



Table of Contents

Foreword.....	iii
Table of Contents	iii
CHAPTER I INTRODUCTION	1
1.1 Background	1
1.3 Research Question:	7
1.4 Research Objective:	7
1.5 Research Scope	7
1.6 Paper Structure.....	8
CHAPTER II LITERATURE REVIEW	9
2.1 Theoretical Framework.....	9
2.1.1 Spatial Economics.....	9
2.1.2 The Economics of Disaster	9
2.1.3 Disaster Related Sustainable Development Goals.....	10
2.1.4 Night Light as an Economic Proxy	12
2.2 Previous Studies:.....	14
CHAPTER III DATA AND METHODOLOGY.....	16
3.1 Data:	16
3.1.1 Nighttime Lights Data.....	17
3.1.2 Population Density Data	18
3.1.3 Built-up Area Data	18
3.1.4 Topography Data.....	18
3.1.5 Global Relative Deprivation Index	19
3.1.6 Earthquake Impact Data.....	19
3.2 Methodology	20
3.2.1 Data extraction and preprocessing	20
3.2.2 Model Specifications.....	21
CHAPTER IV RESULTS	28
4.1 Descriptive Statistics Summary	28
4.2 Impact on Economic Activity	29
4.2.1 Liinear Model.....	29
4.2.2 Spatial Model Selection	30
4.3 Impact on Human Settlement.....	34
4.3.1 Liinear Model.....	34



4.3.2	Spatial Model	34
4.4	Robustness Check	37
4.5	Discussion	38
CHAPTER V CONCLUSION.....		40
5.1	Conclusion	40
5.2	Suggestion.....	41
5.3	Limitation.....	41
REFERENCES		43
ATTACHMENT		49