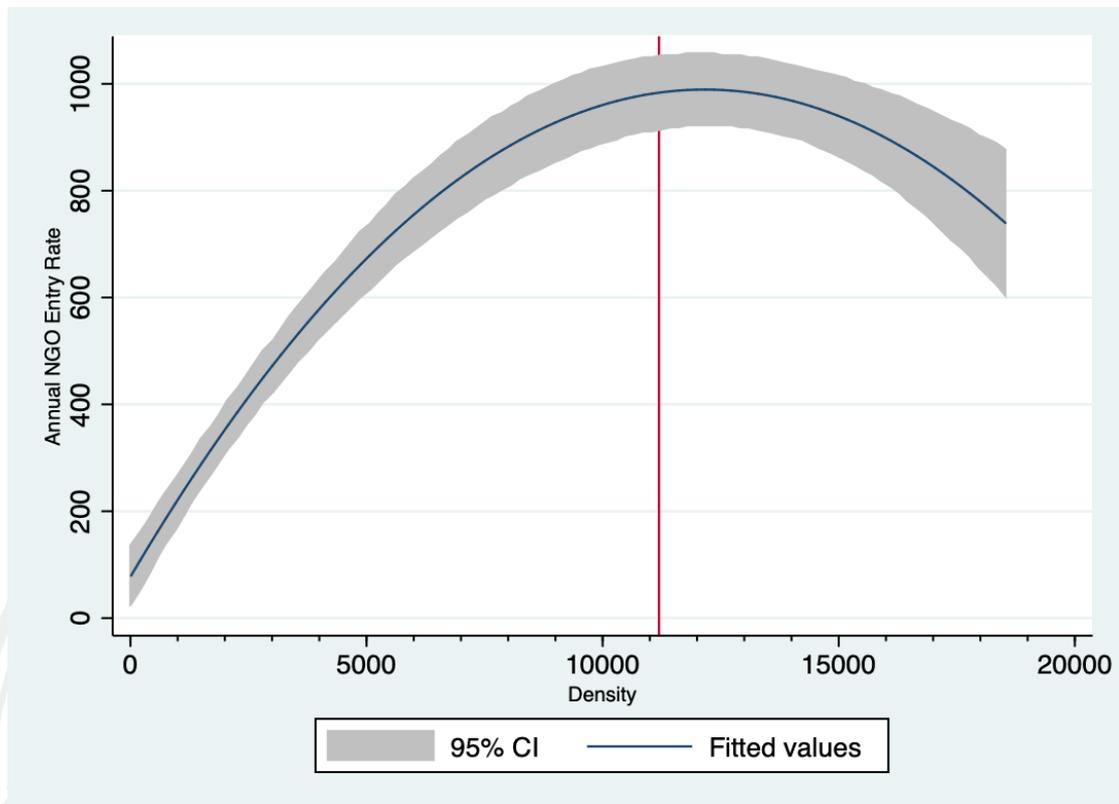


Figure 5-2 Hypothesis Test - Inverted U

In addition, the test results for inverted U hypothesis test (Lind & Mehlum, 2010) portray a statistically significant ( $t=3.48$ ,  $p<0.01$ ) inverted U relationship between the founding patterns and the density of NGOs. These findings are consistent across both models. As indicated by the red line in Figure 5-2, the number of NGOs increases at an increasing rate until it reaches a threshold of 11194.12 NGOs in Kathmandu.

### 5.1.2 Within 100 KMs of Kathmandu Valley

As we look at the spatial differences in the founding patterns of NGOs in the country, it is important to have an analytical frame that looks at the behavior in the periphery of the epicenter of NGOs. In the earlier section of the chapter, this dissertation looked at the founding patterns of NGOs within the three districts of the capital city. However, it is important to see the patterns in the neighboring districts of the capital. These districts are within 100 KMs of the three districts and can be travelled to within a day from the capital city. Given the proximity to Kathmandu valley, these districts

are situated uniquely in terms of access to resources. Table 5.3 presents the descriptive statistics of the founding patterns of the NGOs within the 100 KMs distance from Kathmandu Valley. The mean annual entry of NGOs was 80.74 (SD=65.75) with a minimum of 0 and a maximum of 209 NGOs in the five peripheral districts of Kathmandu valley. The mean density of NGOs in the studied districts was 984.6 (SD=1074) with a minimum of 1 and a maximum of 3,266 NGOs.

Figure 5-3 represents the annual NGO entry patterns within 100 KMs of Kathmandu valley. After the restoration of democracy in 1990, the entry of NGOs increased until 2000, when the conflict began to escalate and the entry of NGOs peaked again as the peace process began in 2006.

Table 5.3 Descriptive Statistics – Within 100 KMs of Kathmandu Valley

VARIABLES	N	mean	SD	min	max
Year	42	1,998	12.27	1,977	2,018
Annual NGO Entry	42	80.74	65.75	0	209
Density	41	984.6	1,074	1	3,266
Law	41	0.634	0.488	0	1
Conflict	41	0.268	0.449	0	1
Absolute Monarchy	41	0.366	0.488	0	1
ODA Per Capita	41	19.75	8.735	1.234	42.74
GDP Per Capita	41	296.7	201.4	74.40	747.2
DensitySq	41	2.096e+06	3.087e+06	1	1.067e+07

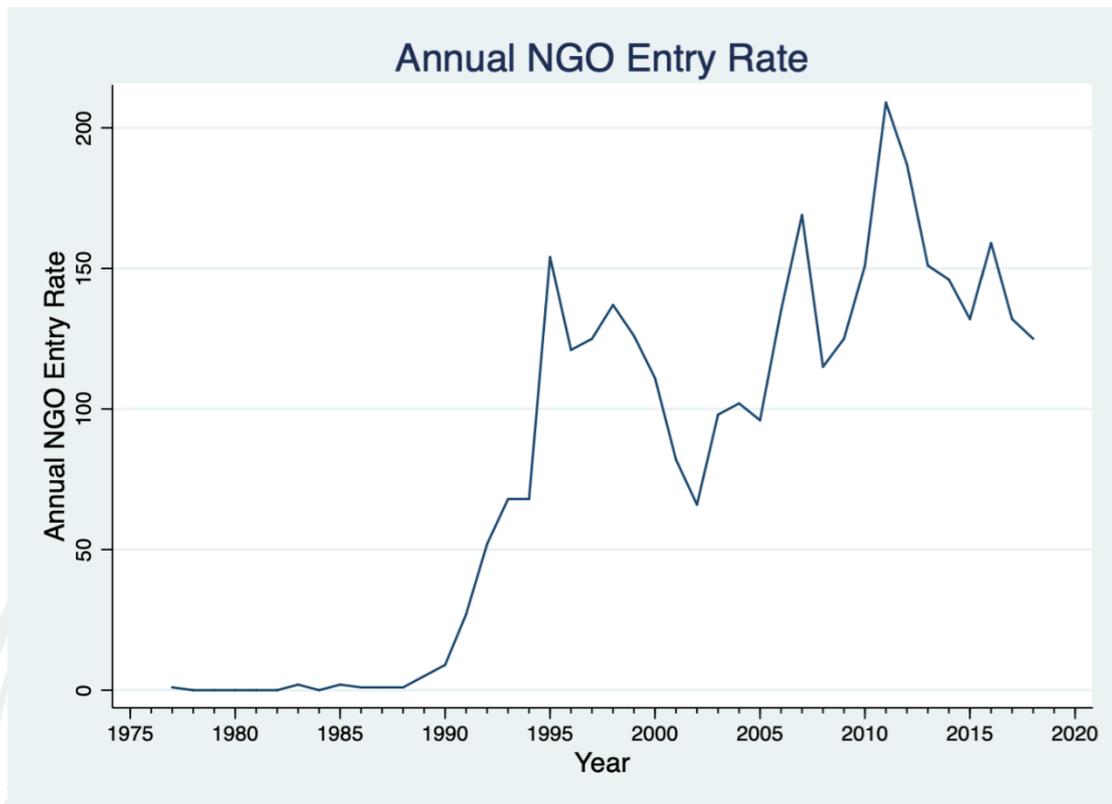


Figure 5-3 Average Annual NGO Entry Rate of NGOs within 100 KMs of Kathmandu Valley

Effects of Population Level Legitimacy, Competition, Institutional Factors, Needs of the Communities, Availability of Resources on the Birth of New NGOs within 100 KMs of Kathmandu Valley.

The results of the negative binomial regression results suggest that density dependent legitimation has a positive effect and density dependent competition has a negative effect on the founding patterns of NGOs within a 100 KM radius of Kathmandu valley. These findings support the theoretical proposition of the density dependence theory. In general, the theory holds true; however, the effect of these variables varies across the models.

Model 1 is the base model and model 2 has other control variables. The effect of legitimation on the founding pattern is stronger when other institutional control variables are not introduced. However, when the control variables are introduced, the

effect of density dependent legitimation declines compared to the base model. Density dependent legitimation is not statistically significant when other control variables are introduced. Furthermore, the effect of the competition declines when the control variables are introduced. As density dependence theory stipulates, legitimacy has a positive effect on the birth rate of NGOs while its squared term or the measure of competition has a negative effect on the founding patterns.

Other institutional variables affected the entry rate of NGOs. The presence of NGO-friendly law and the presence of armed conflict in the country affected the entry rate of NGOs positively. In addition, the presence of available financial resources in the form of ODA also influenced the entry rate of NGOs positively. This fact also portrays the significant power that institutional forces have on the founding patterns of new organizations.

Table 5.4 Effects of Density Dependent Legitimacy and Competition on Founding Rate within 100 KMs of Kathmandu Valley

VARIABLES	(1) Annual NGO Entry	(2) Annual NGO Entry
Lag NGO Density	0.00273*** (0.000708)	0.000382 (0.000468)
Lag NGO DensitySq	-6.86e-07*** (2.27e-07)	-4.14e-07*** (1.33e-07)
NGO Law		2.364*** (0.329)
Conflict		0.712*** (0.272)
Absolute Monarchy		-0.621** (0.254)
ODA Per Capita		0.0960*** (0.0256)
GDP Per Capita		0.00299 (0.00229)
Constant	2.781*** (0.326)	-0.548 (0.615)
Inalpha	0.345 (0.232)	-2.065*** (0.350)

	(1)	(2)
VARIABLES	Annual NGO Entry	Annual NGO Entry
Observations	41	40

Standard errors in parentheses. The shades of color represent the strength of the effect; a darker color signifies a stronger effect.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In addition, the test results for the inverted U hypothesis test (Lind & Mehlum, 2010) portray a statistically significant ( $t=2.99$ ,  $P < .01$ ) inverted U relationship between the founding patterns and the density of NGOs. These findings are consistent across both models. As indicated by the red line, the number of NGOs increases at an increasing rate until it reaches a threshold of 1987 NGOs in the 100 KM periphery of Kathmandu valley.

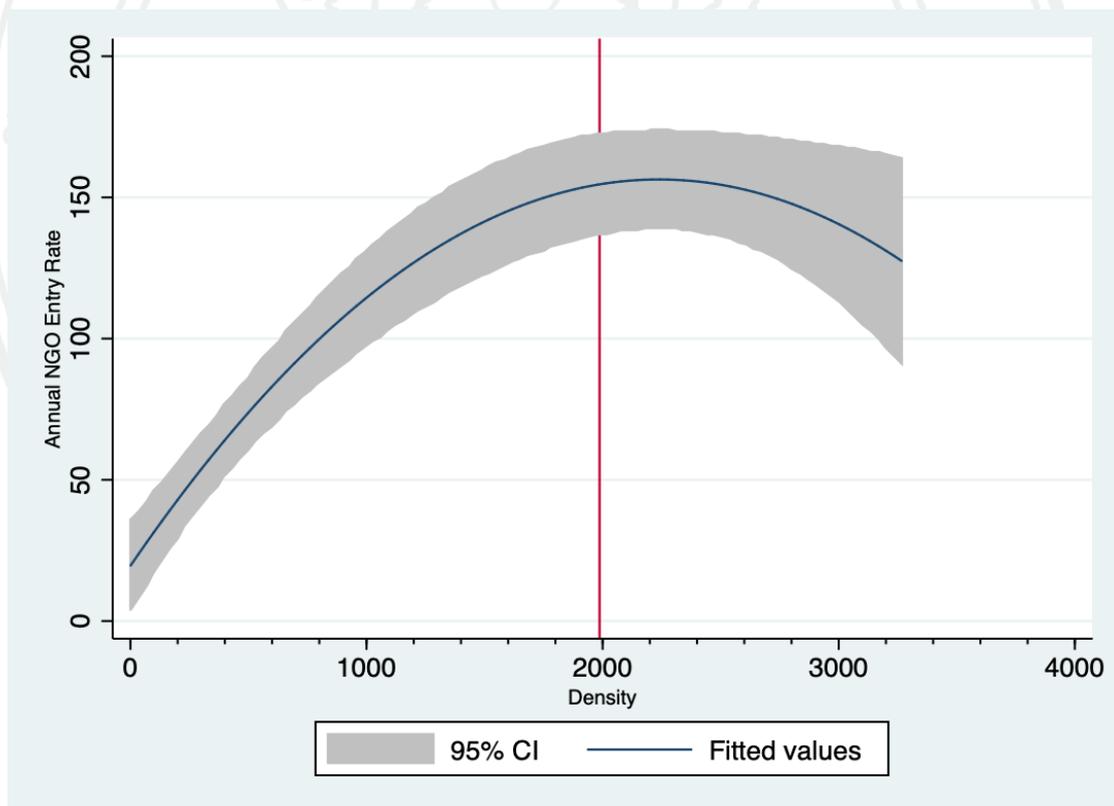


Figure 5-4 Hypothesis Test - Inverted U

### 5.1.3 Beyond 100 KMs of Kathmandu Valley

Beyond 100 KMs of Kathmandu Valley included districts that were beyond 100 KM of Kathmandu valley. Sixty-five out of seventy-five districts were considered in this cluster.

Table 5.5 portrays the descriptive statistics for the districts of the third analytical cluster. The average annual entry of NGOs was 627.3 (SD=541.7) with a minimum of 0 and a maximum of 1,726 NGOs registered within a calendar year in each of the observed districts. The mean density was 7,272 (SD=8,384) with a minimum of 0 and the highest of 25,017 NGOs in the studied districts.

Table 5.5 Descriptive Statistics – Beyond 100 KMs of Kathmandu Valley

VARIABLES	N	mean	SD	min	max
Year	42	1,998	12.27	1,977	2,018
Annual NGO Entry	42	627.3	541.7	0	1,726
Density	41	7,272	8,384	0	25,017
Law	41	0.634	0.488	0	1
Conflict	41	0.268	0.449	0	1
Absolute Monarchy	41	0.366	0.488	0	1
ODA Per Capita	41	19.75	8.735	1.234	42.74
GDP Per Capita	41	296.7	201.4	74.40	747.2
DensitySq	41	1.215e+0	1.841e+0	0	6.259e+0
		8	8	0	8

Figure 5-5 depicts the annual NGO entry patterns in the studied districts. In general, the number of NGOs has an increasing trend. The growth of NGO registration picked up after the restoration of democracy in 1990 and reached a peak in 2006 when the comprehensive peace accord was signed. Since then, there has been a fluctuation in the registration trend. Except for some significant lows during the early 2000s and around 2008, the number of registered NGOs is growing.

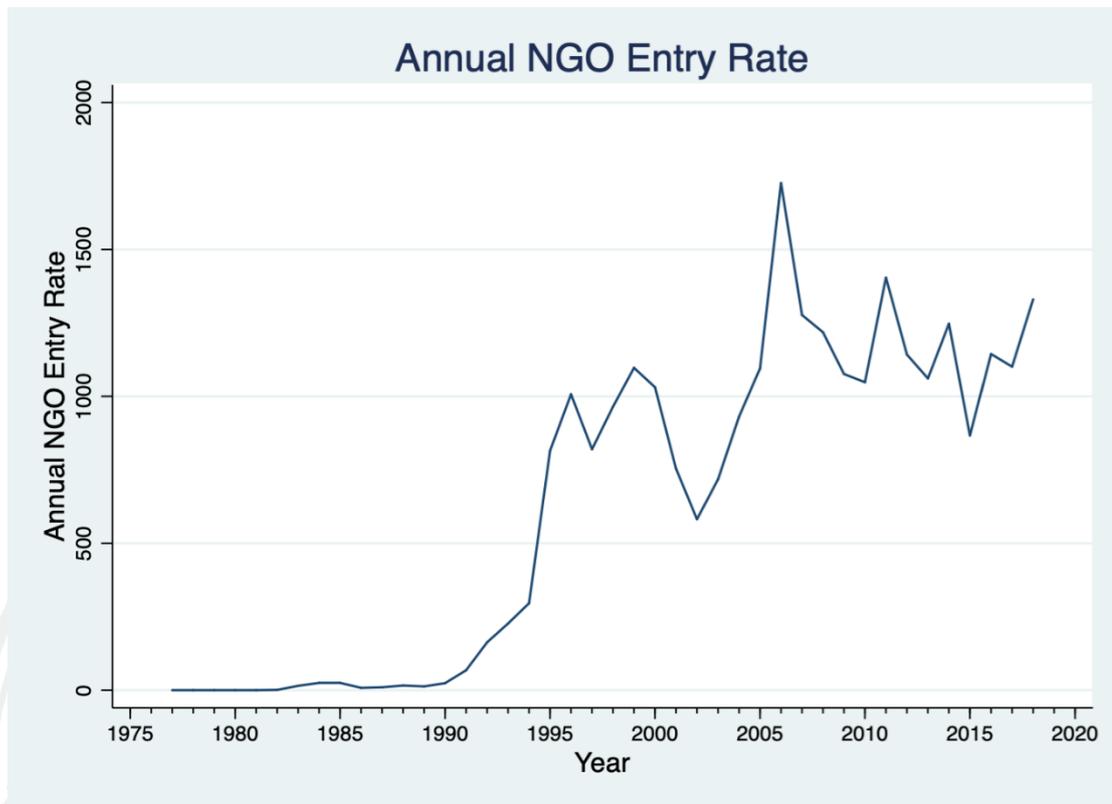


Figure 5-5 Average Annual NGO Entry Rate of NGOs Beyond 100 KMs of Kathmandu Valley

Effects of Population Level Legitimacy, Competition, Institutional Factors, Needs of the Communities, Availability of Resources on the Birth of New NGOs beyond 100 KMs of Kathmandu Valley.

According to the results of the negative binomial regressions, as presented in Table 5.6, the density dependence theory holds true in explaining the phenomenon of NGOs birth beyond 100 KMs of Kathmandu valley. While the theory holds true, the effect of the variables on NGO founding varies across the models.

Model 1 is the base model where this study tested the effect of legitimation and competition on the founding pattern, while model 2 considers other institutional variables as the control variables. The effect of density dependent legitimation is high and statistically significant in the base model. However, when the control variables were introduced, the effect of competition seemed to decline. In the meantime, other control variables appear to have a significant effect on the founding rate. Particularly,

the presence of NGO law seems to be the strongest predictor, followed by the presence of conflict and ODA per capita. The model suggests that in addition to the ecological forces, institutional forces such as the presence of law or the presence of conflict can escalate the number of NGOs. The implication of institutional forces will be discussed thoroughly in the following chapter.

Table 5.6 Effects of Density Dependent Legitimacy and Competition on Founding Rate Beyond 100 KMs of Kathmandu Valley.

VARIABLES	(1) Annual NGO Entry	(2) Annual NGO Entry
Lag NGO Density	0.000402*** (0.000103)	0.000107 (7.95e-05)
Lag NGO DensitySq	-1.33e-08*** (4.25e-09)	-9.65e-09*** (3.59e-09)
NGO Law		2.764*** (0.437)
Conflict		0.762** (0.351)
Absolute Monarchy		-0.280 (0.355)
ODA Per Capita		0.0810** (0.0315)
GDP Per Capita		0.00407 (0.00373)
Constant	4.690*** (0.343)	0.827 (0.799)
Inalpha	0.526** (0.206)	-1.109*** (0.293)
Observations	41	40

Standard errors in parentheses. Shades of color represents the strength of the effect; darker color signifies stronger effect.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In addition, the test results for the inverted U hypothesis test (Lind & Mehlum, 2010) portray a statistically significant (t=2.82, P<.01) inverted U relationship between the founding patterns and the density of NGOs. These findings are consistent across both models. As indicated by the red line in Figure 5-6, the number of NGOs increases

at an increasing rate until it reaches a threshold of 15,098.5 NGOs in the districts that are beyond a 100 KM periphery of Kathmandu valley.

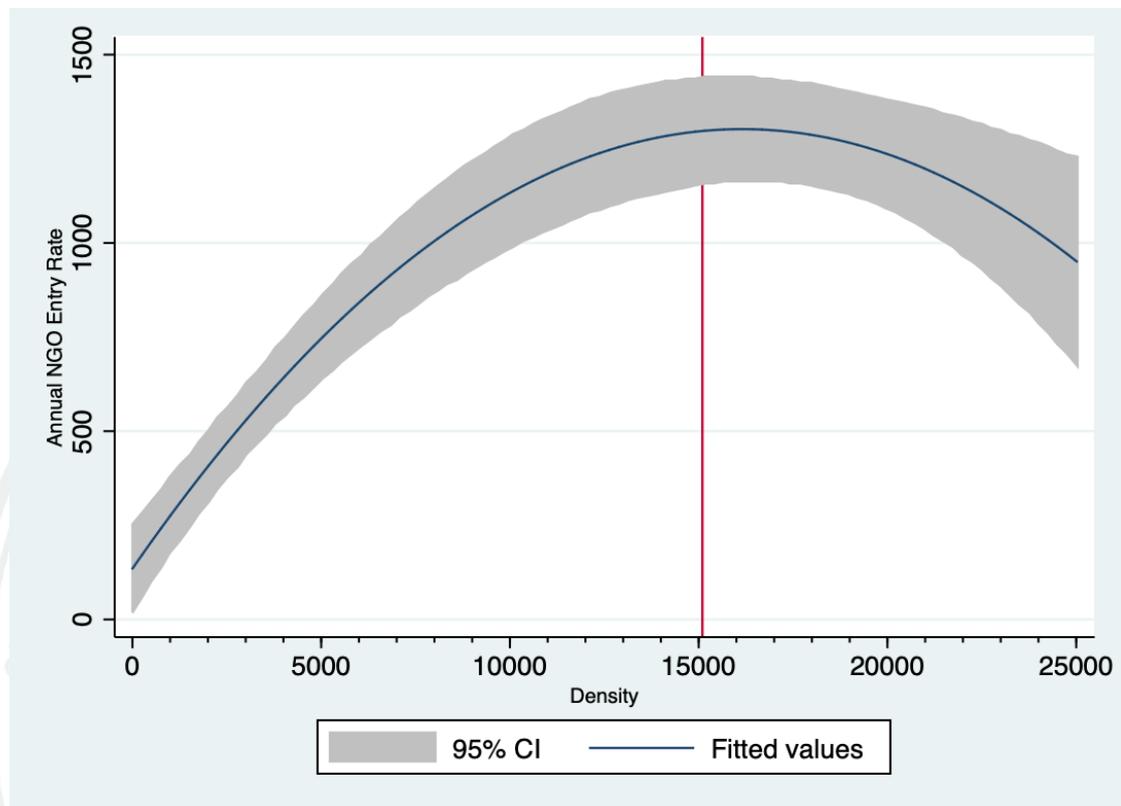


Figure 5-6 Hypothesis Testing - Inverted U

#### 5.1.4 National Level

Following the tradition of density dependence theory, this study also used country level data to analyze the effects of density dependent legitimation and competition on the founding patterns of NGOs. Table 5.7 presents the descriptive statistics of the different variables. Between 1972 and 2018, NGOs were registered during 41 years. The analysis presents the 41-year long observation.

The average NGO entry ranged from 1 to 2,878 within a calendar year, with an average of 1,169 (SD=983.1). The density of NGOs ranged from 17 to 46,813 within 41 years with an average of 13,462 (SD=15,496). NGO law was present approximately 63% of the time during the study period. In the meantime, approximately 27% of the studied time was marred with internal insurgency and roughly around 37% of the study time was governed under an absolute monarchical system. Furthermore, the mean official development assistance (ODA) per capita was 19.75 USD (SD=8.73) with a

minimum of 1.23 and a maximum of 42.74 during the studied time frame. In the meantime, country level data average GDP per capita was USD 296.7 (SD=201.4) with a minimum of USD 74.40 and a maximum of USD 747.2.

Table 5.7 Descriptive Statistics – National

VARIABLES	N	mean	SD	min	max
Year	42	1,998	12.27	1,977	2,018
Annual NGO Entry	42	1,169	983.1	1	2,878
Density	41	13,462	15,496	17	46,813
Law	41	0.634	0.488	0	1
Conflict	41	0.268	0.449	0	1
Absolute Monarchy	41	0.366	0.488	0	1
ODA Per Capita	41	19.75	8.735	1.234	42.74
GDP Per Capita	41	296.7	201.4	74.40	747.2
DensitySq	41	4.155e+0	6.365e+0	8	2.191e+0
		8	8	289	9

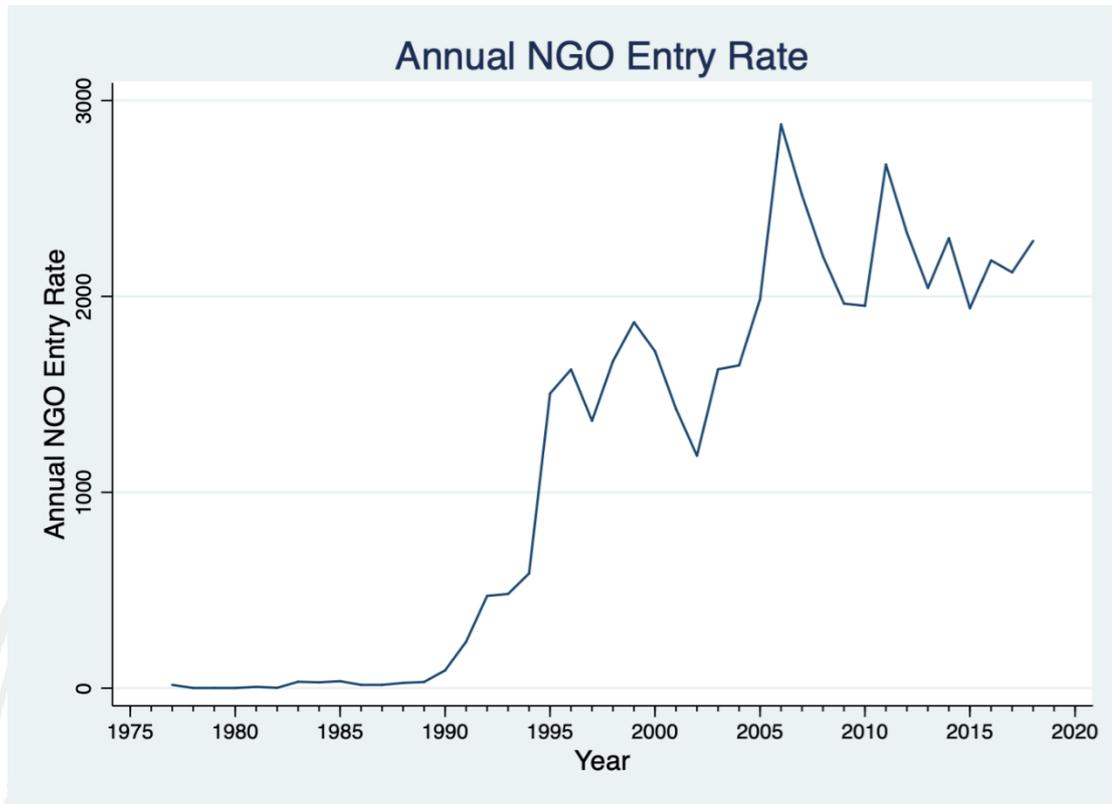


Figure 5-7 Annual NGO Entry Rate at The National Level

Effects of Density Dependent Legitimacy and Competition on Founding Rate at the National Level.

Table 5.8 presents the results of the negative binomial regression at the national level. This study tested three models at this level. The first model (1) is the base model, which tested the effect of density dependent legitimation and competition only. The second model (2) tested the effect of the institutional control variables such as the presence of NGO law, conflict, and the presence of absolute monarchy and the measure the need of communities as well as the resources available for the NGO on the annual NGO registration. The latter two variables were derived from existing non-profit placement studies.

The effect of density dependent legitimation is highest in the base model compared to the second model, while legitimacy did not appear significant when additional control variables were introduced in the second model. Furthermore, the effect of competition was higher in the first model compared to the second model. The

presence of NGO law and conflict had a positive effect on the annual NGO entry rate. However, the presence of absolute monarchy seemed to be an unfavorable condition for the growth of NGOs. The findings suggest that the presence of absolute monarchy affected the entry rate of NGOs negatively. In addition to the institutional control variables, the resource-based view introduced in model three suggests that higher inflow of foreign aid is a favorable condition for the growth in the entry of NGOs in the country. However, the needs of the people as measured by GDP per capita did not appear to be statistically significant.

Table 5.8 Negative Binomial Regression Results

VARIABLES	(1) Annual NGO Entry	(2) Annual NGO Entry
Lag NGO Density	0.000216*** (5.03e-05)	6.50e-05 (4.27e-05)
Lag NGO DensitySq	-3.82e-09*** (1.11e-09)	-2.86e-09*** (9.14e-10)
NGO Law		2.261*** (0.389)
Conflict		0.912*** (0.331)
Absolute Monarchy		-0.540* (0.307)
ODA Per Capita		0.109*** (0.0278)
GDP Per Capita		0.00318 (0.00341)
Constant	5.288*** (0.314)	1.476** (0.703)
lnalpha	0.338* (0.194)	-1.250*** (0.257)
Observations	41	40

Standard errors in parentheses. The shades of color represent the strength of the effect; a darker color signifies a stronger effect.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In addition, the test results for the inverted U hypothesis test (Lind & Mehlum, 2010) portray a statistically significant (t=2.49, P=.0087) inverted U relationship

between the founding patterns and the density of NGOs. This finding is consistent across two models. As indicated by the red line in Figure 5-8, the number of NGOs increases at an increasing rate until it reaches a threshold of 28,302 NGOs.

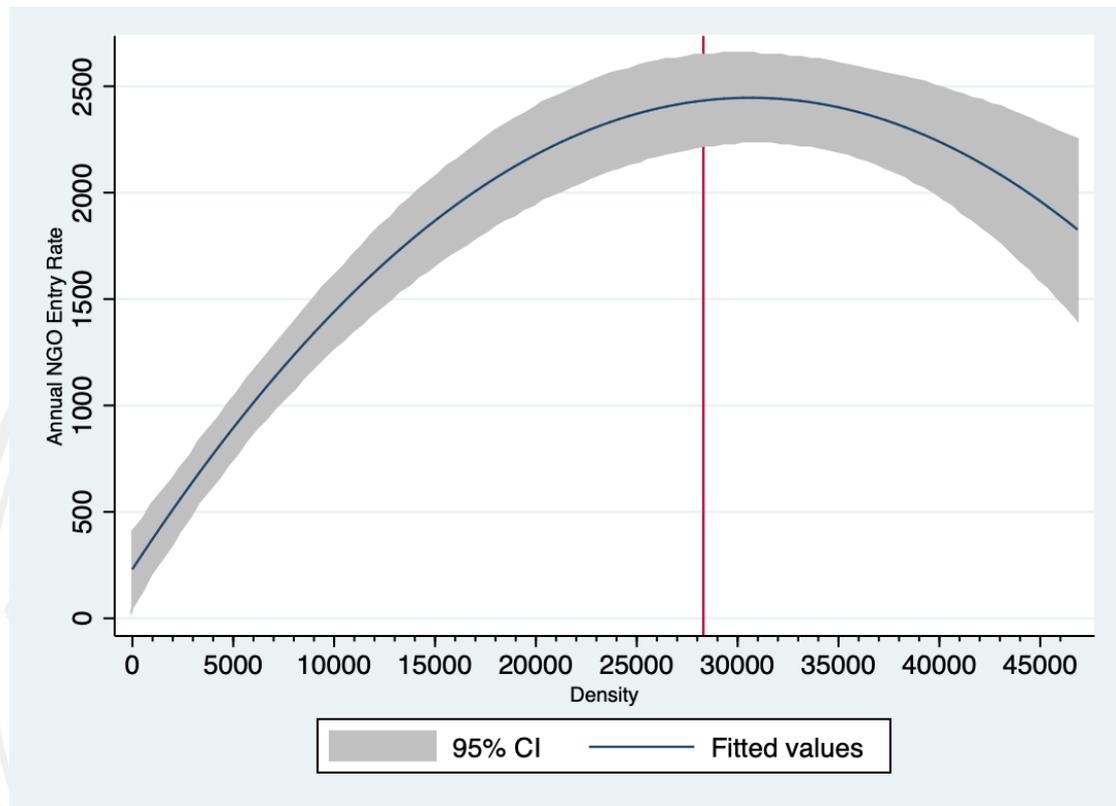


Figure 5-8 Hypothesis Testing - Inverted U

## 5.2 Effects of Population Level Legitimacy, Competition, Institutional Factors, Needs of The Communities, Availability of Resources on the Birth of New NGOs

There is significant difference in the average annual entry rate across different geographies. The average annual NGO entry rate of Kathmandu valley between 1967 and 2018 was 460.4 (SD=388.1) compared to 80.74 (SD=65.75) within 100 KM of Kathmandu valley and 627.3 (SD=541.7) beyond 100 KM of Kathmandu valley. The average rate of annual entry varies across different years.

Table 5.9 presents the comparative results for the negative binomial regression analysis. As indicated by the results, density dependence theory holds its ground inside Kathmandu valley when other control variables are introduced in the model. This dissertation set out with the objective of understanding how the effect of legitimacy and competition vary across the geographies. It further probed the nature of legitimation and the competition process across primate and non-primate cities. In the subsequent sections, the findings of the analysis are presented.

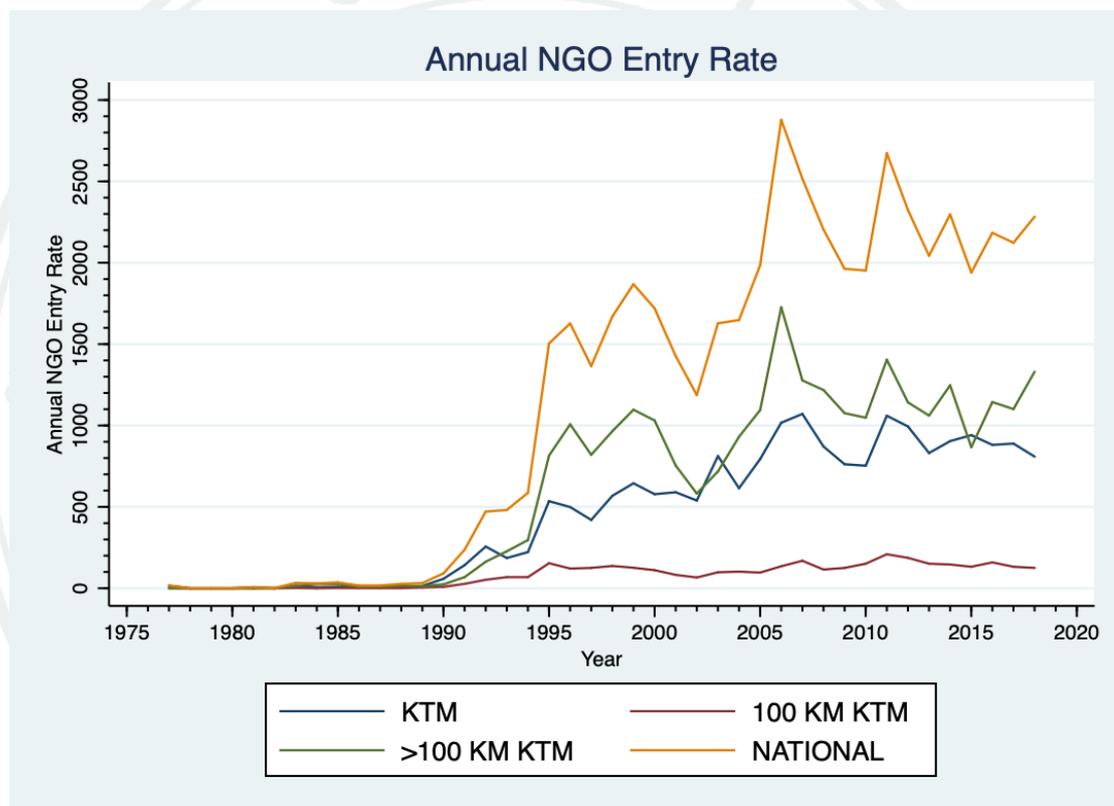


Figure 5-9 Annual Average Entry Rate of NGOs

The results of the study indicate that the effect of legitimacy and competition varies across primate and non-primate cities. Density dependent legitimation exhibits a statistically significant effect on NGO entry within Kathmandu valley. Like the hypothesized relationship, as demonstrated by the  $\beta$  coefficients, the effect of density dependent legitimation is significant in the primate cities. While the coefficients are relatively smaller, the districts of Kathmandu valley experienced a significant positive effect ( $\beta=0.000219$ ,  $p<0.01$ ) on the NGO entry compared to five districts within 100

KMs of Kathmandu valley and districts beyond 100 kilometers of Kathmandu valley. When we observe the same phenomenon at the national level, the effect of legitimacy seems to be non-significant in explaining the patterns of NGO registration.

Looking at the effect of competition on the founding patterns, it appears that competition suppresses the birth of new NGOs. These findings were consistent across all the studied models. The effect of competition is more severe within 100 KMs of Kathmandu valley ( $\beta = -4.14e-07$ ,  $p < 0.01$ ), followed by districts beyond 100 KMs ( $\beta = -9.65e-09$ ,  $p < 0.01$ ), and the least in Kathmandu valley ( $\beta = -1.69e-08$ ,  $p < 0.01$ ). In the meantime, the effect of competition on the founding pattern seems to be weaker at the national level ( $\beta = -2.86e-09$ ,  $p < 0.01$ ).

Table 5.9 Overall Comparative Negative Binomial Regression Results

VARIABLES		NATIONAL Annual NGO Entry	KTM Annual NGO Entry	KTM100 Annual NGO Entry	KTM100+ Annual NGO Entry
Lag	NGO				
Density		6.50e-05 (4.27e-05)	0.000219** (0.000100)	0.000382 (0.000468)	0.000107 (7.95e-05)
Lag	NGO				
DensitySq		-2.86e-09*** (9.14e-10)	-1.69e-08*** (4.86e-09)	-4.14e-07*** (1.33e-07)	-9.65e-09*** (3.59e-09)
NGO Law		2.261*** (0.389)	1.770*** (0.337)	2.364*** (0.329)	2.764*** (0.437)
Conflict		0.912*** (0.331)	0.917*** (0.285)	0.712*** (0.272)	0.762** (0.351)
Absolute Monarchy		-0.540* (0.307)	-0.768*** (0.261)	-0.621** (0.254)	-0.280 (0.355)
ODA	Per				
Capita		0.109*** (0.0278)	0.114*** (0.0238)	0.0960*** (0.0256)	0.0810** (0.0315)
GDP	Per				
Capita		0.00318 (0.00341)	0.00102 (0.00285)	0.00299 (0.00229)	0.00407 (0.00373)
Constant		1.476** (0.703)	1.181** (0.599)	-0.548 (0.615)	0.827 (0.799)
Inalpha		-1.250*** (0.257)	-1.559*** (0.260)	-2.065*** (0.350)	-1.109*** (0.293)
Observations		40	40	40	40

VARIABLES	NATIONAL Annual NGO Entry	KTM Annual NGO Entry	KTM100 Annual NGO Entry	KTM100+ Annual NGO Entry
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Standard errors in parentheses. The shades of color represent the strength of the effect; a darker color signifies a stronger effect.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

This study was also interested in obtaining information beyond the ecological phenomena and wanted to explore the impact of the institutional environment on the founding patterns of NGOs. Following earlier works, it used three variables to measure the distinct institutional time frame of Nepalese history. It probed the effect of NGO-friendly law, the presence of absolute monarchy, and the time frame during which Nepal went through an armed conflict and its impact on the growth of the NGO sector in Nepal. These distinct variables helped to measure the distinct institutional environment present in Nepal.

The presence of NGO law seems to have a much greater impact on the entry rate of NGOs in the non-primate cities compared to Kathmandu valley. Districts beyond 100 KMs away from Kathmandu valley saw the highest positive impact on the founding rate of NGOs ( $\beta = 2.764$ ,  $p < 0.01$ ), followed by districts that were within the radius of 100 KMs ( $\beta = 2.364$ ,  $p < 0.01$ ), and in Kathmandu valley ( $\beta = 1.70$ ,  $p < 0.01$ ). Throughout the investigated models, the coefficients of NGO law appeared highest, signifying the favorable institutional environment created by the wave of democracy and subsequent legal reforms that opened and eased the registration of organizations and contributed to a form of associational revolution in Nepal. At the national level, the presence of NGO law was the significant and strongest predictor of annual NGO entry ( $\beta = 2.261$ ,  $p < 0.01$ ).

This dissertation also investigated the effect of the presence of absolute monarchy in the country on NGO founding behavior. Except for the districts beyond 100 KMs of the valley, the presence of absolute monarchy was not a favorable condition for the entry of new NGOs. This study found a statistically significant negative effect of the presence of the monarchy on the founding pattern within Kathmandu valley ( $\beta = -0.768$ ,  $p < 0.01$ ) and its periphery ( $\beta = -0.621$ ,  $p < 0.05$ ). However, it did not have any effect on annual NGO registration.

Following the footsteps of studies on the non-profit organization and the non-profit founding literature, this study explored if the needs of the community and the availability of resources for NGOs affected the pattern of NGO birth. The data measuring these variables were not available at the sub-national level; hence the measurement was limited to the national level. As indicated in model 3 of Table 5.8, there is not statistically significant evidence suggesting that the measure of the needs of the communities impact the NGO birth rate; however, some evidence was found that suggests that the availability of foreign aid in the country contributed positively to the entry rate of new NGOs. Kathmandu valley witnessed the strongest positive effect on the founding patterns ( $\beta = 0.114$ ,  $p < 0.01$ ), followed by the peripheral districts of Kathmandu ( $\beta = 0.960$ ,  $p < 0.01$ ) and the districts 100 KMs beyond the capital city ( $\beta = 0.081$ ,  $p < 0.05$ ).

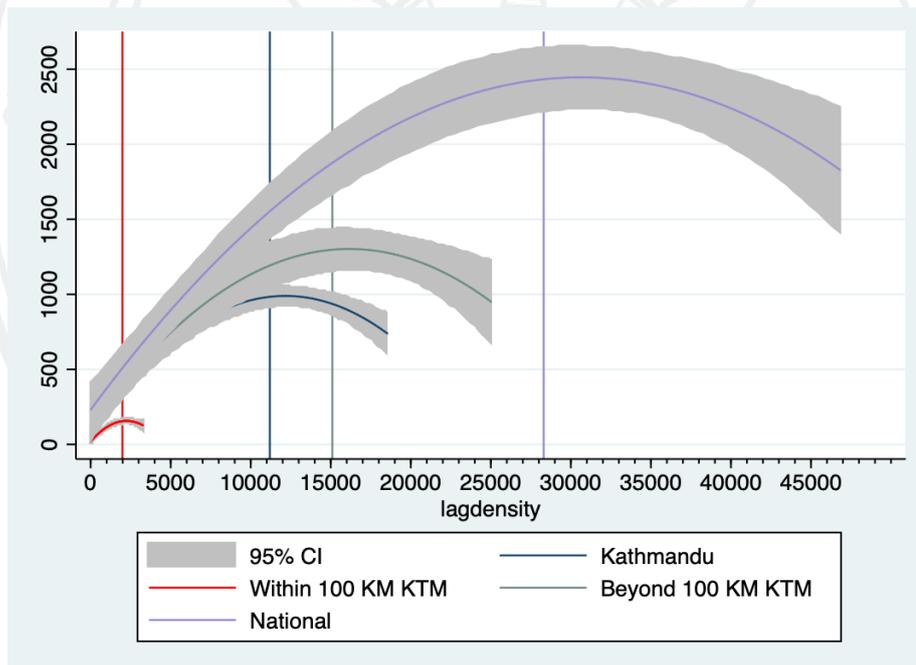


Figure 5-10 Inverted U Hypothesis Testing Across All Analytical Clusters

Table 5.10 Summary of hypothesis test results

<b>Hypothesis</b>	<b>Supported/Rejected/No Evidence</b>
H1a: The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs.	Supported
H1b: The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within primate cities.	Supported
H1c: The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs within non-primate cities.	Supported
H2a: Density dependent legitimation exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate ones.	Supported
H2b: Density-dependent competition exhibits a weaker negative effect on NGO founding rates within primate cities than in non-primate cities.	Supported
H3: The presence of NGO-friendly law exhibits a positive effect on NGO founding rates.	Supported
H3a: The presence of NGO-friendly law exhibits a stronger positive effect on NGO founding rates within primate cities than in non-primate cities.	Rejected
H4: The presence of absolute monarchy exhibits a negative effect on NGO founding rates.	Supported
H4a: The presence of absolute monarchy exhibits a stronger negative effect on NGO founding rates within primate cities than in non-primate cities.	Supported
H5: The presence of armed conflict exhibits a positive effect on NGO founding rates.	Supported
H5a: The presence of armed conflict exhibits a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.	Rejected
H6: The needs of the community exhibit a positive effect on the NGO founding rate	No Evidence
H6a: The needs of the community exhibit a stronger positive effect on NGO founding rates within non-primate cities than in primate cities.	No Evidence
H7: The availability of resources for NGOs exhibits a positive effect on the NGO founding rate.	Supported
H7a: The availability of resources for NGOs exhibits a more positive effect on the NGO founding rate in primate cities than in non-primate cities.	Supported

### **5.3 Founding Patterns of Not for Profit Companies: Old Wine in a New Bottle?**

In the previous section, this study used the classical density dependence theory model to test the hypotheses using the data set between 1967 and 2018. In this section, some of the hypotheses are tested using a relatively shorter and more recent data set and the results are compared with the evolving not for profit companies in Nepal. This chapter considers the time series data between 2012 and 2018 to assess the key hypotheses of this dissertation (H1a, H6, and H7). The time frame of the past six years was used partly in order to understand the pattern of evolution of NGOs and not for profit companies in a more recent time.

This section takes two important theories from the nonprofit research tradition and combines them with density dependence theory. First, community needs theory is considered, which views NGOs as benevolent agents in the society and argues that NGOs go in the areas where the needs of the community are higher (Bielefeld & Murdoch, 2004; Brass, 2012; Grønbjerg & Paarlberg, 2001; Kim, 2015; Yan et al., 2014). The second theory, pragmatic actor theory, argues that NGOs are just like any other organizations and hence they tend to be in areas where they can easily access resources that facilitate their survival and growth (Brass, 2012; Fruttero & Gauri, 2005; Pfeffer & Salancik, 2003). Finally, these two theories are combined with density dependence theory.

In the analysis in the subsequent section, this study uses the yearly VIIRS day night band nighttime lights data (without stray light correction) (Elvidge et al., 2017; Goodman et al., 2019).

#### **5.3.1 Descriptive Statistics**

Not for profit companies are a relatively newer phenomenon in Nepal. The company registration act of 2006 has paved a path for any institutions to be incorporated as a company. These organizations are “incorporated to develop and promote any profession or occupation or to protect the collective rights and interests of the persons engaged in any specific profession or occupation or to carry on any enterprise for the

attainment of any scientific, academic, social, benevolent or public utility or welfare objective on the condition of not distributing dividends” (IBP, 2015).

Table 5.11 and **Error! Reference source not found.** present the descriptive statistics of all the variables included for analysis in this chapter. The average NGO entry rate was higher than the not for profit company entry rate. Kathmandu district had a disproportionately high value across all of the measured variables.

Table 5.11 Descriptive Statistics

VARIABLES	N	mean	sd	min	max
Annual NGO Entry	539	28.60	80.29	0	798
Annual Not for Profit Companies Entry	166	8.386	30.99	1	262
Nighttime Light	539	0.639	0.514	0.192	4.609
Lag NGO Density	462	547.9	1,513	0	15,046
Lag NGO Density Sq.	462	2.585e+06	2.053e+07	0	2.264e+08
Lag Not for Profit Company (NFC) Density	402	13.24	79.70	0	1,062
Lag Not for Profit Company (NFC) Density Sq.	402	6,512	67,618	0	1.128e+06
Foreign Aid (in million USD)	382	9.991	9.281	0.883	64.33

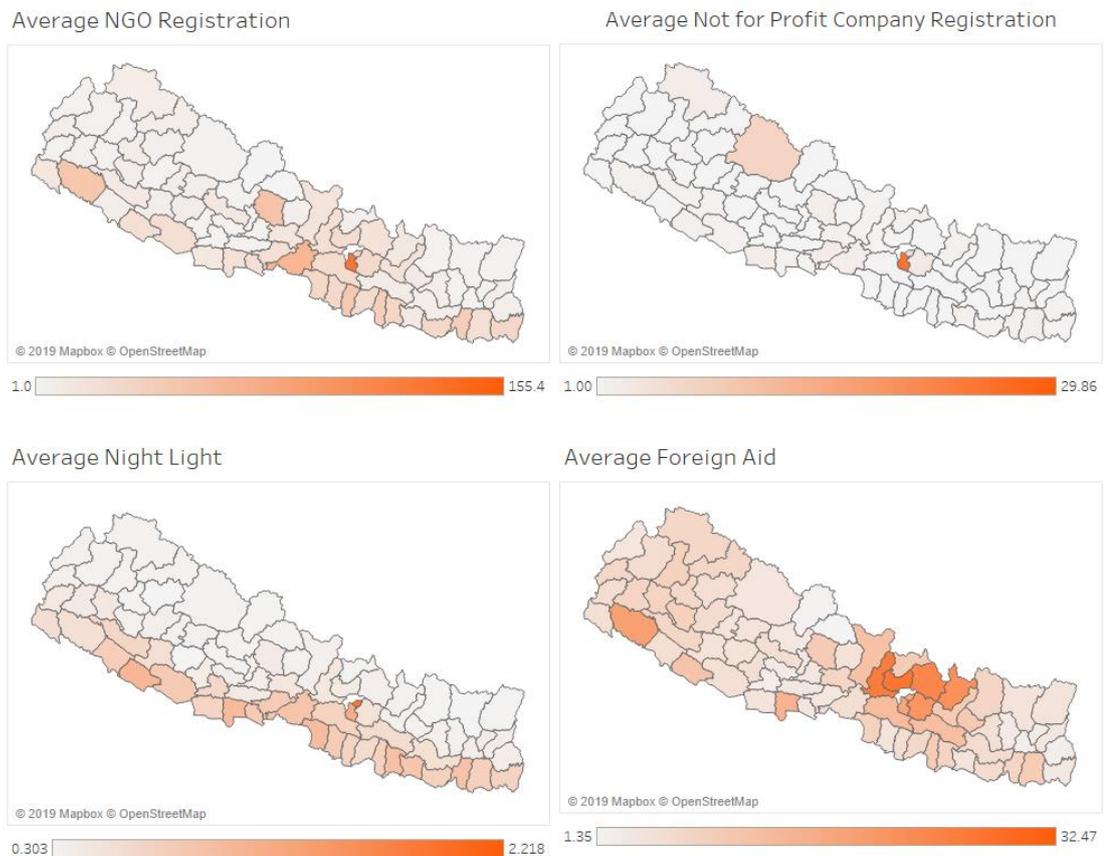


Figure 5-11 Choropleth Maps of the six years average of NGO entry rate, Not for Profit Company entry rate, nighttime light, and foreign aid between 2012-2018

**In Error! Reference source not found.,** Kathmandu district was excluded in order to improve the visibility of the maps. Not for profit companies are a relatively newer phenomenon and only sixty-five out of seventy-seven districts have seen the entry of such organizations, while the entry of NGOs is universal in Nepali districts. The concentration pattern of these companies is similar to that of NGOs in the capital city. However, NGO concentration seems to take place in the periphery of Kathmandu valley and some southern and districts in the east.

The coverage of VIIRS nighttime light was between 2012 and 2018 for all of the seventy-seven districts of Nepal. The mean nighttime illumination of the observed districts was a 0.64 radiance with the lowest of 0.19 and the highest of 4.61. The spatial exploration using the maps demonstrates that the selected districts from the southern

belt of the country have a relatively higher mean nighttime light emission compared to the hilly and mountainous regions of the north.

Similarly, total foreign aid was calculated by summing the total actual disbursements made by the INGOs as well as the multilateral and bilateral donors in a calendar year per district. The visual exploration using maps demonstrates that a large chunk of the foreign aid is concentrated in the peripheral districts of Nepal. However, foreign aid seems to have been distributed more or less to all the districts of Nepal. The average total foreign aid was 9.99 million USD per district with a low of 0.88 million USD to as high as 64.33 million USD.

### **5.3.2 Effect of the needs of the communities, resources availability for organizations, and density of existing organizations on the founding patterns of not for profit companies**

Table 5.13 reports the coefficients of the negative binomial regression results. The table reports five different models indicated by number in the parentheses. Model one tested the effect of nighttime light only on the dependent variable, i.e. the annual entry rate of not for profit companies between 2012 and 2018. Nighttime light alone does not have any statistically significant relationship with the entry rate of NFCs. In the same way the effect of the availability of foreign aid as a proxy of resource availability for these companies was tested in model two. The results indicate that there is a statistically significant positive relationship between foreign aid and the entry rate of NFCs.

In model three, classical density dependence theory was tested to study the effect of the density of NFCs on the entry rate of new organizations. As stipulated in the hypothesis H1a, density affects the entry rate of new organizations positively, indicating that more NFCs enter the areas that have seen the existence of similar organizations.

In model four, humanitarian theory and pragmatic theory were combined in order to understand the founding pattern of not for profit companies. The results indicate that there is positive and statistically significant relationship between nighttime light and the entry of new NFCs at the subnational level and no significant relationship

with foreign aid. Hence, it is safe to deduce that NFCs emerge in areas that are relatively well to do compared to areas that may be in need.

Model five combines the three major theories under investigation and finds strong support for density dependence theory. A statistically significant positive relationship was found between nighttime light and the new entrants. Similar evidence was also found regarding the density of NFCs. This evidence suggests that nonprofits are likely to be in areas where the density of similar organizations is highly similar, and they are also likely to be in the areas that are relatively well to do. The implications of these findings are discussed later in the next chapter.

Table 5.12 Summary of the Findings and Test of Hypothesis based on Model Five.

<b>Hypothesis</b>	<b>Supported/Rejected/No Evidence</b>
H1a: The density of NFCs has an inverted U-shaped relationship with the founding rates of new NFCs.	Supported
H6: The needs of the community exhibit a positive effect on the NFC founding rate	Rejected
H7: The availability of resources for NFCs exhibits a positive effect on the NFC founding rate.	No Evidence

Table 5.13 Negative Binomial Regression Results for Not for Profit Companies

VARIABLES	(1)	(2)	(3)	(4)	(5)
Nighttime Light	0.155 (0.100)			0.362** (0.152)	0.333** (0.147)
Foreign Aid		1.20e-08* (6.42e-09)		-1.63e-10 (7.95e-09)	4.51e-10 (7.27e-09)
Density of NPCs			0.0110*** (0.00115)		0.00785*** (0.00181)
Density of NPCs Sq.			-7.77e-06*** (8.62e-07)		-6.13e-06*** (1.14e-06)
Constant	1.025*** (0.239)	1.281*** (0.264)	1.157*** (0.234)	1.063*** (0.273)	1.002*** (0.271)
Observations	166	142	152	142	142
Number of Districts	65	64	64	64	64

Standard errors in parentheses. The shades of color represents the strength of the effect; a darker color signifies a stronger effect.  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### **5.3.3 Effect of the needs of the communities, resources availability for organizations, and density of existing organizations on the founding patterns of NGOs between 2012 and 2018**

In this section the results for the time series negative binomial regression results are presented between 2012 and 2018. In line with the previous section, a series of models was tested in order to test the different underlying relationships among the observed variables. In model one, a significant positive relationship between the nighttime light and the entry rate of NGOs was found, and this result is consistent across all of the studied models. However, the strength of the statistical significance declines in model five.

The effect of available foreign aid across models two, four, and five was also tested and statistical significance in the relationship between aid and new NGOs was found. These results are consistent across all of the studied models. In model three, the effect of density on the founding patterns of NGOs was tested, and a statistically significant positive relationship between density and a significant negative effect of the squared term on the founding pattern of new NGOs was found. This relationship confirms the validity of density dependence theory once again in the context of Nepali NGOs.

In model five, this dissertation combines all three analytical frames. In doing so, a statistically significant relationship between the nighttime light and density on the founding behavior of NGOs was found. Hence, it is safe to conclude that between 2012 and 2018, NGOs have emerged in areas that are relatively affluent.

If we compare the coefficients of the regression analysis, not for profit companies were seen to have a higher coefficient than NGOs, indicating that NFCs are more sensitive to the wealth of the communities. The more the affluent communities are, the more likely it is that NFCs are going to emerge there compared to NGOs. Similarly, the effect of legitimation as one more organization emerges is also higher in NFCs compared to NGOs, and this may be partly because the NFC sector is emerging

and is only thirteen years old unlike NGOs, which is about a sixty-seven year-old industry. Furthermore, the effect of competition is also higher in the NFCs compared to NGOs.



Table 5.14 Negative Binomial Regression Results for Non-Governmental Organizations

VARIABLES	(1)	(2)	(3)	(4)	(5)
Nighttime Light	0.172*** (0.0532)			0.302*** (0.0691)	0.124* (0.0690)
Foreign Aid		2.21e-09 (3.11e-09)		-2.71e-09 (3.23e-09)	-3.84e-09 (3.03e-09)
Density of NGOs			0.000685*** (8.15e-05)		0.000692*** (9.35e-05)
Density of NGOs Sq.			-2.57e-08*** (3.22e-09)		-2.69e-08*** (3.56e-09)
Constant	2.628*** (0.140)	2.620*** (0.165)	2.233*** (0.147)	2.495*** (0.173)	2.185*** (0.171)
Observations	539	382	462	382	382
Number of Districts	77	77	77	77	77

Standard errors in parentheses. The shades of color represents the strength of the effect; a darker color signifies a stronger effect.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.15 Summary of the Findings and Test of Hypothesis based on Model Five.

<b>Hypothesis</b>	<b>Supported/Rejected/No Evidence</b>
H1a: The density of NGOs has an inverted U-shaped relationship with the founding rates of new NGOs.	Support
H6: The needs of the community exhibit a positive effect on the NGO founding rate	Reject
H7: The availability of resources for NGOs exhibits a positive effect on the NGO founding rate.	No Evidence

#### **5.4 Chapter Summary**

This chapter presented the results of the analysis and tested the hypotheses. In general, the analysis found a support to density dependence related hypotheses. Table 5-10 presents a list of all the supported and rejected hypotheses and where no evidence was found. This study also found general support for the variables related to institutionalism. However, the study found no evidence to suggest that NGOs emerge in areas where they are needed. In the meantime, the availability of foreign aid at the national level seems to have contributed to the growth of the NGO sector at the national level.

This chapter also analyzed three key hypotheses of the dissertation using a relatively shorter data set. It used a newer data set of the last six years to assess the validity of the findings presented in chapter five. It also compared the results of NGO founding behavior with not for profit companies' behavior. In the later part of the chapter, the study used nighttime light data to assess the needs of the communities and total foreign aid disbursement by INGOs, and multilateral and bilateral agencies in Nepal, to estimate the availability of resources for NGOs.

The chapter also performed a series of descriptive and inferential analyses and revealed that there is general support for density dependence theory. However, it rejected the proposition of traditional community needs theory, which argues NGOs and nonprofits go to areas where the needs of the community are higher; instead, the analysis revealed that both NGOs and NFCs emerge in relatively affluent communities rather than communities with needs. Furthermore, the analysis of this chapter found no

evidence to support the idea that NGOs go in areas where they can obtain financial resources.



## CHAPTER 6

### DISCUSSION AND CONCLUSION

The first section of this chapter discusses the findings of the study with reference to relevant literature. The second section of the chapter discusses the implications of the study. The final section concludes the study. This dissertation set out with an objective of explaining why NGOs agglomerate in primate cities. In explaining this phenomenon, it took density dependence theory and institutional theory as potential explanations. A series of analyses tested the validity of the hypothesized relationship between the different variables and the phenomenon of NGO birth.

There has been a long tradition of study of organizational founding patterns at the national level (Box, 2017; Cruz et al., 2018; Hannan, 1997; Hannan & Freeman, 1977, 1988; Ranger-Moore et al., 1991; Sorenson & Audia, 2000; Stuart & Sorenson, 2003). For instance, Box (2017) analyzed the long-term business entry rate in the Swedish brewing industry. That study was modelled at the national level. Similarly, van den Oord and van Witteloostuijn (2017) studied the emergence of biotechnology patents in the United States where the study adopted an analytical framework at the national level.

However, some recent studies have begun to explore founding patterns beyond the national level and to explain the reasons behind the variation in the founding patterns across geographies. For instance, Stuart and Sorenson (2003) studied the founding patterns of all US biotechnology firms. The present study contributes to the growing body of evidence that observes the founding patterns beyond the national level. In a similar vein, Cattani et al. (2003) studied the founding patterns of the Dutch accounting industry and specified the model across a geographic gradient—from proximate to neighboring, to more distant contexts. Following the footsteps of empirical studies on the agglomeration of similar firms, this dissertation engaged in discourse on density dependence theory and looked at the impact of organization density and the

associated phenomena of legitimation and competition on the founding patterns of NGOs in Nepal. It analyzed the effects of legitimacy and competition on the founding rates in three analytical clusters, and looked to see if the effect of legitimacy and competition would vary as we move from the geographical core to the periphery of the primate city of Nepal. It examined the effects within the primate cities, within the peripheral area of the capital city, and finally beyond the peripheral districts.

In total, the base model of density dependent theory was seen to hold true in all of the studied geographical areas. However, the effect of density changes as we introduce other control variables in the model. In the following section of the chapter, the findings of studies with other studies and its implication in Nepali context are discussed.

### **6.1 Effects of Density on the Founding Pattern in Capital and Large Cities**

This dissertation began out of curiosity after seeing a series of newspaper op-eds in the country criticizing the agglomeration of NGOs in the capital city. After a careful analysis of existing published studies on NGO placement behavior in Bangladesh (Fruttero & Gauri, 2005), Brazil (Costa, 2016), China (Ma & Liu, 2019), Kenya (Brass, 2012), and including this author's own published work on Nepal (K C, 2019), the author found that earlier studies ignored the agglomeration phenomenon in the capital cities. Furthermore, there has been renewed interest in the study of agglomeration and its implications for entrepreneurship in the field of economic geography (Baum & Sorenson, 2003; Dumais, Ellison, & Glaeser, 2002; Stuart & Sorenson, 2003; Tan & Tan, 2017; Wang et al., 2018). Scores of empirical research confirm that similar firms, particularly the manufacturing firms and similar businesses, tend to agglomerate.

The study found that the effect of density dependent legitimacy and competition is statistically significant in the primate cities. Two facts emerge distinctly as the relationship appears significant. First, the coefficients of the effect of legitimacy is strongest in primate cities compared to other geographical areas, and second, the effect of competition is weakest compared to other regions. These findings are similar to the findings of Wezel (2005), who studied the founding patterns in the motorcycle industry between 1895 and 1993 in the United Kingdom. In the study of the evolution of motorcycle industries, the study found that the density dependent legitimation

demonstrates a positive and stronger effect in the founding patterns in agglomerated populations. Furthermore, in a comprehensive study by Armington and Acs (2002) covering more than half a million firm births for 384 labor market areas in six industry sectors between 1991 and 1996 in the United States, they found a significant difference in the formation rate of organizations. They found a significant positive relationship between the existing number of organizations and the entry rate of new organizations. Similar results have been furnished in several other studies across different industries. Some of the empirically tested industries include automobiles, accounting firms (Cattani et al., 2003), the microbrewery industry (Cruz et al., 2018), computers, the motorcycle industry (Wezel, 2005), accounting, biotechnology firms (Stuart & Sorenson, 2003), fashion houses (Wenting & Frenken, 2011), and video games.

There are multiple reasons why density has a greater effect on the founding rate of organizations in an agglomerated population and in primate cities. Economic geographers term this phenomenon as agglomeration economies—the number of organizations located in a particular region increases with the number of existing firms in the area (Krugman, 1991). Several reasons have been put forth in explaining the agglomeration phenomenon. First is the “spillover” effect—it is the spillover of knowledge and expertise between geographically proximate firms.

Being closer to each other facilitates the exchange of knowledge as well as the diffusion of technical know-how of the business. In firms producing goods, this technical the know-how can be the availability of technical experts. For instance, in a study of founding patterns of biotechnology firms, Stuart and Sorenson (2003) found that the availability bio-tech experts affected the founding patterns. They also found that such experts are often produced by existing industries. Hence, locating in an area that has established organizations in a similar area makes it easier for the organization to access expertise. Similarly, being closer to areas that already have NGOs signifies that the new NGOs can access the technical expertise that people have gained working in the NGOs. Furthermore, the creation of new NGOs is also contingent on the understanding of how NGOs operate and their functions. This information often comes from experience. Even though some individuals start organizations without prior knowledge of the industry, most entrepreneurs accumulate relevant experience as an

employee and begin their own firm as a “spinoff” within the industry that they are familiar with.

Furthermore, a greater number of NGOs in a particular location is also a sign of the presence of a conducive institutional setting for the organization type. Due to the cognitive legitimation of the new organizational form, it is taken for granted because of its visibility to potential entrepreneurs. Also, because of its familiarity, there are more attempts of replicating them and the chances of successful replication attempts are higher. The primary notion is that as bounded rational actors, entrepreneurs seek to initiate new opportunities locally. Entrepreneurial activities are local because they entail the utilization of local resources such as human and physical capital, goodwill, social capital, and normative support. These resources are often not distributed evenly across the space. Particularly, the degree of sociopolitical legitimation; that is, the “process by which key stakeholders, the general public, key opinion leaders, or government officials accept a venture as appropriate and right, given existing norms and law” (Aldrich & Fiol, 1994, p. 648) of an organizational form may vary greatly.

One way of enhancing the legitimation of a new organizational form is increased cooperation and interaction with diverse individuals, groups, and organizations. Several reasons indicate that marginal increase in density can be effective in gaining legitimation within agglomerated populations than in more dispersed ones. Proximity in fact stimulates information exchange, and this exchange can take place through individual contacts as well as due to the localized nature of spillovers. In the case of NGOs, Fruttero and Gauri (2005) see that NGOs might concentrate in certain geographical areas partly because it is easier to demonstrate outcomes and results. Also, thinking from the perspective of donors supporting NGOs, it is easier for them to fund in small geographical areas and demonstrate the outcomes or results of their resources than in dispersed areas with smaller numbers of NGOs.

Furthermore, primate cities also often have the agglomeration of knowledge networks. Particularly in developing countries such as Nepal, academic institutions, donor organizations, and other conducive resources are often available in the primate cities. The first university and schools were established in Kathmandu valley where mostly people from Kathmandu valley studied. As a result, the first generation of people that were educated are from Kathmandu and naturally they will have the technical

know-how and the ability to understand and navigate the legal and bureaucratic steps in establishing an NGO. Furthermore, the pool of people with socio-political awareness that can start such organizations is also abundant in Kathmandu valley. The level of exposure with international communities and international trends is also higher in Kathmandu valley.

The agglomeration of other types of organizations is often associated with the availability of resources and the ease of doing business as well. For manufacturing firms, it is often the availability of raw materials. For NGOs, it is the availability of grants and donations. In most of the developing countries, donors and grant-making organizations often have their headquarters in the primate cities. The proximity to donors also helps NGO leaders to connect with the donors easily and the donors can see the presence of the NGOs. For instance, Kathmandu valley has the head office of almost all the 245 INGOs registered in Nepal (Social Welfare Council, 2019). The average foreign aid flow in Kathmandu valley was almost seven times higher compared to the average aid flow outside Kathmandu valley between 2010 and 2017. An average of USD 669,534 was allocated inside Kathmandu valley while it was only USD 95,687 outside Kathmandu valley (Ministry of Finance, 2012, 2016, 2017a).

The present study also found that the effect of density dependent competition was weakest in the primate cities. Among other explanations, it is often argued that entrepreneurs can estimate the likelihood of competition better in an agglomerated population than in a scattered one (Lomi, Larsen, & Freeman, 2005; Ruef, 2004). Furthermore, as the population ages in agglomerated populations, cultural homogeneity also facilitates information sharing, and builds stronger coordination among the members of the population. This eventually builds a shock-absorptive capacity, and the marginal effect of the competition reduces the competitive forces. Thus, agglomerated populations demonstrate a stronger decline of density-dependent competition over time compared to scattered ones. This dissertation confirms this line of reasoning.

While the density significantly predicted organizational founding rates in the primate cities, it was not seen to be a significant predictor of organizational founding outside these cities. The addition of one more organization outside the primate cities adversely affected the founding of new NGOs. While the density dependence theory

holds true when only the ecological model is run, density fails to explain the founding rate as predicted when institutional variables are introduced.

Similar results were found when the analysis was carried out for a relatively shorter period and across other types of organizations. Density dependence theory was supported by the analysis that was conducted in chapter six, where only density dependence theory and nonprofit theories were considered.

The effects of institutional variables are discussed in the subsequent section.

## **6.2 Effects of Institutional Variables on the Founding Pattern in Capital and Large Cities**

In addition to ecological dynamics, this dissertation was also interested in understanding the effect of the institutional environment on the founding patterns of organizations. Particularly, the study was interested in the effect of the socio-political legitimation of NGOs on the founding rates. Organizations receive socio-political legitimation when they are considered as appropriate and right for the society. Often, stakeholders do not recognize the new forms of organizations, and one way to measure socio-political legitimation is the government's view of the form of organization. If the government thinks that it is a legitimate actor, it will acknowledge such organizations through its policies and acts. Furthermore, the state is also the biggest source of coercive power, and organizations often gain their legitimacy by adhering to the rules and regulations. Studies have shown that the presence of laws affecting organizations often impacts the vitality of the organizations. Hence, this dissertation also studied the effect of the law on the founding patterns.

This study found that the effect of the Social Welfare Act of 1992 was very positive in terms of the founding rates of NGOs. In fact, the number of new NGOs exploded after 1992 in Nepal. As demonstrated by the regression coefficients, the presence of law is the strongest predictor of NGO founding across the studied models.

These findings are similar to the findings of Tucker et al. (1990), who studied the founding patterns of voluntary sector organizations. Box (2017) concluded that the presence of laws that are conducive to the industry escalates the founding rates and non-conducive laws suppress the founding rates. In a study of the founding rate of breweries,

they found that the number of breweries began to decline as the brewing industry began to be regulated.

While the general hypothesis of the positive effect of NGO law on NGO founding was met and was consistent with the literature, this study found differences in this effect across the geographic gradient. Unlike the hypothesized relationship, the effect of law was strongest in non-primate cities. The study expected the effect to be highest in the primate cities, assuming that the information about the new law would pass quickly due to established knowledge networks and better government institutional presence. Further studies are required to understand why the non-primate regions of the country saw greater effect of laws on the founding.

In addition to studying the effect of the presence of the Social Welfare Act, 1992, the study was also interested in other historical time frames and major institutional changes that happened in the country that could influence the growth of the NGO sector. As DiMaggio and Powell (1983) indicated, the nation state is a powerful source of resources and of coercive power in modern societies. The pressure that emerges through coercion by acts of the state remains as one of the forces that either suppresses or encourages the growth of industries. The type of political system that a country has can hugely influence what kind of organization can flourish.

While the Social Welfare Act of 1992 and the Eighth Plan recognized the important role that NGOs played in the development of Nepal, there were periods in Nepalese history where these organizations were seen as a threat to the hegemonic power that the state wanted to maintain (Bhatta, 2012). For a long time, Nepal was under an absolute monarchical system, which curtailed associational rights, and the presence of absolute monarchy is often associated with limited civic space in Nepal (Bhatta, 2012). For instance, at the beginning of this century, the king turned out to be totalitarian and limited the freedom of expression and right to assembly for one year. The study found that the effect of such a regime is not a conducive environment in which NGOs can grow. In fact, the country saw a negative effect on the founding rate of new NGOs. As hypothesized, the effect was strongest in the capital city, given the tighter grip that the state had through its well-developed institutions. However, the effect withered as we move away from the focal cities. It can be clearly seen that citizen-

led organizations flourish more in open and non-rigid systems than in political systems that maintain a tight grip on the liberties of people.

This dissertation also studied the effect of the presence of armed conflict in Nepal as a distinct historical era that could have affected the birth of NGOs in Nepal. The findings suggest that the presence of armed conflict was a conducive environment for the birth of NGOs. During the years Nepal was witnessing the armed conflict, the effect was strongest in the primate cities. Unlike the hypothesized relationship, this study found that the effect was weaker outside the primate cities. One reason why the effect was weaker outside Kathmandu valley is probably that NGOs need security and protection to carry out their activities. The insurgents would see NGOs as substitute actors of the government that receive resources from the government and fill the void created by the absence of the state in districts beyond the major cities. Furthermore, during the armed conflict, NGOs were often seen as the actors serving “foreign interests.” Given the fact that many NGOs received foreign support, NGOs could have been perceived as one of the “enemies” during the insurgency. The fact that NGOs receive foreign assistance has been a matter of mundane criticism in Nepali public rhetoric. For instance in a recently published book, Sangroula (2019) suggests that NGOs serve foreign interests and do not recognize the important role they have played in strengthening democracy in Nepal and in providing important services to citizens of Nepal in far flung areas of the country. It is this kind of public rhetoric that might have contributed to the erosion of legitimacy of NGOs during the conflict. However, further studies are needed to explain the findings.

### **6.3 Effects of Needs of Communities and Resource Availability for NGOs on the Founding Pattern in Capital and Non-Capital Cities.**

This study also incorporated a more rational actor notion concerning whether NGOs go to areas that need their services or not. On one side, there are academics that have found that NGOs are humanitarian actors and explain that nonprofits and NGOs will be in areas where the needs of the community are higher. Unlike their for-profit counterparts, nonprofits work towards making the life of the people in the community easier. This school of scholars views NGOs as benevolent agents and argues that they

will be in the areas with greater demand for their services. The areas where their demands are higher are normally the areas that are deprived and far-flung (Bielefeld & Murdoch, 2004; Brass, 2012; Grønbjerg & Paarlberg, 2001; Kim, 2015; Yan et al., 2014).

However, this study found no evidence that the needs of the communities measured by GDP per capita predicted the founding rate of new NGOs. These findings were in line with the findings of studies that have found no evidence of NGOs being in areas of need. In a study of nonprofit location in Brazil, Costa (2016) found little evidence that NGOs target inequality or unemployment. Similarly, Fruttero and Gauri (2005) also see no evidence that NGOs focus on poverty.

According to the analysis presented in chapter six where nighttime light was used to measure the needs of the communities, the result was opposite of what was hypothesized. There was no evidence that NGOs and not for profit companies emerged in areas where there the needs of the community are higher. The analysis revealed that NGOs and NFCs are more in areas where the nighttime light was higher. These findings coincide with the study of voluntary agencies of England, where Clifford (2012) found the higher prevalence of voluntary organizations in less-deprived areas compared to more deprived ones, suggesting that not all voluntary agencies serve the neediest. Similarly, in a recent study of American nonprofits, Bae and Sohn (2017a) found a significant negative relationship of the density of nonprofits and the proportion of children below the poverty line, indicating that nonprofits and NGOs do not necessarily serve in the areas of need.

In addition to measuring the needs of the communities, this study also looked at the resource needs of organizations and tested if they affected the founding patterns. The classic “resource dependency perspective” from management theory explains that organizations are not self-contained and the key to organizational survival is the ability of the organization to acquire and maintain resources (Pfeffer & Salancik, 2003). Hence, NGOs tend to be in the areas where they can meet their resource needs, i.e., human resource needs, and the need to procure volunteers or to meet their financial needs (Brass, 2012; Kim, 2017; Peck, 2008; Yan et al., 2014). The survival instinct of the organization drives them to be in the areas where they can access the means and resources. These institutions are driven by their pursuit of serving the needs of the

beneficiaries, which means that in order to complete their activities they need to be in the areas where the pool of their beneficiaries or clients is high.

This study used the availability of financial resources for NGOs—measured using ODA per capita—and found that it significantly predicted the founding patterns. The findings help us to deduce that like any other organizations, NGOs are also drawn in by the availability of the resource pool that is vital for the survival. The effect on the founding rate however varies across the geographical gradient. It is strongest in the primate cities and the effect gets weaker as we move further away from the primate cities.

While the findings were significant at the national level, a subnational analysis of a relatively shorter time frame did not demonstrate any statistically significant relationship between the available resources for NGOs and the evolution of the NGO sector.

#### **6.4 Policy Implications of the Study**

This dissertation has multiple implications. First and foremost, density dependence theory can be easily applied in conjunction with institutional theory and available nonprofit explanations in explaining the founding patterns of NGOs. Second, theoretically, disaggregating organization population across geographical gradient helps us to understand the local nature of the effect of legitimacy and competition on the vitality of organizations.

Second, since the eighth periodic plan of 1990-1995, the government of Nepal has attempted to reduce the agglomeration of NGOs in the capital and major cities. However, until this date, one third of all the registered NGOs were in Kathmandu valley. The findings of the dissertation help us to understand what factors affect the birth of NGOs in primate cities, and the findings of the study can help the government of Nepal devise better strategies to encourage NGOs to go beyond Kathmandu valley. Particularly, the government of Nepal should focus on creating better institutional environments for NGOs in the far-flung areas. Coordinating with other donors and local agencies to provide financial and non-financial resources that are needed for organizational survival and growth in remote parts of the country.

Since the country is now a federal nation, more responsibilities of coordinating with NGOs and creating a conducive environment in which NGOs can work should be decentralized to the local and provincial governments. All NGOs for instance were forced to come to Kathmandu to get project approvals. Given this cumbersome process, NGOs would rather maintain their office in Kathmandu valley itself in order to avoid travelling and spending their resources. Hence, decentralization of the authority to local governments is imperative for reducing agglomeration in the capital city.

### **6.5 Limitations of the Study and Recommendation for Future Studies**

This study provides a preliminary historical quantitative analysis of the founding pattern of NGO founding in Nepal. It studies the ecological and institutional factors and their effects on the founding patterns. However, it does not look at the role of each entrepreneur, or in the case of NGOs, the role of the NGO founders in the founding patterns. Furthermore, this dissertation relies extensively on macro theories and does not take a micro perspective of NGO founding. It also largely ignores the micro factors that might affect the when and where that NGOs are founded. The study also found that the effect of NGO law was higher in non-primate cities than in the primate ones. However, it failed to explain why this happens. Further studies are required to establish and explain these phenomena.

While this dissertation shows the varying effects of ecological and institutional factors on the founding patterns, it is not able to explain in depth why those variations occur. Future studies should use qualitative in-depth case studies to bring out the nuances of the reasons behind the varying effects.

### **6.6 Conclusion**

This study began with the fundamental question of how population level legitimacy, competition, and institutional factors affect the birth of NGOs and if there are any differences in the effect across primate and non-primate cities. In short, the answer is that legitimacy enhances the founding rates and competition suppresses the

founding rates; however, their effect varies across primate and non-primate cities. In addition, institutional factors are better predictors of the organizational founding rate than the density of the NGOs.

While population ecology theory helps us understand the ecological dimension of organizational vitality, in practically explaining the phenomena of organization founding in Nepal, institutional factors seemed to be stronger. For instance, no matter what geographical gradient we observe, the effect of the presence of NGO law was the strongest predictor among all other observed variables. Furthermore, another institutional variable, the presence of armed conflict, was the second strongest predictor in explaining the differences in the founding patterns of NGOs in Nepal.

Ecological models alone are not sufficient to capture the nuances of distinct institutional environment organization flourish. This study concludes that the differences in the founding patterns of Nepali NGOs are partly because of the disproportionate development of institutional setups across the country. Be it the implementation of NGO law, the approval process for NGO funding, the availability of better educational opportunities, or the availability of resources for NGOs, the distribution is not identical.

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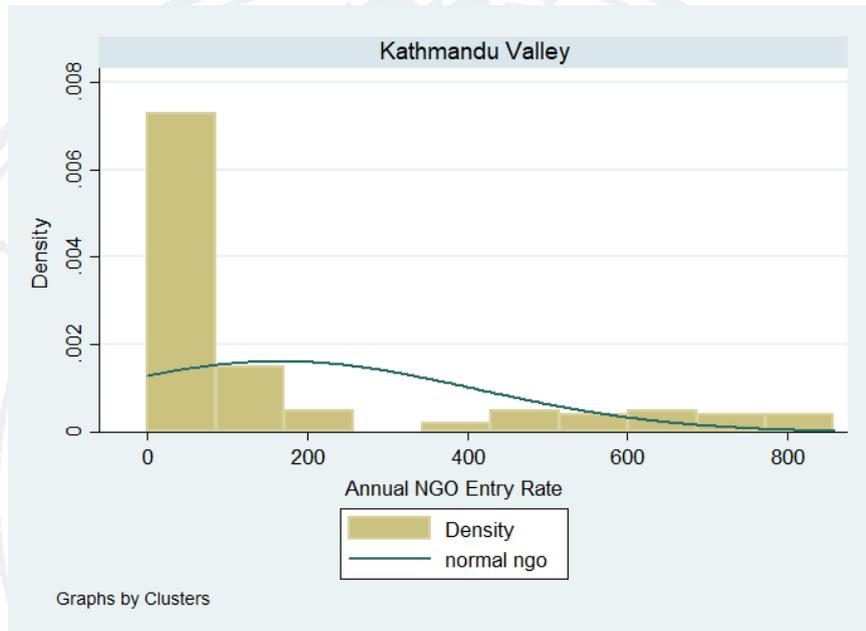
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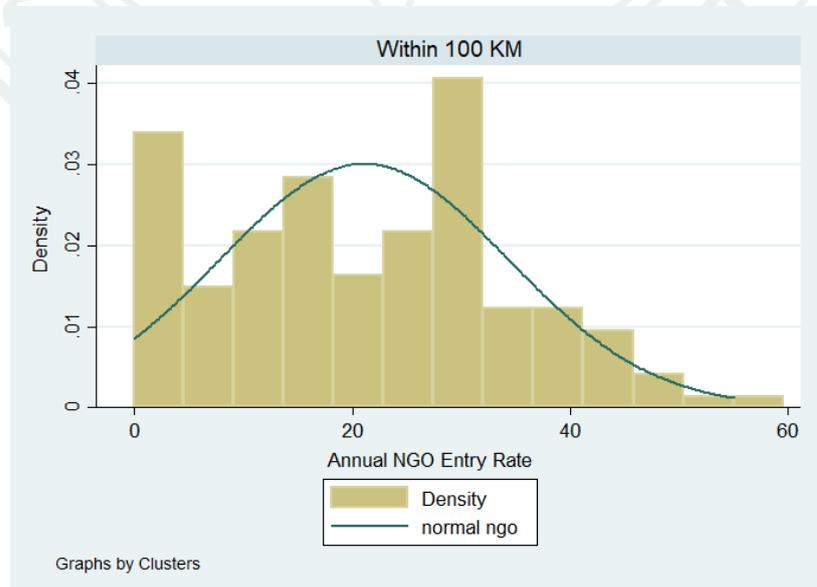
# APPENDIX

## Histogram of Dependent Variables

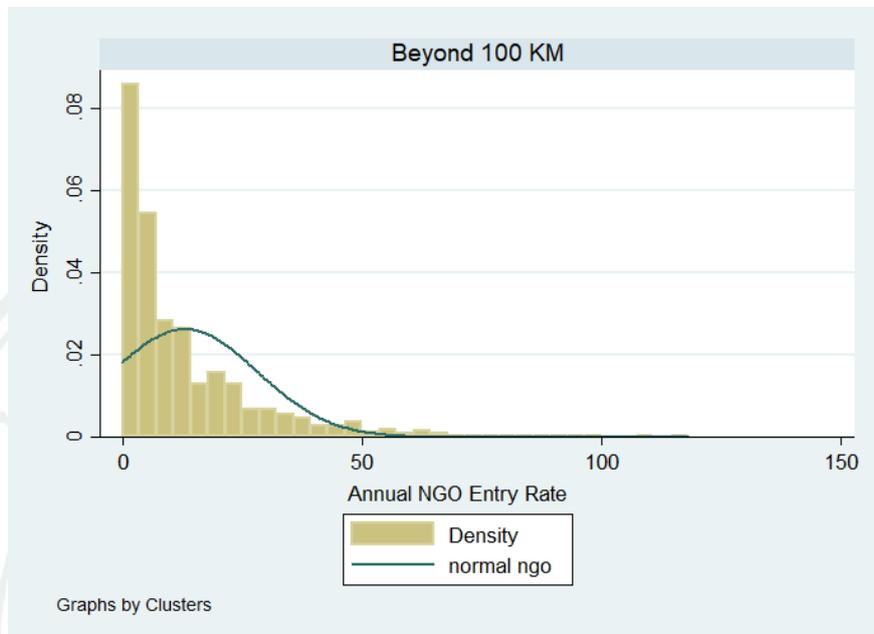
### 1. Distribution of NGO Entry in Kathmandu Valley between 1967-2018



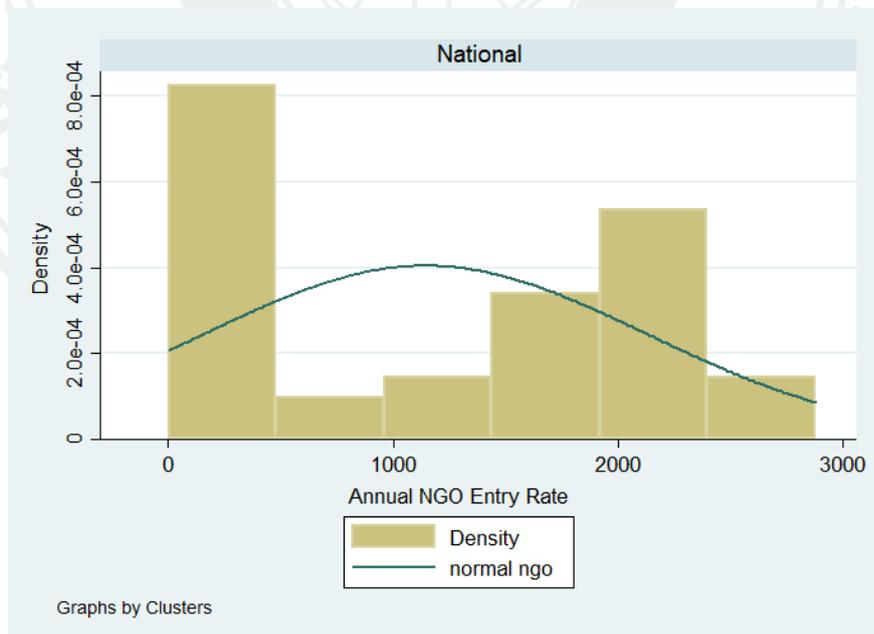
### 2. Distribution of NGO Entry within 100 KMs of Kathmandu Valley between 1967-2018



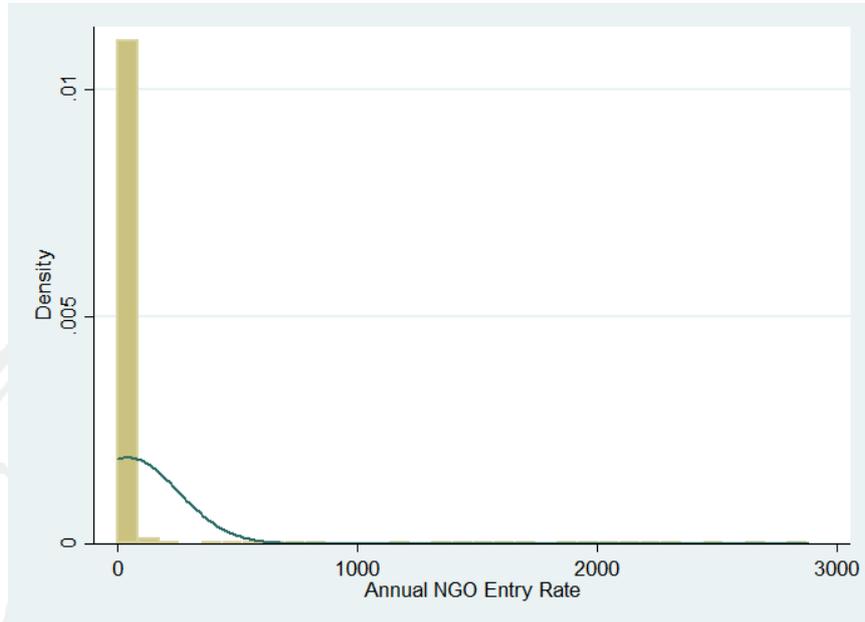
3. Distribution of NGO Entry beyond 100 KMs of Kathmandu Valley between 1967-2018



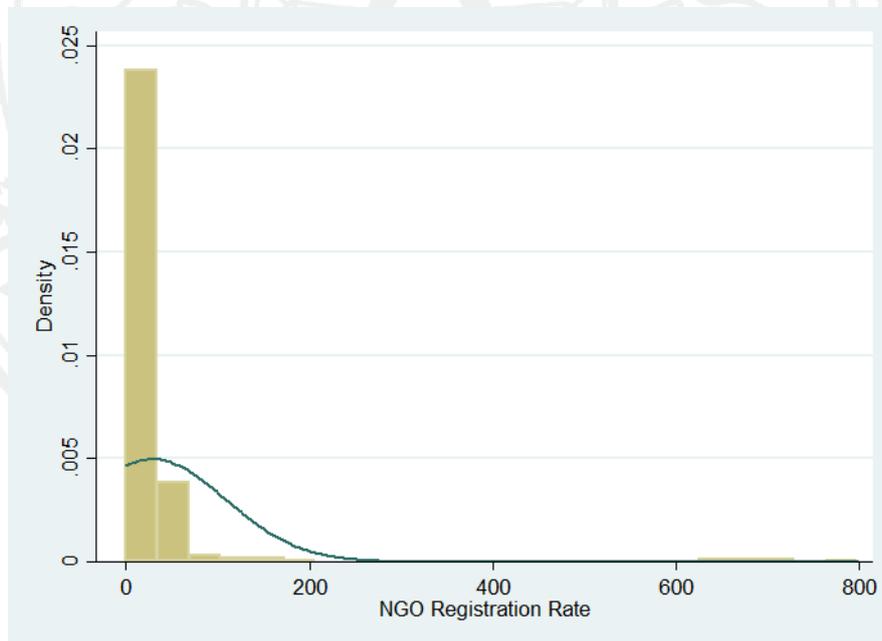
4. Distribution of NGO Entry aggregated at the national level between 1967-2018



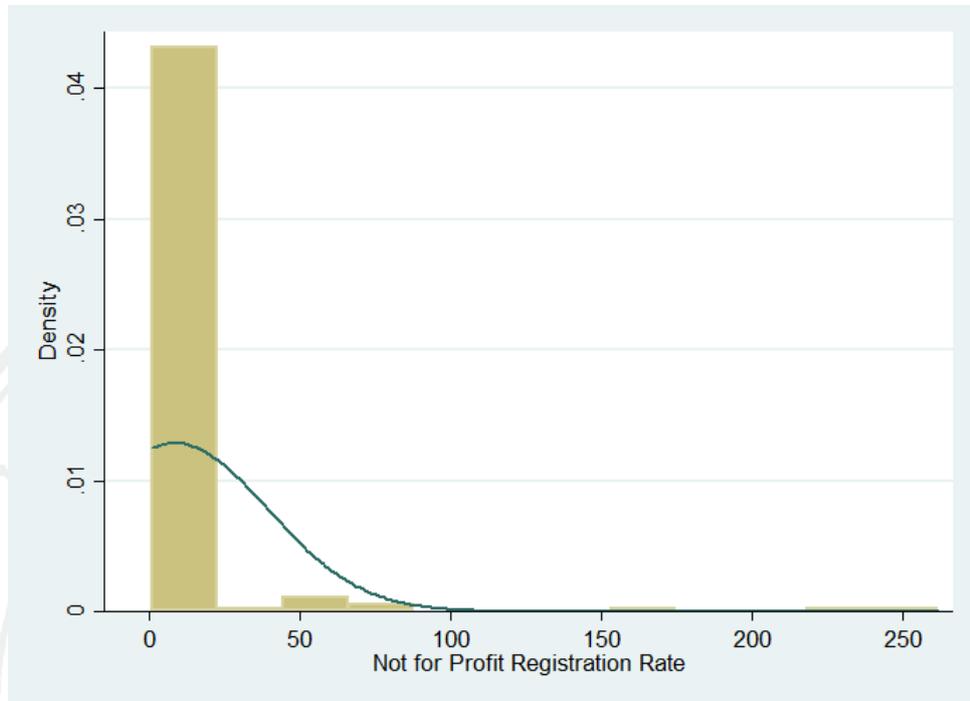
5. Distribution of NGO Entry in all districts between 1967-2018



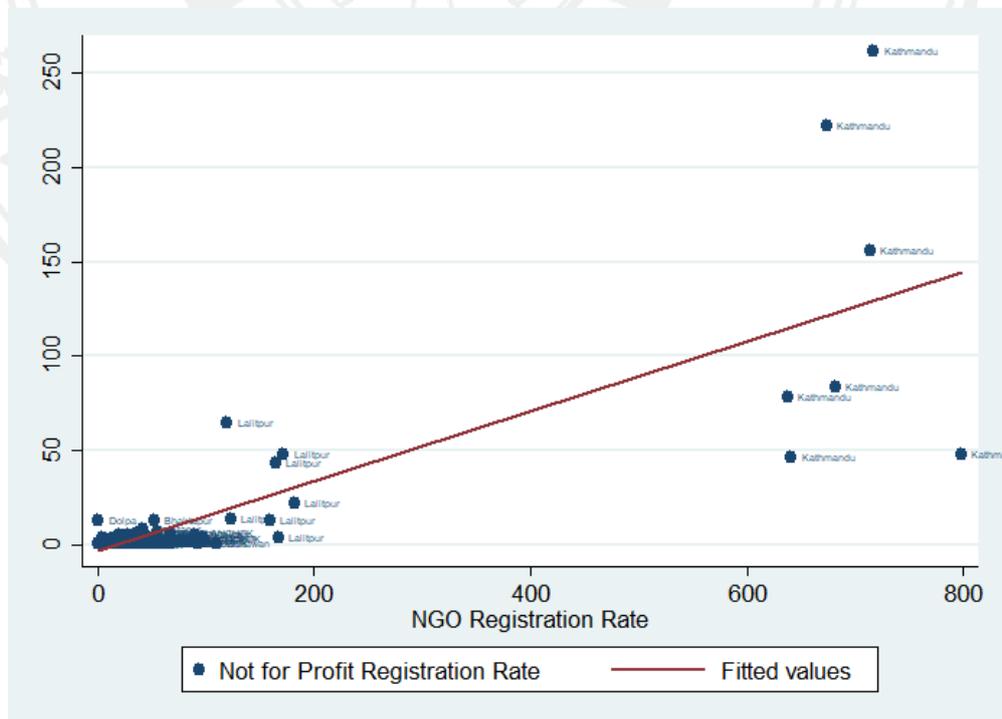
6. Distribution of NGO Entry in all districts between 2012-2018



7. Distribution of Not for Profit Companies in all districts 2012-2018



8. Scatterplot of NGO and Not For Profit Company entry rate, 2012-2018







## BIOGRAPHY

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