Essays on Political Dynasties: Evidence from Empirical Investigations

By

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Declaration

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Abstract

This thesis consists of four papers, each of which helps to understand certain dynamics surrounding political dynasties. The first paper focuses on the role of 'dynastic identity' in influencing the behaviour of legislators from the political class of Bangladesh. In particular, it analyses whether dynastic legislators behave differently in comparison to non-dynastic legislators by examining their parliamentary attendance level and the likelihood of them having a criminal profile. The findings from the analysis suggest that 'dynastic identity' may influence a legislator's behaviour. The second paper investigates if there is a systematic relationship between dynasty-politics and corruption in a cross-country empirical analysis. In doing so, the paper produces multiple dynasty indices that try to capture the variation in dynasty-politics across countries. The key findings from this scrutiny are indicative that countries with greater prevalence of dynasty-politics are associated with higher levels of corruption. In the third paper, I study the role of political assassination in facilitating the rise of political dynasties in Bangladesh. More specifically, I construct a data set of political leaders from Bangladesh who faced at least one assassination attempt to exploit the randomness in the success or failure of assassination attempts to identify assassination's effect on the probability that a leader will start a political dynasty. The results point out that successful assassination increases the likelihood that a political leader will have a posterior relative in office. Lastly, the fourth paper examines if political assassinations have facilitated the rise of political dynasties across countries. To this end, the paper builds on the data used in Jones and Olken (2009), which has information on leaders with at least one assassination attempt. Thus, by comparing national leaders who barely survived an assassination attempt with those who died, the effects of political assassinations on dynasty formation are studied.

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Contents

Abstract **3**

Acknowldgements **4**

List of Tables **7**

List of Figures **9**

List of Boxes **9**

List of Maps **10**

1. Introduction **11**

1.1 Why understand the dynamics surrounding political dynasties **11**

1.2 What motivations govern the behaviour of *dynastic* politicians **14**

1.3 What facilitates the emrgence of political dynasties **20**

1.4 Theme – I **23**

1.5 Theme – II **27**

1.6 Outline of the Thesis **32**

2. Motivations of Dynastic Leaders: An Emperical Investigation from Bangladesh **33**

2.1 Introduction: Why look into the motivations of dynastic leaders? **34**

2.2 Literature Review and Theory **36**

2.3 Historical Background, Data and Emperical Method **45**

2.4 Results and Interpretations **56**

2.5 Conclusion **64**

3. Corruption and Dynasty Politics **86**

3.1 Introduction: Is Corruption and Dynasty-Politics linked? **87**

3.2 Literature Review and Theory **89**

3.3 Data and Methodology **98**

3.4 Results **108**

3.5 Conclusion **120**

4. The Comnposition of Political Class: The Role of Assassinations 144

4.1 Introduction: What factors hspe the composition of political class? 145

4.2 Literature Review 147

4.3 The Composition of Political Class in Bangladesh 151

4.4 Identification Strategy an Results 161

4.5 Conclusion and Caveats 171

5. Assassinationsand Political Dynasties 187

5.1 Introduction: Does political assassination matter? 188

5.2 Literature Review and Theory 191

5.3 Data and Methodology 196

5.4 Identification Strategy 201

5.5 Extending the Analysis 209

5.6 Conclusion and Caveats 211

6. Concluding Remarks 227

6.1 Theme – I: What motivation govern the bahaviour of *dynastic* politicians? 227

6.2 Theme – II: What facilitates the emrgence of poltical dynasties? 233

6.3 Final Thought 240

Bibliography…… 241

Appendix……..... 258

List of Tables

Table 2.1A: Summary Statistics for MPs in the 9th National Parliament 71
Table 2.1B: Summary Statistics for MPs in the 8th National Parliament 72
Table 2.1C: Correlation between different dependent variables 73
Table 2.2: Base-Line Results 74
Table 2.3A: Base-Line Results 75
Table 2.3B: Base-Line Results 76
Table 2.3C: Base-Line Results 77
Table 2.4: Is the Effect Causal? 78
Table 2.5A: Is the Effect Causal? 79
Table 2.5B: Is the Effect Causal? 80
Table 2.5C: Is the Effect Causal? 81
Table 2.6: Legislator's in Government 82
Table 2.7: Key Dynasties are Excluded 83

Table 3.1: Country List and Dynasty Index 123
Table 3.2A: Correlation coefficients between different measures of corruption 128
Table 3.2B: Summary statistics for the dependent variables 128
Table 3.3A: Re-examining Treisman (2000) findings 129
Table 3.3B: Re-examining Treisman (2000) findings 131
Table 3.4A: Base-Line Regressions 133
Table 3.4B: Base-Line Regressions 134
Table 3.4C: Base-Line Regressions 135
Table 3.5A: Role of Immediate Succession 136
Table 3.5B: Role of Immediate Succession 137
Table 3.5C: Heterogeneous Nature of Immediate Succession 138
Table 3.6: Role of Political Competition 140
Table 3.7A: Robustness Checks 142
Table 3.7B: Robustness Checks for Immediate Succession 143

Table 4.1: Summary Statistics 177
Table 4.2: Base-Line Results 178
Table 4.3: Robustness Checks 179
Table 4.4: Summary Statistics for Leaders with at least one Assassination Attempt 180
Table 4.5: Conducting pair-wise t-test to see group similarity 181
Table 4.6: Testing Identification Assumption 182
Table 4.7: Are Assassination attempts mutually explosive? 183
Table 4.8: Does Assassination Facilitate Emergence of Political Dynasties? 184
Table 4.9: Robustness Checks 185
Table 4.10: Further Robustness ChecksRole of Immediate Succession 186

Table 5.1: Base-Line Results 218
Table 5.2: Robustness Checks 219
Table 5.3: Conducting pair-wise t-test to see group similarity 220
Table 5.4: Testing the Identification Assumption 221
Table 5.5: Are assassination attempts mutually exclusive? 222
Table 5.6: Identifying causal effect of political assassination 223
Table 5.7: Robustness Checks 224
Table 5.8: Heterogeneous Nature of Dynastic Succession 225
Table 5.9: Is it a 'Dying in Office' Phenomenon? 226

List of Figures

Figure 2.1A: Composition of the 9th National Parliament{By Dynastic Identity} 69

Figure 2.1B: Composition of the 9th National Parliament {By Number of Times MP} 69

Figure 2.1C: Composition of the 9th National Parliament {By Profession}.....69

Figure 2.2A: Composition of the 8th National Parliament {By Dynastic Identity}.....70

Figure 2.2B: Composition of the 8th National Parliament {By Number of Times MP} 70

Figure 2.2C: Composition of the 8th National Parliament {By Profession}.....70

Figure 3.1: Scatter Plot.....127

Figure 4.1: Spatial Distribution of Dynastic Leaders.....176

Figure 4.1: Spatial Distribution of of Assassination Attempts and Successful Assassinations in Post 1971 period.....176

Figure 5.1: Spatial Distribution of Dynastic Leadersand Assassinated Leaders for 65 Countries.....214

List of Boxes

Box 2.1: Political Parties in the 9th National Parliament and the family connections of their Chairpersons.....67

Box 2.2: Low Attendance Records 68

Box 2.3: Boycott of Parliament By Opposition Parties 68

Box 4.1: Description of Families producing Three Generations of Leaders 174

Box 4.2: Politicians from the Sheikh Dynasty and their encounters with Assassination Attempts.....175

Box 5.1: List of Assassinated Leaders Post 1950 from 65 Countries 215

Box 5.2: Death in Office of National Leaders due to Natural Causes or Accidents Post 1950.....216

List of Maps

Map 2.1: Bangladesh 84
Map 2.2: Divisions of Bangladesh.....85

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1. Introduction

1.1 Why understand the dynamics surrounding political dynasties?

This thesis is about political dynasties. Yet, it is not about *who* they were, or *how* they have influenced their respective political landscapes. While they are important historical questions on their own, this scrutiny is about the *motivations* that govern the political life of dynastic leaders. It's also about the *factors* that have facilitated the emergence of political dynasties in diverse political arenas. Political dynasties exist and have existed across both time and space in various forms and degrees. At present, more than one-third of the world population entertains political landscapes where dynastic politicians play a pivotal role in political decision making.[1] From polities governed by monarchies to authoritarian format of government, and from consolidated democracies to volatile states, dynastic leaders have exerted their influence in almost all types of polities.[2]Until now, within the discipline of political economy, there is a dearth of empirical research on outcomes related to this particular socio-political phenomenon, and factors that have facilitated the emergence of political dynasties. The main concern over political dynasties is that it reflects inequality in the distribution of political power (Dal bo et al, 2009), and equilibrium policies and institutions in a given polity is often a product of preference of groups with greater political power (Acemoglu and Robinson, 2008). In addition, in recent times there is a growing recognition that inequality in the distribution of political power can sow harmful seeds for long-run development paths of economies (Acemoglu et al, 2008; Ferraz and Finan, 2010). This makes it imperative to understand why such politically powerful groups emerge, and what exact motivations shape their behaviour. More specifically, does the presence of political dynasties merely reflect inequality in the distribution of political talent? In other word, do political dynasties exist because some political families entertain relatively higher level of ability than others? Or, is it also a product of idiosyncrasies associated with certain political events?

On this mentioned issue, classic elite theorist, such as Mosca (1966[1896]), argued that enduring inequalities in political attainment can reflect hereditary inequalities in talent, which may have beneficial consequences for citizens. In contrast, Dal bo et al (2009) points out that positive

[1]Chapter-3 provides a discussion about how political dynasties prevail at the national level across a large set of countries.

[2]From the Gandhis in India, Bhuttos of Pakistan, Gloria Macapagal's family in the Philippines, Duvalier family in Haiti, to the Bush family in United States, influential political dynasties exist in the political arena of various countries in different forms and degree.

shocks to political power have persistent effects by facilitating *de facto* inheritance of political positions. Besides, some reservations also exist concerning the effects of 'dynastic identity' on a political leader's behaviour in his or her respective political domain (Asaka et al. 2010)

Even if one casually reviews some cases of political dynasties across the globe, the opinion is mixed. For example, in Burma, Aung San Suu Kyi – the daughter of the assassinated revolutionary leader Aung San – has epitomized the movement for attaining democratic rights for more than two decades (Wintle, 2007). On the other hand, the Bhutto dynasty of Pakistan, which has produced three executive head of the state, has been accused of corruption and misuse of power in both domestic and international media.[3] On the role of a dynasty in changing economic fortunes of a country, the Lee dynasty is often credited for the economic rise of Singapore (Ghesquiere, 2006). Alternatively, Kim dynasty's six decades of authoritarian rule of North Korea has probably influenced its economic and humanitarian demise (Martin, 2004). Thus, in this thesis, I address two important inquiries on political dynasties. **First**, given that dynastic leaders are associated with diverse socio-economic outcomes, it is pertinent to ask: what governs the motivations of dynastic politicians? The question, in effect, intends to disentangle the possible *incentives* that can determine the behaviour of dynastic politicians, and verify empirically the outcomes that are associated with the presence of political dynasties. **Second**, as political dynasties have emerged in diverse political landscapes, the research aims to pinpoint the factors that can facilitate the rise of political dynasties. In doing so, it analyses a specific political event – *political assassinations* –to understand its effects on the composition of political class by shaping the emergence of important political families.

Hence, to provide insights on the above mentioned issues, the thesis embodies two themes. **Theme-I** presents papers that helps understand the motivations that govern the behaviour of dynastic politicians. It undertakes two empirical investigations of the stated topic, both at the 'sub-national' and 'cross-country' levels. The work "*Motivations of Dynastic Leaders: An Empirical Investigation from Bangladesh*" analyses the behaviour of dynastic parliamentarians within the political realm of Bangladesh to see if they relatively work or shirk more in comparison to non-dynastic parliamentarians. More explicitly, the paper studies parliamentary

[3] For example, see: http://www.independent.co.uk/news/world/fall-from-grace-marks-the-last-hurrah-of-the-bhutto-dynasty-1350942.html

attendance records[4] for the 8th and 9th National Parliament to point out if a leader's dynastic identity had any capacity in explaining its variation across parliamentarians. Furthermore, if any notable relationship is identified between the variables of interest, then it will help isolate the motivations that govern the behaviour of dynastic politicians. The paper "*Corruption and Dynasty Politics*" investigates if there is a systematic relationship between dynasty-politics and corruption in a cross-country empirical analysis. This is undertaken with the help of a dynasty index, which is created by looking at the political history from 1950 to 2010, for a large cross-section of countries. The purpose is to quantify the variation in the degree of dynasty-politics that exists across different countries.[5] Likewise, if any significant association is detected, then it will offer some understanding about how dynastic politicians behave in their respective polities.

In **Theme-II**, two empirical examinations are provided, which try to identify factors that assist the emergence of political dynasties. The paper "*The Composition of Political Class in Bangladesh: The Role of Assassinations*" attempts to identify if assassinations of domestic politicians have helped political dynasties to emerge and endure. As a result, the paper documents the biographies of more than 500 leaders who were elected (at least once) to the office of a Member of Parliament in the 8th or 9th National Parliament. The aim is to see if dynastic descendants of assassinated political leaders are associated with a higher likelihood of continuing a political dynasty. To address concerns on the causal role of assassination, the study constructs an unique data set of political leaders with at least one assassination attempt to see if those who died in comparison to those who barely survived have a higher likelihood of starting a political dynasty. The paper "*Assassinations and Political Dynasties*" studies at a cross-country level if political assassinations have fuelled the rise of dynastic leaders. To this end, the research uses biographical data on 442 national leaders from 65 countries who have ruled (at least once) as an executive head of their respective country in post 1950 period. The objective is to see if assassination of a national leader is associated with a higher likelihood that a leader will start or continue a political dynasty. In addition, to identify the possible causal effects of assassinations, the paper employs the identification strategy and the data set of Jones and Olken (2009) to see if political assassinations abet the rise of dynastic leaders across countries.

[4] Other measures of legislator behaviour are also studied to address the mentioned question.

[5] The paper borrows the data set from Treisman (2000) which undertakes a cross country analysis to locate the possible determinants of corruption.

Overall, the four papers address inquiries on political dynasties at both cross-country and sub-national level. This allows one to check whether a similar message on the addressed questions emerge from both these settings. The thesis also employs five crucial data sets, out of which three are compiled for undertaking this research, and two are used from the analysis of Treisman (2000) and Jones and Olken (2009). Consequently, any consistency within the findings across all the employed data sets will only minimize the risk that the key inferences I derive are sensitive to a specific data set being used. In addition to this, given that the thesis solely relies on empirical investigations of political dynasties, the findings will give key insights for future theoretical developments on political dynasties, and will direct towards avenues where further empirical examinations are desired.

In the next section, I render further discussion on the two principle questions that are examined in the thesis. This is followed by basic findings that emerge from the four papers within the mentioned themes. Lastly, section 1.6 provides an outline of the overall thesis.

1.2 What motivation governs the behaviour of *dynastic* politicians?

In traditional political economy, the assumption that political actors are driven by self-interest has been well acknowledged. This approach, nonetheless, implicitly assumes that political actors behave in a similar fashion, under certain institutional arrangements, no matter who they are or what is their identity. In contemporary times, however, empirical literature in political economy has taken some interest in isolating the role of leader-identity in determining the behaviour of policymakers. For instance, Rehavi (2007) employs close election to pinpoint that women's representation affects policy formulation in U.S's state legislatures. It is also reflected in the findings of Chattopadhyay and Duflo (2004), which examines two Indian states – Rajasthan and West Bengal. The authors highlight that the kind of issues favoured by women get more attention when women leaders are selected. Likewise, Pande (2003) shows that reservation for scheduled tribes and scheduled castes at the state level in India affected policies towards these groups. More recently, Asaka et al (2010) studies the role of dynastic identity in influencing the behaviour of dynastic legislators in Japan *Diet* between 1997 and 2007, and it finds that dynastic candidates enjoy a higher probability of winning and larger vote share in comparison to non-dynastic candidates. Besides, it also pinpoints that fiscal transfers initiated by dynastic politicians do not necessarily result in higher economic performance. Thus, given that there is some support for the

idea that identity can matter, it remains interesting to ask: can a political leader's *dynastic* identity influence his or her behaviour?

To throw light on the question raised above, the thesis proposes that to understand the behaviour of dynastic politicians, it is useful to *assume* that they have in their objective function a goal to initiate a dynastic succession. That is, dynastic politicians aspire that their dynasty endures within their respective political realm. If this holds true, then dynastic politicians will account for all future consequences of their action on their welfare, and the likelihood that they will facilitate a dynastic succession. Hence, this additional objective of dynastic politicians to ensure that their dynasty endures *can* change their behaviour from others. This, in contrast, raises the question that if dynastic politicians are affected by their desire of a future dynastic succession, then why will non-dynastic politicians act otherwise, since they too can desire that their family will inherit their political position.

A possible reason why this might not be the case is because dynastic politicians often enjoy two issues - *campaign advantage* and *brand-name advantage*, as noted in Laband and Lentz (1985) and Feinstein (2010). The former stems from the two particular factors – inherited human capital and inherited financial capital. To be precise, inherited human capital refers to the familiarity a dynastic politician has with key people in important positions within the party. This 'connection' is inherited due to his or her family's long exposure to politics. This can also allow the dynastic politician to ensure his or her potential dynastic successor is 'picked up' for lower level positions, so that such political experience and exposure allows the potential dynastic successor to succeed his or her dynastic parents electorally. For example, Sonia Gandhi – President of Indian National Congress – facilitated her son Rahul Gandhi's political career (after her alliance's electoral victory in 2004) by giving him the charge of the Youth Congress and the National Students Union of India as part of the party's reshuffle program in 2007. This raised speculation that such a move was undertaken to ensure the political continuity of the Nehru-Gandhi dynasty in the national political domain of India.[6]Even in non-democratic countries, such dynastic political apprenticeship is often witnessed. The late Kim Jong-il ensured that his Kim Jong-un eventually succeeds him by appointing him to the post of Vice Chairman of the Central Military Commission in 2010. This dynastic appointment to the key military position is also speculated to

[6]For more recent developments on Rahul Gandhi's political career, see: http://timesofindia.indiatimes.com/topic/Rahul-Gandhi; The example only casually supports the mentioned political strategy, and no causal inference can be deduced from this discussion.

have facilitated the process that guided Kim Jong-un succession to the post of the 'Supreme Leader of North Korea' after the demise of his father.[7]

Inherited financial capital refers, in essence, to the pre-established donor networks, which are often available to the potential heir of a dynastic leader. Such network can make electoral competition less costly for dynastic entrants in comparison to non-dynastic politicians. This family connection allows second generation political leaders to reap the financial network that the first generation political sowed. The Bush Family in United States, for example, created a fundraising milestone during George W Bush's two Presidential campaigns in 2000 & 2004. More specifically, during his campaign for Republican Party Presidential nomination in 2000, he acquired unprecedented funding which could have facilitated his eventual victory against the twelve other contenders.[8] It is also argued that the name recognition and political connection of the Bush family allowed him to emerge as the early front-runner, even though veteran political candidates such as John McCain were in the nomination race.[9]

Brand-name advantage, on the other hand, is determined by voters, who might have an additional preference for dynastic candidates due to their family's goodwill in their respective political arena. Such an advantage emerges out of voter's expressed preference for political legacies of a dynasty, irrespective of the observable differences in leader quality between dynastic and non-dynastic politicians. This concept is also suggestive that dynastic politicians can enjoy family advantages beyond the human capital and financial advantage, as voters simply favour a name that they recognize due to its association with important political events. In United States, for example, Feinstein (2010) shows that for all open seat House contest between 1994 and 2006, dynastic politician entertain significant "brand name advantage". Moreover, this advantage provides them a considerable edge over comparable non-dynastic opponents. Likewise, empirical evidence from 1983 Congress of Argentina is indicative that legislators with longer tenure in office have a higher of having posterior relative in office. This dynastic transmission of political

[7] For more information, see: http://www.bloomberg.com/news/2011-12-19/north-korea-signals-kim-jong-un-succession-as-south-calls-police-for-duty.html

[8]For more information on George W Bush, see: http://www.encyclopedia.com/topic/George_Walker_Bush.aspx#2

[9]For more information on John McCain, see:http://www.biography.com/people/john-mccain-9542249?page=1

power is particularly aided by the fact that long tenure in office allows legislators to accumulate assets in the form of name recognition (Rossi, 2010).

Cumulatively, both these factors can reduce the effort that is required by dynastic politicians to promote a dynastic succession in comparison to the effort that is required by politicians who are attempting to initiate their own dynasty. Additionally, political dynasties are often the outcomes of historical events (like political assassinations[10]) which are difficult to replicate for individuals attempting to start their own dynasty. This, at least, makes it pragmatic to argue that dynastic politicians are likely to entertain some kind of political capital[11] that is unique to them, and often difficult to acquire over a short course of time.

Assuming that dynastic politicians are partially motivated by the desire to promote a dynastic succession, the relationship between a legislator's dynastic identity and his or her behaviour in the political arena is (still) theoretically not clear. This is because their decision-making process is likely to be affected by two opposing incentives. I call this the *Reputation-Building* incentive and the *Stockpiling-Wealth* incentive. Reputation-Building incentive implies that when members of political dynasties are in office, they will use this opportunity to build a positive reputation for their family. In other words, they will abstain from behaviours that decrease their family's *goodwill*, as much as possible. This will allow them to signal voters that their family embraces a vocation for public interest. Therefore, if dynastic politicians succeed in creating a positive reputation for their family, then dynastic successions have a greater likelihood of being seen legitimate and acceptable. As a result, if this line of reasoning holds, then one will expect legislator with dynastic identity to be more benign in comparison to legislator of non-dynastic identity.[12]

[10] This issue is thoroughly addressed in Chapter-4 and Chapter-5 of the thesis.

[11] This notion finds some support in recent empirical findings of Del Bo et al (2009). The authors argue that political dynasties may entertain higher level of political capital (in the form of contacts with party machineries and name recognition) which allows them to endure in their respective political arena. In line with this, a recent model developed by Asaka et al (2010) to predict the behaviour of dynastic legislators assumes that dynastic legislators have a higher *bargaining advantage*, since they are likely to inherit personal ties with other key political figures, bureaucrats and special interest groups.

[12] In other words, if political positions are transferable from politicians to politician's children, then the last period enforcement problem (i.e. how one restricts politicians from shirking in the last period) is somewhat mitigated.

On the contrary, stockpiling-wealth incentive proposes that while dynastic politicians are in office they will be tempted to amass a fortune so that their future generation can inherit their political position on the basis of their financial and political capital. This, in essence, means that dynastic politicians will appoint their preferred people in key positions in the government and bureaucracy, and in the process accumulate financial and political capital so that the dynastic succession is as smooth as possible. Now, if this incentive is strong then we will expect dynastic politicians to have a greater tendency to misuse their authority (while they are in office) so that they can promote a dynastic succession in their respective political arena. Similarly, a dynastic politician often benefits from *campaign advantage* – that is a product of pre-established donor network, which can make electoral competition less costly in comparison to a non-dynastic legislator. Likewise, dynastic leaders can also enjoy *brand-name advantage* – that results from additional electoral preference for politicians from certain family. Furthermore, both these factors are likely to create barriers to entry for potential non-dynastic challenger. This, in theory, means that incumbent dynastic politicians with inherited political capital can find it in their self-interest to shirk more since it is relatively difficult for potential non-dynastic politicians to compete them out of office. A very similar argument is discussed in Lott, (1986; 1987a & 1987b). The noted papers argue that long exposure to political power creates a brand-name for an incumbent, which is often non-transferable in nature. This brand name can produce greater popular support for incumbent politicians who care about both "net-support" and "commission" that he or she receives for transferring wealth. This additional level of support for politicians with brand-names generates barriers to entry for potentially more competent entrants with no brand-names. As a result, this can mean that that incumbent dynastic politician with brand-names can find it easier to remain in office by restricting entrants even when there exists, more efficient, less recognised candidate. Consequently, dynastic identity among politicians can promote more shirking as they face lower levels of competition from their rival candidates.

The mentioned discussion, however, leaves some questions unanswered. To be specific, as stated above, dynasty identity can either promote goodwill enhancing or asset accumulating mind-set, as they are motivated by their desire to facilitate future dynastic succession. Yet, what is a 'good-will' enhancing or depleting behaviour in politics? Can such behaviour vary in nature across countries? If so, what determines its variation? More importantly, if the tolerance of "goodwill depleting act" varies across electoral populace of different polities, than can we infer anything about the motivation of politician? For example, given extra-marital affairs of national politicians are received with different intensity across nations, can we infer politicians involved

in such acts are not motivated to serve public interest?[13]While answering these questions at length is not within the scope of this study, one can make some specific inferences with caution. First, not all observable "goodwill depleting/enhancing" behaviour carries information about a leader's dedication to public cause. Second, while personal acts – such as sex scandals – might have limited information about a leader's commitment to public interest, actions which are 'illegal as per the law of the land' are more likely to carry information about a political leader's general respect for rule of law in his or her respective countries. As a result, while undertaking an empirical analysis to understand the motivation of dynastic leaders, we need to observe a phenomenon or behaviour that (i) varies across countries/leaders, (ii) carries information about the motivation of political leaders, so that one can infer something about the role of dynastic identity.

Thus, while conducting a cross-country analysis, I observe whether countries that were under significant influence of political dynasties are perceived to be more or less corrupt.[14] This focus on corruption perception is important because, while the political action that is considered to be corrupt might vary across countries, the perception that corruption involves political leaders getting involved in an illegal conduct under the law of the land is almost universal by definition. Therefore, if long exposure to dynastic rule at the national level is associated with higher levels of perceived corruption across countries, then it is possible to pragmatically deduce that that there is limited or no evidence in support of the idea that dynastic leaders are motivated by reputation-building incentive.

On the other hand, to employ a sub-national scrutiny, a more direct measure of leader behaviour is observed. To be specific, I see whether a legislator's involvement in general legislative process is determined by his or her dynastic identity. In addition, the study also checks if such identity predicts the criminal profile of a legislator. The choice of these two criteria for examination is influenced by two important rational. One, given that the sub-national analysis is done for the legislators in Bangladesh, examining these dimensions allows the analysis to closely relate to the theoretical discussion on dynastic identity's possible role is shaping legislator behaviour. Two,

[13]John F Kennedy is acclaimed to be one of the most popular Presidents of United States. There are, however, many controversies that undermined his political life. For more discussion on this issue, see: Hersh (1997).

[14] Corruption is defined as the misuse of public office for personal gains. For more information, see:Rose-Ackerman (2004).

since such measures are objective in construction, there is little room for measurement error to affect our estimates.

Overall, as the discussion above points out, the net effect of dynastic identity on a leader's behaviour is ambiguous, as reputation-building and stockpiling-wealth incentive work in opposite direction. Thus, the undertaken empirical examinations embody an effort to understand two important issues: (i) Whether dynastic identity at all matters in shaping leader behaviour? (ii) Which incentive on average dominates the behaviour of dynastic politicians?

1.3 What facilitates the emergence of political dynasties?

As noted earlier, influential political dynasties have emerged in almost all format of government. Their presence and often long endurance is an enigma in political science. For example, what unique factors allowed the Nehru-Gandhi Dynasty of India to produce five head of Indian National Congress and three former Prime Ministers of India are still not clear.[15] In United States Congress, the Breckinridge dynasty has almost endured for two centuries (1789-1978), and has produced 17 congressmen (Dal Bo et al, 2009). All this, and many other numerous cases, makes it imperative to analyse and pinpoint some causative factors that can influence the rise of dynastic politicians. On this, some qualitative investigations have isolated the forces that have allowed political dynasties to emerge across countries. For instance, Ritcher (1990) and Mark R. Thompson (2002) provide a comparative analysis to understand the rise of female dynastic leaderships in South and Southeast Asia. The authors note that 'martyrdom' of their political male counterpart (father or husband) has played a pivotal role in making them a symbol of opposition struggle against autocratic regimes, and thereby promoting their emergence in their respective political landscapes. On the role of certain political precedents and conditions, Brownlee (2007) provides an insightful investigation of hereditary successions in modern autocracies. More specifically, the research shows that whether elites will assist dynastic succession depends on the precedent for leadership selection. That is, where rulers are predated by parties, surrounding political elites will defer to the party as the recognized arbiter of succession. Alternatively, where rulers predate their parties and political elites lack an established precedent for an orderly transfer of power, hereditary succession offers a focal point for reducing uncertainty, achieving consensus, and forestalling a power vacuum.

[15] For more information, see: http://www.aicc.org.in/new/

Micro-level qualitative work on dynasty politics also exist, which tries to identify the conditions in which dynastic successions are more likely. For example, Sidel (2004) in his comparative analysis of '*bossism*" argues that, in Philippines, when the structure of the state apparatus allows local leaders to enjoy monopolistic control over a state's resources, and when such monopolistic control is used by the leader to construct a solid base in propriety wealth outside the realm of the state intervention, then a dynastic succession in local leadership is easier to implement. The importance of propriety wealth in shaping political outcomes has also received some validation in empirical research. For instance, Rossi (2011) uses an unique land experiment that occurred during the foundation of Buenos Aires to understand the effects of exogenous change in wealth on posterior political success. The paper examines if the distance of randomly allotted land to Buenos Aires predicts the posterior political success of the land recipient families. The findings of the study are suggestive that families who received land closer to Buenos Aires have a higher likelihood of achieving political office, since such land were of more economic value. This analysis also allowed the author to offer insights on how certain families got political representation on the first place.

Empirical scrutiny of political dynasties also tries to pinpoint factors that facilitate the emergence and endurance of political dynasties. Being specific, Dal Bo et al (2009) in its investigation of political dynasties in U.S Congress, show that political power is self-perpetuating in nature. That is, by comparing outcomes of close elections the study shows that holding power longer increases the likelihood that one's heirs attain political office in the future in spite of their individual or family characteristics. The study also identifies that dynastic legislators are less common in more politically competitive states. This, as argued by the authors, indicate that dynastic legislators may rely on their familiarity with political machineries (in the form contacts with party elites ant etc) to secure political positions in states where party safely controls the political authority. Similarly, Querubin (2010) empirically examines the evolution of political dynasties in the Congress of Philippines and identifies that non-dynastic candidates who win their first election by narrow margin are four times more likely to have posterior relative in office in comparison to those who lost their first election my a thin margin and never serve. Additionally, evidence from 1983 Congress of Argentina is also suggestive that legislators with longer tenure in office have a higher likelihood of having posterior relative in office (Rossi, 2010).

Taken as a whole, the discussed findings are indicative that *positive* exogenous shocks to a leader's time in power have persistent effects by facilitating the possibility of future dynastic succession. Consequently, this paper contributes to the overall inquiry by looking at the role of specific political events – political assassinations – in facilitating the emergence of political dynasties. This specific focus on the causal role of political assassination is interesting because it studies the effect of *negative* exogenous shock to a leader's life on the likelihood of shaping posterior dynastic attainment. Furthermore, given numerous national dynastic leaders across the globe are descendants of assassinated politicians[16], an empirical examination will allow us to identify whether on average assassinations have a causal role in facilitating dynasty formation in a given polity.

Nonetheless, as pointed out in details in the respective papers, identifying if political assassination contributes towards the possibility that a leader will start a political dynasty is both theoretically and empirically difficult. This is because assassination can hinder or facilitate the likelihood that a leader will start a political dynasty, since the effect of political assassination depends on two opposing forces. I call this the *martyrdom-effect* and the *disruption-effect*. The martyrdom-effect suggests that political assassination can often create a martyr out of the assassinated leader, and this can act as a *political asset* for the victim's family for facilitating dynastic successions.Conversely, the disruption-effect suggests that assassination might disrupt the injection of dynastic successors into the political stream as the violent incident-the assassination of the leader- might discourage potential biological heir from taking up political life. Therefore, this theoretical ambiguity concerning the possible effects of assassination makes it insightful to understand the net effect of political assassination on political dynasties.

The empirical difficultly of isolating the effects of assassination on the likelihood that a political leader will start or continue a political dynasty stems from the scenario that the estimations might suffer from individual heterogeneity. That is, political leaders with individual characteristics (like charisma and etc) that are conducive to dynasty formation might attract assassination attempt. As a result, to isolate the impact of assassinations, the papers employ a unique identification strategy used in Jones and Olken (2009). More specifically, the paper compares leaders who barely

[16] Additionally, some qualitative analysis (ex- Ritcher, 1990; Thompson, 2002) do argue that assassination did in fact have facilitate the rise of female dynastic leader.

survived an assassination attempt in comparison to leaders who died to understand the role of successful assassination in facilitating the rise of political dynasties.[17]

In the next two sections, I elaborate in details the empirical investigations undertaken in the four papers. This is done with the objective to shed some light on these two essential questions on political dynasties.

1.4 Theme-I

In this section, I present brief summaries of the papers on the motivational dynamics of dynastic politicians. The empirical investigations aim to pinpoint if a leader's 'dynastic' identity determines his or her behaviour in a given polity, and highlight the social outcomes that are associated with the prevalence of dynasty politics across countries.

1.4.1Motivations of Dynastic Leaders: An Empirical Investigation from Bangladesh

This paper studies whether the motivations of dynastic leaders[18] are similar or different from the motivations of non-dynastic political leaders. In doing so, the paper examines the behaviour of Member of Parliaments (MPs) from the 8th and 9th National Parliament[19]of Bangladesh to see if 'dynastic-identity' has any role in determining the level of shirking a parliamentarian exhibits. Bangladesh provides an ideal case for this scrutiny for three reasons. First, in both 8th and the 9th National Parliament, dynastic legislators occupy more than one sixth of the parliament. This is complemented by the fact that the two key parties (Awami League [AL] and Bangladesh Nationalist Party [BNP]) are led by two dynastic politicians (namely Sheikh Hasina Wajed and Khaleda Zia). Second, individual level characteristics and political biographies of parliamentarians are readily available. Third, almost all work on legislator behaviour primarily focuses on North America, South America and Europe as their venue for investigation. Thus, by

[17]This empirical strategy is dependent on the identification assumption that conditional on trying to kill a leader, whether a leader survives the assassination attempt or dies in it is a product of pure chance (For more information on this identification strategy, pleaser review the paper (Jones and Olken, 2009).

[18] A leader is categorized as dynastic (Pre-Relative=1) if he is related to a past or present legislator who entered office before him.

[19] The 8th National Parliament is referring to government that was in office between 2001-06. The 9th National Parliament is referring to the incumbent government, which was elected to office on the 29th December, 2008.

focusing on Bangladesh, a new territory is opened for testing some of the findings that emerge from the literature.

The paper starts by summarising the literature on political dynasties, and how it relates to the body of work on political shirking. It highlights that existing work on 'political shirking' have primarily focused on institutions, and how they change political behaviour. As a result, this work contributes to this stream by examining the role of legislator identity in determining political behaviour. This is done with the help of new data sets on all parliamentarians in the 8th and 9th National Parliament of Bangladesh. To measure legislator behaviour, three measures are constructed. The principal variable is the *Parl-Attendance-Ratio* which measures a parliamentarian's general involvement with the daily legislative business. For the 8th National Parliament, the attendance ratio is computed by dividing the number of parliamentary days attended by the number of days a legislator can attend in all 23 sessions. Moreover, for the 9th National Parliament, the ratio is computed by repeating the same procedure for first five sessions (given that this parliament is still in progress).[20] This makes a score of one reflect that a parliamentarian has not been absent for a single day in the parliament. For legislators in the 9th National Parliament, it also computes two additional dependent binary variables *Legal-Charges* and *Corruption-Charges*, which are equal to one if they have such charges before they contested the 9th parliamentary elections. This is done with the intention to shed some light on a parliamentarian's criminal profile, and see if a legislator's dynastic identity has any role in predicting its variation.

Additionally, the base-line results indicate that dynastic legislators in 8th National Parliament one average have lower levels of attendance. In terms of magnitude, the relevant coefficients are indicative that offspring of past legislators on average have at least 6.5 percentage point lower attendance than non-dynastic legislators. This relationship is robust for multiple changes and restrictions to the key specification. Besides, the association of dynastic identity is particularly strong when the analysis solely focuses on legislators from the incumbent party in the 8th National Parliament. This relationship, however, is not significant for legislators in the 9th National Parliament. Likewise, a legislator's dynastic identity also fails to predict whether he faced a legal or corruption charge before participating in the 9th National Parliament. On the relevance of other factors, the study shows that a legislator's experience is associated with lower

[20]This information is collected from the Legal Office of the National Parliament of Bangladesh.

levels of attendance. This is echoed in the contemporary findings of Besley et al (2011), which notes that more experienced legislators in the British House of Commons tend to have lower levels of attendance. Overall, the results provide some support to the idea that a legislator's dynastic identity can influence his or her behaviour, even though it only finds support from the data set of the 8th National Parliament.

If one, now, views the key findings in light of the possible incentives that can affect a dynastic politician's behaviour, the results are difficult to square with the reputation-building hypothesis. That is, the estimations fail to portray dynastic politicians as relatively more benign in comparison to non-dynastic politicians, when they are solely judged by their general involvement in everyday legislative business. This message is also, to an extent, in line with the recent empirical evidence from Japan, which shows that dynastic legislators lower the rate of growth enjoyed by Japanese municipalities (Asaka et al, 2010). Lastly, the paper acknowledges that by solely focusing on a legislator parliamentary attendance and criminal profile, the evaluation of a legislator's motivation suffers from narrowness in scope.

1.4.3 Corruption and Dynasty Politics

The second paper focuses on the social outcomes associated with the prevalence of dynasty politics across countries. In particular, this paper tries to pinpoint if there is a systematic relationship between corruption and dynasty-politics. Corruption, defined as the misuse of public office for personal gains, exists in diverse political arenas in different degrees. It has also been blamed for the unimpressive performance of certain "developing" countries, and empirical research supports the hypothesis that there is a link between higher perceived corruption and lower investment and growth (Mauro 1995; World Bank 1997). It is, therefore, pertinent to understand the factors that make some polities more corrupt than others. Moreover, scrutinizing the possible link between the prevalence of influential political dynasties and the level of corruption is imperative because political dynasties reflect inequality in the distribution of political power. As a result, such a political phenomenon is likely to have some impact on certain dimensions of governance (namely corruption) in a given political landscape. This motivates this paper to focus on a specific question: can the prevalence of dynasty politics help explain the variation in the level of perceived corruption across countries?

To address the above stated query, this paper builds on the data set used in Treisman (2000) which finds six key determinants of corruption.[21] The paper extends the data set by including more countries, and uses more contemporary measures of perceived corruption. It is found that some of the identified determinants of corruptions maintain their strong predictive capacity on a larger data set. That is, for more than one hundred countries - *protestant tradition*, *economic development* and *long exposure to democracy* explain significantly the variation in the level of perceived corruption. Furthermore, in order to shed insights on the central question, the paper constructs multiple dynasty indices to measure the variation in the prevalence of dynasty politics across countries. The analysis starts by computing a dynasty-index ***DI*** which measures the variation in the degree of dynasty-politics by examining each country's exposure to members of political dynasties in state power in last six decades. It then uses this measure to identify if dynasty-politics helps explain the variation of corruption across countries. And, the key findings suggest that there is a 'weak' correlation between dynasty-politics and corruption. In essence, it notes that a higher degree of dynasty-politics is associated with a higher level of (perceived) corruption. This correlation is, however, pointed out as 'weak' since it is only significant when the sample is restricted by excluding monarchies and Singapore from the estimations.[22]

The paper also investigates a special kind of phenomenon associated with dynasty-politics – immediate dynastic succession. The estimations show that countries with immediate dynastic succession in their top political office are on average associated with higher levels of corruption. This association remains strong and survives multiple robustness checks. The paper studies this particular phenomenon (immediate dynastic succession) further by checking if any specific type of immediate dynastic succession is associated with corruption. Additionally, the results pinpoint that immediate dynastic successions following the assassinations of national leaders (example- Indira Gandhi and Rajiv Gandhi of India) or immediate dynastic successions after the retirement of national leaders (example- Nestor Kirchner and Cristina Kirchner) are the primary drivers of the result.

To sum up, the paper supports the claim that countries with greater prevalence of political dynasties are associated with higher levels of corruption, even though the relationship is not

[21] Treisman (2000) pinpoints six key factors that helps explain the variation of corruption across countries. These are, (I) Economic development, (II) Protestant tradition, (III) History of British rule (IV), Long exposure to democracy, (V) Federal States, and lastly (VI) Higher degree of openness.

[22] This only results in a loss of three observations.

argued to be causal in any respect. This is because the results can suffer from endogeneity stemming from both reverse causality and omitted factors. In other words, a higher degree of corruption can itself allow national political leaders to start their dynasty by taking advantage of the weak institutions due to corruption. Consequently, it is prudent to state that observed evidence is basic. Nonetheless, the overall evidence provides motivation to investigate if in future any causal inference merits this finding. Besides, given that higher prevalence of dynasty politics is associated with higher levels of perceived corruption, the evidence fails to provide any support for the reputation-building hypothesis. In other words, the cross country evidence provides no strength to the idea that dynastic politicians with an additional objective to initiate dynastic successions will devote their career to public interest so that it creates a reputational capital which their offspring can inherit.

1.4.3 Key Message

The two papers collectively offer some empirical insights on the motivations of dynastic politicians. The principle aim of the investigations in Theme-I is to see if dynastic identity has any role in determining the behaviour of politicians. This is complemented through an inquiry of socio-political phenomenon (in this case - corruption) that is associated with the prevalence of dynasty politics across countries. The findings, taken together, suggest that dynastic identity can make legislators relatively less benign, and on a cross-country level, the prevalence of dynasty politics is associated with higher levels of corruption. In other words, the central message from both these settings is consistent with a relatively 'less-than-altruistic' view of dynastic politicians in comparison to non-dynastic politicians. These results are also difficult to square with the reputation-building hypothesis, which suggests that dynastic politics will attempt to generate goodwill to facilitate posterior dynastic attainment.

1.5 Theme-II

This section provides summaries of papers that investigate the factors that have facilitated the rise of political dynasties. In particular, the papers look at political assassinations to see if such events fuel the rise of dynastic leaders.

1.5.1 The Composition of Political Class in Bangladesh: The Role of Assassinations

This paper examines if political assassinations across the political landscape have facilitated the rise of political dynasties. Political assassination, which is generally defined as the murder of a public figure, is often held responsible for disrupting state efficacy. However, what outcomes it bears for the political class and the victim's family is little scrutinized in political economy. More specifically, it is interesting to examine if political assassinations 'back-fire' in the sense that it re-imposes the moral authority of the deceased leader by making him a *martyr*. This later on (or immediately) can be instrumental as a political asset for the victim's family to initiate a dynastic succession. Thus to identify the effects of political assassinations on the likelihood that a political dynasty will emerge or endure, I investigate this specific relationship within the political landscape of Bangladesh. In 1971, when Bangladesh emerged as a newly independent country, the political and economic climate was volatile and political assassinations became a common phenomenon within the political arena. The first president to suffer death in an assassination attempt was Bangabandhu Sheikh Mujibur Rahman who is considered as the founding father of the country.[23] This was later followed by the assassination of President Zia ur Rahman in 1981 in an aborted coup.[24] Besides, qualitative analysis on the rise of female dynastic leadership in South and Southeast Asia has argued that assassination of Bangabandhu Sheikh Mujibur Rahman and Lt. General Zia ur Rahman is the triggering point in the rise of female dynastic leaders in Bangladesh (Ritcher, 1990; Thompson, 2002).

As a result, to investigate this phenomenon, the paper employs two newly constructed data sets to pinpoint if assassination on average facilitates the rise of political dynasties. The paper starts by briefly scrutinizing the literature on the composition of political class with a specific focus on political dynasties. This is followed by looking at studies on political identity, and the paper's broader contribution to the literature on political assassinations. In terms of the data sets, the paper first uses a newly complied data set which constitutes biographical information on 536 leaders elected to the 8th or 9th National Parliament. The purpose is to isolate if dynastic descendants of assassinated leaders or non-assassinated leaders are associated with a higher

[23] For more information on Bangabandhu, see: http://www.rulers.org/indexr1.html#rahma

[24]For more information on Zia, see: http://www.rulers.org/indexr1.html#rahma

likelihood of having posterior relatives in office in comparison to leader who are non-dynastic. Moreover, the baseline results show that both types of dynastic leaders (i.e. being descendant of assassinated or non-assassinated leaders) matters for having relatives later in office. The findings are also suggestive that the relationship is possibly stronger for descendants of assassinated leaders.

It should be noted that the identification of a potential causal relationship between political assassinations and the emergence of political dynasties is complicated. This is because political traits, such as family connection, charisma, wealth or etc, which may allow leaders to facilitate dynasty formation, can also in turn attract assassination attempts. That is individual heterogeneity can determine the correlation that one witnesses between political assassination and dynasty formation. Hence to address this issue, the paper employs an identification strategy used in Jones and Olken (2009), which studies the effects of assassination on institutional transition and intensity of war. The study suggests and supports that while assassination attempt on a national leader is possibly endogenous, whether a leader barely survives or dies in attempt is a product of chance. As a result, if one compares outcomes associated with leaders who barely survived an assassination attempt with leaders who died, then the effects of political assassination can be isolated. So, to employ this identification technique, this paper compiles a historical data set of 97 leaders from the political landscape of Bangladesh in post 1971 period who have faced at least one serious assassination attempt on their life. Furthermore, the results show that the outcome of an assassination attempt turns out to be factor in facilitating the likelihood that a leader will start or continue a political dynasty. The coefficients indicate that successful assassination can increase the likelihood of dynastic succession by 28 percentage point. This finding also remains consistent when multiple robustness checks are performed.

On the whole, the empirical analysis is indicative that political assassinations in Bangladesh have facilitated the *de facto* inheritance of political power. It is also in line with the idea that martyrdom of assassinated leaders can play an instrumental role in facilitating dynastic successions.

1.5.2 Assassinations and Political Dynasties

The fourth paper studies the role of political assassination in fuelling the emergence of political dynasties across countries. In essence, it studies whether political assassinations across the globe had a causal role in aiding the emergence of political dynasties through facilitating dynastic successions at the highest executive political office. This is an interesting inquiry since political assassinations of national leaders have often brought mixed fortunes for the victim's family. To be more specific, the assassination of Swedish Prime Minister Olof Palme in 1986 or Pakistani Prime Minister Liaqat Ali Khan in 1951 have failed to trigger the rise of dynastic successors who emerged as the executive head of the state for their respective countries. On the other hand, the assassination of Philippines leader Benigno Aquino in 1983 or Sri Lankan Prime Minister Bandaranaike in 1959 aided the rise of their widows as the premier of Philippines and Sri Lanka respectively (Ritcher, 1990). Thus, a few important questions that follow are: does political assassination on average increases the likelihood that a leader will start a political dynasty? If so, are there *conditions* that make political assassination a triggering event for dynasty formation? Lastly, are assassinations capable of promoting certain *type* of dynastic successions?

This paper provides an empirical examination at a cross country level to shed light on these mentioned questions. In doing so, the analysis employs two new data sets. The first data set uses biographical information on 442 national leaders from 65 countries who have governed (at least once) as an executive head of their respective country during the period starting from 1950 to 2005.[25] This is then empirically scrutinized to see if assassinated leaders are on average associated with a higher likelihood of having a posterior relative in office. Furthermore, the base-line results point out that assassinated leaders are on average associated with a higher likelihood that they will later have a relative enter office. This association is robust for various changes in the econometric specifications. Even so, it is not pragmatic to infer that the observed relationship is in any respect causal. This is because the estimations might suffer from unobserved individual or family heterogeneity of national leader.[26]

[25] In order to establish a baseline list of national leader for each country post 1950, the work uses the Archigos dataset, v2.5 (Goemans et al, 2007), which identifies the primary national leader for each country at each point in the mentioned time interval.

[26] For example, national leader who are more likely to start a political dynasty (due to the political capital endowment they entertain or etc) might also attract assassination attempt.

Hence, to address this identification problem, the paper employs the empirical strategy and the data used in Jones and Olken (2009). The authors exploit the inherent randomness in the *success* or *failure* of assassination attempts to pinpoint the potential impact of assassination on institution and war. Additionally, the identification assumption is that, although attempts on a leader's life may be driven by political circumstances or individual ability, conditional on trying to kill a national leader the failure or success of an assassination attempt can be treated as exogenous.[27] In other words, chance has a role in determining if a leader barely survives or dies in an assassination attempt. Consequently, the second data set, which is studied in Jones and Olken (2009), constitutes information on more than 190 national leaders with at least one assassination attempt between 1875 and 2003. This allows the empirical examination to pinpoint that conditional on an attempt taking place, whether or not the outcome of the attempt (which is a product of chance) partially determines the likelihood that a leader will start or continue a political dynasty. And, the primary results show that assassinations facilitate the likelihood that a national leader will have a posterior relative in office. In particular, this effect is stronger for leaders with a cumulative tenure of more than ten years. The findings also reflect that assassinations are more likely to trigger immediate dynastic succession as means of aiding the rise of national political dynasties. On the role of other factors, national leader with a longer tenure are associated with a higher likelihood of starting (or continuing) a political dynasty. This is in line with the notion that dynastic political power is self-perpetuating (Dal Bo et al, 2009).

Taken together, the estimations provide no support for the disruption-effect hypothesis, which suggests that assassinations might hinder the likelihood that a national leader will have a posterior relative in office. Alternatively, the results do indicate that assassinations facilitate the rise of national political dynasties. This makes it probable to infer that martyrdom of assassinated leader is likely to play an instrumental role in facilitating dynastic successions at the highest political office

1.5.3 Key Message

The two papers in Theme-II pinpoint factors that facilitate the emergence of political dynasties. In particular, the papers examine if assassination of politicians allow de facto inheritance of

[27] For Example, Hitler's early departure from the beer hall in 1939, which may have saved his life from the waiting bomb, came only because bad weather prevented him from flying back to Berlin, forcing him to leave early for a train (see Jones and Olken (2009) for more examples).

political power by aiding dynastic successions in their respective political arenas. And, the core results from both studies are consistent with the view that assassinations play a causal role in increasing the likelihood that a political leader will start (or continue) a political dynasty. This contributes to our understanding of dynasty formation, since existing empirical studies are suggestive that *positive* exogenous shocks to a leader's time in power can facilitate posterior dynastic attainment (Dal Bo et al, 2009; Querubin, 2010; Rossi, 2010). On the other hand, this thesis shows that even *negative* exogenous shocks to a leader's life can have persistent effects by aiding the rise of political dynasties. This brings to attention the *context* under which the shock to political power was received, which can carry information about the roots of political dynasties. This, nonetheless, remains an avenue for future research to explore. In addition, the results that assassinations perpetuate dynastic rule is counterintuitive and it provokes deeper thought on the effectiveness of violent strategies of displacing leaders. Lastly, it complements the existing qualitative literature that identifies *martyrdom* of assassinated leaders as a crucial factor aiding the formation of political dynasties.

1.6 Outline of the Thesis

The remainder of the thesis is structured as follows. The next section presents the paper which looks at the motivation of dynastic leaders in the political arena of Bangladesh. Chapter 3 describes the cross-country evidence on the relationship between dynasty-politics and corruption. Chapters 4 and 5 contain papers on the role of assassination in facilitating the rise of dynastic leaders. More specifically, the papers provide evidence from both sub-national and cross-country investigations on the stated topic. Lastly, chapter6 provides concluding remarks and identifies important avenues for future investigations.

2. Motivations of Dynastic Leaders: An Empirical Investigation from Bangladesh

Abstract

This research examines if 'dynastic identity' matters in influencing the behaviour of legislators from the political class of Bangladesh. To this end, the paper uses data on all elected parliamentarians from the 8th and 9th National Parliament to see if their attendance record or the likelihood of having a legal or corruption charges is explained (partially) by their dynastic identity while controlling for other relevant covariates. The base-line result suggests that for all MPs in the 8th National Parliament, there is a negative association between an MP's parliamentary attendance level and his or her dynastic identity. On the other hand, no significant association between an MP's dynastic identity and the dependent variables are identified for the data from the 9th National Parliament. To address the issue of causality, the paper looks into individual relationship to exploit a more exogenous determination of one's dynastic identity, and conduct multiple robustness checks. The estimations, however, remain qualitatively similar after all such checks. Thus, the results taken together make it pragmatic to argue that an MP's dynastic identity has some causal role in determining his or her subsequent behaviour. Overall, the results are difficult to reconcile with reputation-building incentive, which proposes that MPs with dynastic identity will relatively shirk less in order to create a positive reputation for the family. Lastly, in line with Besley et al (2011), the paper finds that legislative experience is negatively correlated with an MP's legislative attendance level.

Key words: Dynastic Legislators, Parliamentary Attendance, Legal Charges, Corruption Charges, Shirking

2.1 Introduction: Why look into the motivations of dynastic leaders?

The motivation of political actors has been a subject of both intrinsic and instrumental importance within the discipline of political economy. The traditional view in the public interest domain has been that political actors are motivated by their sense of duty while they are in public office. This makes them altruistic in nature, and one can enhance their competence if they are sufficiently professionalized. In contrast, the "rational choice" literature argues that it is important to assume that individuals behave according to their own self-interest (Edgeworth, 1881; Sen, 1977). This, in effect, means that politicians in office too will prioritize their self-interest, but as they are elected and have to face re-election their behaviour will take into account the possibility of being voted out of office if they fail to satisfy the citizens. Hence, in the midst of this general debate about motivations of politicians and standards in public life, some interesting and important questions are worth exploring. For example, is it necessary to assume that all political actors are motivated by similar objective functions? Is it possible that the "objective function" of political agents varies across politicians of different types? Or in other words, can their *identity* matter in influencing their behaviour?

In this paper, I attempt to throw light on a similar question. That is, this analysis aims to understand whether the dynastic identity of political leaders has a modifying role in determining their behaviour. This is crucial for two reasons. First, existence of political dynasties reflects inequality in the distribution of political power. This makes it interesting to see if dynastic politicians and non-dynastic politicians are driven by similar motivations, given that dynastic leaders are more likely to entertain a higher level of political capital (Dal Bo et al 2009). Second, on a global level, more than one third of world population lives in political arenas where dynastic leaders play a pivotal role in shaping political outcomes.[28] Even in Bangladesh, the current national parliament (and the preceding one) has more than fifty lawmakers from important political families.[29] As a result, an empirical scrutiny of the behaviour of leaders with such identity will provide new insights on the governing dynamics of political actors, and pinpoint the exact role of dynastic identity in determining their respective motivations.

[28]For more information on political dynasties across countries, please review the paper in chapter-3: "Corruption and Dynasty Politics", which is a key component of this thesis.

[29] See - Figure- 2.1A & 2.2A

Theoretically, two principle incentives can determine the behaviour of dynastic leaders. To begin with, dynastic legislators who are motivated by an objective to endure and facilitate dynastic succession can be influenced by a '**reputation-building**' incentive. That is, the incentive will motivate dynastic legislators to be relatively more benign and abstain from shirking (or corrupt activities) to signal voters that their family is in politics to serve the common good. Accordingly, if this incentive is strong, then one can expect a legislator's dynastic identity to facilitate relatively less shirking among dynastic legislators to generate (or maintain) goodwill for their family-name. Conversely, dynastic legislators can also be motivated by what I term the '**stockpiling-wealth**' incentive. This incentive suggests that dynastic legislators will use their position for personal enrichment (in terms of accumulating both financial and political capital) so that they can use their inherited and accumulated political capital to ensure their political endurance. Hence, if this incentive dominates then it is probable that dynastic identity will motivate legislator to be relatively less benign, and will encourage greater levels of shirking. Besides, since both these incentives work in opposite direction, the relationship between a legislator's dynastic identity and his or her subsequent behaviour remains a subject of empirical inquiry.

Therefore, to address this issue, I compile an individual level data set on all MPs present in the 8th and 9th National Parliament of Bangladesh between 2001-06 and 2009-10, and pinpoint if dynastic identity can help predict their behaviour on multiple dimensions once I control for relevant covariates. In doing so, for all legislators in the 8th National Parliament, I examine their parliamentary attendance records to construct a variable *Parliamentary Attendance Ratio*, which equals to one if a parliamentarian has not been absent for a single day in all 23 sessions of parliament held between 2001-2006.[30] This procedure is also followed for all legislators in the 9th National Parliament. I then see if a legislator's dynastic identity explains the variation in *Parliamentary Attendance Ratio* when I control for relevant structural and individual characteristics. For MPs in the 9th National Parliament, I also review the personal affidavits of parliamentarians to construct two additional binary variables - *Legal Charges* & *Corruption Charges*. This is done with the intention to see if a legislator's dynastic identity predicts if he or she has a criminal profile or not.

[30] This variable ranges between zero and one.

The remainder of this paper is structured as follows. The following section, provides a discussion on the related literature, and elaborates on the theoretical insights. In Section 2.3, I discuss the background, data and the empirical methodology. Section 2.4 illustrates the results and provides interpretation. Lastly, section 2.5 offers some concluding remarks.

2.2 Literature and Theory

2.2.1 Literature Review

The central aim of this paper is to improve our understanding of the factors that governs the behaviour of politicians. In particular, this work tries to see if dynastic identity has any role in determining legislator behaviour. Focusing on political dynasties is interesting because in modern democracies these groups reflect inequality in the distribution of political power. This makes it pertinent to explore numerous questions. For example, how do dynastic leaders behave in their respective political avenues? Are they relatively more or less benign? What factors facilitate their emergence? Finally, what is their relationship with electoral competitiveness and policy formation? It is relevant to mention that very few empirical studies touch these issues. Recently, Dal Bo et al. (2009) studied the evolution of political dynasties in the United States Congress since its inception in 1789. With many other interesting findings the authors found that legislators who serve for long tenures are significantly more likely to have relatives entering Congress later. This, in essence, suggests that existing democratic process allows for de facto inheritance of political power. On its relationship with electoral competitiveness, Feinstein (2010) shows that dynastic leaders have a higher likelihood of attaining electoral success due to their brand-name advantage. Likewise, Asaka et al (2010) develops a simple model which predicts two phenomena. First, dynastic leaders enjoy a higher probability of winning. And second, fiscal transfers delivered by dynastic legislators do not necessarily result in higher economic performance. Furthermore, their predictions find support in data on Japan *Diet* between 1997 and 2007.

Qualitative analysis of contemporary political dynasties also exists. For example, Brownlee (2007) provides an interesting scrutiny of hereditary successions in modern autocracies. In particular, the analysis shows that whether elites will abet dynastic succession depends on the precedent for leadership selection. That is, where rulers are predated by parties, surrounding political elites will defer to the party as the recognized arbiter of succession. On the other hand, where rulers predate their parties and political elites lack an established precedent for an

orderly transfer of power, hereditary succession offers a focal point for reducing uncertainty, achieving consensus, and forestalling a power vacuum. Other works have focused on the role of political events (such as assassination) in facilitating the rise of female dynastic leaders in South and South East Asia (Ritcher, 1990; Thompson, 2002). Descriptive and comparative analysis have also scrutinized various issues concerning with political dynasties in different regions (Schatz; 2004; Hess, 1997; Brandes et al, 1997; Camp 1982). Thus, by focusing on the importance of dynastic identity in determining political behaviour, this work contributes to the effort in literature to shed light on the dynamics surrounding political dynasties.

The nature of this investigation also makes the work closely related to the study of political shirking. This literature on political shirking is diverse, and it constitutes multiple streams. To begin with, there is an important strand within the literature on political shirking which emphasizes on the role of institutional design to make legislators more effective. The focus on the role of institution is important because institutions determine the level of shirking in a given political arena in twofold ways. First, institutional arrangements shape the incentives of political actors. They affect how legislators behave in the parliament, and decide on transfers, taxes and public good provision towards specific groups of citizens.[31] Second, institutions determine the process through which political selection takes place in a given polity (Besley, 2005, Acemoglu, et al , 2008; Besley et al 2009). Selection of politicians also matters because it affects their competence, honesty or motivation.[32] Consequently, on the role of institution in shaping incentives for politicians, Besley and Case (1995)identify that policies are different in states when U.S. state Governors are barred by term limit to stand for re-election. Analysing the effect of term limit is interesting because the prospect of facing re-election has been much emphasized as the primary disciplining mechanism in a representative democracy.

In addition to this, Diermeier, Keane, and Merlo (2005)notes the effects of term limits in U.S. Congress, and it highlights that term limits may discourage relatively ‘skilled’ and ‘policy

[31]Autocracies are more likely to be governed by groups of elite while representative democracies create incentive to appeal to important swing groups (for more information, please see Acemoglu et al (2005). In addition to this, institutions create the level of accountability a political arena exhibit, which in essence determines how politicians are punished for misdemeanors and rewarded for good behavior.

[32]Institutional arrangements in political arenas differ in the way they select their leaders. For example, military dictatorships tend to select leaders with good credentials from the armed forces. Monarchies rely on hereditary norms in facilitating succession. Democratic institutions rely on how leaders appeal to the mass electorate. It isalso important to mention that coalition formation can also differ between autocratic and democratic arrangements as highlighted by Acemoglu et al. (2008).

minded' politicians from staying in Congress. The authors show that term limits might tend to tilt the composition of Congress toward younger and less experienced politicians. Keane and Merlo (2007) contribute to this line of inquiry by pointing out that term limits will disproportionately reduce the continuation probabilities of members of the majority party. Tituinik (2008) uses an unique randomized experiment in the state senates of Arkansas and Texas to identify that senators serving shorter terms have higher abstention rates. On a similar note, Dal Bo and Rossi (2008) focus on an experiment in the Argentine Senate to suggest that longer terms enhance legislative productivity. Conversely, Smart and Sturm (2004) argue that term limits can benefit voters (ex ante) by making politicians more truthful about their policy preference, as it reduces the value of occupying public office. In the empirical literature, democratic institutions are also examined to understand whether they enhance economic performance (Przeworski and Limongi, 1993;Barro, 1996; Papaioannou and Siourounis, 2008; Aghion et al, 2008; Besley et al 2010)

Institutions also determine the level of political shirking in a given political landscape by guiding the process of political selection. More specifically, since any given polity will suffer from incomplete contracts and limited commitment, adoption of a socially optimal policies /behaviour will ultimately depend upon an incumbent leader's capacity to use his or her discretion effectively. Hence, selection of political leaders matter, and a handful of empirical studies confirm this issue. For example, Rehavi (2007) uses close election to identify that women's representation affects policy formulation in U.Ss state legislatures. This is also reflected in the findings of Chattopadhyay and Duflo (2004) which examine two Indian states – Rajasthan and West Bengal. The authors show that the kind of issues favoured by women get more attention when women leaders are selected. In line with this, Pande (2003) finds that reservation for scheduled tribes and scheduled castes at the state level in India affected policies towards these groups. These studies also collectively show that 'leader' identity plays an instrumental role in altering leader behaviour in democratic policymaking process.

Some studies on political shirking relatively rely more on legislators as the unit of observation to understand whether legislators are actually working or shirking. Two issues are mostly studied to analyse shirking - namely voting patterns and expenses/monetary returns to a political career. On the issue of voting, an interesting body of work has emerged focusing on whether politicians behave differently after they have decided to retire from politics. This focus is insightful because if a legislator is in politics to serve public interest then the decision

to retire will not affect his voting pattern in his last term. In contrast, if a legislator is governed by any other motivation (self-interest), then it is likely that the voting pattern will change when he decides to retire. However, empirical evidence on these competing views remains mixed. For example, Lott (1987a)scrutinizes if a congressman's decision to retire him alter how he votes when he does vote.[33] The author identifies that while congressmen do not vote as regularly in their final term as they do otherwise, congressmen carry on voting in the same way whenever they do vote. This finding is in line with the hypothesis that a legislator's personal ideology restricts shirking as they continue to vote for what they believe, but they do less of it as they no longer face re-election. Similarly, Lot and Reed (1989) pinpoint that congressmen in US miss more votes in their final term in office, even though no evidence suggests that their voting patterns change significantly. In addition to this, Lott and Bronars (1993) examine congressional voting pattern in the US between 1975-90, and point out no significant change in voting behaviour in representative's last term in congress. The authors use this evidence to argue that selection works well for U.S. Congress, leading to a set of politicians who are well aligned with the constituent interests.

On a slightly different note, McArthur and Marks (1988)study U.S Congressional behaviour in lame duck sessions[34], and identifies that retiring congressmen were significantly more likely in 1982 to vote against automobile domestic content legislation than others. In more contemporary times, Padro i Miquel and Snyder (2006) use subjective measure of legislative performance in North Carolina to examine the effects of legislative tenure. The study suggests that legislative performance increases with tenure, and it considers 'learning-by-doing' as a possible explanation. Besley et al (2011), as well, examine the behaviour of lawmakers in the British House of Commons between 2001 and 2004, and find that retiring MPs significantly vote less than their non-retiring colleagues. Additionally, the authors also show that experience and party affiliation are important predictors of parliamentary attendance. Thus, my work controls for these factors while examining the role of dynastic identity in explaining the variation in MPs' attendance in the national parliament of Bangladesh.

[33] Their sample was taken from the 94th and 95th Congresses in the U.S

[34]After an election, members who have not been re-elected are at times called upon to vote on legislation before the new swearing in takes place.

Theoretical and empirical research on political shirking has also focused on the monetary returns to holding office to shed light on the effects of remuneration on political behaviour, and how private and public sector returns determine the decision to enter a political career. On this, Caselli and Morelli, (2004) present a simple theory of the quality of elected officials. Their work offers three main insights. Low-quality citizens have a 'comparative advantage' in pursuing office, because their market wages are lower than those of high-quality citizens (competence), and/ or because they reap higher returns from holding office (honesty). So, voters may find themselves supply constrained of good candidates. Second, bad politicians generate negative externalities for good ones, making their rewards from office increasing in the average quality of office holders. This leads to multiple equilibrium in quality, since individuals with high quality considers a career in politics more valuable only when other high quality politicians are in politics. Third, incumbent policy makers can influence the rewards of future policymakers, leading to path dependence in quality: low quality governments sow the seeds for low quality bad governments.[35] Besley (2004) contributes to this line of inquiry by showing that wages plays an important role in aligning voter preference and policy outcomes. As a result, it reduces turnover among first-term incumbents. Furthermore, the study also highlights the fact that higher remuneration can also increase the fraction of congruent politicians who will put themselves forward for office. This finding is also upheld, to an extent, by Gagliarducci and Nannicini, (2009) who study Italian municipal governments from 1993 and 2001 to find that increase in wages attract better educated leaders. They also show that better paid politicians size down the government machinery by improving internal efficiency. This is also reflected in the results of Feraz and Finan (2008). The authors use a quasi-experimental set up to isolate that higher wages increases quality of legislators and political competition in Brazilian municipal governments.

On the other hand, some argue that an increase in wages will not always play an efficiency wage function in the political arena. For example, Mattozzi and Merlo (2008) lay out a dynamic model where there are both individuals with "political career", who stay in office to signal their ability to the private sector, and "career politicians", who stay in public sector till retirement. Moreover, in their theoretical framework, an increase in wages results in lowering the average quality of citizens who have political careers, since politics becomes a relatively more attractive option for all levels of skills, and it has an ambiguous effect on the average

[35] An interesting proposition of this paper is that bribes may actually *increase* the likelihood that talented politicians run for office.

quality of career politicians, because incumbent politicians with high-ability are more willing to stay in office. Besides, Gagliarducci, Nannicini and Naticchioni (2008) analyse the effect of outside earnings on political selection. To state it otherwise, if political leaders can keep private business while appointed and election boosts the private returns of high ability citizens, then outside earning can induce equilibria with positive sorting, where a wage increase will make the political office relatively more attractive for low ability citizens. On the effects of wage reduction, Keane and Merlo (2007)stress that in the US Congress, a reduction in congressional wage will induce more skilled politicians to exit Congress (where skills refer to the ability to win elections), but this is not true for 'achievers'.[36]

There is also a small body of work which tries to understand the market for political favours. In other words, how politicians benefit from occupying public office by making useful contacts with the private sector, and in the process enhancing their rewards from a post-political career. Diermeier, Keane, and Merlo (2005), on this issue, provided the first empirical scrutiny with political leaders as unit of o suggest that serving as a politician may boost private sector earning after leaving office. The authors estimate a structural dynamic model of congressional careers on all House and Senate members who entered Congress from 1947 to 1993, and they point out that congressional career significantly increase post-congressional wages in the private sector. Similarly, Eggers and Hainmueller, (2009) estimate the returns to serving in the British House of Commons in the post-war era, and they show that serving in office almost doubled the wealth of Conservative MPs, but had no significant financial benefits for Labour MPs.

To conclude, my paper contributes to this overall scrutiny on the behaviour of political leaders by trying to see if dynastic identity matters in shaping political outcomes on a newly compiled data set from Bangladesh. Since most of the existing works on this specific issue have used countries in North America (and Asia), as their primary venue for investigation, Bangladesh (to the best of my knowledge) becomes the first candidate from South Asia where an empirical examination using parliamentarians as unit of observation has been conducted.

[36]Legislators are categorized as "achievers" if they perform very well in terms of legislative and policy goals.

2.2.2 Theory: Reputation Building versus Stock-piling Wealth

Almost all work on political agency assumes that political actors are driven by self-interest. Yet, this assumption implicitly proposes that political leaders act in a similar fashion under common institutional arrangements no matter who they are. This, to an extent, undermines the possibility that individual traits (like identity) can play a crucial role in determining behavioural outcomes. Nonetheless, some existing empirical work suggests that a political leader's identity (such as gender or caste) can have an important role in motivating policy outcomes (Pande, 2003, Chattopadhyay and Duflo, 2004, Rehavi, 2007). Hence, in this section, I provide a discussion on the possible ways through which a leader's dynastic identity might influence his or her behaviour. More specifically, I propose that in understanding the behaviour of politician from dynasties, it is useful to *assume* that dynastic politicians have in their objective function a goal to initiate a dynastic succession. If this is true, then not only dynastic politicians will account for all the future consequences of their action on their welfare, but they will also take into account how their personal and political behaviour affect the probability of a dynastic succession within their respective political realm. As a result, this additional objective of dynastic politicians to make sure that their dynasty endures *can* change their behaviour from others. This, on the other hand, raises a concern that if dynastic politicians are affected by their desire of facilitating future dynastic successions, then why will non dynastic politicians act in any different way? This is because non-dynastic politicians can too desire that their family members will inherit their political position or office, and in the process set up their own political dynasty. A possible reason why this might not be the case is because dynastic leaders might inherit political capital - in the form of key political contacts, familiarity with pre-established donor network and etc – that is difficult to acquire over a shorter time span. Additionally, access to such inherited political capital can allow dynastic politicians to facilitate future dynastic succession with a relatively lower effort in comparison to politicians who are attempting to start their own dynasty. Consequently, if this line of reasoning holds, then it will not be surprising if dynastic politicians motivated partially by the objective to promote a dynastic succession act in a different way than other non-dynastic politicians.

Now, assuming that dynastic politicians are partially motivated by the desire to promote a dynastic succession, the relationship between a legislator's dynastic identity and his or her behaviour in the political arena is still theoretically not clear. This is because their decision-

making process is affected by two opposing incentives. I call this the **Reputation-Building** incentive and the **Stockpiling-Wealth** incentive. Reputation-Building incentive implies that when members of political dynasties are in office, they will use this opportunity to build a positive reputation for the family. That is, they will abstain from behaviours that decrease their family's goodwill, such as engaging in corruption or being ineffective in legislative responsibilities, as much as possible. This will allow them to signal voters that their dynasty embraces a vocation for public interest. Therefore, if dynastic politicians succeed in creating a positive reputation for their family, then the dynastic succession (which by our assumption is one of the objectives of a dynastic politician) has a greater likelihood of being seen legitimate and acceptable.[37]Hence, if this line of reasoning holds and reputation-building incentive dominates the behaviour of dynastic politicians, then one will expect legislator's with dynastic identity to be more benign in comparison to legislators of non-dynastic identity.[38]

In contrast, stockpiling-wealth incentive points out that dynastic politician will use their inherited political capital to consolidate their financial and political strength. This, in essence, means that dynastic politicians will appoint their preferred people to key positions in the government and bureaucracy, and in the process accumulate more financial and political capital so that future dynastic successions are achieved in a smooth manner. One can also argue that they will misuse their authority to manipulate institutions (such as Election Commission, Defence and so on) so that elections contested by their future generations are rigged in their favour. And, if this incentive is strong, then one can expect dynastic politicians will have a greater tendency to misuse their authority (while they are in office) so that they can promote dynastic successions in their political arena. Likewise, Laband and Lentz (1985) identify that children of national politicians are less likely to be opposed for re-election than those who were not from a political dynastic lineage. The authors also opine that opponents of the children of politicians spend more in losing campaigns than do those who run against politicians from non-political family. This makes challenging incumbent dynastic politicians

[37]In practice, it can evoke a similar decision making scenario faced by a politician with term-limits in comparison to a politician without term-limits. That is, the incentive induced from the possibility of facing re-election can (in practice) be similar to one of dynastic politicians aiming to facilitate a dynastic succession.

[38]In other words, if political positions are transferable from politicians to politician's children, then the last period enforcement problem (i.e. how one restricts politicians from shirking in the last period) is somewhat mitigated.

relatively difficult.[39] Accordingly, if such scenarios prevail for legislators belonging to prominent dynasties, then one can expect dynastic legislators to shirk relatively more in comparison to legislators with non-dynastic identity.

On the whole, the discussion highlights that the reputation-building and the stockpiling-wealth incentive work in opposite direction. This makes an empirical investigation essential for isolating the possible net-effect of dynastic identity. Yet, empirically approaching this inquiry in a sub-national data set of legislators is not straightforward. First, it is important to isolate specific leader behaviour or characteristics which can carry information about a leader's motivational dynamics in the public sphere. The continuum of leader behaviour from which one can infer some information about his or her respective motivation can include: (i) his or her general attentiveness in the legislative process, (ii) his or her responsiveness to the acute needs of the constituency in times of flood or drought, (iii) his or her leadership in national issues or constituency development programme, or (iv) his or her having a criminal record. Furthermore, within the political spectrum of Bangladesh, the choice of the dimension that is ultimately scrutinized to understand the role of dynastic identity should keep the political context of Bangladesh in the backdrop. That is, what is expected of legislators? What is a goodwill enhancing behaviour in Bangladesh? Are there ways through which we can accumulate information on a leader's stockpiling-wealth mind-set?

Second, the measure of leader behaviour that the study uses must be objective in construction and available across a large pool of legislators (if not all), so that the findings are not sensitive to any change in sample size of the data. Lastly, the dependent variable measuring leader behaviour must also minimize the scope of measurement error as it will reduce the possibility of finding significant results due to larger standard error.

[39] A very similar view is expressed in Lott, (1986) and Lott, (1987a & 1987b). More specifically, the studies show that long exposure to political power (a trait very common among dynastic leaders) can generate a *brand-name* for an incumbent politician, which is often non-transferable in nature. Besides, such brand name can often result in greater popular support for politicians who care about both "net-support" and "commission" that he or she receives for transferring wealth. This additional level of support for politicians with brand-names creates barriers to entry for potentially more competent entrants with no brand-names. As a result, this can mean that that incumbent politician with brand-names can find it easier to remain in office by restricting entrants even when there exists, more efficient, less recognised candidates.

2.3 Historical Background, Data and Empirical Method

Evidence for this study comes from Bangladesh, where dynastic leaders play an influential role in political decision making at various political levels. To better understand the content of the data a brief overview is provided.

2.3.1Historical Background of Political Elites in Bangladesh.

Political Dynasties are the modern day political elites of Bangladesh. Yet, the prevalence of political elites is not a contemporary phenomenon. In colonial period, land lord elites – *zamindars* - first received official recognition when the Permanent Settlement Act 1793 was introduced by the British authority. This act allowed the zamindars to have absolute proprietor rights over their land, which included their rights to transfer their land through sale, mortgage or gift. These rights, on the other hand, were not available to *raiyats* – the subjects of the zamindars which mostly constituted their tenant population engaged in peasantry. The zamindars, however, were obligated to perform one principle duty. That is, zamindars were compelled to prepare details of revenue assessment, collect rent from the peasants and remit it to the British authorities. Furthermore, they were also required to support the imperial officers in the peace-keeping of the locality and to supply troops whenever needed.[40] In case of default, the British authorities could auction the landed propriety of the zamindars to meet their revenue expectation.[41]The idea behind this was to create landed aristocracy which was supposed to be loyal to the British Raj. The arrangements of the Act also meant that zamindars had to rigorously monitor their tenants in order to protect their rights, which fuelled the growing discontent between the two groups of the people.

The second source of discontent emerged from the religious composition of the *zamindari* class. More precisely, the majority of zamindars in East Bengal (now Bangladesh) during the colonial period[42] were Hindus, which created discomfort among the majority Muslim tenants in East Bengal. In fact, this issue was so prominent during the colonial period that Mr Fazlul

[40] This was required under the Permanent Settlement Act 1793.

[41] This was required under the Revenue Sale Law 1793. Besides, the large territorial landlords often lost their lands to auctions, which created a new breed of small territorial landlords.

[42] The British Colonial period of India ended in 1947. In 1947, East Bengal was renamed as East Pakistan, and it remained so until its independence as the People's Republic of Bangladesh in 1971.

Huq[43] - Chief Minister of undivided Bengal (1937–1943) – stated during his election campaign in 1937 that, "...my fight is with landlords, capitalist, and holders of vested interests. The landlords are 95 percent hindus, and...far from helping me, they are out to throw obstacles in my way....As I have made it abundantly clear already, I am fighting for a satisfactory solution of the bread problem or, in other words, of the "*Dal Bhat"* problem of Bengal, and also for over hauling of the Tenancy Laws in Bengal so as to give some relief to agriculturalist."[44]Despite this rhetoric, which explicitly highlights his discomfort with the *zamindari* class, the Cabinet of Mr Fazlul Huq included eleven members out of which ten belonged to prominent *zamindari* family (Sen, 1986).

In the post-colonial period, however, the grip of the *zamindari* class[45] in East Pakistan (and now Bangladesh) diminished significantly after the enactment of the East Bengal State Acquisition and Tenancy Act 1950. Under this Act, all holders of land emerged as the direct tenants of the government. Besides, the new dynamics surrounding post-colonial politics in East Pakistan opened up doors for Bengali Muslim *professionals* – lawyers, journalists, teachers, etc -to organize movement for their political agendas under a new political outfit – namely the Bangladesh Awami Legue. It must be noted here, however, that in the early years of post-colonial period the Muslim League became the most prominent party in both West Pakistan (now Pakistan) and East Pakistan Quaid-i-Azam Muhammad Ali Jinnah – the founder of Pakistan – was the leader of the party and Governor General of the new country. Nonetheless, due to the growing economic disparity between West and East Pakistan during 1947 and 1971, the Muslim League increasingly became alienated from the people of East Pakistan (Choudhury, 1972). In addition, given the leadership of Muslim League mostly constituted influential persons and families from West Pakistan (*Pirs, Zamindars, Khans* and *Nawabs*), the party failed to address the sentiments concerning the socio-economic conditions in East Pakistan.

Against this backdrop, Maulana Abdul Hamid Khan Bhasani formed the Awami League in 1949. Maulana Bhasani rose to political prominence during the 1930swhen he lead the

[43] For more information on AK Fazlul Huq, see: http://www.bdlifeline.com/a-k-fazlul-huq/

[44] This political speech was first published in the newspaper "*The Amrit Bazar Patrika*" (Calcutta), 11 September 1936.

[45]Especially the role of the zamindari class that belonged to the Hindu community.

peasant movement in East Bengal and Assam. Other Bengali nationalist leaders including H.S Suhrawardy – the former mayor of Calcutta - Ataur Rahman Khan, Shamsul Huq and Bangabandhu Sheikh Mujibur Rahman occupied various posts in the new born party. The first twelve-point programme initiated by the Awami League included the abolishment of the *Zamindari* system.[46] This 'anti-zamindari' stand was possible for Awami League to advocate as it entertained a relatively non-elitist leadership composition. To be more precise, Maulana AHK Bhasani himself came from a peasant background. Moreover, three Vice Presidents of the party were lawyers with a non-landlord family lineage, and the General Secretary and the Assistant Secretary of the party also belonged to middle income families. Bangabandhu Sheikh Mujibur Rahman, who emerged as a party leader in the late sixties, also belonged to a non-elitist background (Sen, 1986).

By the late 1960s, Awami League under the leadership of Bangabandhu Sheikh Mujibur Rahman emerged as formidable political force in East Pakistan. This rise in political popularity was a resultant effect of the disparity in economic and political power of West and East Pakistan. More precisely, during Ayub Khan's authoritarian rule of Pakistan between 1958 and 1968, the polity of Pakistan witnessed the emergence of an all-powerful ruling elite – mostly comprised of senior bureaucrats, military personal and members of some prominent families in West Pakistan. To some extent, it was a modernising oligarchy in which Bengalis had no share (Rashiduszzaman, 1970; Sen 1986). Besides, the economic disparity between the two wings also meant that *intelligentsia* of East Pakistan soon realised that secession from West Pakistan was the only possible solution.[47] These sentiments and the associated political events between 1966 and 1971 triggered the *war of liberation*[48], which facilitated the emergence of Bangladesh as an independent country in December 1971.

With Bangladesh emerging as sovereign nation from a devastating liberation war, Bangabandhu Sheikh Mujibur Rahman –the Prime Minister of Bangladesh – had a difficult

[46] Details of the 12-point programme by Awami League in 1949 was publish in the newspaper "*The Statesman*" (Calcutta), 26 June 1949.

[47] For more discussion on the economic disparity between West and East Pakistan, see Khan (1999).

[48] The liberation war was fought under the direct control of the Government in exile- comprising key Awami League leaders. Bangabandhu Sheikh Mujibur Rahman was arrested and imprisoned by the military body of West Pakistan, and was only released when Bangladesh emerged as an independent country.

situation to administer. Additionally, Bangabandhu's first Cabinet composed of thirteen lawyers, four businessmen, three full-time politicians, one college teacher, one landlord and an ex-army officer, were relatively inexperienced in state craft due their long exposure to opposition politics. These issues together with the acute famine that took place in 1974 claiming thousands of lives[49] left the political and economic very unstable. Ultimately, on the 15th August 1975, Bangabandhu and other important leaders of Awami League were assassinated in a military coup, which triggered the rise of military rule that dominated the Bangladeshi political arena between 1975 and 1991(Karim, 2005).

After a prolonged period of military regimes since 1975, democracy returned when military strongman President HM Ershad decided to resign after a popular movement in 1991 (Baxter and Rahman, 1991). The election was held on 27th February 1991 in which all parties participated. Likewise, the Bangladesh Nationalist Party (BNP) led by Begum Khaleda Zia (widow of the assassinated military leader General Ziaur Rahman[50]) won a simple majority, and Mrs Zia was sworn in the Office of the Prime Minister on the 20th March 1991. On the other hand, Sheikh Hasina Wajed – daughter of the founding father of Bangladesh Bangabandhu Sheikh Mujibur Rahman[51] – became the leader of the opposition in the Parliament, a position she earlier held in 1986. Since then, both these leaders have succeeded each other in every respective election to attain the top political office.[52] At present, Sheikh Hasina is the Prime Minister of Bangladesh, after Awami League won a landslide victory in the ninth-parliamentary election on the 29th of December 2009. This election was preceded by two years of emergency rule under the military backed interim caretaker government during which numerous political leaders (including Sheikh Hasina and Khaleda Zia) were arrested under charges of corruption (Alamgir, 2009).

[49] For more discussion on the 1974 Famine, see Sen (1981).

[50] General Zia was the *de facto* military ruler of Bangladesh between 1975 and 1981, during which he established the Bangladesh Nationalist Party [BNP].

[51] For more information on Bangabandhu, see http://www.rulers.org/indexr1.html#rahma

[52]Khaleda Zia won the election held on the 15thFebruary 1996, giving her two successive victories. This election, however, was boycotted by AwamI League and all other major political parties. As a result, the government only lasted a month, and in June the seventh national parliamentary elections took place in which Awami League was elected to govern with Sheikh Hasina as the Prime Minister.

It must be observed at this point, that the dynastic politicians who influence the political arena of Bangladesh in contemporary times are descendants of key politicians who dominated political scene in 1960s, 1970s and 1980s. Moreover, it is also important to recognise that they are not small in proportion. For example, in both 8th and 9th National Parliament, more than fifty dynastic political leaders (out of the 300 parliamentary seats) were elected to office. In terms of the political rise of both Khaleda Zia and Sheikh Hasina – the two rival dynastic leaders – it is argued that the martyrdom of Zia and Bangabandhu respectively have played decisive role (Thompson, 2002).[53] In effect, the Sheikhs and Zias remain the most influential political dynasties within the political domain of Bangladesh, and their rivalry is a well noted phenomenon in both domestic and international press.[54] Bangabandhu Sheikh Mujibur Rahman - the father of Sheikh Hasina- has a deep rooted legacy in the liberation struggle of 1971, and his charismatic leadership is often credited for the creation of Bangladesh (Jahan, 1973).[55] Furthermore, when Bangabandhu was assassinated in 1975, the policy makers of the Awami League chose Sheikh Hasina as its chairman in 1981, as it helped them achieve a degree of continuity. Besides, the martyrdom of Bangabandhu allowed Hasina to a gather popular support against the military regime of Ershad (Rahman, 1984; Thompson, 2002). This also remains true for Khaleda Zia, whose husband's regime immediately preceded Ershad's nine year-long military rule.

In terms of their origin, Sheikhs hail from the District of Gopalganj where Bangabandhu Sheikh Mujibur Rahman was born. In the current national parliament, both Prime Minister Sheikh Hasina and her cousin Sheikh FK Selim are MPs from Gopalganj-2 and Gopalganj-3 respectively. Sheikhs also have a stronghold on the District of Madaripur[56] (which is adjacent to the District of Gopalganj), where Sheikh Hasina's nephew Noor-E-Alam Chowdhury is an

[53] It is also interesting to note that, all Cabinet colleagues of Bangabandhu who were assassinated in 1975 ended up having an eventual political dynastic successor.

[54]In international media, the rivalry between Sheikh Hasina and Khaleda Zia is dubbed as "*the battle of the two Begums*". For more information on this, see: http://www.independent.co.uk/news/world/asia/battle-of-the-begums-brings-bangladesh-to-a-standstill-2148033.html; Their rivalry is also noted in the country profile of BBC.see: http://news.bbc.co.uk/1/hi/world/south_asia/country_profiles/1160598.stm.

[55] In 2004, Bangabandhu was voted by the population of Bangladesh and West Bengal as the Greatest Bengali of all time beating India's Nobel winning playwright and poet Rabindranath Tagore. For more information on this, see: http://news.bbc.co.uk/1/hi/world/south_asia/3623345.stm

[56] Both the districts (Gopalganj and Madaripur) are within Dhaka Division.

MP. Zias, on the other hand, have strong holds in two non-adjacent districts- Feni[57] and Bogura.[58] To be specific, Begum Khaleda Zia is from the District of Feni, where she is an MP from the constituency Feni-1.

Apart from the Sheikhs and Zias, other political dynasties also play an influential role in regional political arena of Bangladesh. For example, constituencies in the Faridpur district have been under the influence of the Chowdhury dynasty for last seven decades.[59] Yusuf Ali Chowdhury, who was from Faridpur was a veteran politician in the then East Pakistan. He belonged to the aristocratic *zamindar* family of Chowdhury Moyezuddin Biwshash who was a patron of the Indian National Congress. Yusuf Ali was elected to the local assembly in the 1930s and was member of the provincial cabinet in the 1950s. Later, his children also emerged as influential politicians in independent Bangladesh. His eldest son, Chowdhury Kamal Ibne Yusuf was elected to the parliament for five times, and held cabinet positions in all BNP tenures. His second son Chowdhury Akmal IbneYusf was also an MP in 2001. Similarly, in the district of Sirajganj, the Monsur Ali[60] dynasty produced four members of parliament across three generations. In the southern district of Bhola, Naziur Rahman Manjur's oldest son Barrister Andaleeve Rahman is currently an MP. Manjur played an instrumental role in the cabinet for Ershad during the 1980s[61], and founded a new party – Bangladesh Jaitiya Party (BJP), which is currently in the BNP-led Four Party alliance.[62]Subsequently, given that dynastic leaders exist at both regional and national levels, it will be interesting to examine if dynastic legislators behave any differently than non-dynastic leaders. As discussed above, in theory dynastic leaders are motivated by two

[57] District of Feni is within Chittagong Division.

[58] District of Bogura is within Rajshahi Division.

[59]For a brief sketch of the life of Yusuf Ali Chowdhury, see:http://www.thedailystar.net/2004/12/04/d41204150392.htm

[60]Manusr Ali was assassinated in 1975, when Mujib's government was overthrown on the 15th of August 1975. His, two sons – Mohammed Nasim and Mohammed Selim – were later elected to parliament on numerous occasions. At present, his grandson, Tanvir Shakil Joy is a MP.

[61] It is also argued that Naziur played a key role in the electoral victory of the BNP-led Four-Party alliance in 2001. see: http://www.probenewsmagazine.com/index.php?contentId=1785&index=2

[62]Naziur is also married Bangabandhu Sheikh MujiburRahman's niece Sheikh RebaRahman.: For more information, see: http://www.thedailystar.net/newDesign/news-details.php?nid=31156; Naziur's eldest son Andaleeve Rahman is also married to a member of the Sheikh Family, For more information on this, see: http://groups.yahoo.com/group/khabor/message/29020

opposing incentives making the overall effect on legislator behaviour ambiguous. This calls for a suitable empirical investigation of the topic, which I address in the following sections.

2.3.2 Data and Sources

In order to address the central question of the paper, a new data set is compiled on all elected legislators in the 8th and 9th National Parliament of Bangladesh. In terms of administrative structure, Bangladesh is a unitary parliamentary republic consisting of three hundred parliamentary seats.[63] These seats are located in six administrative Divisions, which in turn are subdivided in sixty-four Districts.[64] This means that each District constitutes one or more seats, and each Division has more than one District.[65] There is a unicameral parliament known as the *Jatiyo Sangsad*. The database includes three measures of legislator behaviour. These measures are chosen so that one can analyse to see if dynastic legislators are driven by reputation-building incentive or stockpiling wealth incentive. Hence, to start with, I use *Parl-Attendance-Ratio* to measure a legislator's general involvement with the daily legislative business. For the 8th National Parliament, the attendance ratio is computed by dividing the number of parliamentary days attended by the number of days a legislator can attend in all 23 sessions. And, for the 9th National Parliament, the ratio is computed by repeating the same procedure for first five sessions (given that this parliament is still in progress).[66] This makes a score of one indicating that the legislator has not been absent for a single day in the parliament.

To provide more insights into the criminal profile of legislators, two additional dependent variables are constructed for the analysis of the 9th National Parliament. I use information provided by individual MPs in their personal affidavits to the Bangladesh Election Commission [BEC] before they participated in the ninth parliamentary elections held on the 29th of December 2008. These affidavits were made available by the Bangladesh Election Commission [BEC] in June 2009 under the Right to Information Act 2009, and I employ them to construct two binary dependent variables - *Legal Charges* and *Corruption Charges.*

[63] An additional 45 seats are reserved for women. This is decided upon after an elected government takes office.

[64] For more information, see: http://www.discoverybangladesh.com/meetbangladesh/the_admin.html

[65] Please see the Map- 2.1 & 2.2

[66] This information is collected from the Legal Office of the National Parliament of Bangladesh

Moreover, two kinds of charges are categorized as corruption charges: (I) political leaders charged under "Prevention of Corruption Act, 1947", or (II) political leaders charged under "Anti-Corruption Act 2004". I also use the Annual Report 2007-08 published by Anti-Corruption Commission [ACC] of Bangladesh to minimize the risk of any missing information. It is important to mention, however, that in order to contest in the 8th National Parliament it was not mandatory for MPs to submit personal affidavits. This made it not feasible to obtain information on legal and corruption charges for legislators in the 8th National Parliament. As a result, the data set is relatively more informative for the elected parliamentarians in the 9th National Parliament in comparison to the elected legislators of the 8th National Parliament.

To characterize MPs from political dynasties, an indicator variable *Pre-relative* is created, which is equal to one whenever a legislator has or had a relative[67] entering office before he or she did, and zero otherwise.[68] This information is primarily taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MP's biological or social link with other politicians. Likewise, I have also engaged in a long series of interviews to establish dynastic linkages between present and former parliamentarians. The interviewees are mostly existing dynastic parliamentarians, relatives of politicians, reporters etc. List of newspapers that were useful in noting dynastic linkages of parliamentarians is also provided in Appendix- Box-2. Given that dynastic leaders often receive substantial media attention within the political domain of Bangladesh, newspapers provide a very useful medium for collecting biographical information on such leaders. In addition, before each national parliamentary election, biographical profiles of important parliamentary candidates for each parliamentary constituency are reported in the major newspapers. Thus, I have examined all such coverage on each parliamentary constituency that preceded the 9th Parliamentary election.[69] This exercise (along with the information available in Rashid and Feroz (2002)) allowed the data set to have a comprehensive biological profile of almost all MPs in both 8th and 9th National Parliament.

[67]Anyone with a biological or social connection to the leader is considered a relative, For example- Wife, Brother, Son, Daughter, Cousin, Grandson, Son-in-Law, Brother-in-law, and etc.

[68]Dal Bo et al (2009) use a similar indicator variable to measure legislators with a dynastic identity. E-sources were also useful in establishing dynastic linkages.

[69]The 9th Parliamentary election that took place on 29th December 2008.

To study other characteristics, I use the *Member Directory* on the 9th National Parliament produced by NDI[70]which provides useful information on the individual characteristics of MPs. The following indicator variables are used. *Female* is an indicator variable equal to one if a legislator is not a male individual, and zero otherwise. *Num. of Time MP* is the total number of times a leader is elected to the office of an MP. *Minister* is an indicator variable equal to one if the leader is in the cabinet of the present government (or was in the cabinet in last government). *Military* is an indicator variable equal to one if a leader had a military career at some point in his or her career. *Lawyer* is an indicator variable equal to one if the leader had a law degree, and zero otherwise. *Businessman* is an indicator variable equal to one if the leader is or was businessman by profession, and zero otherwise. The *Non-Marginal Seat* is a binary variable equal to one if the legislator won the election by difference of more than twenty percentage points, and zero otherwise. *Valid-Voter* is a constituency characteristic, which represents the number of legal votes a parliamentary seat had in elections for the 8th and 9th National Parliament. This information is collected from the electoral records, which are available from the Election Commission of Bangladesh. Lastly, *Distance-from-Dhaka* is measure of distance in kilometres of constituencies from the district of Dhaka. This is used as a crude proxy to measure how far a constituency is from the parliament, and this information is collected from the Office of the Ministry of Communication, Government of Bangladesh.

Table-2.1A &2.1B provides summary statistics for all elected legislators in the 8th and the 9th National Parliament. The mean value of *Pre-relative* is greater than 0.17 in both terms. This indicates that roughly more than seventeenth percentage of all elected parliamentarians in the 8th and the 9th National Parliament are of dynastic identity. In the present government, six elected members belong to the prominent Sheikh dynasty. Besides, from Box-2.1 we can see that out of the eight political parties which have representation in the current national parliament, four are chaired by members of prominent political dynasties.[71] The summary statistics also show that there is a noticeable variation in *parl-attendance-ratio* in both 8th and

[70]National Democratic Institute for International Affairs (NDI). For more information, see http://www.ndi.org/; The *Member Directory* project on the 9th National Parliament of Bangladesh was partially funded by USAID.

[71] Box-2.2 and Box-2.3 also shows some interesting phenomenon. First, Box-2 shows that dynastic parliamentarians are among individuals with the lowest attendance record. Second, Box-3 reflects the increasing tendency of the principle opposition party to boycott parliament as means of expressing political

9th National Parliament. And the mean *parl-attendance-ratio* for all elected parliamentarians in both terms stands at 0.69 and 0.56 respectively. In terms of range, in both parliaments the variation ranges between values less than ten percentage to values more than ninety percentage, and dynastic legislators are among the four worst performers in both terms. This makes it interesting to analyse if this variation is predicted by one's dynastic identity once I control for other important covariates. Similarly, a large number of parliamentarians in the 9th National Parliament have criminal profiles. Being more specific, in the 9th National Parliament, almost fifty percentage of all MPs have faced legal charges in their political career. In Table-2.1C, one can see that there is positive correlation between the two dimensions of criminal profile which are used as dependent variables (legal charges &corruption charges). But most correlations are weak (less than 0.4), and also negative when calculated against *Par. Attendance Ratio*. This indicates that these measures are proxying for different attributes of legislator behaviour. In order to undertake the empirical examination in the later stages, I have dropped MPs who have died (or was assassinated) before they finished their respective tenure. I also excluded MPs who were elected in by-elections. This increases the comparability of the unit of observations.

2.3.3 Empirical Methodology

The purpose of this analysis is to shed light on questions concerning the motivations of dynastic politicians in Bangladesh. This is only possible when one carefully examines the behaviour of such leaders in their political domain, which in practice is difficult. Rather, the study has to rely on certain outcomes (as noted earlier) associated with each MP to infer something about their motivations, and then find out whether their dynastic identity has any role in explaining its variation within the sample. Therefore, a multiple regression framework allows the study to see if there is a systematic relationship between the behaviour of MPs and their dynastic identity. The multiple regression framework also allows us to control for structural, individual and party characteristics that are identified in the literature as important determinants of legislator behaviour. (Besley et al 2011; Eggers et al 2009; Gagliarducci et al 2008; Padro et al 2006)

To this end, I employ three base-line regressions. First, I try to model the variation in parliamentary attendance of MPs with the econometric specification as mentioned below.

$$Parl.AttendanceRatio_{i,\,c} = \alpha + \mu\, Pre\text{-}Relative_{i,c} + \beta \underline{X}_{i,c,} + \delta \underline{C}_{c,} + \zeta_D + \acute{\varepsilon}_{i,\,c} \quad (1)$$

Consequently, *Parl. Attendance Ratio* (as mentioned above)is a measure of attendance for an MP [i] in constituency [c], and it takes the ratio between the number of parliamentary days attended by a legislator and the number of days he can attend. This makes a score of one indicate that the legislator was not absent for a single day in the parliament. Recall ,*Pre-relative* which is equal to one whenever a legislator [i] from constituency [c] has or had a relative entering office before he or she did, and zero otherwise. $\underline{X}_{i,c,}$ is a vector of individual characteristics, and $\underline{C}_{c,}$ incorporates constituency level variables. I also include district dummy variables ζ_D to account for basic regional differences, and ε_i is the random error term

Second, I use the specification in equation - (2) to see whether dynastic identity can predict legal charges on MPs as mentioned in their respective personal affidavits submitted to Bangladesh Election Commission. Hence, *Legal Charges* is a binary variable for an MP (i) in constituency (c), which equals one if the candidate mentioned existing or past legal charges in their personal affidavits, and zero otherwise.

$$Legal\ Charges_{i,\,c} = \alpha + \mu\, Pre\text{-}Relative_{i,c,} + \beta \underline{X}_{i,c,} + \delta \underline{C}_{c,} + \zeta_D + \acute{\varepsilon}_{i,\,c} \quad (2)$$

Finally, the econometric model in equation-3 focuses on a specific kind of charge – corruption charges. This explicit focus is interesting because it allows the study to relate closely to the discussion in the theory section concerning dynastic politicians facing two opposing incentives while they are in office – reputation-building versus stockpiling wealth. Accordingly, *Corruption Charges* is an dummy variable for an MP (i) in constituency (c), which equals one if the individual mentioned existing or past corruption charges in their personal affidavits, and zero otherwise. In addition, the coefficient μhelps identify if dynastic identity (at all) explains the variation in such charges.

$$Corruption\ Charges_{i,\,c} = \alpha + \mu\, Pre\text{-}Relative_{i,c} + \beta \underline{X}_{i,c,} + \delta \underline{C}_{c} + \zeta_D + \acute{\varepsilon}_{i,\,c} \quad (3)$$

Now, it is essential to state that the empirical strategy will only allow us to detect a correlation between the variables of interest, since the results might suffer from both omitted variable bias. Even so, if the estimations produce a significant correlation between the variables of

interest, then this will provide adequate motivation for investigating a possible causal relationship.

2.4 Results and Interpretations

The core results are presented and interpreted in section 2.4.1, while issues concerning causality are addressed in section 2.4.2. Finally, I highlight some caveats of the present analysis in section 2.4.3.

2.4.1 Base-line Results

2.4.1.1 Role of Dynastic Identity

Table 2.2 reports the regression results for all the MPs elected to the 8th National Parliament. In particular, I examine whether the variation parliamentary attendance across MPs is explained by their dynastic identity while I control for other important covariates. In column-1-2, the specifications control for individual and constituency characteristics, and we can see that the coefficient for *Pre-relative* is negative and significant at 10% in column-1, but fails to attain significance in column-2. The explanatory power of the overall model is weak, however. The R-square is less than 0.10in both columns indicating that the model fails to explain even ten percentage variation in the parliamentary attendance ratio in all twenty-three sessions of the 8th National Parliament. In column-3, I control for party fixed effects by incorporating dummy variable for parties in the opposition (Awami League and Jatiya Party), and this results in substantial improvement in the R-square. The model (with the party fixed effects) now explains more than forty percentage variation in the dependent variable. Interestingly, the coefficient for *Pre-relative* is negative and significant at 5%. The magnitude of the coefficient is roughly (-) 0.067, which points out that legislators with dynastic identity are on average associated with a six and a half percentage point less attendance than legislators of non-dynastic identity.

For the mentioned results, I avoid a causal interpretation because under some circumstances individual heterogeneity can create a spurious relationship between the variables of interest. For example, if individuals who care about political status can marry into established dynasties to benefit from political capital for other motives, and care less about parliamentary performance, than such scenarios are likely to create a negative relationship between one's dynastic identity and his subsequent legislative performance measured in terms of attendance.

Nonetheless, a significant correlation provides motivation for inquiring whether dynastic identity has a causal role in determining legislator behaviour. The specification in column-4 includes divisional dummies (with division Dhaka as the reference category), and it is observed that the coefficient for *Pre-relative* remains negative and significant at 5%. The absolute magnitude of the coefficient also increases in size. Column-5 introduces Districts[72] dummies (with district Dhaka as the reference category) to control for district specific effects that are common to all parliamentary constituencies within a district. The magnitude of the coefficient for *Pre-relative* is (-) 0.07, and is significant at 5%. Additionally, the R-square increases to 0.6.This means that there is some indication that legislators who are related to past (or present legislators) are on average associated with lower levels of attendance than legislators of non-dynastic identity. Lastly, in column-6, I cluster robust stand errors at a District level. And, the coefficient for *Pre-relative* remains negative, but marginally fails to attain significance at 10%.[73]

In Table-2.3A, I repeat the same analysis for all elected legislators in the 9th National Parliament. Furthermore, the sign for the coefficient of *Pre-relative* stays negative, even though the magnitude reduces in absolute size. Besides, the coefficients also fail to attain significance in all six columns. For this, there are three possible explanations. First, the data on attendance for the 9th National Parliament are only taken from the first year (2009-10: Five Sessions). This raises the likelihood that estimations suffer from the idiosyncrasies associated with first year of a new government. Second, the political landscape of Bangladesh suffered a two years of military backed state of emergency[74] before the ninth parliamentary elections (which took place on the 29th of December 2008). During this period of a quasi-military rule, an effort was in place by the administration to dilute the influence of the two dynasties (Sheikhs and Zias) by exiling both Khaleda Zia and Sheikh Hasina, which, in effect, came to be known as the *minus-two*[75] formula (Alamgir, 2009). This was complemented with the

[72] While incorporating District dummies, I do not include Division dummies since divisions are composed of numerous districts. I also drop three districts with one parliamentary seats form the analysis. The results remain qualitatively similar even if we have them within the data-set. See Appendix- Table A1

[73] The p-value for the coefficient is 0.109.

[74]For more information on the political climate before the state of emergency was declared, see: http://www.time.com/time/magazine/article/0,9171,1582121,00.html

[75] For more information on this, see http://www.boloji.com/index.cfm?md=Content&sd=Articles&ArticleID=274

imprisonment of multiple dynastic leaders under charges of corruption. So, there is a likelihood that the present dynastic intake of parliamentarians in the 9th National Parliament are relatively more cautious about their legislative behaviour, given that country is emerging from a recent political turmoil. Third, it is also probable that reputation-building motivations are primarily effective in shaping dynastic leader's behaviour during the first year (where one tries to set an impression). Unfortunately, the scope of this empirical inquiry makes it difficult to identify the factors that are driving these results.

Nevertheless, given that the coefficient for *Pre-relative* remains negative for legislator in both 8th& 9th National Parliament, it makes it difficult to reconcile with the reputation building incentive which suggest that legislators of dynastic identity are less likely to shirk. On the other hand, from Table-2.3B & C, it can be seen that dynastic identity has no significant association with one's criminal profile (judged on the basis of having legal or corruption charges). The coefficient for *Pre-relative* remains insignificant in all six columns in both Table-3B and Table-3C. Consequently, the primary message that one can infer from the mentioned findings is that there is some evidence supporting the notion that legislators with dynastic identity are associated with lower levels of parliamentary attendance.

2.4.1.2 Role of Other Factors

The key factors that explain the variation in the attendance ratio in both 8th& 9th National Parliament are one's experience as a legislator and one's affiliation with the political parties. To be more specific, from both Table-2.2 and Table-2.3A, it is visible that the coefficient for *Num. of Time MP* in all six columns remains negative and significant at 10%[76]. This, in essence, points out that a legislator's experience within the realm of parliament is associated with lower levels of attendance for parliamentarians in the 8th and 9th National Parliament. This is in line with the recent findings of Besley et al (2011), which shows that more experienced MPs in the British House of Commons tend to have lower levels of attendance. On the other hand, this finding is difficult to square with the 'learning by doing hypothesis' noted by Padro I Miguel and Snyder (2006). The authors in their analysis of North Carolina

[76] In some cases, the coefficients are significant at 1% when I control for Division and District effects.

House of Representatives pinpoint that senior members and members of majority party tend to be relatively more effective legislators.[77]

A legislator's membership with the main opposition party is also significantly associated with his or her attendance ratio. In both the 8th and the 9th National Parliament, attendance ratio of legislators of the opposition party is significantly lower[78] in comparison to MPs from the incumbent party. To an extent, these results shed some light on the culture of boycotting the parliament by the primary opposition party, which has been a noticeable phenomenon since 1991(See Box-2.3).[79]This is also in line with the findings of Besley et al (2011) which show that MPs from the Conservative Party (i.e. from the non-incumbent party) were associated with lower levels attendance between 2001-2004.

On the determinants of a legislator's criminal profile (measured by the presence of prior legal charges or corruption charges as shown in their personal affidavits to Bangladesh Election Commission) in the 9th National Parliament, it is visible that the coefficient for *Num. of Time MP* is positive and significant at 10% (and often at 1%) in all six columns of both Table-3B and Table-3C. This can have multiple rationales. First, in a long political tenure, legislators are likely to commit rent-seeking activities which make them subject to legal or corruption charges. Second, individuals with longer political careers are more likely to have faced the military oppression that dominated the political landscape of Bangladesh between 1975 and 1991. The scope of the present analysis does not allow me to disentangle the driving factor behind the observed results. Nonetheless, when taken together with results from Table-2.2 and 2.3A (which shows that legislators with longer tenure are associated with lower levels of attendance), the plausibility of viewing veteran legislators as relatively more benign is minimum. Table-2.3B and Table 2.3C also show an interesting correlation between a legislator's profession and whether they have faced any legal or corruption charges in their career up till 2009. The results provide some indication that legislators with a prior career in defence services are associated with lower likelihood of having both legal and corruption

[77] This is possible because the authorsadoptdifferent measures of legislator effectiveness.

[78] The coefficient for being in the primary opposition party in both the 8th and the 9th National Parliament is negative and significant at 1% in all six columns in both Table-2.2 and Table-2.3A.

[79]In the 8th National Parliament, Awami League was the main opposition party. In the current 9th National Parliament, Bangladesh Nationalist Party (BNP) is the main opposition party. On the culture of boycotting the parliament, see Hagerty (2007).

charges. This is likely to be driven by the fact that most legislator with a prior political career in the military were not prosecuted during the military regimes that lasted between 1975 to1991. Similarly, the fact that legislators from the legal fraternity are less likely to have faced corruption charges (as shown in Table-2.3C) is a pointer to the fact that such groups are better equipped to avoid such charges with the help of their legal expertise. In the following section, I address the issue of causal relationship between the variables of interest.

2.4.2 Is the effect causal? Insights from Individual Relationships

So far, the estimations collectively point out that that there is an association between a legislator's dynastic identity and his or her levels of attendance in the national parliament. Additionally, the magnitude of the coefficients suggests that legislators in the 8th National Parliament who are related to past legislator (or present) legislators are on average associated with approximately seven percentage point less attendance. Then again, the results also highlight that such dynastic identity has no significant association with someone's subsequent criminal profile. As mentioned earlier, I avoid a causal inference from the computed results since individual heterogeneity can drive a spurious relationship between the variables of interest. For example, if individuals who care about political status marry into established dynasties for enhancing their future election chances, and care less about parliamentary performance, than such scenarios are likely to create a negative relationship between one's dynastic identity and his subsequent legislative performance measured in terms of attendance. Thus, to mitigate this concern that a legislator's dynastic identity is endogenous I re-code a legislator's dynastic identity by using an indicator variable *Son-Daughter*, which is equal to one if a legislator is an offspring of a past legislator (and zero otherwise). Moreover, the idea here is that a legislator's dynastic identity – defined by his or her being offspring of a past legislator - is unlikely to be determined by a legislator's action.[80]

[80]In other words, it is unlikely that a legislator in our sample had any role in determining whether he or she is a son or daughter of a legislator. This makes this variable- *Son-Daughter* – exogenous in construction. However, an unique line of argument that can undermine this rationale is, for example- if a high ability individual exists and he campaigns for his family member during his youth, then it is possible that it will increase the likelihood that a member of his family is elected to the parliament. Additionally, given that the individual is of high ability, he himself might get elected when he chooses to run for office. Thus, in some special cases an individual's ability can facilitate the formation of one's dynastic identity. Likewise, an individual's high ability might also determine his subsequent legislative performance. As a result, if such a scenario exists, then legislator heterogeneity might produce a spurious correlation between one's dynastic identity and their legislative performance. Now, even though this concern has not been empirically investigated, but it is possible to state that such scenarios are unlikely to hold given most dynastic legislator's were under the age of 18 when their parents entered the parliament. For instance, Sheikh Hasina was 7 years old, when Bangabandhu Sheikh

Table-2.4 reports the regression results when I explore the variation in the parliamentary attendance ratio for legislators in the 8th National Parliament. The specification in the first column excludes Division and District fixed effects. Furthermore, the central message that one can infer from the estimations is that a dynastic identity of a legislator is associated in lower levels of parliamentary attendance. The absolute size of the coefficient for *Son-Daughter* pinpoints that dynastic legislators have approximately nine percentage point less attendance than non-dynastic legislators. This finding is robust to a number of legitimate statistical concerns, and it even holds true when I cluster robust standard errors at District level in column-4. Besides, in line with the previous results, a legislator's experience and his or party affiliation is strongly correlated to his or her attendance level. Similarly, from Table-2.5A it can be seen that the coefficient relating a legislator's dynastic identity and his or her attendance level fails to attain significance once I employ the data set of legislator's from the 9th National Parliament (although the coefficient remains negative once I control for District fixed effects). Alternatively, results from Table-2.5A and Table-2.5B are suggestive that there is no significant correlation between a legislator's dynastic identity and his or her likelihood of having a criminal profile. In Table-2.6, I check whether the results are qualitatively different when I only explore the variation in attendance and criminal profile of legislators in government (i.e. in the key ruling party) for both the 8th and 9th National Parliament. This is done to address a rare scenario that dynastic legislators within the opposition are relatively more likely to face government threats and this can constraint their performance in terms of parliamentary attendance (or the likelihood of having legal or corruption charges). The results, however, remain qualitatively similar.[81] In Table-2.7, I address the concern that the computed results are driven by the presence of legislators from the three key national political dynasties.[82] So, I check whether the key message is fundamentally altered when I drop

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Mujibur Rahman was first elected to the Parliament in 1954. This makes it improbable that Sheikh Hasina had any role in Bangabandhu winning the election in 1954.

[81]From column-1, the results show that the absolute magnitude of the coefficient for *Son-Daughter* is approximately (-)0.16. This is a substantial increment from the previous estimates, and it highlights that dynastic identity (at least) mattered for the 8th National Parliament in determining parliamentary attendance.

[82] Being more precise, I drop all legislators from the 8th and 9th National Parliament who are in the Sheikh, Zia or the Ershad dynasty. Now, it is important to mention that HM Ershad (the former President) is not an offspring of a past legislator. Nonetheless, he did establish his dynasty as his brother GM Qader and wife Raushan Ershad have been elected in both the 8th and 9th National Parliament.

legislators from the three key political dynasties.[83] Nonetheless, the results remain similar and that there is some evidence supporting the notion that dynastic identity can facilitate shirking among legislator. Even so, it is still very difficult to rule out the role of omitted factors that might be correlated with both shirking and being a descendant of a political leader.

On the whole, the over results from the stated analysis are not compatible with the reputation building incentive. If anything, the result from Table 2.4, Table-2.6 and Table-2.7 are indicative of the fact that a legislator's dynastic identity may play a causal role in facilitating behaviour that amounts to shirking. In the next section, I discuss some issues concerning the analysis, and note some caveats of the mentioned scrutiny.

2.4.3Some Discussions and Caveats

An important caveat of the present empirical investigation is the narrowness of the perspective that I have taken in terms of assessing legislator behaviour. By primarily focusing on parliamentary attendance and the likelihood of having a legal or corruption charge, I have implicitly raised the possibility that the employed evaluation is narrow in scope, and consequently sheds little light on the motivations of dynastic legislator. This is because it is arguable that there are other possible standards for evaluating MPs behaviour which are more informative about their guiding motivations. For example, Sen (1981, 1984) and Ram (1991) have shown that famines are less likely in functioning democracies with free media and open election. Similarly, Besley and Burgess (2002) has used state level data from India to show that governments are more responsive to falls in food production and flood damage via public food distribution and calamity relief expenditure where newspaper circulation is higher and electoral accountability is greater. This, in essence, highlights the chance that one can judge legislators' performance in terms of their responsiveness to acute needs of their constituencies when they are facing phenomenon like drought, floods or famine. More specifically, in Bangladesh where natural calamities like floods or land erosion[84] are common, it is imperative to state that any assessment of MP behaviour which measures how responsive legislators were to acute needs is more informative than any measure which only focuses on legislative

[83] In appendix Table -2.1A, report regressions results where district dummies and part dummies are randomly chosen. These estimations also include districts with one parliamentary seat. I have also compute the adjusted R-square. Overall, the results echo the general findings mentioned above.

[84] On the impact of floods in Bangladesh, see http://www.nytimes.com/1988/09/07/world/by-the-river-refuge-but-little-relief.html

performance. Unfortunately, due to the lack of quantifiable indicators which can measure the responsiveness of legislators to such acute needs (due to famines or floods) of his or her constituents, such dimension of legislator behaviour are not considered in the present study.

It is also arguable that there are better measures of parliamentary performance than one's focusing primarily on attendance. For example, Besley et al (2011) constructs a 'cost per vote' measure of parliamentary performance in the British House of Commons, which is basically a ratio of allowance received by a legislator to the number of votes caste by him or her in a given year. Regrettably, I have failed to replicate such a measure for the present study since no data on allowances[85] of legislators are provided by the Legal Office of the National Parliament of Bangladesh.[86] Besides, Article 70 in the Constitution of Bangladesh prohibits legislators from voting against bills sponsored by their respective party. If the legislator's do so, however, then they will lose the membership of the house. This makes it irrelevant to investigate voting patterns[87] of legislator [88] as there are no cases where legislators have defied their party's decision in the 8th and 9th National Parliament. Even so, an advantage of the employed measure is that it is simple and objective in construction. In addition, parliamentary attendance is the minimum voters can expect from their MP. A measure of attendance can also reflect a legislator's general involvement with everyday legislative business, and an MP can also use the parliament as a venue for appealing for greater development fund for their respective constituencies. Thus, with these caveats and issues in mind, I proceed to the conclusion

[85]Member of Parliament (MPs) in Bangladesh often claims medical and travelling expenses from the Office of the Prime Minister or from the Office of the Speaker. Detailed information on such provisions are, however, not easily available to the ordinary public. Irregularities on such fronts have also taken place in the past.
For more information see: http://www.thedailystar.net/story.php?nid=83983

[86]I can compute a similar measure by dividing MP salary with parliamentary participation measure. Nonetheless, since MP salary is constant across all legislators, no added information will inferred from such exercise. Furthermore, I tried accessing information on number of bill sponsored and floor speeches made by individuallegislators. These measures are often used to see how term limits affect political performance (For example Dalbo and Rossi, 2008). However, the paper was denied access to such information on grounds that such information can embarrass key figures in the incumbent government.

[87] Voting patterns are often investigated to see whether retiring legislators vote differently in their last term. See: Lott and Bronars (1993)

[88]For more clarity, see:http://www.commonlii.org/bd/legis/const/2004/part5.html#70. Additionally, for its subsequent effects ,
read: http://www.sunday-guardian.com/analysis/article-70-guts-parliament

2.5 Conclusion

The principle aim of this paper is to isolate whether dynastic identity matters in influencing the behaviour of politicians. This is important because dynastic politicians play a pivotal role in the political landscape of various countries in different degrees and forms. In modern democratic political process, their presence reflects inequality in the distribution of political power (Dal Bo et al 2009), since they are likely to benefit from inherited political capital, As it appears, very few systematic empirical analysis exists which investigates the motivations of leaders with such identity. The only sub-national empirical study that attempts to pinpoint the economic consequences of dynastic leaders is Asaka et al (2010), which notes that dynastic legislators in Japanese Diet produces suboptimal economic allocation of resources. Thus, to shed further insight on the possible role of dynastic identity in determining political behaviour, the study compiles a new data set on all legislators in the 8^{th} and 9^{th} National Parliament of Bangladesh. The polity of Bangladesh provides an excellent ground for empirical examination because dynastic leaders play a fundamental role in determining outcome within the political landscape of the country. To be more specific, the two main political parties (Awami League and BNP) are chaired by dynastic leaders, and (as earlier mentioned in the paper) their influence is felt at the both local and national levels. Besides, almost all work on the legislative behaviour has focused on the polities of North America and Europe to examine multiple hypotheses. This makes it interesting to empirically scrutinize whether some of the findings are echoed in the data from a polity where democracy is still in the process of consolidation.

To quantify legislator behaviour, I construct a dependent variable *Parliamentary-Attendance-Ratio* for all legislators in the 8^{th} and 9^{th} National Parliament, which ranges between zero and one. For legislators in the 9^{th} National Parliament, I also compute two additional dependent binary variables *Legal-Charges* and *Corruption-Charges*, which are equal to one if they have such charges on their affidavits before they contested the 9^{th} parliamentary elections. The rationale for this is to shed some light on the criminal profiles of legislator. Furthermore, the econometric methodology primarily tries to identify if a legislator's behaviour (captured by these dependent variable) is explained by a legislator's dynastic identity once other structural characteristic are controlled for within the analysis. To begin with, the paper starts by discussing that it is theoretically ambiguous how a legislator's dynastic identity should

influence his or her behaviour. This is because the behaviour of dynastic legislators can be influenced by two opposing incentives, namely reputation-building incentive and stockpiling-wealth incentive. And, as noted earlier, the overall results are difficult to square with reputation-building incentive. The base line results from table-2 and table -3 (A, B & C) are suggestive that dynastic legislators in the 8th National Parliament[89] are associated with lower levels of attendance. On the other hand, no significant relationship is identified between a legislator's dynastic identity and the likelihood of having legal or corruption charges. I interpret these results as correlation, because under some rare circumstances an individual dynastic identity can be endogenous in construction.[90]

In order to mitigate the role of omitted factor, the investigation looks at individual relationships to reclassify dynastic leaders as legislators who are direct offspring of past legislators. This minimizes the chance a legislator has in determining his or her dynastic identity. And, the results from table-2.4 and table-2.5A are indicative that offspring of past legislators (in the 8th National Parliament) have on average lower levels of attendance. The results are consistent when I restrict the sample to legislator from government to address the concern that dynastic legislators in the opposition are subject to relatively more threats from incumbent government. I also see whether the results are driven by the presence of three key national dynasties, and the estimations suggest that the key message remains robust even when I drop these observations from the employed data set. Likewise, the magnitude of the coefficient for the variable *Son-Daughter* ranges between (-)0.066 to (-) 0.15, which points out that legislators who are offspring of past legislators on average have at least 6.5 percentage point lower attendance than non-dynastic legislators. This also makes the findings difficult to reconcile with the reputation building hypothesis for dynastic politician. Conversely, the results are (to an extent) in line with the findings of Asaka et al (2010) which finds that dynastic legislators do not necessarily result in higher economic performance. On the role of other factors determining legislative behaviour, the paper finds that legislators with more experience (in both the 8th and the 9th National parliament) have lower levels of attendance. This is in line with the recent findings of Besley et al (2011) which pinpoints a

[89] The coefficients for *Pre-Relative* is negative for the legislators in the 9th National Parliament, even though they fail to attain significance at 10%.

[90]For example, individuals with political ambition can marry into political families to boost their political career. Such individuals might also not care about the parliamentary attendance level. This might create a spurious relationship between one's dynastic identity and his or her subsequent legislative performance.

similar phenomenon in the British House of Commons. This paper also provide some evidence that legislators of certain professions (military and lawyer) have lower likelihood of having criminal profile, even though dynastic identity plays no role in explaining its variation

Overall, the results taken together are indicative that dynastic identity can have a role in determining the level of shirking a legislator exhibits in the 8th National Parliament. This has an important implication. In other words, while modern democracies provide room for dynastic transmission of political power, the leaders who avail such identity do not necessarily act in public interest. This brings to attention some important unresolved issues, which future studies can address. To start with, does dynastic identity also motivates sub-optimal behaviour on other dimensions of public life? If so, what are these dimensions? Furthermore, what exact combination of factor makes dynastic identity to matter? Is it their familiarity with pre-established donor networks that gives them a competitive edge against their rivals? Or is it their 'brand-name' which emerges from the electoral appeal of their family name that allows them to restrict the entry of any potential competitor? In addition, given that dynastic politicians often emerge at the national level of many countries, is it possible that such 'identity' can shape socio-political outcomes at the macro-level? More precisely, do countries with a heavy influence of 'dynasty politics' at the national level benefit or suffer from better or worse governance scenario?

To conclude, in contemporary times there is an increased interest in understanding the role of identity (being female, or from the minority etc) in determining legislative behaviour, and subsequently affecting policy choices (Rehavi, 2007; Chattopadhyay and Duflo, 2004; Pande 2003). The novelty of this paper, however, is that it focuses on the importance of dynastic identity in determining legislator behaviour. Hence, future work on this topic can investigate whether the observed relationship finds support in different political landscapes. Additionally, it can scrutinize the potential mechanisms that allow dynastic identity to matter, and shed more light on factors that makes such groups to emerge and endure in respective political arenas.

Box-2.1 Political Parties in the 9th National Parliament and the family connections of their Chairpersons	
Bangladesh Awami League (AL)	**Leader**: Sheikh Hasina- She is, at present, the Prime Minister of Bangladesh, and the daughter of the country's founding father Bangabandhu Sheikh Mujibur Rahman. Sheikh Mujib was the first President of Bangladesh and the third chairman of Awami League.
Bangladesh Nationalist Party (BNP)	**Leader**: Khaleda Zia- She is, at present, leader of the Opposition, and the widow of General ZiaurRahman who founded BNP and was also the 7th President of Bangladesh.
Jatiya Party (JP)	**Leader**: General HM Ershad- Ershad founded Jatiya Party, and he has no major previousfamily connection. Ershad was also the President of Bangladesh from 1983-1991.
Bangladesh Jatiya Party (BJP)	**Leader**: Barrister Andaleeve Rahman Partho[91]- Anadeeve is the son Naziur Rahman Manjur who founded BJP. Naziur was also the 3rd Mayor of Dhaka and a Minister during 1987-1991. Andaleeve, at present, is a Member of Parliament.
Bangladesh Jamaat-e-Islami	**Leader**: Maulana Nizami. He was a Minister during 2001-2006, and he has no major family connection.
Liberal Democratic Party (LDP)	**Leader**: Col. Oli Ahmad. Mr Oli founded LDP He is an MP, and he has no major family connection.
JatiyaSamajtantric Dal (JSD)	**Leader**: Hasanul HaqInu. He is a Member of Parliament with no major family connection.
Workers Party of Bangladesh (WP)	**Leader**: Rashed Khan Menon. He is a Member of Parliament. His sister is an influential leader in BNP. His father was a Speaker of the National Parliament.

[91]Andaleeve Rahman is also a nephew of AL Chairperson and current Prime Minister Sheikh Hasina, and a son-in-law of Awami League MP Sheikh Helal.

Box- 2.2 Low Attendance Records			
9th National Parliament (Five Sessions)			
Rank	Name	Par. Attendance Ratio	Dynastic
1	Begum Khaleda Zia	0.03	Yes
2	KSMH Kaikobad	0.06	No
3	Barrister Andaleeve Rahman	0.07	Yes
4	Md BarkatUllah Bulu	0.08	No
8th National Parliament (Twenty Three Sessions)			
Rank	Name		Dynastic
1	Altaf Hossain Goldaz	0.06	No
2	Dr Abdul Moyeen Khan	0.07	Yes
3	Sheikh Helal Uddin	0.08	Yes
4	Kazi Zafurullah	0.11	Yes

Box- 2.3 Boycott of Parliament By Opposition Parties				
Parliament	Ruling Party	Main Opposition	Total Working Days	Total Days of Opposition Boycott
1991-1996	BNP	Awami League	400	118
1996-2001	Awami League	BNP	383	156
2001-2006	BNP	Awami League	373	223
Source: Moniruzzaman (2009)				

Figure - 2.1A: Composition of the 9th National Parliament {By Dynastic Identity}

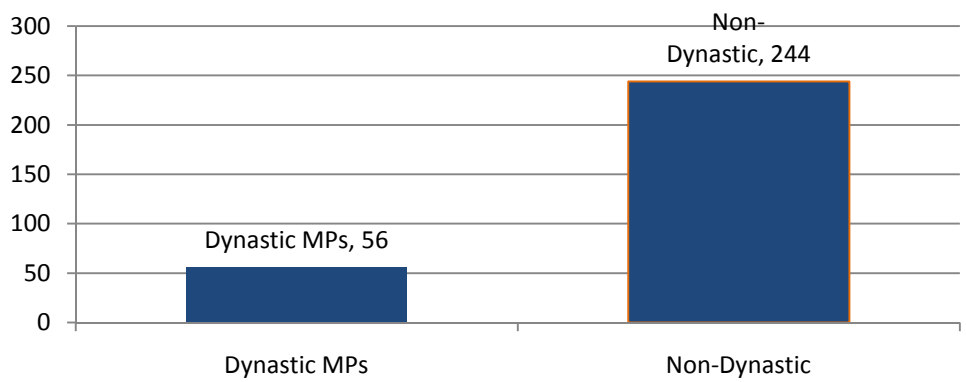


Figure - 2.1B: Composition of the 9th National Parliament in percentage {By Number of Times MP}

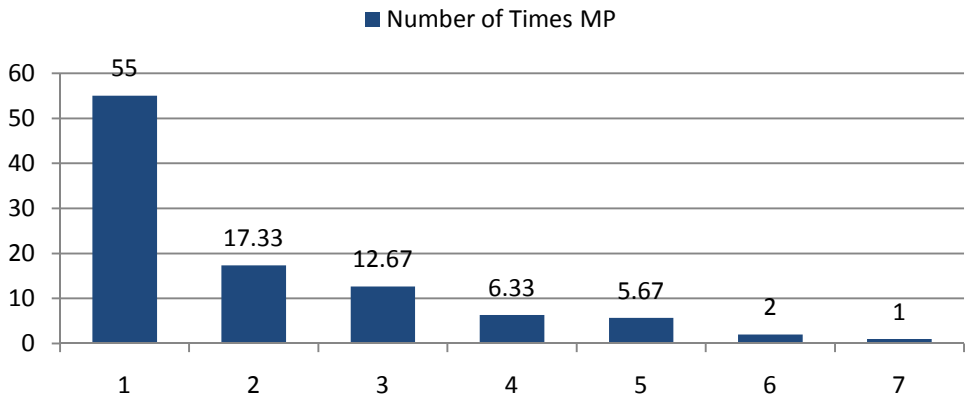


Figure - 2.1C: Composition of the 9th National Parliament {By Profession}

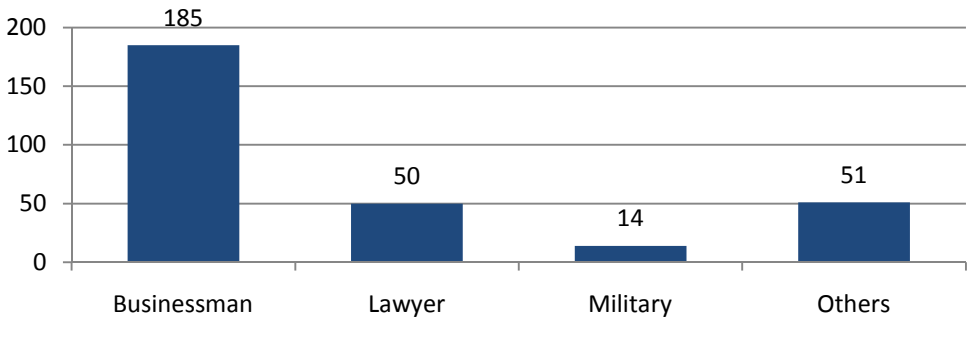


Figure - 2.2A: Composition of the 8th National Parliament {By Dynastic Identity}

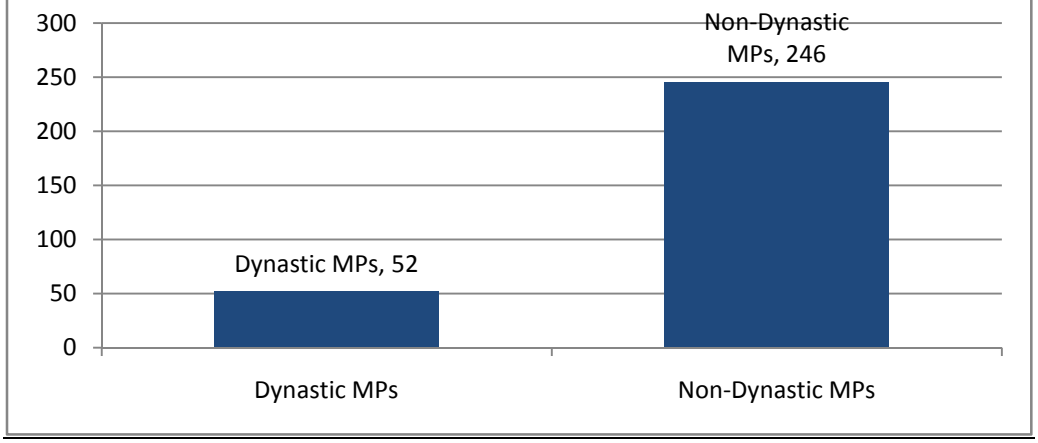


Figure - 2.2B: Composition of the 8th National Parliament in percebtage {By Number of Times MP}

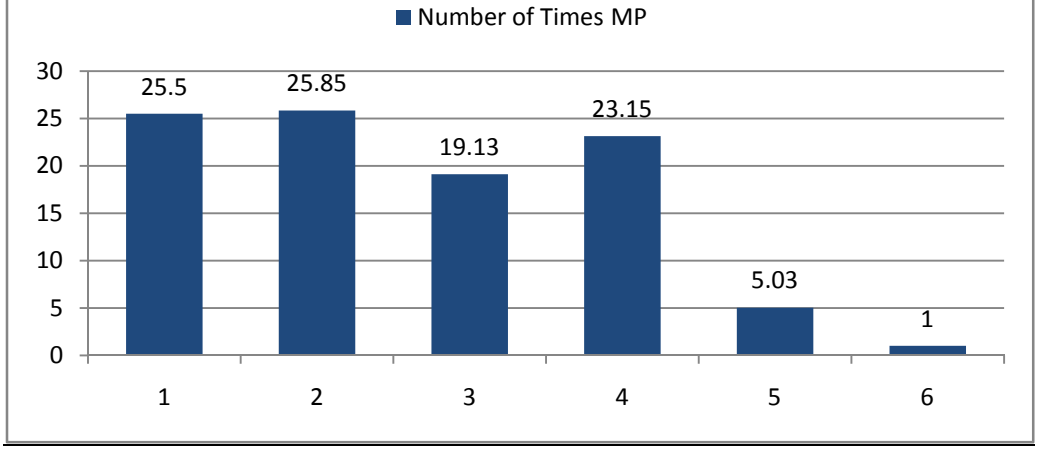


Figure - 2.2C: Composition of the 8th National Parliament {By Profession}

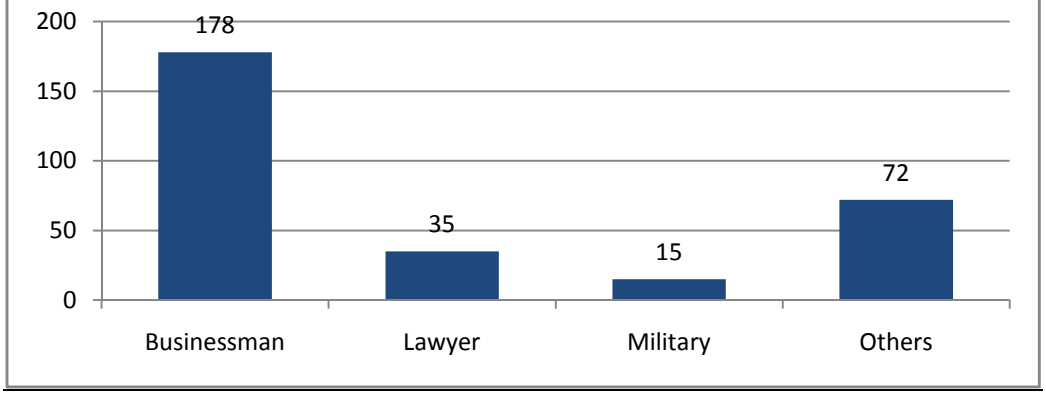


Table- 2.1A: Summary Statistics for MPs in the 9th National Parliament

	N	Mean	Standard Deviation	Min	Max
Parliamentary Attendance Ratio*	300	0.689	0.2381	0.03	1
Legal Charges	289	0.539	0.4993	0	1
Corruption Charges	288	0.146	0.3535	0	1
Lawyer	300	0.167	0.3733	0	1
Businessman	300	0.617	0.487	0	1
Military	300	0.047	0.2113	0	1
Age	300	58	9.804	30	86
Female	300	0.063	0.2439	0	1
Number of Times MP	300	2.003	1.42	1	7
Pre-Relative	300	0.187	0.39	0	1
Voting Percentage of Winner	300	57.48	8.478	37	97
Valid Vote in a Constituency	300	233265.9	49489	114519	459729
Distance from Dhaka	300	175.78	98.07	0	443

*This ratio is only available for five sessions

Table – 2.1B: Summary Statistics for MPs in the 8th National Parliament

	N	Mean	Standard Deviation	Min	Max
Parliamentary Attendance Ratio*	285	0.569	0.234	0.06	0.97
Lawyer	299	0.117	0.322	0	1
Businessman	299	0.595	0.492	0	1
Military	299	0.050	0.219	0	1
Age	296	52.91	9.02	30	77
Female	300	0.02	0.140	0	1
Number of Times MP	298	2.604	1.297	1	6
Pre-Relative	298	0.175	0.380	0	1
Voting Percentage of Winner	296	52.91	10.51	30	96
Valid Vote in a Constituency	296	184977	51493	76487	391257
Distance from Dhaka	300	175.78	98.07	0	443

*This ratio is available for the entire twenty three sessions (i.e. the whole term)

Table – 2.1C: Correlation between different dependent variables			
9TH NATIONAL PARLIAMENT			
	Par. Attendance Ratio	Legal Charges	Corruption Charges
Par. Attendance Ratio	1		
Legal Charges	-0.153	1	
Corruption Charges	-0.258	0.363	1

Table – 2.2: Base-Line Results

Dependent Variable: Parl. Attendance Ratio in 2001-06 from Twenty Three Sessions

	1	2	3	4	5	6
Pre-Relative	(-)0.068*	(-)0.058	(-)0.067**	(-)0.073**	(-)0.071**	(-)0.071
	{0.041}	{0.04}	{0.034}	{0.035}	{0.036}	{0.044}
Num. Times MP	(-)0.022*	(-)0.022*	(-)0.025***	(-)0.023***	(-)0.029***	(-)0.029***
	{0.012}	{0.012}	{0.009}	{0.01}	{0.01}	{0.01}
Minister	0.086**	0.099***	0.025	0.024	0.004	0.004
	{0.036}	{0.036}	{0.032}	{0.031}	{0.035}	{0.036}
Age	0.001	0.001	0.002	0.003**	0.0034**	0.0034*
	{0.002}	{0.002}	{0.002}	{0.0015}	{0.0017}	{0.0019}
Female	(-)0.072	(-)0.088	(-)0.017	(-)0.023	(-)0.07	(-)0.07
	{0.107}	{0.11}	{0.042}	{0.039}	{0.055}	{0.059}
Businessman	(-)0.040	(-)0.028	(-)0.015	(-)0.004	0.004	0.004
	{0.036}	{0.036}	{0.029}	{0.031}	{0.032}	{0.043}
Lawyer	(-)0.002	0.009	0.067*	0.071*	0.099**	0.099*
	{0.052}	{0.052}	{0.039}	{0.042}	{0.045}	{0.051}
Military	(-)0.042	(-)0.028	0.015	0.017	0.03	0.03
	{0.069}	{0.066}	{0.047}	{0.045}	{0.054}	{0.06}
Distance		0.0003**	0.00019	0.0003	(-)0.0008***	(-)0.0008***
		{0.00014}	{0.00012}	{0.0002}	{0.0003}	{0.00001}
Valid-Voters		4.67E-07*	3.06E-07	2.11E-07	2.14E-07	2.14E-07
		{2.69E-07}	{2.04E-07}	{2.20E-07}	{2.60E-07}	{2.53E-07}
Non-Marginal Seat			0.044	0.056**	0.05	0.051
			{0.027}	{0.026}	{0.038}	{0.043}
Awami League			(-)0.382***	(-)0.393***	(-)0.407***	(-)0.407***
			{0.021}	{0.022}	{0.03}	{0.036}
Jatiya Party			0.033	0.022	0.224*	0.224***
			{0.054}	{0.057}	{0.126}	{0.039}
Constant	0.606***	0.448***	0.484***	0.488***	0.427***	0.427***
	{0.098}	{0.122}	{0.101}	{0.103}	{0.12}	{0.12}
Division Effect	NO	NO	NO	YES	NO	NO
District Effect	NO	NO	NO	NO	YES	YES
N	271	271	271	271	268	268
R-square	0.05	0.07	0.46	0.47	0.61	0.61

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 6

Table – 2.3A: Base-Line Results

Dependent Variable: Parl. Attendance Ratio in 2009-10 from Five Sessions

	1	2	3	4	5	6
Pre-Relative	(-)0.005	(-)0.007	(-)0.005	(-)0.013	(-)0.033	(-)0.033
	{0.0387}	{0.039}	{0.027}	{0.028}	{0.0302}	{0.038}
Num. Times MP	(-)0.041***	(-)0.038***	(-)0.022***	(-)0.02**	(-)0.026***	(-)0.026**
	{0.012}	{0.012}	{0.009}	{0.008}	{0.009}	{0.011}
Minister	0.126	0.008	(-)0.048	(-)0.057*	(-)0.069**	(-)0.069**
	{0.033}	{0.033}	{0.029}	{0.031}	{0.035}	{0.033}
Age	0.003**	0.003**	0.0015	0.0015	0.0021*	0.0021
	{0.0016}	{0.0015}	{0.0011}	{0.0011}	{0.0013}	{0.0014}
Female	(-)0.02	(-)0.02	0.046	0.039	0.046	0.046
	{0.071}	{0.072}	{0.039}	{0.039}	{0.036}	{0.038}
Businessman	(-)0.025	(-)0.023	0.027	0.021	0.048	0.048
	{0.037}	{0.037}	{0.030}	{0.029}	{0.035}	{0.028}
Lawyer	0.024	0.021	0.049	0.046	0.060	0.060
	{0.047}	{0.047}	{0.033}	{0.033}	{0.04}	{0.039}
Military	0.071	0.079	0.062	0.072	0.048	0.048
	{0.055}	{0.056}	{0.054}	{0.054}	{0.064}	{0.074}
Distance		(-)0.00017	(-)0.00008	(-)0.00004	0.00017	0.00017***
		{0.00013}	{0.00009}	{0.0002}	{0.00012}	{0.00004}
Valid-Voters		3.56E-07	(-)1.06E-07	1.56E-07	(-)2.17E-08	(-)2.17E-08
		{2.58E-07}	{19.94E-07}	{2.10e-07}	{2.49E-07}	{2.93E-07}
Non-Marginal Seat			(-)0.009	(-)0.024	(-)0.015	(-)0.015
			{0.02}	{0.023}	{0.029}	{0.031}
BNP			(-)0.542***	(-)0.507***	(-)0.488***	(-)0.488***
			{0.033}	{0.042}	{0.058}	{0.076}
Bangladesh Jatiya Party			(-)0.704***	(-)0.732***	(-)0.766***	(-)0.766***
			{0.036}	{0.038}	{0.078}	{0.035}
Jamaat E- Islam			(-)0.534***	(-)0.467***	(-)0.448***	(-)0.448***
			{0.022}	{0.037}	{0.042}	{0.042}
Constant	0.595***	0.552***	0.733***	0.767***	0.656***	0.656***
	{0.102}	{0.124}	{0.095}	{0.098}	{0.128}	{0.118}
Division Effect	NO	NO	NO	YES	NO	NO
District Effect	NO	NO	NO	NO	YES	YES
N	291	291	290	290	286	286
R-square	0.07	0.08	0.57	0.59	0.66	0.66

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 6

Table – 2.3B: Base-Line Results

Dependent Variable: MP's with Legal Charges in the 9th National Parliament

	1	2	3	4	5	6
Pre-Relative	(-)0.021	(-)0.034	(-)0.022	(-)0.031	(-)0.03	(-)0.03
	{0.079}	{0.079}	{0.079}	{0.082}	{0.088}	{0.085}
Num. Times MP	0.061***	0.056***	0.052**	0.055**	0.059**	0.059*
	{0.022}	{0.022}	{0.023}	{0.024}	{0.029}	{0.036}
Minister	(-)0.136	(-)0.131	(-)0.117	(-)0.115	(-)0.111	(-)0.111
	{0.092}	{0.089}	{0.091}	{0.095}	{0.106}	{0.104}
Age	(-)0.003	(-)0.003	(-)0.003	(-)0.004	(-)0.004	(-)0.003
	{0.004}	{0.004}	{0.004}	{0.004}	{0.004}	{0.005}
Female	0.172	0.139	0.109	0.097	(-)0.051	(-)0.051
	{0.127}	{0.129}	{0.128}	{0.129}	{0.139}	{0.157}
Businessman	0.119	0.128	0.108	0.107	0.108	0.108
	{0.088}	{0.088}	{0.089}	{0.091}	{0.109}	{0.128}
Lawyer	(-)0.105	(-)0.106	(-)0.099	(-)0.087	0.004	0.004
	{0.107}	{0.106}	{0.107}	{0.109}	{0.126}	{0.156}
Military	(-)0.251**	(-).263**	(-)0.258**	(-)0.237*	(-)0.209	(-)0.209
	{0.125}	{0.123}	{0.124}	{0.131}	{0.168}	{0.128}
Distance		(-)0.0005*	(-)0.0006*	(-)0.0001	(-)0.001***	(-)0.001***
		{0.0003}	{0.0003}	{0.0004}	{0.0003}	{0.0001}
Valid-Voters		(-)1.02E-07*	(-)9.46E-07	(-)6.51E-07	(-)1.44E-06*	(-)1.44E-06*
		{6.07E-07}	{6.15E-07}	{6.60E-07}	{7.77E-07}	{8.56E-07}
Non-Marginal Seat			(-)0.009	(-)0.005	0.039	0.039
			{0.062}	{0.068}	{0.079}	{0.085}
BNP			0.138	0.168*	0.12	0.12
			{0.097}	{0.101}	{0.109}	{0.104}
Bangladesh Jatiya Party			(-)0.433***	(-)0.559***	(-)0.643**	(-)0.643**
			{0.133}	{0.158}	{0.253}	{0.157}
Jamaat E- Islam			(-)0.017	(-)0.047	(-)0.375*	(-)0.375
			{0.372}	{0.366}	{0.227}	{0.247}
Constant	0.568***	0.901***	0.905***	0.834***	1.022***	1.022***
	{0.228}	{0.264}	{.28}	{0.291}	{0.362}	{0.399}
Division Effect	NO	NO	NO	YES	NO	NO
District Effect	NO	NO	NO	NO	YES	YES
N	282	282	281	281	277	277
R-square	0.08	0.11	0.11	0.13	0.34	0.34

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column – 6

Table – 2.3C: Base-Line Results

Dependent Variable: MP's with Corruption in the 9th National Parliament

	1	2	3	4	5	6
Pre-Relative	(-)0.004	(-)0.013	(-)0.006	0.004	(-)0.006	(-)0.006
	{0.049}	{0.052}	{0.051}	{0.05}	{0.06}	{0.069}
Num. Times MP	0.079***	0.076***	0.07***	0.069***	0.079***	0.079***
	{0.019}	{0.019}	{0.019}	{0.019}	{0.021}	{0.026}
Minister	(-)0.027	(-)0.026	(-)0.014	0.012	(-)0.009	(-)0.009
	{0.069}	{0.066}	{0.065}	{0.066}	{0.075}	{0.083}
Age	(-)0.0003	(-)0.0003	0.0003	0.0003	0.002	0.002
	{0.002}	{0.002}	{0.002}	{0.002}	{0.002}	{0.002}
Female	0.194	0.169	0.139	0.149	0.079	0.079
	{0.125}	{0.135}	{0.121}	{0.121}	{0.114}	{0.141}
Businessman	(-)0.102	(-)0.096	(-)0.115*	(-)0.109*	(-)0.123*	(-)0.123
	{0.069}	{0.069}	{0.067}	{0.066}	{0.073}	{0.086}
Lawyer	(-)0.163**	(-)0.164**	(-)0.165**	(-)0.151*	(-)0.202**	(-)0.202**
	{0.08}	{0.081}	{0.08}	{0.08}	{0.088}	{0.085}
Military	(-)0.161*	(-)0.167**	(-)0.16*	(-)0.183**	(-)0.242*	(-)0.242*
	{0.085}	{0.09}	{0.09}	{0.091}	{0.13}	{0.153}
Distance		(-)0.0004**	(-)0.0004**	(-)0.0003	(-)0.0003	(-)0.0004***
		{0.0002}	{0.0002}	{0.0003}	{0.0002}	{0.00001}
Valid-Voters		(-)5.94E-07*	(-)4.37E-07	(-)1.41E-07	(-)1.89E-07	(-)1.89E-07
		{3.51E-07}	{3.51E-07}	{3.69E-07}	{4.68E-07}	{4.53E-07}
Non-Marginal Seat			0.047	0.09**	0.126**	0.126**
			{0.039}	{0.039}	{0.049}	{0.066}
BNP			0.169**	0.111	0.135	0.135
			{0.086}	{0.087}	{0.139}	{0.107}
Bangladesh Jatiya Party			0.031	(-)0.047	(-)0.151	(-)0.151*
			{0.075}	{0.095}	{0.196}	{0.086}
Jamaat E- Islam			0.010	(-)0.117	(-)0.359	(-)0.359*
			{0.052}	{0.106}	{0.227}	{0.201}
Constant	0.094	0.313*	0.221	0.085	0.103	0.103
	{0.133}	{0.172}	{0.1742}	{0.167}	{0.201}	{0.173}
Division Effect	NO	NO	NO	YES	NO	NO
District Effect	NO	NO	NO	NO	YES	YES
N	282	282	281	281	277	277
R-square	0.14	0.16	0.19	0.22	0.37	0.37

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column – 6

Table- 2.4: Is the Effect Causal?

Dependent Variable: Parl. Attendance Ratio in 2001-06 from Twenty Three Sessions

	1	2	3	4
Son-Daughter	(-)0.088**	(-)0.097**	(-)0.098**	(-)0.098*
	{0.041}	{0.041}	{0.041}	{0.057}
Num. Times MP	(-)0.025***	(-)0.023**	(-)0.029***	(-)0.029***
	{0.009}	{0.009}	{0.009}	{0.009}
Minister	0.03	0.03	0.012	0.012
	{0.03}	{0.03}	{0.034}	{0.036}
Age	0.002	0.002	0.003*	0.003
	{0.002}	{0.002}	{0.002}	{0.002}
Female	(-)0.036	(-)0.042	(-)0.082	(-)0.082
	{0.038}	{0.037}	{0.064}	{0.069}
Businessman	(-)0.011	0.001	0.007	0.007
	{0.028}	{0.029}	{0.031}	{0.042}
Lawyer	0.076**	0.079**	0.114***	0.114**
	{0.038}	{0.040}	{0.044}	{0.049}
Military	0.014	0.018	0.032	0.032
	{0.048}	{0.047}	{0.055}	{0.062}
Distance	0.00019	0.0003	0.003	0.003***
	{0.00013}	{0.0002}	{0.002}	{0.001}
Valid-Voters	3.11E-07	2.07E-07	2.00E-07	2.00E-07
	{2.05E-07}	{2.22E-07}	{2.59E-07}	{2.65E-07}
Non-Marginal Seat	0.039	0.058**	0.046	0.046
	{0.027}	{0.026}	{0.038}	{0.043}
AL	(-)0.381***	(-)0.394***	(-)0.409***	(-)0.409***
	{0.022}	{0.022}	{0.031}	{0.037}
Jatiya Party	0.034	0.022	0.227*	0.227***
	{0.054}	{0.057}	{0.13}	{0.046}
Constant	0.488***	0.497***	0.44***	0.44***
	{0.101}	{0.104}	{0.121}	{0.117}
Division Effect	NO	YES	NO	NO
District Effect	NO	NO	YES	YES
N	271	271	268	268
R-square	0.47	0.48	0.62	0.62

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 4

Table – 2.5A: Is the Effect Causal?

Dependent Variable: Parl. Attendance Ratio in 2009-10 from Five Sessions

	1	2	3	4
Son-Daughter	0.03	0.03	(-)0.003	(-)0.003
	{0.032}	{0.034}	{0.04}	{0.046}
Num. Times MP	(-)0.023***	(-)0.022***	(-)0.026***	(-)0.026**
	{0.009}	{0.008}	{0.009}	{0.011}
Minister	(-)0.05*	(-)0.06*	(-)0.074**	(-)0.074**
	{0.031}	{0.031}	{0.037}	{0.034}
Age	0.002*	0.002*	0.0025*	0.0025*
	{0.001}	{0.001}	{0.0013}	{0.0013}
Female	0.045	0.038	0.037	0.037
	{0.037}	{0.039}	{0.037}	{0.043}
Businessman	0.031	0.026	0.052	0.052
	{0.03}	{0.03}	{0.035}	{0.028}
Lawyer	0.056*	0.052	0.066	0.066
	{0.033}	{0.033}	{0.042}	{0.042}
Military	0.067	0.077	0.055	0.055
	{0.054}	{0.054}	{0.065}	{0.077}
Distance	(-)0.00001	(-)0.00002	0.0001	0.0001***
	{0.00001}	{0.0001}	{0.0001}	{0.00003}
Valid-Voters	(-)1.44E-07	(-)1.88E-07	(-)3.80E-08	(-)3.80E-08
	1.92E-07	{2.05E-07}	{2.50E-07}	{3.00E-07}
Non-Marginal Seat	(-)0.008	(-)0.023	(-)0.013	(-)0.013
	{0.020}	{0.029}	{0.029}	{0.031}
BNP	(-)0.540***	(-)0.506***	(-)0.492***	(-)0.492***
	{0.034}	{0.042}	{0.058}	{0.075}
Bangladesh Jatiya Party	(-)0.730***	(-)0.761***	(-)0.782***	(-)0.782***
	{0.043}	{0.046}	{0.080}	{0.039}
Jamaat E- Islam	(-)0.529***	(-)0.465***	(-)0.445***	(-)0.445***
	{0.021}	{0.036}	{0.042}	{0.042}
Constant	0.706***	0.736***	0.628***	0.628***
	{0.094}	{0.096}	{0.128}	{0.121}
Division Effect	NO	YES	NO	NO
District Effect	NO	NO	YES	YES
N	287	287	283	283
R-square	0.57	0.59	0.66	0.66

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 4

Table – 2.5B: Is the Effect Causal?

Dependent Variable: MP's with Legal Charges in the 9th National Parliament

	1	2	3	4
Son-Daughter	0.030	0.037	0.123	0.123
	{0.104}	{0.107}	{0.115}	{0.105}
Num. Times MP	0.056**	0.059**	0.057**	0.057
	{0.024}	{0.024}	{0.029}	{0.035}
Minister	(-)0.116	(-)0.118	(-)0.121	(-)0.121
	{0.091}	{0.095}	{0.106}	{0.106}
Age	(-)0.004	(-)0.004	(-)0.002	(-)0.002
	{0.004}	{0.004}	{0.004}	{0.005}
Female	0.105	0.087	(-)0.048	(-)0.048
	{0.128}	{0.13}	{0.139}	{0.159}
Businessman	0.109	0.11	0.128	0.128
	{0.089}	{0.091}	{0.109}	{0.132}
Lawyer	(-)0.107	(-)0.091	0.023	0.023
	{0.107}	{0.11}	{0.131}	{0.162}
Military	(-)0.249**	(-)0.224*	(-)0.171	(-)0.171
	{0.122}	{0.128}	{0.167}	{0.126}
Distance	(-)0.0006	(-)0.0001	(-)0.0014***	(-)0.0014***
	{0.0003}	{0.0005}	{0.0003}	{0.00009}
Valid-Voters	(-)1.00E-07	(-)7.47E-07	(-)1.28E-06*	(-)1.28E-06
	{6.19E-07}	{6.62E-07}	{7.38E-07}	{8.19E-07}
Non-Marginal Seat	(-)0.025	(-)0.025	0.0404	0.0404
	{0.062}	{0.069}	{0.079}	{0.086}
BNP	0.133	0.165*	0.111	0.111
	{0.097}	{0.101}	{0.109}	{0.107}
Bangladesh Jatiya Party	(-)0.476***	(-)0.603***	(-)0.728***	(-)0.728***
	{0.148}	{0.176}	{0.239}	{0.166}
Jamaat E- Islam	(-)0.005	(-)0.027	(-)0.367	(-)0.367
	{0.364}	{0.358}	{0.229}	{0.253}
Constant	0.921***	0.859***	0.902**	0.902**
	{0.283}	{0.295}	{0.359}	{0.406}
Division Effect	NO	YES	NO	NO
District Effect	NO	NO	YES	YES
N	275	275	274	274
R-square	0.12	0.14	0.34	0.34

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 4

Table – 2.5C: Is the Effect Causal?

Dependent Variable: MP's withCorruption Charges in the 9th National Parliament

	1	2	3	4
Son-Daughter	(-)0.052	(-)0.031	(-)0.048	(-)0.048
	{0.067}	{0.067}	{0.089}	{0.116}
Num. Times MP	0.073***	0.07***	0.081***	0.081***
	{0.019}	{0.019}	{0.022}	{0.027}
Minister	(-)0.012	0.0129	(-)0.006	(-)0.006
	{0.064}	{0.066}	{0.075}	{0.084}
Age	(-)0.0001	0.00003	0.0024	0.0024
	{0.002}	{0.002}	{0.0024}	{0.003}
Female	0.135	0.152	0.076	0.076
	{0.125}	{0.124}	{0.117}	{0.152}
Businessman	(-)0.118*	(-)0.105	(-)0.126*	(-)0.126
	{0.069}	{0.066}	{0.074}	{0.087}
Lawyer	(-)0.177**	(-)0.157*	(-)0.214**	(-)0.214**
	{0.081}	{0.081}	{0.092}	{0.091}
Military	(-)0.167*	(-)0.191**	(-)0.252*	(-)0.252
	{0.088}	{0.089}	{0.131}	{0.159}
Distance	(-)0.0004**	(-)0.0003	(-)0.0004	(-)0.0004***
	{0.0002}	{0.0003}	{0.0003}	{0.00001}
Valid-Voters	(-)4.37E-07	(-)1.15E-07	(-)2.09E-07	(-)2.09E-07
	{3.59E-07}	{3.74E-07}	{4.74E-07}	{4.61E-07}
Non-Marginal Seat	0.048	0.097**	0.126**	0.126*
	{0.041}	{0.039}	{0.051}	{0.068}
BNP	0.165*	0.096	0.136	0.136
	{0.087}	{0.088}	{0.139}	{0.108}
Bangladesh Jatiya Party	0.074	(-)0.016	(-)0.116	(-)0.116
	{0.094}	{0.113}	{0.195}	{0.111
Jamaat E- Islam	0.003	(-)0.156	(-)0.361	(-)0.361*
	{0.052}	{0.11}	{0.226}	{0.201}
Constant	0.251	0.089	0.124	0.124
	{0.170}	{0.160}	{0.199}	{0.169}
Division Effect	NO	YES	NO	NO
District Effect	NO	NO	YES	YES
N	275	275	274	274
R-square	0.19	0.23	0.37	0.37

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Robust Standard Errors are clustered at District Level in column- 4

Table – 2.6: Legislator's in Government

	Data: 2001-06	Data: 2009-10		
	Party-BNP	Party-AL		
	Dependent Variable			
	Attendance	Attendance	Legal Charges	Corruption Charges
	1	2	3	4
Son-Daughter	(-)0.157**	(-)0.016	0.128	(-)0.014
	{0.077}	{0.051}	{0.142}	{0.123}
Num. Times MP	(-)0.019	(-)0.026	0.045	0.067**
	{0.017}	{0.015}	{0.045}	{0.027}
Minister	0.001	(-)0.073	(-)0.083	0.022
	{0.042}	{0.037}	{0.119}	{0.089}
Age	0.003	0.003	(-)0.004	0.003
	{0.002}	{0.002}	{0.006}	{0.003}
Female	(-)0.185	0.042	0.063	(-)0.047
	{0.117}	{0.057}	{0.183}	{0.165}
Businessman	0.017	0.053	0.167	(-)0.098
	{0.074}	{0.039}	{0.161}	{0.084}
Lawyer	0.113	0.073	0.011	(-)0.214***
	{0.075}	{0.049}	{0.193}	{0.081}
Military	0.044	0.119	(-)0.295	(-)0.431***
	{0.095}	{0.075}	{0.211}	{0.158}
Distance	0.002	(-)0.0002	0.0006	0.002***
	{0.002}	{0.0001}	{0.0004}	{0.0002}
Valid-Voters	5.89E-08	(-)5.92E-08	(-)9.90E-07	(-)2.62E-07
	{3.43E-07}	{4.17E-07}	{9.50E-07}	{4.41E-07}
Non-Marginal Seat	0.069	(-)0.002	0.019	0.067
	{0.049}	{0.033}	{0.114}	{0.079}
Constant	0.471***	0.599***	0.876*	0.149
	{0.161}	{0.152}	{0.459}	{0.183}
District Effect	YES	YES	YES	YES
N	174	216	208	208
R-square	0.41	0.30	0.35	0.43

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are clustered at District Level in all columns

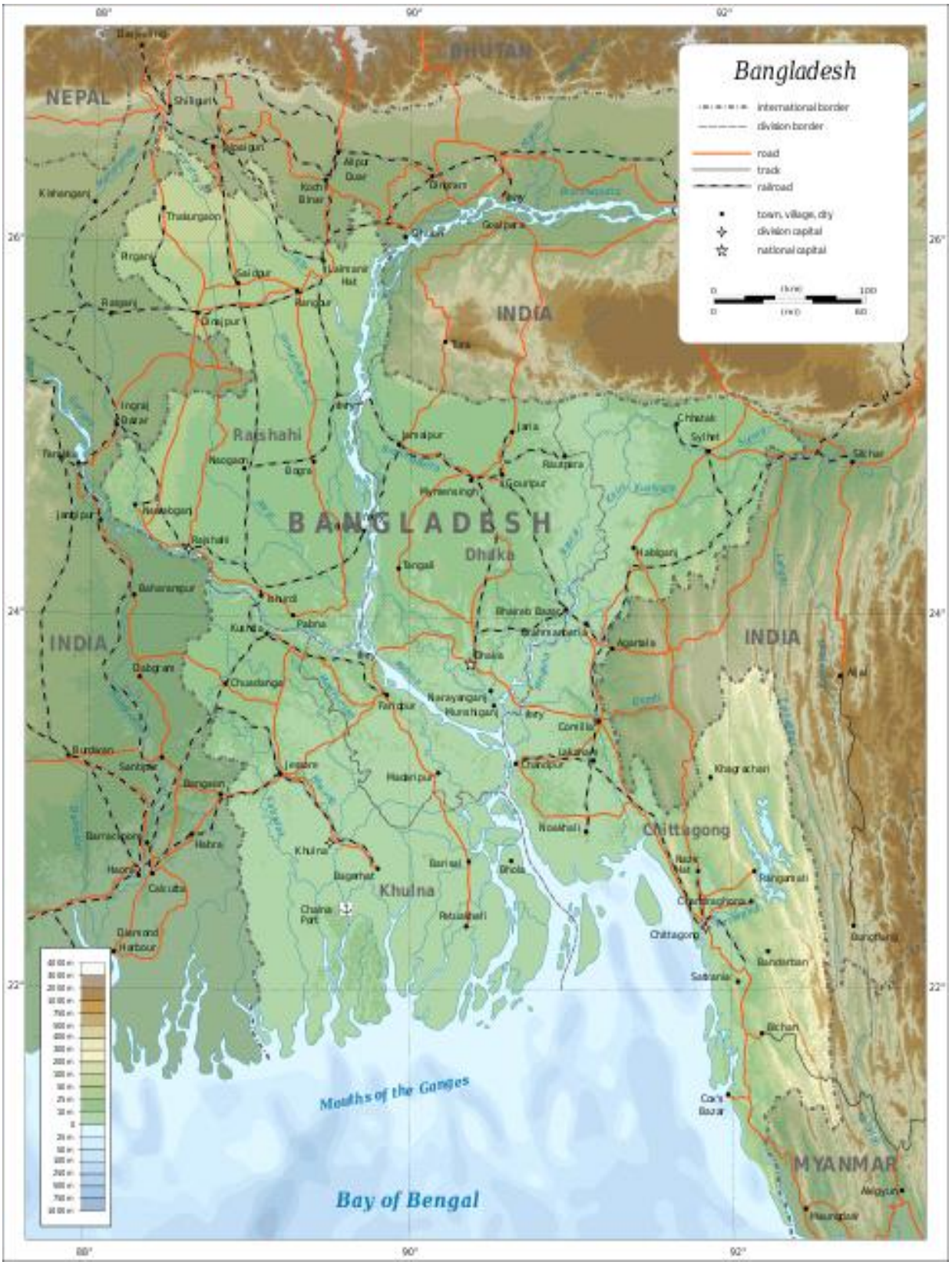
Table – 2.7: Key Dynasties are Excluded.

	Dependent Variables			
	Data: 2001-06	Data: 2009-10		
	Attendance	Attendance	Legal Charges	Corruption Charges
	1	2	3	4
Son-Daughter	(-)0.112*	(-)0.010	0.124	(-)0.072
	{0.059}	{0.047}	{0.111}	{0.118}
Num. Times MP	(-)0.027***	(-)0.024**	0.051	0.075**
	{0.01}	{0.011}	{0.036}	{0.027}
Minister	0.007	(-)0.085**	(-)0.087	0.007
	{0.036}	{0.035}	{0.117}	{0.082}
Age	0.003	0.003**	(-)0.003	0.002
	{0.002}	{0.001}	{0.005}	{0.003}
Female	0.037	0.043	(-)0.087	0.042
	{0.051}	{0.044}	{0.172}	{0.159}
Businessman	0.006	0.041	0.144	(-)0.102
	{0.044}	{0.03}	{0.14}	{0.093}
Lawyer	0.117**	0.052	{0.046}	(-)0.188*
	{0.049}	{0.044}	{0.177}	{0.095}
Military	0.034	0.035	(-)0.120	(-)0.192
	{0.064}	{0.08}	{0.134}	{0.161}
Distance	0.003***	0.0001***	(-)0.0013***	(-)0.0004***
	{0.001}	{0.00003}	{0.0009}	{0.0001}
Valid-Voters	2.31E-07	(-)4.80E-08	1.28E-06	1.23E-07
	{2.67E-07}	{2.94E-07}	{8.59E-07}	{4.37E-07}
Non-Marginal Seat	0.047	(-)0.008	0.025	0.116*
	{0.045}	{0.033}	{0.088}	{0.069}
Constant	0.446***	0.63***	0.927**	0.095
	{0.119}	{0.131}	{0.429}	{0.1737}
Party Effect	YES	YES	YES	YES
District Effect	YES	YES	YES	YES
N	261	275	266	266
R-square	0.61	0.64	0.33	0.32

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are clustered at District Level in all columns

Map- 2.1: Bangladesh[92]



[92]As of 2010; Source: Map of Bangladesh Wikipedia

Map – 2.2: Divisions of Bangladesh[93]

[93]As of 2010; Source: Golbez Wikipedia

3. Corruption and Dynasty Politics

Abstract

This paper investigates whether there is a systematic relationship between dynasty-politics and corruption in a cross-country empirical analysis. This is done with the help of a dynasty index, which is created by looking at the political history from 1950 to 2010 for large cross-section of countries, and it measures the variation in the degree of dynasty-politics that exists across different countries. The overall findings suggest that a higher degree of dynasty-politics is associated with a higher level of corruption when Singapore and monarchies are not included in the sample. This association is robust for multiple measures of corruption and remains significant when we control for important determinants of corruption. The paper also investigates the phenomenon of immediate dynastic succession in the highest political office. The results point out that countries which experiences immediate dynastic succession(s)at the highest political office are strongly associated with having higher levels of perceived corruption. Although I cannot rule out the possibility that the observed relationship is caused by unobserved omitted factors, the overall pattern appear very robust. A disaggregate analysis also reveals that this relationship is particularly strong for countries that experienced immediate dynastic successions after an incumbent leader was assassinated or he or she voluntarily stepped aside to facilitate the entry of the potential dynastic successor. In addition to this, I check for the possibility that the association between dynasty-politics and corruption is different in countries with higher level of political competition in comparison to countries with lower levels of political competition. The evidence, however, does not support this line of reasoning. Lastly, in line with Treisman (2000) I identify that economic development, protestant tradition and uninterrupted democracy play a crucial role in explaining the cross country variation in corruption.

Key words: Dynasty-Politics, Immediate Dynastic Succession, Corruption.

3.1 Introduction: Are Corruption and Dynasty-Politics linked?

This paper helps to understand if there is a systematic relationship between corruption and a socio-political phenomenon, dynasty-politics. Corruption, defined as the misuse of public office for personal gains, exists in every corner of the world in different degrees. Yet, the exact combination of factors that makes some countries corrupt is little known. World Bank Institute, recently, estimated that the total bribes exchanged in a year in the world economy constitutes roughly an amount of $1 trillion (Rose-Ackerman 2004), Likewise, corruption has also been blamed for the unimpressive performance of certain "developing" countries, and recent empirical research supports the hypothesis that there is a link between higher perceived corruption and lower investment and growth (Mauro 1995; World Bank 1997). In some developing countries, such as Kenya and Democratic Republic of Congo, it probably amounts to a large fraction of the Gross National Product. Developed countries too are in no way immune to corruption. For instance, Credit Lyonnais, which was one of the largest commercial banks in France, was sold to its founder (who was not the highest bidder) at a quarter of the market price under government pressure when its losses amounted to $30 billion. The founder then turned out to be a close friend of the county's President (Shleifer and Vishny, 1998). Furthermore, according to Transparency International, the perception of corruption in Italy is higher than that of Costa Rica in 2004, although Italy is much more economically developed than Costa Rica. All these examples highlight the urgent need of pursuing a better understanding of the causes of corruption.

Influential dynasties, on the other hand, dominate political atmosphere in various countries. From the Gandhis in India, Bhuttos of Pakistan, Gloria Macapagal's family in the Philippines, Duvalier family in Haiti, to the Bush family in United States, influential political dynasties exist in the political arena of various countries in different forms and degrees. Nonetheless, very little is known of its possible role in political decision-making process, and what consequences it bears for the idea of 'good' governance. This possible link between corruption and dynasty-politics, an issue thoroughly addressed in this paper, is particularly interesting since political dynasties reflect inequality in the distribution of political power (Dal Bo, et al 2009). Besides, these groups are likely to benefit from inherited political capital, which can increase their capacity for being agents for either 'positive' or 'adverse'

outcomes. This makes it imperative to examine empirically how dynasty-politics is related with corruption.

As I will argue below, theoretically the overall relationship between dynasty-politics and corruption is ambiguous. More specifically, dynastic politicians who desire dynastic succession at the highest political office can be influenced by what I call the '**reputation-building**' incentive. This incentive suggests that members of political dynasties, while they are in office, will try to abstain from corrupt activities since they would want to create a positive reputation for their family. Besides, this positive reputation will act as a signal to the people that their family is in politics to serve the public interest. As a result, if this incentive is strong, then it is likely that dynasty-politics is associated with lower levels of corruption across countries.

In contrary to the reputation-building incentive, dynastic-politician can also be dominated by the **'stockpiling-wealth'** incentive. This incentive suggests that dynastic-politicians, while they are in office, will use their position to amass a fortune so that their future generations can 'buy' their way to office. They can also appoint their preferred people to key positions in the government and bureaucracy (and in the process accumulate political capital) so that the elections contested by their future generations are manipulated in their favour. Hence, if this incentive dominates, then it is probable that countries with a greater prevalence of dynasty politics are on average more corrupt. Since both these incentives (reputation-building vs. stockpiling-wealth) works in opposite directions, the relationship between corruption and dynasty-politics remains a subject of empirical investigation. Therefore, this paper empirically investigates the possible relationship between corruption and dynasty-politics across a large number of countries. This is done with help of two measures which quantifies the variation in dynasty-politics across countries.

The paper is organised as follows. The next section gives an overview of the literature on corruption and some studies on dynasty politics. It also discusses the mechanisms through which dynasties can affect corruption. Section 3.3 provides a description of the data and the empirical model which I have used in the analysis. Section 3.4 will present the results from the base-line regressions and their interpretations. Lastly, section 3.5 concludes and provides direction for future research.

3.2 Literature Review and Theory

3.2.1 Literature Review

Corruption in political economy has been a subject of deep intellectual interest. A common definition of (public) corruption is the misuse of public office for private gain. Defined in this way, the word 'corruption' will capture, for example, the sale of government property by politicians in office, bribery, kickbacks in public procurement and embezzlement of government funds. It can also mean politicians misusing their position to rig elections so that they can be re-elected back into the office. Corruption, in a general sense, can also reflect collusion between firms or misuse of corporate assets that imposes costs on investors or consumers. In addition to this, some activities hover on a legal border line. For example, legal payments that involve lobbying, campaign contributions or gifts can seem quite close to illegal payments that constitute to bribery, or legal offers of 'after-retirement' jobs in private sectors, etc. The focus here is on public corruption or, more specifically, the socio-political factors that have the capacity to increase or decrease public corruption. World Bank, in a recent report pointed out that the estimated cost of bribery is, at least, 3% of the world income in 2002 (Kaufmann, 2003), and there is also a general consensus that corruption is harmful for economic development (Mauro, 1995).

In contrast, a particular stream in the literature does point out what is known as the 'efficient corruption,' which identifies bribes as 'speed money'. As Huntington (1968) stated: 'In terms of economic growth, the only thing worse than a society with a rigid, over-centralized, dishonest bureaucracy is one with a rigid, over-centralized, honest bureaucracy.' In brief, this highlights that bribery may allow firms to get things done in an economy plagued by bureaucratic hold-ups and rigid laws (Leff, 1964; Huntington, 1968). Others argue that a system built on bribery for allocating government licenses and contracts may produce an outcome in which the most efficient firms will be able to afford to pay the highest bribes (Lui, 1985).

Nevertheless, a fundamental drawback with the previous arguments is that they typically take the distortions circumvented by the corrupt actions as given. In almost every case, corruption and distortions are consequences or symptoms of the same set of underlying factors. As pointed out by Myrdal (1968), corrupt officials may not circumvent distortions, but instead

actually cause greater administration delays to attract more bribes. Djankov, et al. (2002) contributes to this point by empirically establishing in a cross-country study that greater degree of corruption is associated with higher regulation of entry for new firms. This provides evidence in support of the 'toll-booth' theory that argues that bureaucratic delays or entry regulation is imposed not for addressing public interest, but for extracting rents from the private sector. Other costs of corruption come from propping up of inefficient firms and the allocation of talent, technology and capital away from their socially most productive uses (Murphy, Shleifer and Vishny, 1991). Corruption also decreases the speed at which existing firms expand their size and new firms enter since a portion of potential profits or actual profits are taken away through corruption.

Additionally, it is also argued that corruption distorts the allocation of entrepreneurial skills. When corruption is institutionalized and widespread, some firms may devote resources for obtaining valuable licenses permits/licences and preferential market access (via which they could enjoy market power), while others focus on improving productivity (Murphy, Shleifer and Vishny, 1991). Sometimes, in extreme cases, for an entrepreneur it might be more rewarding to leave the private sector altogether and instead become a corrupt public official. This theoretical prediction has some support from micro and case study evidence, but the macro evidence on this prediction is indecisive. For example, Bates (1981) pointed out that in many sub-Saharan African countries, farmers avoided corruption by switching to subsistence production with a subsequent fall in their productivity and living standard. On the other hand, many formal sector firms specialized in securing special advantages that they were unable to secure through competition in the market. De Sotto (1989) identifies similar effects in Peru, where high initial start-up costs due to excess regulation and corruption, compelled entrepreneurs to establish new firms underground and on a smaller scale.

As a result, the contemporary wisdom is that the early majority view among social scientists and international development experts was correct and that corruption is harmful for development due to its adverse impacts on the incentives, prices, and opportunities that public and private agents face. Hence, it is important for us to identify the possible economic and social-political determinants of corruption. In the existing literature, theories about the determinants of corruption emphasize the role of structural and economic policies and the role of institutions. These theories are best viewed as complementary, since the choice of structural and economic policies are one way through which institutions influence corruption.

Countries with the highest level of corruption are mostly developing or transition economies (Svensson, 2005). This means that these countries can afford 'low' quality institutions. This results in even higher corruption (Shleifer, A and Vishny, R. 1993). This stream of argument belongs to the first set of theories on institution which argues that institutional quality is shaped by economic factors. In short, the theory states that institutions develop in response to a country's income level and differential needs (Lipset, 1960; Demsetz, 1967). A similar view-the human capital theory- points out that growth in income and human capital causes institutional development (Lipset, 1960; Glaeser et al 2004). Education and human capital, for example, are required for courts and other institutions to operate efficiently, and misuse of power by the government is likely to go unnoticed and unchallenged when the electorate is not highly literate. Consequently, these theories suggest looking at income and education as causes of corruption.

The second set of institutional theories emphasises more on a direct role of institutions, and they argue in favour of the idea that institutions are inherited and persistent. Acemoglu, Johnson and Robinson (2001), along these lines, state that in former colonies, the institutions were set for the benefit of the colonizer and only when Europeans settled in large numbers did this also result in institutions aimed at benefiting residents of the colony. Hence, the disease environment which determined the mortality rates of the European settlers in the colonies explain partially why Europeans in some cases have implanted institutions which aim to benefit residents. So, according to them, corruption should be higher in colonies with an inhospitable environment, since this would have motivated European settlers to implant extracting institutions.

Alternatively, La Porta, Lopez-de-Silanes, Sheifer and Vishny (1999) focused on the identity of the colonizer and, more particularly, the legal system transplanted from the colonizer to the colonies. According to them, countries with English legal origin (as opposed to French and Socialist legal origin) regulate less, and this leads to lower corruption. This means that countries with 'common-law' as opposed to 'civil-law' will suffer from lesser degree of corruption. In the view of the second set of theories, economic and political institutions influence the extent of corruption, especially in the ways that they restrict market and political competition. Furthermore, the variable that captures the restriction in the market place includes openness to external competition from imports (Ades and Di Tella, 1999). On the political side, an independent press provides greater information than a state-controlled

press to voters on government and public sector misbehaviour, which also includes public corruption (Brunetti and Weder, 2003). The type of political institutions-presidential versus parliamentary and federal versus majoritarian- can also have an impact on the level of corruption as it influences the incentives of public sector decision-makers (or politicians) and voter's ability to hold them accountable for misuse of power (Person and Tabellini, 2004). Recently, corruption has also been linked to religious decomposition and ethno-linguistic diversity. Treisman (2002) demonstrated that countries with Protestant tradition performed better in constraining corruption than countries with Muslim or Catholic tradition. The rationale underlying this is that institutions of the Protestant church, which arose in part as an opposition to state-sponsored religion may be more inclined to monitor and address abuses by government officials. The paper also highlighted that a country's experience with long period of uninterrupted democracy is also detrimental to corruption.

Therefore, the recent trend in the literature is to relate corruption to colonial history, legal origin and religious tradition. However, the possible effects of political dynasties – who are likely to have significant role in country's political process - on corruption has not yet received much attention in empirical literature.

Dynasty-politics exists in the political arenas of numerous countries. Their existence and self-perpetuation, to an extent, highlights imperfections in modern democratic representations as they can reflect considerable inequality in the distribution of political power. This can, in principle, also determine the quality of governance within a country's polity. In Haiti, for example, Francois Duvalier and son Jean-Cluade Duvalier occupied the position of the president of Haiti for a total of approximately 29 years. What is more interesting is that after the death of Francois Duvalier (who was initially elected but later turned into a dictator), his son Jean-Claude Duvalier immediately succeeded him, although he was only 19 years old at that time. Besides, both Duvalier regimes in Haiti were known for their corrupt and autocratic nature (Metz, 1989). Similarly, in Togo Gnassingbé Eyadéma (who ruled Togo for 38 years) was succeeded by his son Faure Gnassingbé after his death on the 5thof February 2005.[94] To be more precise, in December 2002, the Constitution of Togo was changed and the term limits on the office of president was removed. Previously,

[94] For more information, see http://www.britannica.com/EBchecked/topic/199240/Gnassingbe-Eyadema

presidents had been limited to two five-year terms, and this would have forced Eyadéma to step down after the 2003 elections. With the removal of these constraints, Eyadéma was free to stand for re-election and he did so, winning the elections on June1. Furthermore, another change was introduced to reduce the minimum age of the President to 35 years, rather than 45. As Eyadéma's son Faure Gnassingbé was 35, many assumed that Eyadéma was opening the way for dynastic succession should he die suddenly.[95]

Both these examples do reflect to some extent how executive head of states can use their position to manipulate key institutions (such as defence) and law to promote dynastic succession. But, since both Francois Duvalier of Haiti and Eyadéma of Togo belonged to an corrupt autocratic regime, one can ask that whether such behaviour is only observed in countries where the political arena is dominated by autocratic leaders, and therefore, in a democratic political process such dynastic succession would not be possible. This is not true since, for example, in India members from the Gandhi dynasty have been voted in and out of power on numerous occasions. More specifically, after the assassination of Prime Minister Indira Gandhi on the 31st of October 1984, her son Rajiv Gandhi was immediately sworn in as the Prime Minister. The succession of Rajiv Gandhi was a product of a democratic political process (where the senior leaders of the Indian National Congress pressurized him to take up the post) and he was later (within 6 months) elected through a parliamentary election to serve as Prime Minister for a full five years (Frank, 2002). This made him the youngest Prime Minister that India has ever witnessed.

Stories of such dynastic succession exist in other countries too, such as Bangladesh where both the former Prime Ministers Khaleda Zia[96] and Sheikh Hasina are related to former Presidents of Bangladesh. In July 2001, Indonesian people elected its first female President Megawati Sukarnoputri[97] who is also the daughter of the country's first president Sukarno.[98] Thus, while analysing these political dynasties, historians and political scientists have given more weight on some than others. However, what historians and political scientist have not

[95] For more information, see http://www.britannica.com/EBchecked/topic/1052895/Faure-Gnassingbe

[96]Khaleda Zia's sons were imprisoned for corruption charges during the Care Taker Government led Dr Fakhruddin Ahmed from 2007-09. For more information,
please see: http://www.thedailystar.net/newDesign/news-details.php?nid=166515

[97] For more information, see: http://www.britannica.com/EBchecked/topic/572221/Megawati-Sukarnoputri

done is to provide us with a theoretical model that could probably explain the behaviour of dynastic politicians and investigate empirically the possible links dynasty politics might have with corruption.

Few studies which focused on the dynamics surrounding political dynasties includes that of Camp (1982), who looked at Mexico's political culture and pointed out that a high percentage of political leaders from Mexico between 1935 and 1980 belonged to politically established families. For the United States, Brandes Crook and Hibbing (1997) tried to identify the impact of the election mode of Senators on a number a dimensions, including the proportion of Senators coming from families that had placed a legislator. Along similar lines, Dal Bo et al. (2009) recently studied the evolution of political dynasties in the United States Congress since its inception in 1789. With many other interesting findings, the authors found that legislators who serve for long tenures are significantly more likely to have relatives entering Congress later. They also pointed out that an increase in political competition is associated with fewer dynastic legislators. Similarly, Brownlee (2007) provides a qualitative examination of hereditary succession in a large number of modern autocracies and argues that whether elites will abet dynastic succession depends on the precedent for leadership selection. In other words, where rulers are predated by parties, surrounding political elites will defer to the party as the recognized arbiter of succession. On the other hand, where rulers predate their parties and political elites lack an established precedent for orderly transfer of power, hereditary succession offers a focal point for reducing uncertainty, achieving consensus, and forestalling a power vacuum. These studies, so far, have neither theoretically nor empirically linked dynasty politics with corruption. But, as mentioned above, there are important theoretical channels through which one can relate dynasty politics to corruption.

3.2.2 Theory: Stockpiling-Wealth versus Reputation-Building

The "rational choice" literature argues that it is important to assume that individuals behave according to their own self-interest. This does not imply that individuals do not care for others, but rather that people put their own interest ahead of others when these conflict. Moreover, individuals pursue their goals in the most efficient manner given that gathering and processing of information is costly. The assumption that obtaining information is costly is important since it means that an individual can take his or her decisions under some

uncertainty as it might be too expensive to make fully informed decisions.[99] This doctrine also suggests that rational individuals will be forward-looking and will try to anticipate the effects of their decision, and the decision of others, on their welfare. Thus, according to rational choice, politicians (who we expect to serve public-interest) in office too will prioritise their self-interest, but as they are elected and have to face re-election their behaviour will take into account the possibility of being voted out of office if they fail to satisfy the citizens. A key question that is now worth exploring is whether this behavioural dynamic is different for dynastic politicians in comparison to non-dynastic politicians? I propose that in understanding the behaviour of politician from dynasties, it is useful to*assume* that dynastic politicians have in their objective function a goal to initiate a dynastic succession. If this is true, then not only dynastic politicians will account for all the future consequences of their action on their welfare, but they will also take into account how their personal and political behaviour affects the probability of their future generation inheriting their political position or office.

Hence this additional objective of dynastic politicians to make sure that their dynasty sustains and prospers *can* change the behavioural dynamics of dynastic politicians from others. This, on the other hand, raises the question that if dynastic politicians is affected by the desire of a dynastic succession, then why will normal politicians (who are not members of dynasties) act in a different way since they too could desire that their family members will inherit their political position or office, and in the process set up their own political dynasty. A possible reason why this might not be the case is that influential dynasties often have an appeal to certain powerful sectors of the political arena. Their familiarity with the political machinery can reduce the effort that is required by dynastic politicians to promote a dynastic succession in comparison to the effort that is required by politicians who are attempting to set up their own dynasty.[100] Consequently, if this line of reasoning is true, then one can expect dynastic identity to matter in altering the behavioural dynamics of politicians.

[99] Standard Economic analysis suggests that individuals wanting to maximize their expected earnings will collect information until the expected value from a marginal increase in information equals the marginal cost. This can well lead to exhibit what seems like satisfactory behaviour (e.g., see Zeckhauser and Schaefer, 1968)

[100] In recent empirical literature, Feinstein (2010) shows that dynastic politicians receive an additional 4 percent increase in the two party vote share in congressional elections due their "brand-name advantage". This might make it relatively easy for dynastic leaders to endure in office in comparison to non-dynastic leaders.

Assuming that dynastic politicians are partially motivated by the desire to promote a dynastic succession after they retire, the relationship between dynasty-politics and the level of corruption is still theoretically not clear. This is because their decision-making process is affected by two opposing incentives. As indicate, I call this the **Reputation-Building** incentive and the **Stockpiling-Wealth** incentive.

Reputation-Building incentive implies that when members of political dynasties are in office, they will use this opportunity to build a positive reputation for the family. This means that they will abstain from behaviours that can decrease their family's goodwill, such as engaging in illegal activities as much as possible, so that they send a positive signal to the voters that their dynasty is in politics to serve the public interest. At the national level, it can mean that they will pursue a political cause (such as enhancing human rights, her commitment to the idea of good governance, etc.)that attracts her admiration both within her country and across borders. Therefore, if dynastic politicians succeed in creating a positive reputation for their family, then the dynastic succession has a greater likelihood of being seen legitimate and acceptable.[101]

In contrast, stockpiling-wealth incentive proposes the idea that while dynastic politicians are in office they will be tempted to accumulate wealth through both legal and illegal means so that their future generation can inherit their political position on the basis of their financial and political capital. At the national level, this can also mean that dynastic politicians will appoint their preferred people to key positions in the government and bureaucracy, and in the process accumulate political capital so that future dynastic successions are easier to achieve. To be precise, it is probable that dynastic politicians can use the inherited financial and political capital to manipulate crucial institutions (such as Election Commission, Defence and so on) so that electoral results are rigged in the favour of the potential dynastic successor.
For example, the electoral victory of Ali Ben Bongo in Gabon in 2009, who succeeded his father Omar Bongo[102], was termed by the opposition parties as an 'electoral

[101] In practice, it can evoke a similar decision making scenario faced by a politician with term-limits in comparison to a politician without term-limits. That is, the incentive induced from the possibility of facing re-election can be similar to one of dynastic politicians aiming to facilitate a dynastic succession.

[102] Omar Bongo was the President of Gabon for more than 41 years. For a detailed analysis of his rule, please see Ngolet, (2000).

coup'.[103]Moreover, it is speculated that the political and financial capital that Bongo family has accumulated over the four decades has facilitated the possibility of such dynastic succession.[104]

A dynastic leader's identity is also often associated with his or her family's long exposure to political power. And, such long exposure to political power often allows legislators with a dynastic identity to enjoy a *brand-name*, which is often non-transferable in nature. On this, Lott, (1986) and Lott, (1987a & 1987b) show that if these *brand-names* create greater popular support for incumbent politicians who cares about both "net-support" and "commission" that he or she receives for transferring wealth, then such scenarios can produce barriers to entry for more potential competent entrants with no brand-names. This, in theory, means that incumbent politicians with brand-names can find it in their self-interest to remain in office by restricting entrants even when there exists more efficient, less recognised candidates.[105]Similarly, Laband and Lentz (1985) identify that children of national politicians were less likely to be opposed for re-election than non-dynastic candidates. The paper also states that opponents of dynastic politicians spend more in losing campaigns than do those who run against non-dynastic politicians. Thus, if such scenarios hold for dynastic politician, then one can expect dynastic leaders to be relatively less benign in comparison to leaders with non-dynastic identity.

Now, to empirically isolate the average net effect of these two opposing incentives on the behaviour of dynastic leaders at a cross country level is difficult. This is because isolating a national leader behaviour which carries information about a leader's motivation is complicated while conducting a cross-country examination, given a 'leader behaviour' might receive or merit a diverse set of response across different polities. As a result, this scrutiny focuses on the variation of a social-economic phenomenon – corruption – across countries, and it attempts to see if dynasty-politics have any explanatory power in predicting its variation. Moreover, this focus on corruption is essential since, while the political action that is considered to be corrupt might vary across countries, the perception that corruption

[103] For more information, please see http://news.bbc.co.uk/1/hi/8236607.stm.

[104] For more information, please see http://www.amnestyusa.org/our-work/countries/africa/gabon

[105] For more details on this argument, please see Lott, (1986): "Brand-names and barriers to entry in political markets" Public Choice 51: pp. 87-92

involves political leaders getting involved in an illegal conduct under the law of the land is almost universal by definition. Consequently, if long exposure to dynastic rule at the national level is associated with higher or lower levels of perceived corruption across countries, then it is possible to prudently acknowledge some information concerning the *motivations* that are governing behaviour of dynastic politicians.

As the discussion above points out, reputation-building and stockpiling-wealth incentive work in opposite direction. This implies that an empirical investigation will be instrumental in understanding the overall relationship of dynasty politics with the level of corruption in a country.

3.3Data and Methodology

3.3.1 Data: Sources of the variables and the Dynasty Index (DI)

3.3.1.1 Dynasty Index: Quantifying the variation in Dynasty Politics.

Dynasty politics exists in the political arena of numerous countries in various forms and shapes. In India, for example, the national political arena is solely dominated by a unique dynasty- the Nehru-Gandhi dynasty- which had three members who were ex-Prime Ministers of India. These three members occupied the position of the executive head of state for approximately a total of 36 years.[106]Conversely, in both Mauritius and Bangladesh two rival dynasties compete in their respective political process to occupy the post of the executive head of the state. Besides, there are numerous countries where in last six decades the political arena never included families from which more than one member occupied the post of the executive head. As a result, in order to quantify the variation in dynasty politics that exists across the countries I primarily employ two measures. First, I classify a political family (i) as a *political-dynasty* when at least two members from the family have occupied the position of the executive head of a country.[107] I then construct a Dynasty Index (***DI***) by looking at the total time share that political dynasties were in power for each country. That is, our measure of dynasty politics employs a very simple measure where:

[106] Jawaharlal Nehru –his daughter Mrs Indira Gandhi – and grandson Rajiv Gandhi were all Prime Minister's of India.

[107]To pin point *political-dynasties* for each country post 1950, I use the Archigos dataset, v2.5 (Goemans et al, 2007), which identifies the primary national leader for each country at each point in time from 1950 to 2004. This data set identify the manner by which rulers enter and leave political power, the post-tenure fate of the ruler, as well as their biological relationship to other leaders. Numerous e-sources were also used to establish the biographical profiles of the national leaders.

$$DI = \frac{T}{60}$$ {if the country gained independence before 1950; T is $\Sigma\, t_i$ where (t) is the total number of years dynasty (i) was in office}

OR

$$DI = \frac{T}{2010 - YearofIndependence}$$ {if the country gained independence after 1950; T is $\Sigma\, t_i$ where (t) is the total number of years dynasty (i) was in office}

Now, calculated in this way the Dynasty Index ranges from (0) to (1), where (1) represents a very strong presence of dynastic influence in a country's political arena and zero represents absolute absence of it.

Table-3.1 presents the Dynasty Index (***DI***) for all countries in the sample. Besides, out of the 132 countries, ***DI*** is greater than zero for forty-nine countries. That is, according to the indicator dynasty-politics exists in approximately every third country of the sample. Likewise, it is trivial to mention that monarchies such as Jordan, Kuwait, Morocco and Saudi Arabia have a ***DI*** equal to one, which reflects that they were under the authority of their respective royal families for the entire period. In addition to this, North Korea has a dynasty index equal to 1 (reflecting the extreme influence that the Kim dynasty exerts in North Korea's political arena) and is closely followed by Azerbaijan with a dynasty index equal to 0.89. One important thing to note, however, is that countries with similar ***DI*** score do not necessarily indicate that their dynasties are homogenous in all dimensions or that they have an equal amount of political strength in their respective national political arena.

For example- both India and Mauritius have a ***DI*** score of 0.57. Nevertheless, the dynamics surrounding the political dynasties differ substantially. To elaborate further on the point, the Nehru-Gandhi family produced three members (Nehru, Indira and Rajiv) who in total occupied the highest political office for 34 years. Additionally, no other political family in India could produce more than one member who occupied the office of the executive head of

the state. On the other hand, the political arena of Mauritius is influenced by two heavy weight *rival* dynasties (Ramgoolams and Jugnauths), and their hostility is carried forward by their next generation. Despite the fact that there are obvious differences between dynasty politics of India and Mauritius - the dynasty index for them is 0.57. This, therefore, points out the possibility that countries with a very similar dynasty-index can have dynasties which are different in various dimensions. Thus, one needs to be cautious while interpreting the results, which tries to understand how the variation in the degree of dynasty-politics affects the level of corruption across countries.

Another possible caveat with this measure is that it can potentially underestimate the degree of dynasty politics that a country's political arena exhibits. This is because in some countries an executive head appoints his or her family members in key positions of the government while he/she is in power. This, to some extent, reflects the influence the family has in the political arena of the country. This can also highlight the intention of the executive head of a state to promote his or her family members as a future heir for the top position after retirement. Nonetheless, this procedure of measuring the degree of dynasty politics fails to take this into account since we do not control for such behaviour undertaken by any executive head of a state. Thus, for example, a country such as China has a ***DI*** equal to zero even though Mao's 27 year rule was heavily influenced by his wife Jiang Qing[108] (Short, 2001)

The second measure attempts to quantify a very special phenomenon associated with dynasty politics – *immediate dynastic successions*. Although such types of political successions are common among monarchies, they are found in modern democracies and autocracies (even in contemporary times). For instance, in Argentina, President Nestor Kirchner voluntarily stepped aside in 2007 to support the successful election bid of wife Cristina Fernandez Kirchner, thereby becoming the only 'First Gentleman' in Argentina's politic arena.[109] Moreover, in autocracies like Gabon, immediate dynastic succession at the highest political office took place when Omar Bongo died in office after being in power for more than four

[108] It is pointed out that Jiang Qing along with her infamous 'Gang of Four' controlled the power organs of the Communist party during the Cultural Revolution. She was later sentenced to life-imprisonment after the death Mao in 1976.

[109] For more information see: http://news.bbc.co.uk/2/hi/business/7069172.stm

decades.[110] Immediate dynastic successions are also associated quite strongly with political assassinations.[111] To be more specific, after the assassination of Prime Minister Solomon Bandranaike of Sri Lanka in 1959, his wife Sirimavo Bandranaike succeeded him within a years after a brief political turmoil. This also made her world's first female Prime Minister.[112]In order to quantify this phenomenon, I use a simple binary variable *Immediate Succession* which is equal to one for a country that has a political dynasty (i) where a political succession between its members for the top political office took place within a year. Thus, Table-3.1 shows that twenty five countries which experienced at least one immediate dynastic succession at the top political office occurred in last 60 years. In other words, one in every five country in the sample entertained such a political phenomenon.[113]

3.3.1.2 Data Analysis

Measuring the level of corruption across countries is a difficult, but an important task. This is both due to the secretive nature of corruption and the variety of forms it takes. This study primarily depends on three sources, which produces a measure of corruption across a large sample of countries.

The first source is the index on corruption called 'Control of Corruption[114],' that has been produced by the World Bank since 1996 in its publication "Governance Indicators 1996-

[110] For more information see: http://news.bbc.co.uk/2/hi/8235875.stm

[111]The thesis addresses this phenomenon in the article: " Assassinations and Political Dynasties"

[112] For more information see: http://www.independent.co.uk/news/world/asia/worlds-first-female-prime-minister-dies-634971.html

[113] It is important to acknowledge here that immediate dynastic succession allows the analysis to closely relate to the discussion in the theory section. More precisely, if dynastic leaders are driven by a motivation to facilitate future dynastic successions at the highest political office, then such factors are likely to reduce the time lag that one witnesses between a dynastic leader leaving office and his or her dynastic successor occupying office. This makes 'immediate dynastic succession' more likely when such motivations are in function. On the other hand, when two members of a family occupy the position of an executive head of the state but with a considerable time lag between, then it reduces the likelihood that such dynastic succession have emerged from the direct motivations of a dynastic leader. For example, it is unlikely that Shigeru Yoshida [Prime Minister of Japan between 1948 and 1954] had any 'hands on' role in fueling the political rise of his grandson Taro Aso [Prime Minister of Japan between 2008 and 2009].

[114]Control of Corruption index is available from the World Bank at: (http://info.worldbank.org/governance/kkz2002/tables.asp)

2005" (Kaufmann et al. 2006). I use this because they have a broader definition of corruption and it takes into account most cross-country indices reporting ranking of countries on some aspect of corruption. The indicator (Control of Corruption) is constructed in order to have a standardised normal distribution across countries. Hence, it lies between -2.5 and 2.5 for almost all countries, with highly corrupted countries scoring towards -2.5. As the primary dependent variable, I have computed the country mean of Control of Corruption from 1996 to 2005. This is done with the intention to reduce the possibility that our results are affected by an unusual corruption score (of any country) in any particular year. Figure-3.1 provides a scatter plot between the 'Dynasty Index' and the" Average Control of Corruption 1996-2005" for the entire sample. As it can be seen, there is a slight negative association between the variables of interest, indicating that we might isolate that higher prevalence of dynasty politics is associated with greater levels of corruption.[115] In addition, as a second source, I use the annual index of "Corruption Perception Index-CPI" produced by Transparency International.[116] This index ranges from 10 (representing least corrupt) to 0 (representing most corrupt).

Nevertheless, a key question arises while using an index that measures perceived corruption is: why should we take this measure seriously since it is based on perceptions rather than some directly observable measure of corruption?[117]I find two convincing reasons. One, perception of corruption may have serious consequences for economic growth as corruption itself. For example, countries that are rated high on corruption by Transparency International have tended to attract lower foreign investment (Wei. 1998). Besides, countries that are rated

[115] To preview a more pronounced association, see Appendix figure 3.3 in page 272, which drops monarchies and Singapore from the analysis.

[116]For further information on Corruption Perception Index (CPI), see: www.transparency.org

[117] The 'Control of Corruption' indicator is also depended on perceived corruption scores. As a result, the criticism is applicable to the first dependent variable as well. In addition, such aggregate composite corruption indexes are often subject to sever criticism, which mainly stems from four issues. (I) *Transparency in Construction*: if some of the components of composite corruption index are not constructed in a transparent manner, then the composite corruption index (CPI or Control of Corruption) also suffers from such lack of transparency. (II) *Conceptual Imprecision:* since composite corruption index aggregates component indexes which are constructed from a wide variety of sources, it enhances the possibility of suffering from conceptual imprecision. (III) *Comparability across Time: as* composite corruption indexes often use components indices that changes sample composition over time, it makes comparison across time problematic. (IV) *Interdependence of Source*: composite corruption index are often made of components that draws information from non-independent source. For example, when components use 'expert opinion' to measure corruption perception, it is probable that these experts often consult each other before proving their opinion. For more discussion along these lines, see Knack, S (2006).

more corrupt by Business International had significantly lower levels of growth and investment (Mauro 1995). Two, the ratings produced by Transparency International-and the component surveys and ratings from which they are formed- turn out to be highly correlated among themselves. Furthermore, ratings that are dependent on different methodologies, using different inputs, and in different decades ended up with results that were very similar (Treisman 2000).[118] The consistency of such ratings across different techniques, source, and time reduces the risk that one is depending on the guesses by any individual organization. Hence, to construct a second dependent variable I compute the country mean of CPI from 2001 to 2009. Now, it is important to point out that in Treisman (2000), the analysis undertaken is largely dependent on the CPI indexes for 1996, 1997 and 1998. Thus, this paper can implicitly provide a robustness check for most conclusions drawn from the Treisman (2000), since it uses a similar methodology on a more larger and contemporary data set.

Lastly, as a third measure of corruption, I employ the variable "Corrupt" used by La Porta et al (1999) to pinpoint the determinants of the quality of government in a large cross-section of countries. The variable ranges between 0 and 10, where low scores indicate that "senior government officials are likely to demand special payments" and "illegal payments are generally expected in lower levels of government" in the form of "bribes connected with imports and export licenses, exchange controls, tax assessment, policy protection, or loans".[119]

In Table-3.2A, the correlations between the three dependent variables are presented, and it can be seen that there is a strong positive correlation between the three measures of corruption. This, to some degree, is in line with findings of Treisman (2000), and it raises confidence concerning the usefulness of the measures of corruption in this investigation.

[118] It is also noted that while doing broad analysis, such as scrutinizing the relationship economic development and corruption, conceptual imprecision that is commonly associated with composite corruption index is unlikely to be a problem Knack, (2006). Moreover, given the scope of this paper is also broad – examining the overall cross-country relationship between dynasty-politics and corruption - possible conceptual imprecision in 'CPI' or 'Control of Corruption' is unlikely to be a problem. Likewise, as the study attempts to explain the spatial variation in corruption (and not over time), aggregate indices are not very harmful.

[119]For more information on this, please see: Political Risk Services - *International Country Risk Guide* East Syracuse, NY: Political Risk Services Institutional Reform and Informational Sector.

In order to control for economic development, we used PPP GDP per capita as of 2000 produced by the Penn World Tables. The same source was also used to measure 'openness' to foreign trade.[120] Data on ethno-linguistic fractionalization, which according to some is a determinant of corruption, has been taken from Easterly and Levine (1997). The variable 'ethno-linguistic fragmentation' ranges from (0) to (1), where (0) reflects ethnically homogeneous regions. Data on legal origin and religious affiliation, which identifies whether a country has English legal origin or not and what percentage of population is Protestant, is taken from La Porta et. al (1997, 1999). The one on colonial heritage was compiled mostly from Horrabin (1937), Fieldhouse (1982) and Grier (1995). This identifies whether a country was a former British colony or not.[121] In order to control for 'federal structure' I used the data that is analysed by Treisman (2000), and also constructed a dummy variable for countries that are not covered by Treisman (2000) following the definition of federal state provided by Elazar (1995) and Riker's (1964, p.11).[122]

Finally, to control for democracy the paper experimented with multiple indicators. I start initially with a measure of uninterrupted democracy (which is a dummy variable) for countries that have witnessed an uninterrupted democratic political process from 1950 to 2009.[123] This measure is based on a classification that is similar to the one provided by Alvarez et al. (1996), where they consider a country to be democratic if: (i) the chief executive is elected, (ii) the legislature (at least the lower house) is elected, (iii) [at least] two party contests election.[124]A second measure of democracy is taken from Jaggers and

[120] Openness is measured by sum of export and import as a share of GDP for the year 2000

[121] Note: For countries for which the data was not available, I have looked into their political history to categorize their colonial heritage.

[122]According to Elazar (1995) and Riker (1964) a country has federal structure if: (1) [at least] two levels of government rule the same land and people, (2) each level has at least one area of action in which it autonomous, and (3) there is some guarantee of the autonomy of each government in its own sphere. The implementation procedure is similar to the one that is used by Treisman (2000) to extend his own data set.

[123] If the country has received its independence post 1950, then I see whether it has had uninterrupted democracy since it independence to 2009.

[124] I have extended the Alvarez et al (1996) data up to 2004, using the 'Europa World Year Book 2006'. Note: The definition provided by Alvarez et al (1996) focuses exclusively on the contested election of governments. According to this definition, a country is considered 'democratic' even if the leader imposes a state of emergency and suspends civil and political rights (like Mrs Indira Gandhi between 1975 and 1977) so long the leader was elected and does not change or violate the rules on holding new elections and leaving office. The 1975 Indian state of emergency was approved by both

Marshall (2000), which quantifies the degree of democracy entertained within political arenas of various countries. In other words, I use the POLITY variable from the POLITY IV dataset. The POLITY variable has 21 categories, ranging from -10 to +10, where -10 reflects extreme autocracies. In the next section, I discuss the empirical methodology employed in this paper.

3.3.2 Methodology: Simple OLS estimation technique employed.

As argued above, the relationship between corruption and dynasty-politics is essentially an empirical question. This is because theoretically the overall impact of dynasty-politics on corruption is ambiguous, as it depends on two opposing forces, namely reputation-building and stockpiling wealth incentives. Hence, one needs to model the variation in corruption across countries as a function of dynasty-politics and other established determinants of corruption, so that the empirical scrutiny identifies the possible impact of dynasty-politics on corruption. Therefore, we estimate the following base-line OLS regression:

$$Corrupt_i = \sim + \quad (DI_i) + ¥(X_i) + £_i$$

Where $Corrupt_i$ is our measure of corruption for country (i) taken from the mentioned sources. DI_i is the dynasty-index for country (i), which measures the variation in the degree of dynasty politics that is/was present in the national political arena of all the countries that we have in our sample. $X_i$is vector of other covariates, and ε_i is the random error term. The key parameter of interest is β, which links corruption to dynasty-politics. In our base-line specification, the vector $\underline{X_i}$ consists of a set of factors that are identified in the literature as important determinants of corruption. These variables are:

(1) **Economic development**: I have controlled for level of economic development by taking log of PPP GDP per capita as of 2000. Countries that are economically developed generally have a lower degree of corruption. This is primarily due to the fact that richer economies (and therefore richer governments) are able to afford stronger institutions and this allows them to reduce corruption (Shleifer, A and Vishny, R. 1993).

Lok Sabha and Rajya Sabha (lower and upper houses of the legislature). Mrs Indira Gandhi did call election in 1977, and she left the office constitutionally when she lost it.

(2) **Openness**: Increasing openness to international trade has the capacity to reduce corruption (Ades and Di Tella, 1999). This is because it increases the competition in the domestic market which results in a fall of equilibrium profit in the market. This eventually reduces the bribe that firms are willing to pay (to bureaucrats) for having an access to the market.

(3) **Religious affiliation**: Institutions of the Protestant Church, which came into existence as an opposition to state-sponsored religion, are more inclined to monitor and address the abuses by government officials. This hints the possibility that countries with Protestant tradition are less corrupt as its citizens are more conscious of abuses by public sector policy-makers. Additionally, a larger fraction of Protestant population reflects the individualistic nature of the society (as oppose to 'familistic' nature) which is good for reducing corruption (Lipset and Lenz, 1999).

(4**) Former British colony**: Colonial heritage has been identified by many as an important determinant of corruption. The countries with British colonial heritage are (on average) typically less corrupt. Two reasons explain the case. First, countries with a British colonial heritage have mostly adopted the 'Common Law,' which has a tradition of protecting property owners from the attempts of the sovereign to regulate and expropriate them (La Porta et. al. 1999). Second, countries with a British colonial heritage might have adopted a 'legal culture' (if not Common Law) that respects legal procedure over substantive issues. According to Eckstein, "British…behave like ideologists in regard to rules and like pragmatists in regard to policies. Procedures, to them, are not merely procedures, but sacred rituals"(Eckstein 1966, p.265). Thus, the willingness of judges to follow procedures even though they are threatened by powerful hierarchy-*to support Dreyfus against the Army*-clearly increases the chance that state corruption will be exposed (Treisman 2000).

(5) **Federal states**: Theoretically, federal structure can promote both high and low corruption. Some have argued that federal structure can lower corruption and improve the efficiency of the government by promoting competition between different levels of government (Breton, 1996) or even between sub-jurisdictions (Weingast, 1995) in the provision of public services for which officials could demand bribe. In contrast, others have suggested that relatively balanced power of sub-national and central government officials

over certain common pool of resources- the possible 'bribe' or tax base in a given region- leads to inefficient suboptimal over-extraction of rent (Shleifer and Vishny 1993).

(6**) Long exposure to democracy**: Corruption will be typically high when the possibility of being exposed or getting caught for misusing the public office is low. So, in democratic political system the competition for office provides an incentive to political parties to discover and publicize the incumbent's misuse of office whenever an election beckons. Moreover, freedom of press and association increases the ability of public interest groups and reporters to expose abuses by government officials. Therefore, all this suggest that democratic governments are on average less corrupt, and empirical evidence on this issue points out that countries with a greater exposure to democracy are typically less corrupt (Treisman, 2000).

(7) **Ethno-linguistic Fragmentation:** It is suggested in the literature that ethnic heterogeneity might facilitate corruption. This is because Shleifer and Vishny (1993) argued that more homogenous societies are likely to come together for joint bribe maximization. This is a less deleterious type of corruption than non-collusive bribe setting observed in ethnically heterogeneous societies. Besides, Mauro (1995) uses measures of ethno-linguistic fractionalization as an instrument for corruption so that a causal effect of corruption on growth is identified.

It is important to note that the employed estimating strategy can only allow one to identify the correlation between corruption and dynasty-politics. This is because the nature of the data set fails to accommodate country specific time invariant effects, which increases the possibility of omitted factors affecting the results. Nonetheless, the empirical model remains flexible and it provides a scope for controlling further covariates which are considered to be important. This allows the paper to examine if dynasty-politics is at all related to corruption.

3.4 Results

3.4.1 Re-examining Treisman (2000) findings.

In this section, I start by re-examining the findings of Treisman (2000), which identifies six factors[125] capable of explaining the variation in the level of corruption across countries. The purpose is to pinpoint whether the conclusions drawn from the empirical analysis remain similar when they are examined on a larger and contemporary data set. In Table-3.3A, the dependent variable is the country mean for 'Control of Corruption' from 1996 to 2005. In column-1, I began my testing an econometric model that includes only the 'most exogenous' variables.[126] The results show that the coefficients for *Protestant* and *Never-Colony* are positive and significant at 1%. This implies that countries with higher proportion of Protestant population entertain lower levels of perceived corruption, and this is in line with Tresiman (2000)which argues that Protestantism is good for reducing corruption as they have a history of revolting whenever public officials (or state) misuses their authority against its citizens.. Additionally, countries that were never colonized are also perceived to be less corrupt. On the other hand, the coefficient for ethno-linguistic fragmentation is negative and significant at 1%, and is in line with La Porta et al (1999) and Treisman (2000). That is, the negative effect of higher ethno-linguistic fragmentation on corruption is only significant when per capita income is not factored into the model.[127] In contrary to La Porta et al (1999) and Treisman (2000), however, I do not find any evidence supporting the hypotheses that former British colonies or countries with Common law are on average less corrupt.[128] The coefficient for both these variable fails to attain significance even at 10%.

[125] These six determinants are: (i) Countries with Protestant tradition, (ii) history of British Rule, (iii) developed economies, (iv) countries with a federal structure, (v) long exposure to democracy, (vi) degree of openness

[126] Variables that are categorised as 'most exogenous' are those which are not likely to be affected by current level of corruption entertained within a country's political arenas. These are – colonial tradition, religious affiliation, ethno-linguistic division, and choice of legal system.

[127] As shown in column-2, once per capita income is factored into the econometric model, the coefficient for ethno-linguistic fragmentation is no longer significant. This possibly suggest that while ethnic division can adversely affect economic development – and thus indirectly increase the level of corruption – it does not have a direct effect.

[128] It is important to point out that the results (possibly) suffer from Multicollinearity since both the variables - 'Former British Colony' and 'Common Law' -are highly correlated. Note: Multicollinearity does mean that the model is mis-specified, but the regression coefficients remain unbiased and the standard errors remain valid.

In column-2, I introduce log (PPP) GDP per capita as of 2000, which proxies for economic development, in the econometric model. The coefficient for the variable is positive and significant at 1%. This highlights a strong positive association between economic development and lower levels of 'perceived' corruption, and it sheds-light on the possible two-way relationship between these two variables. Stated otherwise, richer economies are better in controlling corruption since they can afford stronger institutions (Shleifer, A and Vishny, R. 1993). Then again, Mauro (1995) provided empirical evidence that lower corruption can in turn promote economic growth by increasing investment. Hence, the results confirm the existing view that developed countries are on average less corrupt (Shleifer, A and Vishny, R. 1993; Treisman, 2000; Svensson, 2005). In addition to this, the earlier findings remains qualitative similar for most variables. The regression in column-3 controls indicator variables for having a long exposure to democracy, and for being federal. Consequently, the coefficients for both these variables are positive, but only significant for *Un-Interrupted Democracy* at 1%. This provides some support to the hypothesis that countries with a long exposure to democracy are on average associated with lower levels of corruption.[129] In contrast, political and economic theories (as mentioned above) proposing a link between federal system and the degree of corruption are not supported by the data. In column-4, I examine the proposition of Ades and Di Tella (1999) that increasing openness results in lower level of corruption. The coefficient for *Openness* is positive and significant at 10%, which (to an extent) provides some support to the mentioned proposition.

In estimations presented in column-5, I have redefined the democracy variable by controlling for Polity score for individual countries for the year 2000. The idea here is to capture the association that current degree of democracy has (as opposed to long exposure to democracy) with the level of corruption across countries. The results point out that current degree of democracy too has a positive association with lower corruption, but it is no longer significant. This is suggested by Treisman (2000) who pointed out that only long exposure to democracy matters, while the current degree of democracy is not significant in determining the level of corruption across countries.

The issue of reverse causation between corruption and economic development is addressed in Column-6. In this respect, a key objective of this research is to shed light on factors that are

[129]This was also identified in Treisman (2000).

capable in explaining the variation of corruption – economic development being one of them. Nonetheless, existing literature does suggest that perceived corruption can reduce economic growth (Mauro, 1995). So, to overcome this possible reverse causality, I use an instrumental variable approach that was followed in Treisman (2000). More precisely,log (PPP) GDP per capita is instrumented with latitudinal distance from the equator. The idea here is that a country's latitudinal distance from the equator is clearly not determined by its perceived (or actual) level of corruption. Alternatively, some scholars do argue that physical closeness to equator can result in lower growth[130] (Sachs and Warner, 1997). Thus, if the mentioned rationale holds, then an instrumental variable approach will help identify a causal relationship between economic development and corruption. From the first stage[131] we can see that latitudinal distance from the equator is associated strongly with economic development. Therefore, the positive and significant coefficient of instrumented log (PPP) GDP per capita in column-6 is in line with (on a larger data set) the findings of Treisman (2000) and Svensson (2005) - that economic development can, in fact, adversely affect the level of perceived corruption.[132]

In column – 7 & 8, additional variables controlling for a country's natural resource endowment and the size of the public sector were factored into the regressions. Consequently, it is observed that there has been some loss of observations. In addition, the coefficients for both these variables are negative, but not significant even at 10%. This provides limited support to the notion that countries with larger governments or high natural resources are on average associated with high levels of perceived corruption. In table – 3.3B, I re-estimate the regression with a new dependent variable, which is the country mean of CPI from 2001 to 2009. This is undertaken to see if the findings are sensitive to other measures of corruption. Nonetheless, the results remain qualitatively similar.

[130]It is argued that proximity to equator increases mortality due to greater tropical disease and lower agricultural yield. This, in turn can reduce economic growth.

[131]The first stage results are given in 'Appendix Table-A2'.

[132] This Instrumental Variable approach, however, has come under some criticism in recent times. To be specific, the instrument is unlikely to meet the exclusion restriction. This is because it is unlikely that the sole mechanism through which latitudedistance from the equator can shape corruption outcome is through its effect on economic development. In fact, La Porta et al (1999) shows that latitudinal distance from the equator can have its own independent effect on corruption and government performance.

To sum up, a key message that one can infer from the results in Table 3.3 - A & B is that for more than hundred countries - protestant tradition, economic development and long exposure to democracy explain significantly the variation in the level of perceived corruption. This confirms the findings of Treisman (2000), which points out that religious decomposition, economic development and long exposure to democracy can help determine levels of corruption. The relevance of the degree 'openness' is, to an extent, dependent on the specifications used and variables controlled for in the regressions. Conversely, the data found no support for hypotheses that countries with British colonial heritage were less corrupt, and countries with a federal structure are more corrupt. In the following section, I focus on the primary question of this research: does dynasty-politics matter?

3.4.2 Base-Line Results

Results from the base-line regressions, which investigate a possible relationship between dynasty-politics and corruption are presented in Table 3.4 A, B & C. More specifically, in Table –3.4A, the dependent variable is the country mean for 'Control of Corruption' from 1996 to 2005. The specifications in all three columns include variables that are identified in the literature as important in explaining cross-country variation in the level of perceived corruption. The coefficient for ***DI*** is negative, but not significant at 10% in column-1. This provides some indication that dynastic politicians (while in office) are dominated by the 'stockpiling-wealth' incentive. Nonetheless, the insignificant coefficient for ***DI*** fails to support the notion that countries with dynasty-politics are on average associated with higher levels of corruption. In column-2, I exclude countries that are governed by executive monarchies. The rationale behind this is to infer something for countries where dynastic succession in the highest political office, is to an extent, dependent on actions and events undertaken and encountered by its national leaders, and not validated or legitimized by institutional arrangements.[133] This allows the analysis to relate closely to the mentioned theory which suggests that leaders who are willing to initiate a dynastic succession at the national level faces two opposing incentives: reputation-building versus stock-piling wealth. Hence, by dropping monarchies from the examination, the results suffer from a loss of two

[133] Since monarchies ensure dynastic succession through institutional arrangement, it possibly alters the motivational dynamics of their leader's in office. Hence, it is likely that objective functions of leaders in monarchies and non-monarchies are different as they interact with non-identical norms, conventions and institutional structure.

observations – Jordan and Morocco. Even so, the coefficient for ***DI*** is negative but not significant at 10%. Finally, in column–3, I drop Singapore from the regression estimations. This is done for two primary reasons. First, Singapore has a mean 'Control of Corruption' score of 2.4. This makes it the least corrupt country in the sample. Moreover, Singapore also has a very high ***DI*** score of 0.69, which is solely due to Lee[134] dynasty's influence in Singapore's political arena. This makes Singapore (to a degree) an outlier in the data set.[135] Second, the analysis is done with and without Singapore. Thus, the conclusion drawn from the overall empirical investigation is, in no way, biased from the presence (or absence) of Singapore in the data.

The results from column – 3 point out that that countries with higher degree of dynasty-politics are on average associated with higher levels of corruption. This is because the coefficient for ***DI*** is negative and significant at 10%. In terms of magnitude, the coefficient is -0.41, which means if Iceland was under dynastic control (i.e. DI=1), then it would have failed to qualify as member of the 'top ten' least corrupt countries in 2000. Additionally, it is important to note that after dropping Singapore, the standard errors for all variables decreased in absolute size. This indicates that the precisions of the point estimates have improved. In table-3.4B and table-3.4C, I repeat the previous analysis on different measures of corruption. The country mean of 'CPI 2001 to 2009' is used as a dependent variable in all regressions in table-3.4B. And, the variable 'Corrupt' (earlier used in La Porta et al (1999)) is used as a dependent variable in table-3.4C. The idea here is to check whether the findings are sensitive to multiple measures of corruption. The results from both these tables convey a mixed message. To be more elaborative, in table - 4B, the coefficient for the ***DI*** is negative but insignificant in all the three columns. On the other hand, in table-4C, the coefficient for the dynasty-index is negative and significant at 5% for column-3 (i.e.- for the restricted sample). This, to a degree, is similar to the findings in column-3 in table-4A. In terms of the overall model fit, it is clear that R-square in table-4A and table-4B is greater than 0.8 inall columns.[136] This suggests that our base-line specification accounts for more than eighty

[134] Lee Kuan Yew and his son Lee Hsein Loong have dominated Singapore's political landscape for more than three decades. See http://www.biography.com/people/lee-kuan-yew-9377339

[135]North Korea, on the other hand, has a dynasty index equal to one – representing the absolute of the Kim dynasty. Furthermore, North Korea is also one of most corrupt countries in the sample. Nevertheless, North Korea is automatically not considered in the analysis since I have no measure of ethno-linguistic fragmentation for it in the data set.

[136]The adjusted R-square is above 0.8 as well for all estimation in Table-4A &B.

percent variation in the level of corruption in our sample. This is quite satisfactory for a cross-sectional analysis. In contrast, the R-square for table - 4C is more than 0.5 for all three columns, which is weaker than the previous estimations.

Thus, the results taken together can offer three key points. First, for a sample excluding monarchies and Singapore, there is some association between dynasty-politics and the level of corruption across countries. This, however, does not suggest that this relationship between dynasty-politics and corruption is causal. This is because the results can potentially suffer from endogeniety stemming from both omitted variable and possible reverse causality. To be more specific, if the econometric model fails to control for a country specific time invariant factor which is correlated with two of our variables of interest, then our coefficient will suffer from omitted variable.[137] For example, if a certain political culture exists in some countries that promotes both a higher degree of dynasty-politics and a higher level of corruption, then the results will be picking up the impact of such political culture on the level of corruption in those countries. Besides, the problem of reverse causality emerges from the concern that state of corruption in a country can also allow political dynasties to persist in power, and this makes the country more prone to the influence of dynastic politics. Hence, the mentioned results only point out a *correlation* between dynasty-politics and corruption. Second, the findings are in line with Treisman (2000) and Svennson (2005), which highlight the role of economic development, religious decomposition and long exposure to democracy in explaining the cross-country variation in the level of corruption. Lastly, it identifies a new factor for further scrutiny – the role of political dynasties which can potentially determine something as fundamental as corruption.

3.4.3 Role of Immediate Dynastic Successions

So far, I have examined the relationship between dynasty-politics and corruption, where the degree of dynasty- politics is measured by a dynasty's exposure to state power in last six decades.[138] Yet, in this section the aim is to investigate the role of a very specific political phenomenon associated with dynasty-politics – immediate dynastic successions. The purpose here is to shed light on the question: Are immediate dynastic successions associated with

[137] Time varying omitted factors are also troublesome for the analysis.

[138] Countries gaining independence after 1950 are examined with their period of 'self-rule'

higher (or lower) levels of perceived corruption across countries? This specific focus on immediate dynastic succession is interesting because it allows the analysis to relate closely the theoretical insights discussed previously. In short, I have discussed the possibility that dynastic politicians have in their objective function a desire to initiate a dynastic succession. This can motivate them to build a reputation for their family by serving public interest, which in the process will help them succeed in achieving their objective. This will also result in reducing corruption. In contrast, dynastic politicians while in office can use their position to accumulate political and financial capital so that they can ensure a dynastic succession through their sheer strength in the political arena. This will undermine the governance scenario, and will probably result in facilitating corruption. Thus, immediate dynastic succession can (in principle) result in either higher or lower level of perceived corruption[139]as it is a direct outcome of actions and events undertaken and encountered by national leaders. For this reason, an indicator variable *Immediate Succession*[140] is used in this section to see if such types of political successions are associated with the levels of corruption across countries.

Table 3.5 A, B & C report the regression results. In Table – 3.5A, the analysis is conducted on the total data set. The specification in all three columns incorporate variables that are identified in the literature as imperative in explaining cross-country variation in the level of perceived corruption. In column -1 the dependent variable is the country-mean for 'Control of Corruption' from 1996 to 2005, and the estimations pinpoint some interesting findings. First, countries with immediate dynastic succession are associated[141]with higher levels of perceived corruption. The association is stronger than the findings in earlier sections as the coefficient for the indicator variable *Immediate Succession* is negative and significant at 5%. The coefficient is -0.28, which highlights that if Bangladesh had experienced an immediate dynastic succession in its political landscape, it would have entertained more corruption than

[139]This obviously depends on which motivation (reputation-building versus stockpiling wealth) governs the behavioral dynamics of dynastic politician.

[140]*Immediate Succession* is a binary variable which is equal to one for countries with political a dynasty (i) from which - (1) two members occupied the position of the executive head of the state (post 1950), and (2) where the second member succeeded the first member within one year of his or her retirement from the top political office.

[141] As mentioned above, the results only pinpoint an interesting correlation and not a causal relationship. This is because, higher levels of corruption can in turn also allow immediate dynastic successions to take place by weakening

Democratic Republic of Congo in 2008.[142] Column-2 also provides qualitatively similar results on a different dependant variable. In contrast, in column-3, the coefficient for *Immediate Succession* has a negative coefficient but not significant even at 10%. A possible reason underlying this insignificant result is that the data in column-3 covers fewer countries. Besides, the explanatory capacity of the overall model is weaker than before as indicated by lower R-square of 0.56. Table-3.5B drops monarchies from the empirical analysis.[143] This is done to infer a possible relationship between immediate dynastic succession and corruption in countries where dynastic succession in the top political office is not a product of norms, conventions, and institutional arrangements. The results from column-1 and column-2 highlight a stronger association between the presence of immediate dynastic succession and higher levels corruption. That is, the coefficient for the indicator variable is negative and significant at 1% on both the columns. However, in column-3, the coefficient remains negative but not significant.

On the whole, the estimations (so far) fail to find any support for reputation-building incentive, which can potentially determine the behaviour of dynastic politicians. In particular, the results identify that countries with immediate dynastic successions in their political arena are associated with higher levels of corruption. In this respect, an interesting question that is worth scrutinizing is: what kind of immediate dynastic successions is driving this result? This is because immediate dynastic successions are often associated with various actions and events, which makes them heterogeneous in nature. So, to address this concern, I categorize immediate-dynastic-succession into three broad types. First, I construct an indicator variable *Retirement-IS*[144],which is equal to one when a leader voluntarily retires (or chooses not to stand for re-election) in support of a member of the family for the top office. Second, I construct a dummy variable *Natural Death-IS*[145], which is equal to one for countries where an immediate dynastic occurred after a leader died in office for natural causes. Lastly, a

[142] The interpretation only hints the possible magnitude of the effect, even though no causal inference is made from the overall analysis.

[143] This results in a loss of two observations.

[144] For example- In Cuba, Fidel Castro resigned from the Office of the President to pave way for his younger brother Raul Castro. See: http://www.biography.com/people/fidel-castro-9241487

[145] For example- When Sir Milton Margai- the first Prime Minister of Sierra Leone – died in office, his younger brother Sir Albert Margai immediate succeeded him to the top office. See: http://www.britannica.com/EBchecked/topic/364553/Sir-Milton-Margai

binary variable *Assassination-IS* is constructed, which is equal to one when a country entertains an immediate dynastic succession in the top political office after the assassination of its leader.[146] Consequently, with these three measures of immediate-dynastic-succession, the paper presents a more disaggregated analysis in Table-3.5C.

From column-1, it can be seen that the coefficient for *Retirement-IS* is negative and significant at 1%. This highlights that countries where immediate dynastic successions occur after the voluntary retirement of a national leader from the office of the executive head of the state – are on average more corrupt. Furthermore, this correlation is particularly interesting for two reasons. One, it indicates that 'reputation-building' is unlikely to be the guiding motivation of dynastic leaders while they are in office. Two, the specific nature of the indicator variable- *Retirement-IS*- allows future studies to focus on such types of successions to understand if the political process guiding it can facilitate corruption or not. In column-2, the regression uses *Natural Death-IS* to see how such successions are associated with corruption. The result suggests that such types of succession are not related with levels of perceived corruption.[147] The specification in column-3 uses *Assassination-IS* to quantify dynastic succession associated with assassination of a national leader. In addition, the coefficient points out that immediate dynastic succession of such nature are also associated with higher levels of corruption. Lastly, in column-4, all three types of succession are estimated simultaneously. Likewise, the estimations highlight that only *Retirement-IS* and *Assassination-IS* are associated with higher levels of corruption - where as immediate successions after the death of a national leader do not explain the variation of corruption across countries in any significant degree. This conclusion also remains true when monarchies are excluded from the estimations (as depicted in column-5-8).

3.4.4 Role of Political Competition.

In this section, I expand the present analysis to address a slightly different question. he paper argued that dynastic politicians face two opposing incentives: 'reputation-building' vs. 'stockpiling-wealth'. The idea here is to identify the incentive that on average dominates the

[146]For example- After the assassination of Mrs Indira Gandhi by her own bodyguards in 1984, her son Rajiv Gandhi immediately succeeded her to become India's youngest Prime Minister. See: http://www.encyclopedia.com/topic/Indira_Gandhi.aspx

[147] The relevant coefficient is negative but not significant at 10%.

behaviour of dynastic politicians. Besides, the results so far suggest that higher degree of dynasty-politics is associated with greater levels of corruption, which lends some support to the possibility that 'stockpiling-wealth' incentive dominates the behaviour of dynasty-politicians. Nonetheless, an important question that I will address in this section is- what conditions increase the possibility that the 'stockpiling-wealth' incentive will dominate the 'reputation-building' incentive or vice versa? More precisely, the objective is to pinpoint the role of political competition in making any one incentive stronger than the other. This will help understand whether dynasty-politics have a different association with corruption in countries where political competition is high in *comparison* to countries where political competition is low. If one expects that political dynasties in politically competitive countries will be more dominated by reputation-building incentive in comparison to countries where political competition is low, then one will expect dynasty-politics to have relatively lower levels of association with corruption for countries that are politically more competitive. So, to test these alternative possibilities, I augment the base-line specification by including an interaction between dynasty-index and our measure of uninterrupted democracy.[148]

The new augmented specification is:

$$Corrupt_i = \alpha + \beta DI_i + \gamma Demo_i + \delta X_i + \theta(DI_i).(Demo_i) + \varepsilon_i$$

The results are shown in Table-6. From column-1, 3 and 5, it can be seen that coefficient for dynastic-index is negative but not significant at 10%. On the contrary, results from column-2, 4 & 6 indicate that the coefficient for *Immediate Succession* is negative and significant at 5%, which is in line with the earlier findings. Yet, the key parameter of interest here is θ**.** If this coefficient is significantly different from zero, then the relationship between dynasty-politics and corruption is different in countries with a higher degree of democracy in comparison to countries with a lower degree of democracy. As shown, in all six columns, θ is negative but not statistically significant. Hence, the overall analysis fails to find any solid evidence suggesting a differential relation between dynasty-politics and corruption in countries with higher political competition as opposed to countries with a lower level of political competition.

[148]Countries with un-interrupted democracy post-1950 (or after their independence) are assumed to have high political competition in comparison to countries with monarchy or periodic autocratic rule.

3.4.5 Robustness Check

As noted earlier, the results taken together are suggestive that dynasty-politics is associated with higher levels of corruption. More specifically, the results point out that a higher degree of dynasty-politics is associated with a higher level of corruption when Singapore and monarchies are not included in the sample. This association is robust for multiple measures of corruption and remains significant when important determinants of corruption are considered. The paper also investigates the role of immediate dynastic succession in the highest political office. This is done to capture an alternative phenomenon associated with dynasty-politics. Besides, the results pinpoint that countries with immediate dynastic successions are strongly associated with a greater likelihood of having higher levels of perceived corruption. This correlation is also significant when I restrict the sample with countries without any executive monarchies. The empirical analysis also attempted to identify if the relationship between dynasty-politics and corruption is different for countries with higher political competition in comparison to countries with lower political competition. The results, however, did not support this possible differential relation between dynasty-politics and corruption.

To scrutinize further, in this section I perform some additional robustness checks for the existing results. In Table-3.7A, I check the strength of ***DI*** in explaining the variation of corruption across countries when additional covariates are controlled in the regressions. Column-1 of Table-7A, uses a binary variable DYNASTIC [149]as an alternative measure of dynasty-politics to see whether or not the association between dynasty-politics and corruption remains significant. The result fails to find any significant association. In column-2, I incorporate a measure for size of the government taken from La Porta et al (1999). This is done for two reasons. First, in theory it is suggested to facilitate corruption (LaPolambara 1994). Second, empirical evidence (in contrary) show that larger governments are less corrupt (La Porta et al 1999; Friedman et al 2000). The estimations show that the coefficient for *Public Sector Employment* is positive but not significant. On the other hand, the coefficient for ***DI*** indicates a significant association between dynasty-politics and higher levels of corruption. The specification of the Column-3 includes a measure for natural resource endowment taken from the data set of Treisman (2000). This is because Ades and

[149] The DYNASTIC variable is equal to one of a country has a political dynasty (i) from which more than two members occupied the position of the executive head of the state, and zero otherwise.

Di Tella (1999) suggests that countries with large endowments of natural resources are likely to be more corrupt. As stated, the relevant coefficient is negative[150] but not significant. Additionally, the association between dynasty-politics and corruption is also not significant. Lastly, in column-4 the regression controls for continent fixed effects by including dummy variables for Asia, North America, South America, Africa, Europe and Asia. This makes the continent Australia the reference category. Controlling for continent specific time invariant effects allows the analysis to address less quantifiable factors[151] that can make some countries in a continent more prone to corruption. The findings show that continent specific effects are not significant associated with corruption at 10%. The coefficient for ***DI***alsoremains insignificant, pinpointing no correlation between dynasty-politics and corruption when we measure dynasty-politics by a dynasty's exposure to state power in last six decades.

In Table-3.7B, the robustness of immediate dynastic succession in explaining cross-country variation in the level of corruption is examined. This is essential since earlier regression has identified a strong association between the presence of immediate dynastic succession and higher levels of perceived corruption. Thus, the specifications in column -1, 2, 3 & 4 provide multiple checks to see whether the coefficient for *Immediate Succession* can survive the inclusion of multiple covariates. As displayed below, the results remain qualitatively similar to the ones computed earlier in Table 3.5 A, B & C. This strengthens the original finding that immediate dynastic succession at the top political office is associated with higher levels of corruption. This remains true even when monarchies are excluded from the analysis or when continent specific time invariant effects are incorporated into the specification. In the next section, I conclude with some direction for future research.

[150]The sign indicates some truth in the mentioned hypothesis. Besides, the coefficient is marginally missing significance at 10%.

[151] It is often argued that certain countries entertain a higher level of corruption because their culture makes such behaviour acceptable. Some empirical work focusing using experimental techniques are trying to shed light on such hypothesis. For more information see: Barr and Serra. (2006)

3.5 Conclusion and Caveats.

This paper sets out to examine whether there is a systematic relationship between dynasty-politics and the level of corruption across countries. This focus is interesting because dynasty-politics reflect a specific kind of inequality in the distribution of political power in a country's political landscape. So, to quantify such a political phenomenon, two primary measures are adopted. First, I compute a dynasty-index ***DI***which measures the variation in the degree of dynasty-politics by examining each country's exposure to members of political dynasties in state power in last six decades. I then use this measure to identify if there is a systematic relationship between dynasty-politics and corruption for more than one hundred countries. As noted earlier, one can observe a 'weak' correlation between dynasty-politics and corruption, which indicates that a higher degree of dynasty-politics is associated with a higher level of (perceived) corruption. I state that this correlation is 'weak' because it is only significant when the sample is restricted by excluding Singapore and monarchies from the estimations[152], and it remains sensitive to the inclusion of some important covariates. Second, I use a binary variable to focus on a special kind of phenomenon associated with dynasty-politics – the role of immediate dynastic succession Furthermore, the results point out that countries with immediate dynastic succession in their top political office are on average associated with higher levels of corruption. This association also remains robust for various measures of corruption and is significant when we control for important determinants of corruption.

As a result, the empirical analysis opens the possibility of one key inference. That is, countries with influential political dynasties (or at least with immediate dynastic successions at the highest political office) are on average more corrupt. Likewise, this message is difficult to reconcile with the reputation-building story but it lends some support to stockpiling-wealth incentive which suggests that dynastic politicians will pursue succession in the political arena through developing political machineries and accumulating financial capital. This can result in higher corruption. It is important to note, however, that the mentioned relationship between dynasty-politics and corruption is, in no respect, causal. This is because our results might suffer from an omitted variable as we fail to control for country specific time

[152]This, however, only results in a loss of three observations. It must also be noted that results are also not altered by the absence of North Korea, since it is automatically dropped from most estimations as it does not have a data value for ethno-linguistic fractionalization.

invariant(or variant) factors, which might determine both the degree of dynasty-politics and the level of corruption that we witness across countries. In addition to this, the results can also suffer from endogeneity stemming from reverse causality. In other words, a higher degree of corruption can itself allow politicians to promote their dynasties since politicians in office are able to take advantage of the weak institutions (due to corruption) in place to promote a dynastic succession. Consequently, is it is pragmatic to state that observed evidence is crude but provocative. This is because, the results are suggestive that while the relationship between corruption and dynasty-politics is not noted to be causal, the evidence does indicate that high perceived corruption is an important characteristics of polities under the extreme influence of political dynasties. This provides sufficient encouragement for future research to provide a detailed investigation to see if the observed correlation between dynasty-politics and corruption is reflecting an underlying causal relationship. Future studies can also explore the exact political process that guides immediate dynastic successions (especially when such successions occur after the voluntary retirement of a national leader) to isolate its role in facilitating corruption.

The paper also explores an interesting extension of the analysis by focusing onthe role of political competition to understand the influence of certain conditions in facilitating a differential relationship between corruption and dynasty politics. It seeks to understand whether the association between dynasty-politics and corruption is different for countries with high political competition in comparison to countries with low political competition. This extension, in particular, allows the analysis to address questions such as: does democratic consolidation make dynastic politicians relatively apt for more reputation-building? The, results, however, do not support any differential relationship.

The overall results are also in line with Shleifer, A and Vishny, R. (1993), Treisman (2000) and Svensson (2005), as I too noted that economic development, protestant tradition, and long exposure to democracy have a strong positive relationship with lower levels of corruption. On the other hand, unlike Ades and Di Tella, (1999) and Treisman (2000) I find limited evidence supporting the claim that economic factors like- openness to foreign trade plays an important role in explaining the cross-country variation in the level corruption. The significance of such factor is sensitive to variables I control for in the regressions. This makes me agnostic about its overall relevance. Similarly, in contrast to Mauro (1995), I fail to support the claim that ethnically heterogeneous societies are per se more corrupt. The

results, however, are in line with La Porta et al (1999), which identifies that ethno-linguistic fractionalization only explains government performance when economic development is not factored into the econometric specification. Other than this, I find no evidence supporting the hypotheses that federal states are more corrupt than non-federal states, and former British colonies are less corrupt.

To sum up, this paper investigates an interesting link between dynasty-politics and corruption. To my knowledge, this is the first systematic cross-country empirical analysis that relates corruption with a socio-political phenomenon such as dynasty-politics. Up till now, these two topics have been separately analysed by economists, political scientists and historians. However, this paper is the first step towards understanding the possible relationship between these two important socio-political outcomes, and it belongs to the broader stream of the literature on political dynasties and corruption.

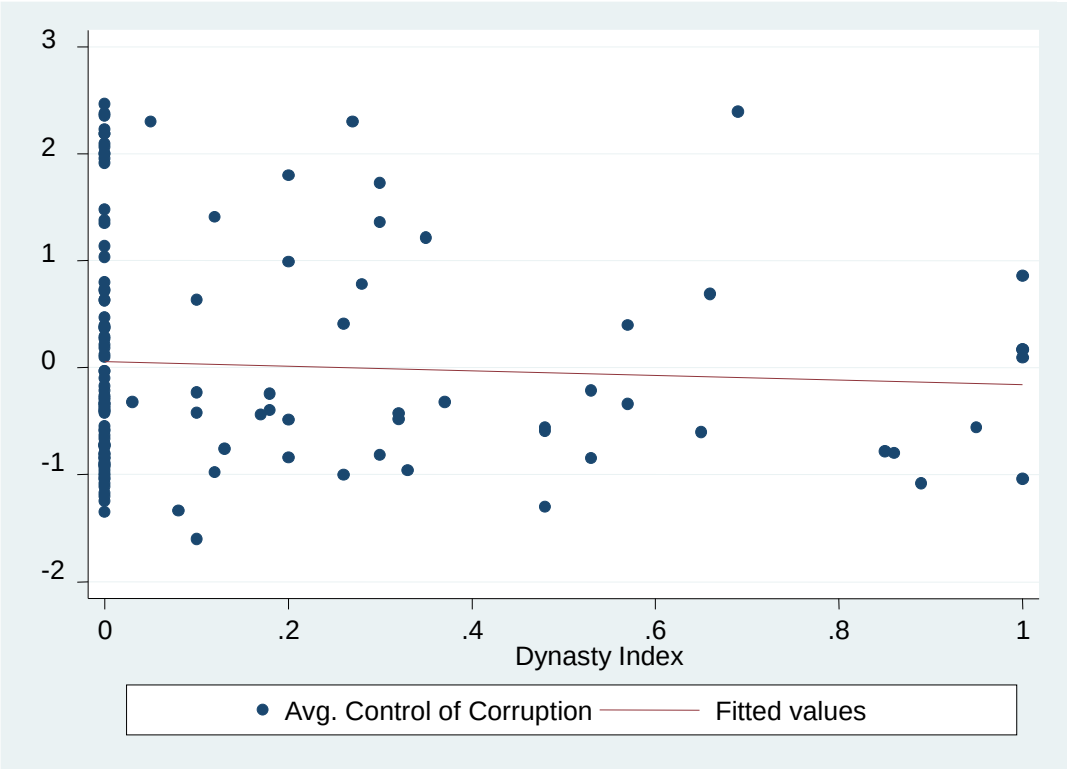
No.	Table – 3.1 Country List and Dynasty Index		
	Country	Immediate Succession	Dynasty Index
1	Albania	0	0
2	Armenia	0	0
3	Argentina	1	0.32
4	Australia	0	0
5	Austria	0	0
6	Algeria	0	0
7	Angola	0	0
8	Azerbaijan	1	0.89
9	Botswana	0	0
10	Bangladesh	0	0.53
11	Bahamas	0	0
12	Brazil	0	0
13	Belarus	0	0
14	Belgium	0	0.12
15	Bolivia	0	0.13
16	Burundi	0	0
17	Bulgaria	0	0.1
18	Barbados	0	0.2
19	Cameroon	0	0
20	Canada	0	0
21	Chile	0	0.3
22	China	0	0
23	Chad	0	0
24	Colombia	0	0.2
25	Congo, Democratic Republic	1	0.26
26	Costa Rica	0	0.28
27	Cote d'Ivoire	0	0
28	Croatia	0	0
29	Czech Republic	0	0
30	Cambodia	0	0.3
31	Denmark	0	0
32	Dominican Republic	1	0.17
33	Egypt	0	0
34	Ecuador	0	0
35	Ethiopia	0	0
36	Estonia	0	0
37	El Salvador	0	0
38	France	0	0
39	Finland	0	0
40	Fiji	0	0

No.	Table – 3.1 Country List and Dynasty Index *continued*		
	Country	Immediate Succession	Dynasty Index
41	Germany	0	0
42	Gabon	1	0.86
43	Gambia	0	0
44	Georgia	0	0
45	Ghana	0	0
46	Grenada	0	0
47	Guinea	0	0
48	Guinea-Bissau	0	0
49	Guyana	1	0.18
50	Guatemala	0	0
51	Haiti	1	0.48
52	Honduras	0	0
53	Hungary	0	0
54	Ireland	0	0.3
55	India	1	0.57
56	Indonesia	0	0.33
57	Iraq	1	0.08
58	Israel	0	0
59	Italy	0	0
60	Iran	0	0.48
61	Iceland	0	0.27
62	Jordan	1	1
63	Japan	0	0.35
64	Jamaica	0	0
65	Kazakhstan	0	0
66	Kenya	0	0
67	Kuwait	1	1
68	Liberia	0	0
69	Latvia	0	0
70	Luxemburg	0	0
71	Lebanon	1	0.1
72	Lithuania	0	0
73	Madagascar	0	0
74	Mexico	0	0
75	Mali	0	0
76	Mauritius	0	0.57
77	Malawi	0	0
78	Malaysia	1	0.26
79	Malta	0	0
80	Maldives	0	0
81	Mozambique	0	0
82	Morocco	1	1

No.	Table – 3.1 Country List and Dynasty Index *continued*		
	Country	Immediate Succession	Dynasty Index
83	Netherland	0	0
84	New Zealand	0	0
85	Nepal	1	0.95
86	North Korea	1	1
87	Niger	0	0
88	Norway	0	0
89	Nigeria	0	0
90	Nicaragua	1	0.48
91	Namibia	0	0
92	Paraguay	0	0
93	Pakistan	0	0.2
94	Panama	0	0.37
95	Peru	0	0.18
96	Philippines	0	0.32
97	Portugal	0	0
98	Poland	0	0
99	Russia	0	0
100	Rwanda	0	0
101	Romania	0	0
102	Saudi Arabia	1	1
103	Senegal	0	0
104	Sierra Leone	1	0.12
105	Singapore	0	0.69
106	South Africa	0	0
107	Syria	1	0.65
108	Sweden	0	0.05
109	Sri Lanka	1	0.53
110	Switzerland	0	0
111	Spain	0	0
112	Slovakia	0	0
113	Somalia	1	0.1
114	Sudan	0	0
115	South Korea	0	0

No.	Table – 3.1 Country List and Dynasty Index *continued*		
	Country	Immediate Succession	Dynasty Index
116	Taiwan	1	0.66
117	Tanzania	0	0
118	Togo	1	0.85
119	Turkey	0	0
120	Thailand	1	0.03
121	Trinidad & Tobago	0	0
122	Tunisia	0	0
123	USA	0	0.2
124	Uganda	0	0
125	UK	0	0
126	Uruguay	0	0.1
127	Ukraine	0	0
128	Uzbekistan	0	0
129	Venezuela	0	0
130	Vietnam	0	0
131	Zambia	0	0
132	Zimbabwe	0	0

Figure - 3.1 Scatter Plot



Note: To view scatter plots with more details, please see Appendix Figure – 3.1, Appendix Figure – 3.2, Appendix Figure – 3.3 (available in pages 270, 271 and 272);Source: Author's Computation

Table- 3.2A: Correlation coefficients between different measures of corruption

	Avg TI CPI (2001-2009)	Avg Control of Corruption (1996-2005)	Corrupt
Average TI CPI (2001-2009)	1		
Average Control of Corruption (1996-2005)	0.98	1	
Corrupt***	0.84	0.85	1

Note: Simple averages were calculated for each country by using their available score in each measure.

Table – 3.2B: Summary statistics for the dependent variables

	N	Mean	Standard Deviation	Min	Max
Average TI CPI (2001-2009)	127	4.13	2.26	1.52	9.5
Average Control of Corruption (1996-2005)	132	0.024	1.059	(-)1.6	2.47
Corrupt	99	5.46	2.4	0.18	10

*** The variable corrupt is taken from La Porta et al (1999): "The Quality of Government" data set.

Original Source: *Political Risk Services*

Table – 3.3A: Re-examining Treisman (2000) findings

	Dependent Variable: Average of 'Control of Corruption 1996-2005'			
	OLS 1	OLS 2	OLS 3	OLS 4
Common Law	(-)0.063 {0.395}	(-)0.036 {0.204}	(-)0.134 {0.196}	(-)0.169 {0.181}
Former British Colony	0.379 {0.359}	0.262 {0.192}	0.249 {0.179}	0.236 {0.169}
Never Colony	1.035*** {0.254}	0.481*** {0.147}	0.413*** {0.14}	0.447*** {0.143}
Protestant	0.017*** {0.004}	0.01*** {0.002}	0.009*** {0.002}	0.009*** {0.002}
Ethno-linguistic Frac.	(-)1.23*** {0.259}	(-)0.046 {0.21}	(-)0.062 {0.21}	(-)0.121 {0.206}
Log of GDP		0.642*** {0.061}	0.55*** {0.082}	0.49*** {0.049}
Federal			0.057 {0.145}	0.128 {0.139}
Un-interrupted Dem			0.451*** {0.176}	0.002*** {0.0012}
Openness				0.002* {0.001}
Constant	(-)0.005 {0.145}	(-)5.665*** {0.545}	(-)4.93*** {0.696}	(-)4.59*** {0.597}
N	113	113	113	113
R-square	0.49	0.79	0.81	0.82

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table – 3.3A: Re-examining Treisman (2000) findings. *continued*

	Dependent Variable: Average of 'Control of Corruption 1996-2005'			
	OLS	IV	OLS	OLS
	5	6	7	8
Common Law	(-)0.079	0.002	(-)0.109	(-)0.065
	{0.214}	{0.229}	{0.233}	{0.238}
Former British Colony	0.292	0.218	0.269	0.219
	{0.198}	{0.212}	{0.217}	{0.22}
Never Colony	0.5***	0.249	0.324**	0.219
	{0.159}	{0.205}	{0.144}	{0.16}
Protestant	0.0105***	0.007**	0.0084***	0.008**
	{0.003}	{0.003}	{0.002}	{0.004}
Ethno-linguistic Frac.	(-)0.169	0.402	0.228	0.183
	{0.226}	{0.335}	{0.297}	{0.35}
Log of GDP	0.549***	0.923***	0.721***	0.723***
	{0.079}	{0.21}	{0.104}	{0.127}
Federal	0.127	(-)0.124	0.051	0.0125
	{0.159}	{0.203}	{0.147}	{0.183}
Un-interrupted Dem		(-)0.004	0.367**	0.317
		{0.289}	{0.179}	{0.2249}
Openness	0.002	(-).0007	0.0023*	0.002
	{0.0014}	{0.0017}	{0.0012}	{0.0013}
Polity 2000	0.015			
	{0.012}			
Natural Resources			(-)0.0036	(-)0.004
			{0.0025}	{0.0029}
Public Sector Employment				0.0063
				{0.036}
Constant	(-)5.09***	(-)8.05***	(-)6.62***	(-)6.56***
	{0.629}	{1.69}	{0.89}	{1.069}
N	105	110	79	68
R-square	0.79	0.67	0.86	0.86

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table – 3.3B: Re-examining Treisman (2000) findings.

	Dependent Variable: Average of 'TI CPI 2001-2009'			
	OLS	OLS	OLS	OLS
	1	2	3	4
Common Law	(-)0.011	0.046	(-)0.146	(-)0.208
	{0.813}	{0.43}	{0.438}	{0.406}
Former British Colony	0.778	0.543	0.512	0.489
	{0.742}	{0.395}	{0.397}	{0.372}
Never Colony	2.24***	1.063***	0.939***	1.002***
	{0.525}	{0.325}	{0.312}	{0.312}
Protestant	0.039***	0.026***	0.022***	0.023***
	{0.008}	{0.005}	{0.0049}	{0.005}
Ethno-linguistic Frac.	(-)2.548***	(-)0.058	(-)0.089	(-)0.206
	{0.557}	{0.425}	{0.419}	{0.415}
Log of GDP		1.34***	1.169***	1.05***
		{0.124}	{0.168}	{0.142}
Federal			0.073	0.209
			{0.307}	{0.287}
Un-interrupted Dem			0.849**	0.929***
			{0.402}	{0.357}
Openness				0.004
				{0.003}
Constant	3.97***	(-)7.84***	(-)6.49***	(-)5.849***
	{0.301}	{1.08}	{1.42}	{1.16}
N	110	110	110	110
R-square	0.52	0.8	0.82	0.83

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table – 3.3B: Re-examining Treisman (2000) findings. *continued*

	Dependent Variable: Average of 'TI CPI 2001-2009'			
	OLS	IV	OLS	OLS
	5	6	7	8
Common Law	0.032	0.116	(-)0.024	0.035
	{0.449}	{0.475}	{0.629}	{0.633}
Former British Colony	0.518	0.471	0.549	0.452
	{0.421}	{0.435}	{0.6}	{0.599}
Never Colony	1.11***	0.652	0.837**	0.609
	{0.351}	{0.421}	{0.349}	{0.396}
Protestant	0.026***	0.021***	0.023***	0.0216**
	{0.006}	{0.006}	{0.006}	{0.009}
Ethno-linguistic Frac.	(-)0.299	0.753	0.28	0.138
	{0.441}	{0.698}	{0.643}	{0.782}
Log of GDP	1.17***	1.84***	1.39***	1.34***
	{0.154}	{0.432}	{0.235}	{0.295}
Federal	0.24	(-)0.254	0.112	0.019
	{0.328}	{0.418}	{0.308]	{0.384}
Un-interrupted Dem		0.003	0.665	0.697
		{0.604}	{0.419}	{0.542}
Openness	0.004	(-)0.0009	0.005*	0.005*
	{0.004}	{0.003}	{0.003}	{0.003}
Polity 2000	0.017			
	{0.022}			
Natural Resources			(-)0.006	(-)0.007
			{0.006}	{0.007}
Public Sector Employment				0.021
				{0.087}
Constant	(-)6.77***	(-)12.2***	(-)8.93***	(-)8.33***
	{1.22}	{3.47}	{2.004}	{2.46}
N	104	107	79	68
R-square	0.8	0.75	0.84	0.83

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table – 3.4A: Base-Line Regressions

	Dependent Variable: Average of 'Control of Corruption 1996-2005'		
	OLS - Total Sample	OLS - Monarchies Excluded	OLS - Mon + Singapore Excl.
	1	2	3
DI	(-)0.0788	(-)0.254	(-)0.406*
	{0.2315}	{0.259}	{0.239}
Common Law	(-)0.1842	(-)0.151	(-)0.188
	{0.1844}	{0.189}	{0.188}
Former British Colony	0.247	0.209	0.188
	{0.1726}	{0.182}	{0.184}
Never Colony	0.448***	0.43***	0.396***
	{0.146}	{0.149}	{0.149}
Protestant	0.009***	0.009***	0.009***
	{0.002}	{0.002}	{0.002}
Ethno-linguistic Frac.	(-)0.1208	(-)0.112	(-)0.115
	{0.2028}	{0.195}	{0.185}
Log of GDP	0.483***	0.485***	0.47***
	{0.073}	{0.073}	{0.072}
Federal	0.133	0.138	0.129
	{0.138}	{0.136}	{0.135}
Un-interrupted Dem	0.511***	0.521***	0.602***
	{0.162}	{0.164}	{0.157}
Openness	0.0022*	0.0023*	0.0009
	{0.0012}	{0.0013}	{0.0008}
Constant	(-)4.54***	(-)4.55***	(-)4.31***
	{0.605}	{0.605}	{0.573}
N	112	110	109
R-square	0.82	0.82	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: In all regressions, North Korea is not considered since we have no measure of ethno-linguistic frac.

Table – 3.4B: Base-Line Regressions

	Dependent Variable: Average of 'TI CPI 2001-2009'		
	OLS - Total Sample	OLS - Monarchies Excluded	OLS - Mon + Singapore Excl.
	1	2	3
DI	(-)0.072	(-)0.375	(-)0.694
	{0.442}	{0.522}	{0.485}
Common Law	(-)0.213	(-)0.071	(-)0.169
	{0.407}	{0.401}	{0.401}
Former British Colony	0.491	0.321	0.265
	{0.375}	{0.376}	{0.394}
Never Colony	0.989***	0.933***	0.864***
	{0.325}	{0.331}	{0.334}
Protestant	0.023***	0.023***	0.023***
	{0.005}	{0.005}	{0.005}
Ethno-linguistic Frac.	(-)0.207	(-)0.159	(-)0.161
	{0.417}	{0.401}	{0.367}
Log of GDP	1.059***	1.074***	1.036***
	{0.146}	{0.147}	{0.143}
Federal	0.201	0.201	0.187
	{0.289}	{0.286}	{0.288}
Un-interrupted Dem	0.924***	0.939***	1.144***
	{0.363}	{0.365}	{0.351}
Openness	0.004	0.004	0.0009
	{0.003}	{0.003}	{0.002}
Constant	(-)5.87***	(-)5.98***	(-)5.38***
	{1.19}	{1.19}	{1.093}
N	109	107	106
R-square	0.83	0.83	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: In all regressions, North Korea is not considered since we have no measure of ethno-linguistic frac.

Table – 3.4C: Base-Line Regressions

	Dependent Variable: La Porta (1999) Variable 'Corrupt'		
	OLS - Total Sample	OLS - Monarchies Excluded	OLS - Mon + Singapore Excl.
	1	2	3
DI	(-)1.094	(-)1.48	(-)1.86**
	{0.699}	{0.932}	{0.94}
Common Law	(-)1.092	(-)0.927	(-)0.998
	{0.705}	{0.749}	{0.759}
Former British Colony	0.799	0.609	0.504
	{0.638}	{0.695}	{0.695}
Never Colony	0.881	0.824	0.753
	{0.544}	{0.549}	{0.557}
Protestant	0.012	0.012	0.0127
	{0.008}	{0.009}	{0.009}
Ethno-linguistic Frac.	0.505	0.554	0.516
	{0.958}	{0.955}	{0.917}
Log of GDP	0.953***	0.978***	0.931***
	{0.313}	{0.321}	{0.315}
Federal	0.382	0.395	0.413
	{0.417}	{0.42}	{0.434}
Un-interrupted Dem	1.202**	1.16*	1.353**
	{0.59}	{0.592}	{0.615}
Openness	0.0012	0.001	(-)0.002
	{0.004}	{0.004}	{0.0039}
Constant	(-)3.304	(-)3.49	(-)2.802
	{2.7}	{2.76}	{2.72}
N	93	91	90
R-square	0.56	0.57	0.58

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: In all regressions, North Korea is not considered since we have no measure of ethno-linguistic frac.

Table – 3.5A: Role of Immediate Succession

	Sample: Total		
	Dep. Var- 'Control of Corruption'	Dep. Var- ' TI CPI'	Dep. Var- ' Corrupt'
	1	2	3
Immediate Succession	(-)0.286**	(-)0.569**	(-)0.579
	{0.117}	{0.252}	{0.493}
Common Law	(-)0.151	(-)0.1469	(-)0.973
	{0.175}	{0.4036}	{0.694}
Former British Colony	0.222	0.449	0.725
	{0.168}	{0.383}	{0.6}
Never Colony	0.439***	0.96***	0.974*
	{0.141}	{0.022}	{0.541}
Protestant	0.008***	0.022***	0.013
	{0.002}	{0.005}	{0.008}
Ethno-linguistic Frac.	(-)0.169	(-)0.3119	0.364
	{0.195}	{0.41}	{1.01}
Log of GDP	0.468***	1.033***	0.881***
	{0.069}	{0.1371}	{0.316}
Federal	0.155	0.2391	0.472
	{0.138}	{0.2811}	{0.433}
Un-interrupted Dem	0.488***	0.8713***	1.19**
	{0.152}	{0.3421}	{0.573}
Openness	0.0024**	0.0046*	0.001
	{0.0011}	{0.0027}	{0.003}
Constant	(-)4.37***	(-)5.54***	(-)2.75
	{0.564}	{1.099}	{2.74}
N	112	109	93
R-square	0.83	0.83	0.56

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: In all regressions, North Korea is not considered since we have no measure of ethno-linguistic frac.

Table – 3.5B: Role of Immediate Succession

	Sample: Excluding Monarchies		
	Dep. Var- 'Control of Corruption'	Dep. Var- ' TI CPI'	Dep. Var- ' Corrupt'
	1	2	3
Immediate Succession	(-)0.363***	(-)0.718***	(-)0.625
	{0.114}	{0.254}	{0.551}
Common Law	(-)0.081	0.072	(-)0.877
	{0.176}	{0.369}	{0.756}
Former British Colony	0.158	0.219	0.619
	{0.171}	{0.35}	{0.678}
Never Colony	0.437***	0.931***	0.958*
	{0.142}	{0.308}	{0.543}
Protestant	0.009***	0.023***	0.013
	{0.002}	{0.0049}	{0.008}
Ethno-linguistic Frac.	(-)0.169	(-)0.278	0.379
	{0.191}	{0.404}	{1.022}
Log of GDP	0.465***	1.038***	0.887***
	{0.069}	{0.138}	{0.321}
Federal	0.174	0.266	0.484
	{0.137}	{0.279}	{0.439}
Un-interrupted Dem	0.49***	0.873***	1.18**
	{0.152}	{0.337}	{0.576}
Openness	0.0025**	0.005	0.001
	{0.001}	{0.003}	{0.003}
Constant	(-)4.35***	(-)5.59***	(-)2.79
	{0.566}	{1.11}	{2.79}
N	110	107	0.91
R-square	0.84	0.84	0.56

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: In all regressions, North Korea is not considered since we have no measure of ethno-linguistic frac.

Table – 3.5C: Heterogeneous Nature of Immediate Succession

Dependent Variable: Average of 'Control of Corruption 1996-2005'				
	OLS	OLS	OLS	OLS
	1	2	3	3
Retirement-IS	(-)0.576***			(-)0.586***
	{0.134}			{0.138}
Natural Death-IS		(-)0.101		(-)0.024
		{0.154}		{0.148}
Assassination-IS			(-)0.359***	(-)0.367***
			{0.093}	{0.095}
N	112	112	112	112
R-square	0.83	0.82	0.83	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: Openness, Un-interrupted Democracy, Federal, Ethno. , Protestant, & Never a Colony, Former British Colony

Log of GDP and Common Law are considered in each regression

Table- 3.5C: Heterogeneous Nature of Immediate Succession *continued*

	Dependent Variable: Average of 'Control of Corruption 1996-2005'			
	OLS	OLS	OLS	OLS
	5	6	7	8
Retirement-IS	(-)0.572***			(-)0.566***
	{0.136}			{0.134}
Natural Death-IS		(-)0.201		(-)0.114
		{0.159}		{0.158}
Assassination-IS			(-)0.351***	(-)0.333***
			{0.094}	{0.103}
N	110	110	110	110
R-square	0.83	0.83	0.83	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: Openness, Un-interrupted Democracy, Federal, Ethno. , Protestant, & Never a Colony, Former British Colony log of GDP, Economic Development and Common Law are considered in each regression

Table- 3.6: Role of Political Competition

	Sample: Total		Sample: Monarchies Excluded	
	Dependent Variable: Average of 'Control of Corruption 1996-2005'			
	OLS	OLS	OLS	OLS
	1	2	3	4
DI	0.011		(-)0.172	
	{0.249}		{0.302}	
Immediate Succession		(-)0.269**		(-)0.356***
		{0.131}		{0.131}
Common Law	(-)0.2	(-)0.152	(-)0.169	(-)0.082
	{0.181}	{0.177}	{0.191}	{0.179}
Former British Colony	0.269	0.227	0.232	0.1601
	{0.175}	{0.171}	{0.191}	{0.175}
Never Colony	0.44***	0.439***	0.428***	0.437***
	{0.149}	{0.142}	{0.151}	{0.143}
Protestant	0.0079***	0.008***	0.008***	0.009***
	{0.003}	{0.002}	{0.003}	{0.002}
Ethno-linguistic Frac.	(-)0.088	(-)0.164	(-)0.092	(-)0.167
	{0.205}	{0.198}	{0.198}	{0.194}
Log of GDP	0.478***	0.465***	0.481***	0.464***
	{0.07}	{0.071}	{0.074}	{0.071}
Federal	0.132	0.159	0.136	0.175
	{0.135}	{0.138}	{0.135}	{0.138}
Un-interrupted Dem	0.622***	0.509***	0.595***	0.498***
	{0.205}	{0.178}	{0.207}	{0.176}
Openness	0.002*	0.0024**	0.002*	0.003**
	{0.0012}	{0.0012}	{0.0013}	{0.001}
(DI)x(Demo)	(-)0.662		(-)0.448	
	{0.55}		{0.586}	
(IS)X(Demo)		(-)0.148		(-)0.058
		{0.23}		{0.231}
Constant	(-)4.51***	(-)4.35***	(-)4.533***	(-)4.35***
	{0.61}	{0.576}	{0.609}	{0.578}
N	112	112	110	110
R-square	0.83	0.83	0.83	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table- 3.6: Role of Political Competition *continued*

	Total Sample Excluding Monarchies and Singapore	
	Dependent Variable: 'Control of Corruption 1996-2005'	
	OLS	OLS
	5	6
DI	(-)0.349	
	{0.277}	
Immediate Succession		(-)0.306**
		{0.125}
Common Law	(-)0.199	(-)0.118
	{0.195}	{0.182}
Former British Colony	0.204	0.159
	{0.197}	{0.181}
Never Colony	0.395***	0.427***
	{0.151}	{0.144}
Protestant	0.008***	0.009***
	{0.003}	{0.002}
Ethno-linguistic Frac.	(-)0.101	(-)0.162
	{0.188}	{0.191}
Log of GDP	0.468***	0.449***
	{0.072}	{0.071}
Federal	0.128	0.17
	{0.134}	{0.138}
Un-interrupted Dem	0.652***	0.577***
	{0.208}	{0.171}
Openness	0.0009	0.0013
	{0.0008}	{0.0008}
(DI)x(Demo)	(-)0.305	
	{0.582}	
(IS)X(Demo)		(-)0.156
		{0.218}
Constant	(-)4.294***	(-)4.15***
	{0.579}	{0.563}
N	109	109
R-square	0.84	0.84

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Table – 3.7A: Robustness Checks

Dependent Variable: Average of 'Control of Corruption 1996-2005' ; Sample: Excluding Monarchies and Singapore

	OLS 1	OLS 2	OLS 3	OLS 4
DYNASTIC	(-)0.098 {0.094}			
DI		(-)0.582* {0.302}	(-)0.573 {0.47}	(-)0.210 {0.28}
Public Sector Employment		0.009 {0.037}	0.015 {0.038}	
Natural Resources			(-)0.005 {0.003}	
North America				(-)0.313 {0.199}
South America				(-)0.195 {0.216}
Africa				0.081 {0.183}
Europe				0.174 {0.214}
Asia				(-)0.171 {0.191}
Constant	(-)4.33*** {0.587}	(-)4.31*** {0.801}	(-)6.13*** {1.0934}	(-)4.34*** {0.676}
N	109	83	64	109
R-square	0.83	0.83	0.87	0.86

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: Openness, Un-interrupted Democracy, Federal, Ethno. , Protestant, & Never a Colony, Former British Colony, Log of GDP and Common Law are considered in each regression

Table – 3.7B: Robustness Checks for Immediate Succession

	Sample: Total			Sample: Monarchies Excluded
	Dependent Variable: Average of 'Control of Corruption 1996-2005'			
	OLS	OLS	OLS	OLS
	1	2	3	4
Immediate Succession	(-)0.299**	(-)0.338**	(-)0.235*	(-)0.302**
	{0.126}	{0.139}	{0.125}	{0.125}
Average Polity 1950-2000	0.023*			
	{0.0132}			
Public Sector Employment		(-)0.009		
		{0.035}		
North America			(-)0.324*	(-)0.31
			{0.193}	{0.193}
South America			(-)0.19	(-)0.178
			{0.21}	{0.209}
Africa			0.174	0.142
			{0.179}	{0.177}
Europe			0.085	0.099
			{0.216}	{0.213}
Asia			(-)0.103	(-)0.108
			{0.186}	{0.186}
Constant	(-)4.53***	(-)4.664***	(-)4.61***	(-)4.55***
	{0.679}	{0.799}	{0.669}	{0.667}
N	105	86	112	110
R-square	0.81	0.82	0.85	0.85

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces

Note: Openness, Federal, Ethno. , Protestant, & Never a Colony, Former British Colony, Log of GDP and Common Law are considered in each regression ; Un-interrupted Democracy is considered in column - 2, 3 & 4

4. The Composition of Political Class in Bangladesh: The Role of Assassinations

Abstract

This paper investigates the factors that have facilitated the emergence of political dynasties within the political class of Bangladesh. In particular, this research tries to understand whether assassinations of political leaders have a causal role in increasing the likelihood that a leader will start or continue a political dynasty. To this end, the paper documents the biographical data on 536 leaders who were elected to office of a Member of Parliament in either the 8th or 9th National Parliament. It finds that leaders who are descendants of assassinated leaders are on average associated with a higher likelihood that they will continue a political dynasty. This association is robust for various econometric specifications and remains significant when important covariates are incorporated into the analysis. The results also highlight that leaders who are dynastic descendants of non-assassinated leaders are also associated with a higher likelihood of having posterior relatives in office. On the role of other factors, the paper pinpoints that leaders with longer tenures are associated with a higher likelihood of starting or continuing a political dynasty, which is in line with Dal Bo et al (2009). To identify the causal role of assassinations, the paper employs the identification strategy of Jones and Olken (2009) to isolate the impacts of political assassination. Their employed strategy is based on the assumption that although attempts on a political leader's life may be driven by unobserved individual ability or etc, conditional on trying to kill a leader, the *failure* or *success* of assassination attempt can be treated as exogenous. In other words, some element of pure chance has a role in determining if a leader barely survives or dies in an assassination attempt. Hence, a new data set is compiled from information on 97 political leaders from all six Divisions in post 1971 period who had *at least one* serious assassination attempt on their life. Furthermore, the results indicate that the outcome of an assassination does, in fact, facilitate the emergence and endurance of political dynasties. These findings remain consistent when multiple robustness checks are conducted. This also indicates that some element of randomness can have a role in shaping the composition of political class.

Key words: Political Assassination, Political Dynasties, Identification Assumption

4.1 Introduction: Can assassinations determine the composition of the political class?

The political class is, by far, the most important segment of a society. This political class is composed of various groups, as it includes leaders from established political dynasties, business groups, military etc. The composition can also be categorized in terms of gender- male and female. Besides, in some abstract sense, the political class can also be viewed by categorizing leaders into two sets-'good' and 'bad' politicians (Caselli et al, 2004). Thus, while examining important factors that shape the composition of the political class, it is necessary to specify the particular segment of the political class that is under investigation. So, this paper aims to identify the factors that have facilitated the emergence and endurance of political dynasties[153] in Bangladesh. This is crucial since after its independence in 1971, representatives from the Sheikh and Zia dynasties, during different time spans[154], have led the country for approximately 25 years. At present, out of the eight political parties that have representation in the current parliament of Bangladesh, four are led by dynastic leaders.[155] Consequently, given the importance of political dynasties in the political landscape of Bangladesh, it is interesting to ask: what conditions and factors have facilitated their emergence and endurance? More specifically, since the two major political dynasties of Bangladesh- Sheikhs and Zias- only came into existence after the assassinations of Bangabandhu[156] and Zia[157], it is crucial to see if such events have a causal role in promoting the emergence of political dynasties.

[153] The main concern over political dynasties is that it leads to inequality in the distribution of political power. It also reflects imperfections in modern democratic representations. The classic elite theorists Pareto, Mosca, and Michels noted, on the other hand, that the domination of large societies by a group of elites in inevitable (SeeMosca 1966 [1896];Michels 1999 [1911] Ch 6.2; Putnam, 1976). According to Mosca, the rule of elites can be beneficial because the concentration of political power in a small group of elites may simply reflect inequality in the distribution of abilities. Likewise, Michels (1999 [1911]) stated that even under democratic institutions forces operate thatnecessarily lead to oligarchy.

[154] Sheikh Mujibur Rahman was in power from 1971-1975 & Sheikh Hasina was in power from 1996-2001 and 2009-present; Ziaur Rahman was in power from 1975-1981 & Khaleda Zia was in power from 1991-1996 & 2001-2006 (see: http://rulers.org/rulb1.html#bangladesh)

[155] See Table-2.1 in chapter-2.

[156] Sheikh Mujibur Rahman is popularly known as '*Bangabandhu'* – 'Friend of Bengal'. He was the first President of Bangladesh. In 2004, he was by the listeners of BBC's Bengali radio service as the 'greatest' Bengali of all time beating Rabindranath Tagore and many others.
Please see: http://news.bbc.co.uk/2/hi/south_asia/3623345.stm

Consequently, in this paper, I seek to point out if assassination of a political leader increases the likelihood that a leader will start or continue a political dynasty. Stated otherwise, can such events facilitate the *de facto* inheritance of political power? This is an essential question since qualitative analysis of assassinations argues that they have played a significant role in promoting dynastic leaders in Asia. For examples, Mark R. Thompson (2002) highlights the role of assassinations in promoting female leadership in Asia by stating, "…the starting point for the women's leadership was the martyrdom of their fathers or husband, who were assassinated…martyrdom freed politicians from ambivalent political pasts, elevating them into powerful symbols of opposition struggle". As a result, to address this issue, I compile a data set on all leaders who were elected to the office of a Member of Parliament in the 8th or 9th National Parliament. This helps to empirically examine if their relation to past assassinated parliamentarians is associated with the likelihood that they will continue a political dynasty. The identification of a potential causal relationship, however, between political assassination and the emergence and endurance of political dynasties remains problematic. This is because political leaders with influential family connections, great charisma or authority (i.e. traits that can be conducive to dynasty formation) can attract assassination attempts. That is, the results might be driven by unobserved family or individual heterogeneity.

To overcome this identification problem, the paper adopts a unique empirical strategy employed by Jones and Olken (2009) to isolate the potential impact of political assassinations. More precisely, the paper exploits the inherent randomness in the *success* or *failure* of assassination attempts to identify the effects of assassination. Moreover, the identification assumption is that, although attempts on a leader's life may be driven by unobserved individual or family characteristics, conditional on trying to kill a leader, the failure or success of assassination attempt can be treated as plausibly exogenous. In other words, the identification assumption suggests that '*chance*' has a role in determining whether an assassination attempt is successful or not. For example, Idi Amin survived an attack in 1976, when a thrown grenade bounced of his chest and killed several bystanders. However, John F Kennedy did not escape the bullet which was fired from 265 feet away and the

[157] General Ziaur Rahman was the seventh President of Bangladesh.
Please see; http://rulers.org/indexr1.html#rahmaz

president was in a moving car (Warren et al. 1964). To this end, the paper looks into the political arena of Bangladesh in post independence period, and it compiles an alternative data set of leaders with at least one publicly reported assassination attempt on them. The idea here is to find whether or not the outcome of the assassination attempt (which is assumed to be a product of *chance*) partially determines the likelihood that a leader will start or continue a political dynasty.

The remainder of the paper is structured as follows. The next section will give an overview of the literature on the composition of political class. In particular, I will reflect on studies surrounding political dynasties and leadership successions. The section will also reflect on the literature on the consequences of political assassinations. Section 4.3 provides a short history of assassinations and political dynasties in Bangladesh. It also provides sources of the data and results from multivariate regressions. Section 4.4 will discuss the employed identification strategy, and will interpret the main findings of the paper. Finally, section 4.5 concludes and provides direction for future research.

4.2 Literature Review.

In his analysis of the factors that shape political selection, Besley (2005) argues that almost every major episode of economic change over the past 200 years of political history has been associated with key personalities coming to power with a commitment to these changes. Yet, political scientists have paid rather more attention on attaining the institutions for getting the incentive right for politicians, than emphasizing on the factors that facilitates the emergence of honest and competent and visionary leaders within a political class. Any inquiry on this subject attempts to shed light on a rather controversial question: how can we explain the cross-national variation in composition of the political class? To be more elaborative, why some political landscapes have more educated leaders than others? Why higher female participation is higher in certain political arena? Why military leaders have a greater say in certain political landscapes than in others? And lastly, a query that is addressed in this essay is- what exact combination of factors facilitates the emergence and endurance of political dynasties? All these questions, in essence, attempt to explain the diversity that exists among political classes across the globe.

On this topic, some quantitative, qualitative and theoretical works exist, which inquire why certain groups emerge and endure in different political arenas. Starting with a few theoretical scrutiny, Caselli and Morelli (2004) envisage a scenario where political process is captured by a group of 'bad' politicians. That is, they categorize the political class with two sets of leaders-good and bad politicians. Moreover, the term 'bad' politician refers to the set of politicians who lack talent. Hence, the authors analyse conditions under which politicians with different attributes run for office, and in doing so they produce three key insights. First, low-quality citizens have a 'comparative advantage' in pursuing office, because their market wages are lower than those of high-quality citizens. So, the voters may find themselves supply-constrained of 'good' candidates. Second, bad politicians generate negative externalities for good ones, making their returns from office increasing in the average quality of office holders. This leads to multiple equilibria in quality. And finally, incumbent policymakers can determine the rents for future policy makers, leading to path dependence in quality; bad governments sow seeds for more bad government.

On a slightly different note, Dal Bo and Di Tella (2003) show that even if good politicians receive sufficient representation within a political class, it is not necessary that they will be able to align themselves with public interest. The authors argue that even presidents with high morals are incapable of pursuing good policies[158] due to threats from interest groups. Since good policies are detrimental to the rents of the interest group, they are willing to punish a policy maker for implementing such policy. Accordingly, such punishments may offset any returns that a politician derives from re-election. Furthermore, to counter this effect, a political party may offer some protection to the president from the interest group. Nonetheless, punishments will be observed in equilibrium since it never pays a party to offer full protection. Taken together, these papers offer an important corrective to the conventional and sanguine view that democratic competition allows citizens to weed out politicians of inferior caliber only when good leaders are available to replace them. Caselli and Morelli show that we cannot accept it as a rule of thumb. Additionally, Dal Bo and Di Tella point out that even if political class is composed of honest and benevolent political leaders, it is not necessary that good policies will be adopted or implemented by them due to threats from interest groups**.**

[158] In their model, pursuing good policies increases the probability of re-election.

Moving away form such abstract categorizations of the political class, specific qualitative studies also exist which attempt to shed light on the dynamics that facilitates the emergence of specific groups within a particular political arena. To be more specific, Ritcher (1990) and Mark R. Thompson (2002) provide a comparative analysis so that the factors facilitating female dynastic leaderships in South and Southeast Asia are identified. The authors argue that 'martyrdom' of their male counterpart (father or husband) has played a significant role in making them a symbol of opposition struggle[159], and thereby promoting their rise in their respective political landscape. On the role of specific political precedents and conditions, Brownlee (2007)provides an interesting scrutiny of hereditary successions in modern autocracies. The research shows that whether elites will abet dynastic succession depends on the precedent for leadership selection. That is, where rulers are predated by parties, surrounding political elites will defer to the party as the recognized arbiter of succession. Alternatively, where rulers predate their parties and political elites lack an established precedent for an orderly transfer of power, hereditary succession offers a focal point for reducing uncertainty, achieving consensus, and forestalling a power vacuum. Political dynasties are also noted as an outcome of the interaction between local government structure and leader behaviour. For instance, Sidel (2004) in his comparative analysis of '*bossism*" argue that, in Philippines, when the structure of the state apparatus allows political leaders to enjoy monopolistic control over a state's resources, and when such monopolistic control is used by the leader to construct a solid base in propriety wealth outside the realm of the state intervention, then a dynastic succession in local leadership is easier to implement.

Some descriptive studies also exist which note the evolution of political dynasties in certain regions. For example, Camp (1982) documents that high percentage of Mexican politicians between 1935 and 1980 belonged to established political families. Likewise, Clubok, Wilensky, and Berghorn (1969) use biographical data of US legislators to see the ratio of congressman belonging to politically connected families. The authors describe the evolution of that magnitude over time and across regions of the US until 1961, and point out that the observed decrease cannot simply be explained by population growth. In their opinion, the decrease is a product of modernization. Similarly, Hess (1997) provides a detailed history of sixteen American political dynasty.Brandes, Crook and Hibbing (1997), on the other hand, analyse the impact of election mode of Senators on a number of dimensions, including the percentage of Senators coming from

[159] Since most of these countries were facing autocratic regimes during such political climax. For example: Aquino was trying to topple Marcos in Philippines; Sheikh Hasina and Khaleda Zia were trying to overthrow the military strong man HM Ershad.

political families that had earlier placed a legislator in the Senate before. This work also bears some resemblance to the recent progress on the theory and evidence of legislative careers (Snyder et al. 2006; Mattozi et al. 2007; Diermeier et al. 2005).

Empirical investigations also examine the role of 'leader-identity' in political representation. For example, Pande (2003) finds that reservation of scheduled tribes and castes at the state level in India affected policies aimed towards these groups. Additionally, Cattopadhyay and Duflo (2004) examine the importance of female representation by analyzing the outcomes in two Indian states- Rajasthan and West Bengal- and pin point that issues preferred by women get more attention when women politicians are selected. On hereditary politics, Dal Bo et al. (2009) recently examined the evolution of political dynasties in the United States Congress after its inception in 1789. With many other interesting finding, the analysis shows that legislators who serve long tenures are significantly more likely to have relatives entering Congress later. The authors also argue that various channels could contribute to this self-perpetuating effect. That is, a longer tenure in office may affect the preferences of a legislator's family. An alternate possibility is that a longer tenure allows a legislator to accumulate assets-financial, human, political capital- which he can later use for supporting dynastic successions. Nonetheless, the primary message that comes from the empirical investigation is that tenure in office matters for assisting dynastic self-perpetuations, and existing democratic process allows for the *de facto* inheritance of political power.

On a broader note, this paper contributes to the growing empirical literature on the consequence of political assassination. Asaf Zussman and Noah Zussman (2006), for example, find evidence that assassination of senior members of Palestinian organizations affect the returns from Israeli capital markets. Zaryab Iqbal and Christopher Zorn (2008) also analyse all assassinations of heads of state between 1952 and 1997 states that assassinations' effects on political stability are greatest in systems in which the process of leadership succession is informal and unregulated. In addition to this, Benjamin F. Jones and Benjamin A. Olken (2009) used a new data set of assassination attempt on all national leaders from 1875 to 2004 to identify the effect of assassinations on institutions and war. Their paper finds that, on average, successful assassinations of autocrats results in a sustained move towards democracy, and it also affect the intensity of small-scale conflicts. Other systematic social-scientific analysis on the causal effect of political assassination also exists, which tends to examine the social impact of assassination on public opinion (Greenberg, 1964; Hartnett and

Libby, 1972; Angermeyer and Matschinger, 1995;Esaiasson and Granberg, 1996;Yuchtman-Yaar and Hermann, 1998;Raviv et al, 1998;Peri, 2000;Kilingman, 2001), crime (Berkowitz and Macauley, 1971) and political socialization (Orren and Peterson, 1967; Siegel, 1977). Lastly, this paper is related to literature on the impacts of political conflict (Collier and Hoeffler, 2002;Alesina and Perotti, 1996; Alesina et al, 1996;Mauro, 1995; Barro, 1991).

4.3 The composition of political class in Bangladesh.

4.3.1 A short history of key political assassinations and martyrdom in Bangladesh

Before embarking on our empirical analysis, it is worth illuminating the context surrounding political dynasties and assassinations in Bangladesh. Since its inception in 1971, political assassinations became a constant feature of the political arena in Bangladesh. Bangabandhu Sheikh Mujibur Rahman, who was the first President of Bangladesh, became the first prominent victim of political assassinations on the 15th of August 1975 (Karim, 2005). He, along with other members of his family (except two daughters), were assassinated in a military coup when a group of disgruntled junior army officers raided the presidential residence to overthrow his government. This opened a flood gate of coups and counter coups given that 'assassination' became a useful tool for plotters who intended to over throw a particular person or a regime. Moreover, immediately after the assassination of Bangabandhu the conspirators attempted to consolidate power by killing his four key cabinet colleagues on the 3rd of November 1975. These leaders were Syed Nazrul Islam, Tajuddin[160] Ahmed, AHM Quamruzzaman[161] and Captain Mansur Ali[162], and this event is subsequently remembered as the 'Jail Killing Day' as these leaders were initially imprisoned and later executed within the territories of the Dhaka Central Jail (Talukder, 1976). Furthermore, between the 3rd and 7th November, multiple coups and counter coup trebled the political structure of Bangladesh, and, finally, Lieutenant Genral Ziaur Rahman (Zia)[163] emerged as the de facto military ruler

[160] Tajjudin Ahmed is the first Prime Minister of Bangladesh. Besides, Syed Nazrul Islam was the first acting President of the Government in exile of Bangladesh.
Please see: http://rulers.org/rulb1.html#bangladesh).

[161] For a brief sketch of AHM Quamruzzaman's life,
please see: http://fourleaders.webs.com/ahmquamruzzaman.htm

[162]For a brief sketch of Mansur Ali's life, please see http://fourleaders.webs.com/mmansurali.htm

[163]Zia was the deputy chief of army staff under Bangabandhu's administration from 1971 to 1975, and became the chief of army staff when Bangabandhu was assassinated.

who continued to maintain a strong grip over both the civil and the military administration till his assassination in 1981 (Islam, 1984). Till now, Bangabandhu, Tajjudin, Nazrul, Mansur Ali and Zia are the only five statesmen who have fallen victims to conspiracies that have resulted in their assassinations.

In above backdrop, it is interesting to point out that the assassinations of the two dominant figures of Bangladeshi politics (particularly Bangabandhu and Zia) have failed to dilute their influence in the political landscape of the country. Few years later, Bangabandhu's daughter Sheikh Hasina Wajed, who was in Germany with her younger sister Sheikh Rehana Siddique during the military coups of 1975, eventually returned to Bangladesh in 1981, and was elected as the president of Bangladesh Awami League (AL)[164]-a post that she continues to hold to this present date.[165] In addition, she led her party to an electoral victory in 1996, which marked the return of AL to state power after 21 years. She is also, at present, the Prime Minister of Bangladesh after attaining a landslide victory in the ninth parliamentary election held on the 29th December 2009[166]Conversely, Khaleda Zia[167], the widow of Ziaur Rahman succeeded the chair of BNP, which was founded by her husband in 1979. Mrs Zia became the first female Prime Minister of Bangladesh in 1991, and she was elected again for a second tenure between 2001 and 2006.

These two dynasties- Sheikhs and Zias - remain the most influential political segment of the country since representatives from these two dynasties have maintained AL and BNP's leadership for more than two decades. It is also important to note that these two dynasties only came into existence after the assassinations of Bangabandhu and Zia, and political scientists have argued that the martyrdom of Bangabandhu and Zia has facilitated their rise in the political hierarchy of Bangladesh (Ritcher, 1990; Thompson, 2002).In particular, the authors argue that *martyrdom* of Bangabandhu and Zia (in the context of Bangladesh) has

Please see: http://rulers.org/indexr1.html#rahmaz).

[164] Bangladesh Awami League (AL) is the oldest political party in Bangladesh. It was formed in 1949 by Maulana Bhashani, HS Suhrawardy and Shamsul Huq. Awami League played a pivotal role in facilitating the emergence of Bangladesh, and Mujib was its president from 1963 to 1975. See: Choudhury (1972).

[165]See: www.albd.org

[166]See: ibid.

[167] For more information on Begum Khaleda Zia, please see http://www.rulers.org/indexz.html#zia

allowed these leaders to transcend their past, and evolve into symbols of popular protest against the incumbent military regimes. In essence, their martyrdom turned them into saints and their graves into pilgrimage sites. A dynastic succession within the party hierarchy only allowed them to attain unity within the support base, and continue with martyr's 'cause'. Hence, a key question that remains to be answered is: would these political dynasties emerge if there were no assassinations? Or, can we ignore the possibility that both Bangabandhu and Zia had an inherent ability (such as charisma, loyalty of important political groups and, etc) which facilitates possible dynastic succession and also attracts assassination attempts?[168]

This is a difficult question to answer since a historical narrative within the scope of this paper will not be able to account for all other possible explanations of such dynastic emergence. Nonetheless, it is possible to state that assassinations are neither a *necessary* nor *sufficient*[169] condition for the emergence of political dynasties in a global or local context. For example, Nehru-Gandhi dynasty of India emerged without any contribution from political assassinations, since Mrs Indira Gandhi[170] succeeded her father's successor Lal Bahadur Shastri to become the first female Prime Minister of India in 1966 (Frank, 2002). On the other hand, Mahatma Gandhi who was the undisputed leader of Indian National Congress and the *father of nation* of India failed to have a political dynasty even though he was assassinated on the 30th January 1948. Meanwhile, domestic cases (i.e. political assassinations of leaders from Bangladesh) also point out similar phenomenon. For instance, Shah AMS Kibria[171] - the former finance of Bangladesh- failed to have his own dynasty even though he was assassinated on the 27th January 2005. This, to an extent, shows that political assassinations per se do not result in dynastic succession. Even so, this paper inquires if political assassination of leaders increases the chance that a leader will start or continue a political dynasty. In the subsequent sections, the analysis will attempt to identify empirically

[168] Box - 4.2 provides a list of politicians from the Sheikh Dynasty and their encounters with assassination attempts.

[169] A *necessary* for some state of affair {S} is a condition that must be satisfied in order for S to be obtained. Moreover, a *sufficient* condition for some state of affair {S} is a condition that, if satisfied, guarantees that S is obtained. For more information,
please see http://www.sfu.ca/~swartz/conditions1.htm

[170] Indira Gandhi and her son Rajiv, however, fell victim to assassination attempts in 1984 and 1991. The Nehru-Gandhi dynasty, however, came into existence before any one faced such attempts. See. www.congress.org.in

[171] The Daily Star, 28th January 2005. www.thedailystar.net/2005/01/28/index.htm

whether political assassinations have a causal role in facilitating the emergence of various dynasties across the political landscape of Bangladesh.

4.3.2 Data on political dynasties

The data for this research comes from various sources. I document the biographies of 536 members of parliament who are either elected in the 8th or 9th National Parliamentary. I use information provided by individual MPs in their personal affidavits to the Bangladesh Election Commission [BEC] before they participated in the ninth parliamentary elections held on the 29th of December 2008. The *Member Directory* on the 9th National Parliament produced by NDI[172] also provided useful information on the individual characteristics of MPs. I also use the biographical profiles of all parliamentarians in the 8th National Parliament in the *Documentary on the Parliament* by Rashid and Feroz (2002). Other details on individual characteristics and political events faced by these leaders during their lifetime are taken from a wide range interviews, newspapers archives and e-sources.[173] The interviewees are mostly existing dynastic parliamentarians, relatives of politicians, reporters etc. List of newspapers that were useful in noting dynastic linkages of parliamentarians is also provided in Appendix- Box-2. Given that dynastic leaders often receive substantial media attention within the political domain of Bangladesh, newspapers provide a very useful medium for collecting biographical information on such leaders. The biographical information also helps the analysis to map any family relation of leaders in the data set to any assassinated leaders in the past. In addition, before each national parliamentary election, biographical profiles of important parliamentary candidates for each parliamentary constituency are reported in the major newspapers. As a result, I have examined all such coverage on each parliamentary constituency that preceded the 9th Parliamentary election.[174] This exercise (along with the information available in Rashid and Feroz (2002)) allowed the data set to have a comprehensive biological profile of almost all MPs in both 8th and 9th National Parliament.

As noted earlier, Sheikhs and Zias are the two important political families who dominate political life in Bangladesh. Sheikhs hail from the District of Gopalganj where Bangabandhu

[172]National Democratic Institute for International Affairs (NDI). For more information, please see http://www.ndi.org/

[173] See Appendix-2A & 2B.

[174]The 9th Parliamentary election that took place on 29th December 2008.

Sheikh Mujibur Rahman was born. In the current national parliament, both Prime Minister Sheikh Hasina and her cousin Sheikh FK Selim are MPs from Gopalganj-2 and Gopalganj-3 respectively. Sheikhs also have a stronghold on the District of Madaripur[175] (which is adjacent to the District of Gopalganj), where Sheikh Hasina's nephew Noor-E-Alam Chowdhury is an MP. Zias, on the other hand, have strong holds in two non-adjacent districts- Feni[176] and Bogura.[177] More precisely, Begum Khaleda Zia is from the District of Feni, where she is a MP from the constituency Feni-1. Her deceased husband Late President Ziaur Rahman is from the District of Bogura. In terms of political dynasties with longest endurance, there are five dynasties which have produced three generation of political leaders. These are Mollahs from the District of Kushtia, Osmans from the District of Narayanganj, Mansur Ali's family from the District of Sirajganj, Chowdhury's from the District of Munshiganj, and the Sheikh dynasty of Gopalganj. Among them, only the Sheikhs and Mansur Ali's family have members who have been victims of assassination, and Professor B Chowdhury (a member of the Chowdhury dynasty) survived an assassination attempt in 1981 in which President Ziaur Rahman was killed (See Box-4.1).

To characterize MPs from political dynasties, two indicator variables are created. *Pre-relative*and *Post-relative*. The former is equal to one whenever a parliamentarian had a relative[178] entering office before he or she did, and zero otherwise. These politicians are termed as dynastic politicians.[179] The latter is equal to one if a parliamentarian has a relative who, after him, entered office, and zero otherwise.[180] Likewise, to pinpoint the role of assassination, there is an indicator variable *Pre-Relative-Assassinated* which is equal to one if MP is related to a former lawmaker who was assassinated, and zero otherwise. In contrast,

[175] Both the districts (Gopalganj and Madaripur) are within Dhaka Division.

[176] District of Feni is within Chittagong Division.

[177] District of Bogura is within Rajshahi Division.

[178] Anyone with a biological or social connection to the leader is considered a relative. For example- Husband/Wife, Brother/ Sister, Son/Daughter, Nephew, Niece, Cousin , Grandson/Granddaughter, Son-in-Law/Daughter-in-law, etc

[179] In other words, these are lawmakers from a family that had previously placed a member in the National Parliament.

[180] This means, in essence, that an MP in the national parliament will have Post-Relative = 1 if and only if his date of his first entry to the parliament precedes the date of entry of relative who is presently an MP (or were an MP in the 8th National Parliament). This very same procedure was used by Dal Bo et al (2009) to analyse political dynasties in the United States.

Pre-Relative-Not-Assassinated is dummy variable equal to one if an MP in the sample is related to lawmaker who did not fall victim to an assassination. To study other characteristics, the following indicator variables are used. *Female* is an indicator variable equal to one is the leader public office experience in his life time. *Num. of Time MP* is the total number of times a leader is elected to the office of an MP. *Minister* is an indicator variable equal to one if the leader ever occupied the position of minister during the present government. *Military* is an indicator variable equal to one if a leader had a military career at some point in his or her career. *Lawyer* is an indicator variable equal to one if the leader had a law degree from university. *Businessman* is an indicator variable equal to one if the leader is or was businessman by profession. *Distance-from-Dhaka* is measure of distance in kilometres of a leader's constituency from the district of Dhaka. This is used as a crude proxy to measure how far a constituency is from the parliament.[181] Lastly, *INTEGRATED* is a dummy variable which is equal to one if a leader's constituency is geographically contiguous to either Dhaka or Chittagong metropolitan areas (and zero otherwise).

From Table-4.1 one can see some descriptive statistics on Members of Parliament (MPs) in the data set. At present, out of the 536 directly elected members of parliaments (MPs), ninety one have relatives who had tenure(s) as MP before them. The spatial distribution of dynastic leaders across the various divisions of Bangladesh is shown in Figure-4.1. Moreover, it is shown that Dhaka Division (which has the highest number of parliamentary seats) exhibits the largest proportion of dynastic leaders. Thisalso reflects the influence that dynastic leaders exert in the national political arena of Bangladesh since Dhaka is also the capital of Bangladesh. Besides, as pointed out earlier, out of the eight political parties which have some representation in the current national parliament, four are chaired by dynastic descendants.[182] More importantly,both the office of the *Prime Minister* and the *Leader of the Opposition* are occupied by dynastic leaders (Sheikh Hasina and Khaleda Zia) who are the descendants of the two most towering figures of Bangladeshi politics-Bangabandhu Sheikh Mujibur Rahman and General Ziaur Rahman. In terms of MPs with assassinated relative, seventeen leaders in the mentioned data are descendants of assassinated leaders (a little more than 3% of the leaders in data). Table-2 also summarizes the professional affiliation of the MPs. Businessmen constitute more than 55% of the parliamentarians. This is followed by lawyers

[181] This information is collected from the Office of the Ministry of Communication, Government of Bangladesh.

[182] See Box 2.1 in Chapter-2.

with 13.7% representation. The descriptive statistics also show that the main political parties (AL and BNP) are (to an extent) evenly represented in the data as both have roughly (or more than) 40% representatives.

4.3.3 Methodology and Results

4.3.3.1 Methodology

This paper aims to identify the factors that have facilitated the emergence and endurance of political dynasties within the political class of Bangladesh. In particular, the analysis examinesa possible casual role of assassinations in facilitating the emergence and endurance of political dynasties. To this end, I regress a base-line econometric specification which models the variation in dynastic linkages on multiple covariates. The idea here is to see whether current MPs who are descendants of assassinated political leaders or descendant of non-assassinated politicians are associated with higher/lower likelihood that they will continue a political dynasty. Nonetheless, it is important to mention here that given the data sets included MPs in the 8th or 9th National Parliament (who are mostly alive), the empirical model will not isolate the effects of assassination on dynasty formation. Rather, the employed empirical model will help see if political descendants of assassinated leaders are more likely to continue the dynasty than others.

$$Post\text{-}Relative_i = \alpha + \delta Pre\text{-}Relative\text{-}Assassinated_i + \pi Pre\text{-}Relative\text{-}Not\text{-}Assassinated + \beta \underline{X}_i + \gamma_p + \zeta_D + \acute{\varepsilon}_i (1)$$

As stated earlier,*Post-Relative*$_i$is a dummy variableequal to one if a legislator *i* has a relative who entered Parliament after him or her.*Pre-Relative-Assassinated* is equal to one if MP is related to a former lawmaker who was assassinated, and zero otherwise. Similarly, *Pre-Relative-Not-Assassinated* is dummy variable equal to one if an MP in the sample is related to lawmaker who did not fall victim to an assassination. Thevector $\underline{X}_i$consists of a set of individual characteristics.[183]Additionally, $\gamma_p$and $\zeta_D$controls for party and divisional[184]fixed

[183] The vector mostly includes variables that are controlled by Dal Bo et al (2009)

[184] Bangladesh is divided into six divisions- Rajshahi, Barisal, Sylhet, Khulna, Dhaka. These six divisions have in total 64 districts. And each district have at least two parliamentary seats (except three districts –Khagrachchari; Rangamati and Bandarban which have one seat). The largest division is Dhaka with 94 parliamentary seats and smallest is Sylhet with 19 parliamentary seats.

effects, and ε_i is the random error term. Nonetheless, our key parameter of interest is δ which links assassinations with dynastic endurance. Hence, if δ is significantly different from zero, then we can assert that there is a strong association between being a descendant of an assassinated politician and dynastic endurance within the political landscape of Bangladesh. Additionally, if $\boldsymbol{\pi}$ is significantly different from zero, then it is possible to suggest that being a descendant of a politician who was not assassinated is also associated with the likelihood that a lawmaker will have a posterior relative in office in comparison to a lawmaker who is not a dynastic successor. Thus, any modifying role of assassination in facilitating dynastic endurance can only be observed *if and only if*δ is significantly differentfrom π.[185]

Besides,it is imperative to mention that any significant relationship between the variables of interest must be interpreted as a correlation because the OLS (or Probit/ Logit) estimates might suffer unobserved family heterogeneity. More specifically, if certain political families entertain higher ability, then such family traits might allow them to endure within the political landscape of Bangladesh. Likewise, such traits can also make the families victims of assassination attempts from their rivals. As a result, if such unobserved family heterogeneity exists, then a spurious relationship might emerge between the variables of interest. Even so, any significant association between political assassination and dynastic endurance will provide motivation for investigatingan underlying causal relationship.In the following section, the results are displayed and discussed.

4.3.3.2 Results: Role of Assassination

From column-1 in Table-4.2, we can see that being a descendant of a past or present law maker is associated with a higher likelihood of having a relative later in office. That is, the coefficient for *Pre-relative* is positive and significant at 1%.In column-2, I estimate the base-line which checks whether this result is driven by the presence of any particular type of dynastic leader (i.e. being a descendant of an assassinated politician *or*being a descendant of a non- assassinated politician). As shown, the coefficient for *Pre-Relative-Assassinated* and *Pre-Relative-Not-Assassinated* are both positive and significant at 5% and 1%. The magnitude of the coefficient for *Pre-Relative-Assassinated* suggests that being descendant of

[185] The estimations derived from employing this empirical model can suffer from omitted variable bias if assassination of non-political relative has any role in facilitating self-perpetuation among political dynasties. However, given no concrete theoretical relationship exist between assassination of a non-political relative and dynastic endurance, the employed model is useful in addressing the principle inquiry of this analysis.

an assassinated lawmaker is associated with a 27% higher probability of a having a posterior relative in office in comparison to those with no family connections to other present or past lawmakers. Additionally, the coefficient for *Pre-Relative-Not-Assassinated* highlights that descendant of non-assassinated lawmaker is associated with a 12% higher probability of continuing the dynasty. In column-3, I control for other personal characteristics like gender, professional affiliation of lawmakers, the number of times one has been elected to the office, and whether the lawmakers ever held a position in the cabinet. The results remain qualitatively similar even though the magnitude of the coefficient for *Pre-Relative-Assassinated* marginally decreases in size.Column-4 introduces two constituency level characteristics. As mentioned above, *Distance-from-Dhaka* measures the distance of a leader's constituency from the capital of Dhaka.[186]The indicator variable *INTEGRATED* is equal to one if a leader's constituency is geographically contiguous to either Dhaka or Chittagong metropolitan areas (and zero otherwise).[187] The resultsshow that both these variables fail to explain endurance of dynastic leaders. On the other hand, the coefficient relating political assassination and dynastic endurance is positive and significant at 5%. Finally, in column-4, I fit in dummy variables for the two prime political parties to see whether party effects can explain dynastic endurance within the parliament of Bangladesh. Yet, the estimations show that the party effects are not significant. In contrast, the relevant coefficient δ remains positive and significant.

On the role of other factors, the coefficient for *Num. of Times MP* is positive and significant at 1% in columns 2-4. This is consistent with self-perpetuation hypothesis that argues - holding power for longer increases the chance that one will facilitate a dynastic succession, and is in line with the findings of Dal Bo et al (2009), which point out that US legislators with a longer tenure in U.S senate are more likely to start or continue a political dynasty.[188]The estimations also show that lawmakers who are descendants of past or present lawmakers are also associated with a higher likelihood of continuing the political dynasty.

[186]As noted earlier, it is crude proxy to measure how far a constituency is from the parliament

[187] Some empirical studies have suggested that areas which are geographically contiguous the two most economically important cities (Dhaka and Chittagong) entertain households with better observed characteristics (see- Shilpi, 2008; Ravillion and Wodon, 1999)

[188] The positive association between a leader's tenure and the likelihood that he or she will start or continue a political dynasty is also reflected in the cross sectional work of Rahman (2011): "Assassination and Political Dynasties" which is a key component of the thesis.

This finding is also echoed in the results of Dal Bo et al (2009). The regressions also points out that lawmaker with a previous career in military are associated with a lower likelihood of facilitating a dynastic succession. The coefficient for *Military* is negative and significant at 5% in all columns.

In Table-4.3, I conduct some robustness checks to see the strength of the computed estimations. Colmun-1 incorporates five divisional dummies with the Division Dhaka as the reference category.[189] This is done to control for factors that are common to all leaders from the same division but varies for leaders from different divisions. Nevertheless, the key finding remains robust. Column-2 introduces district fixed effects with the District of Dhaka as the reference category.[190] This is likely to account for unobserved district specific time invariant effects that varies for lawmakers from different districts, but is similar for leaders from the same district. The results point out that δcontinues to be positive but is no longer significant (even at 10%). In column-3, lawmakers who are no longer alive are omitted to make the sample more comparable. Similarly, in column-4, leaders who are born after 1965 are excluded to account for the possibility that younger legislators have less time to establish dynasties. From both the columns, however, the primary message remains consistent that lawmakers who are descendants of assassinated lawmakers are on average associated with a higher likelihood of having posterior relative in office in comparison to leaders who are not dynastic descendants.

Lastly, in both Table-4.2 and Table-4.3, I check for the possibility that δ is significantly different than π**,** since in all columns in Table-4.2 and Table-4.3, δ is greater than π in absolute magnitude.Besides, checking for differences in the coefficients is insightful as this will hint a heterogeneous relationship between political assassinations and dynastic endurance. More precisely, if δ is significantly different than π, then only one can assert that there is a significant modifying role of assassination in facilitating the endurance of dynastic leaders, and the estimation is not solely picking up the possible effect of being a descendant

[189]The results remain similar when the reference category is chosen randomly or when Probit regressions are estimated. See Appendix Table - A3

[190]Bangladesh is a unitary parliamentary republic consisting of three hundred parliamentary seats. These seats are located in six administrative Divisions, which in turn are subdivided in sixty-four Districts. This means that each District constitutes one or more seat, and each Division has more than one District. Now, since Divisions are aggregate of Districts, I drop divisional effects when controlling for district fixed effects. For more information,
please see: http://www.discoverybangladesh.com/meetbangladesh/the_admin.html

of dynastic leader. In this regard, the results provide some indication (even though very weak)that δ is significantlydifferent from π, becauseδ is greater than π in absolute magnitude in all columns in Table-4.2 and Table -4.3.Besides, this difference is significantly different at 10% in column-4 of Table-4.3.

Overall, the estimations highlight that both types of dynastic politicians (those who are related to assassinated lawmakers & those who are related to non-assassinated past or present lawmakers) are associated with a higher likelihood of continuing the dynasty. This is interpreted as a correlation since the results might be driven by unobserved family heterogeneity. Nonetheless, the finding does provide some motivation for investigating whether assassinations have a causal role in facilitating the emergence and endurance of political dynasties within the political landscape of Bangladesh. This will help shed light on the question: do political assassinations back fire in the sense that it imposes the moral authority of the leader by creating a martyr out of him, which ultimately assist the endurance of the leader's family in the country's political arena? Hence, with this question at sight, the remaining analysis proceeds.

4.4. Identification Strategy and Results.

4.4.1 Empirical Approach and Data.

The econometric identification of a potential causal relationship between political assassination and the likelihood that a leader will start or continue a political dynasty is not straightforward. This is because while some assassinations may have correlations with political turning points, the direction of causation is difficult to establish particularly since political leaders with influential family connections, great charisma and authority can attract assassination attempts. This makes it difficult to identify empirically if there is a causal impact of assassination on the emergence and endurance of political dynasties. To overcome this problem, the paper here adopts a simple identification strategy employed by Jones and Olken (2009) to find out the potential impact of assassination of national leaders on institution and war. In other words, the paper exploits the inherent randomness in the *success* or *failure* of assassination attempts to identify the effects of assassination.

To be more elaborate, the employed identification assumption notes that although assassination attempts on a leader's life may be driven by historical circumstances, personal

ability or family heterogeneity, conditional on trying to kill a leader, the *failure* or *success* of the assassination attempt can be treated as plausibly exogenous.For example, Ronal Reagan only survived the assassination attempt on him in 1981 because the bullet, which was fired at him within a range of twenty feet, missed his heart by less than one inch (Reeves, 2005)**.** Then again, John FKennedy was unfortunate to die in an assassination attempt from a bullet which was fired at him from 265 feet away (Warren et al. 1964). Some examples from the Bangladeshi political arena also convey the same message. For example, Sheikh Helal[191] survived the bomb blast, which took eight lives, during his election campaign in 2001.[192] In contrast, former Finance Minister of Bangladesh, Shah AMS Kibria was unlucky enough to die in a grenade attack on him during a rally in his homedistrict Habiganj in 2005.[193] Hence, if pure luck has a role in determining whether a leader survives an assassination attempt or not, then one can test the impact of successful assassinations on various socio-political phenomenon related to the leader while controlling for its other key determinants.

To this end, this paper uses data on a large number of publicly reported assassination attempts on political leaders in Bangladesh post during the period 1971 - 2010, and it tries to isolate that conditional on an attempt taking place, whether or not the outcome of the attempt partially determines the likelihood that a political leader will later have a relative enter office of a Member of Parliament. At this point, it is essential to mention that for this part of the analysis, I do not restrict my sample to MPs or ex-MPs.[194] The unit of observation is re-coded to a '*Political Leader*' who was a member of the Central Committee or District Committee[195] of any major political party[196], and has faced at least one *serious* assassination

[191] Sheikh Helal is an MP in the current national parliament from the constituency Bagerhat-1. He is also a cousin of the current Prime Minister Sheikh Hasina, and father-in-law to Barrister Andaleeve Rahman Partho MP.

[192] See: www.encyclopedia.com/doc/1P2-18393632.html

[193] See: The Daily Star, 28th January 2005. www.thedailystar.net/2005/01/28/index.htm

[194] The findings, however, remain consistent when I do so.

[195] The political party system in Bangladesh provides considerable political power in the members of the District Committee or Central Committee of any major party. The members of the District Committees essentially determine how political strategies are implemented at the district level. In addition, District Committee members also play a vital role while electoral candidates are competing in National elections, given they often form the organizational roots on which election campaigns are competed. The Central Committee, on the other hand, is the core organizational body of a party at the national level. They are endowed with the responsibility of both formulating and implementing the political strategies and campaigns that a party adopts at the national level.

attempt in hisor her life time. This has threeprinciple rationales. First, if I solely restrict my sample to MPs with one assassination attempt, then sample size will be forty-four. This is a relatively small data-set, and thus undermines the chances that enough variation will exist for the estimations to identify a strong relationship between the variables of interest. Second, by focusing on leaders who were members of theCentral Committee or District Committee of any major political party but were not necessarily elected to the office of a Member of Parliament, the regressions shed some light on how political families emerge at the parliamentary level. Third, given thatI study leaders who held a position in the Central Committee or District Committee of any major political party, any assassination attempt on them is going to receive substantial media coverage due the importance of their political portfolio. As a result, the data set is unlikely to suffer from any major missing information.

The data set on assassination attempts was constructed after consulting the archives of three major English newspapers: *The Daily Star, The New Age*,and *The lndependent.* Bengali newspapers like *DainikIttefaq*[197] and *DainikJugantor* were also used.[198]In addition, numerous e-sources, interviews with reporters, politicians and other civil society members are also conducted to compile the mentioned data set. This data set is restricted to leaders who have faced a "serious attempts" which is defined as those cases in which the weapon (gun, bomb, etc) was actually discharged, as opposed to cases where the attempt was thwarted prior to the weapon being used.[199] The new data set has 97 political leaders from all six Divisions, and each leader faced *at least one* serious assassination attempt on their life during the period 1971 - 2010. There is a dummy variable $SUCCESS_i$which equals to one if the leader (i) died from the assassination attempt and is zero otherwise. Moreover, from Table-4.4, we can see

[196] A major political party is defined as political party which at least had on member in the National Parliament of Bangladesh in post 1971 period.

[197]*Dainik Ittefak* was first published in 1953 as a weekly newspaper. It played a pivotal role during movement for national independence, and was often dubbed as the 'voice of East Pakistan'. This is the only newspaper which has uninterrupted publication from 1971 till present date. Thus, this newspaper was instrumental for compiling the data set.

[198] See Appendix-2A and 2B for information on the interviews and newspapers. Please also review Appendix Box 4A, which discusses the data collection methodology.

[199] This is done, in particular, to strengthen the robustness of our identification assumption that pure luck determines whether a leader survives or dies in an assassination attempt. Furthermore, given that the analysis sole depends on 'serious' assassination attempt – where the bomb actually exploded/or the gun shot took place – as opposed to thwarted assassination attempt, the analysis is likely to have a complete coverage of all assassination attempts in the political arena in Bangladesh.

that roughly 55% leaders who faced a serious assassination attempt died in the incident, while the remaining 45% barely survived. Furthermore, the identification assumption used allows us to treat the dummy variable $SUCCESS_i$as exogenous conditional on observables[200] because it proposes that some element of luck has a role in determining whether a leader dies in a assassination or not.[201]

As a result, a causal relationship between the key variables of interest can simply be inferred by estimating the linear probability model of the form:

$$Post\text{-}Relative_i = \alpha + \beta SUCCESS_i + \theta X_i + \gamma_p + \zeta_D + \acute{\varepsilon}_i \qquad (2)$$

Where (i) indexes a political leader with at least one assassination attempt on his or her life in post 1971 (till 2009). $Post\text{-}relative_i$ is a dummy variable equal to one if a political leader (i) has a relative[202]later in the office of Member of Parliament.[203] Thus, if β is significantly different than zero, then one can assert that there is a causal relationship between the outcome of an assassination attempt and the probability that a political leader will start or continue an electorally relevant political dynasty by having a family member in the office of a Member of Parliament. $\boldsymbol{X_i}$is a vector of other covariates measuring the variation in individual characteristics across leaders. Lastly, the coefficients $\gamma_p$and $\zeta_D$controls for party and divisional fixed effects, and ε_i is the random error term. Before proceeding with the estimations in the next section, I check the strengthof the employed identification assumption.

[200] This means we assume E (u / SUCCESS, X) = 0, and the average treatment effect can be written as:$\beta = E(Y \mid SUCCESS = 1, X) - E(Y \mid SUCCESS = 0, X)$

[201] Figure-4.2 shows the spatial distribution of assassination attempts and successful assassinations. As it can be seen, the Dhaka Division entertained both the highest number of assassination attempt and successful assassination. This is, to an extent, in line with findings of UNDP(2005): "Beyond Hartals" which suggests that Dhaka Division has historically witnessed highest level of political violence and strikes in comparison to other divisions.

[202] For this segment of the analysis, I have used a more strict definition of relative. That is if a leader (i) is considered a relative of leader (j), then he is either: Son/Daughter OR Brother/ Sister OR Husband/ Wife.

[203] It is important to mention that, since no dynastic succession for a political leader (i)took place before he or she faced an assassination attempt, the possibility does not exist for a spurious relationship to emerge from the rare scenario that a dynastic successor is less likely to die from a assassination attempt given that they are relatively young in comparison to their senior political relative who has also faced an assassination after the dynastic succession has already taken place.

4.4.2. Is *Success* exogenous conditional on attempt?

The identification assumption suggests that conditional on an attempt taking place, the failure or success of the assassination attempt can be treated as plausible exogenous. Thus, in Table-4.5, I examine if individual characteristics predict successful assassination by comparing the mean of individual characteristics of political leaders who barely survived with those who died. Across the eight explanatory characteristics that I have examined, the differences between success and failure are only significant for *Pre-Relative* and *MP* at 1%. To be more elaborative, the results suggest that a significantly greater proportion of political leaders who are descendants of lawmakers or political leaders who were themselves lawmakers have barely survived an assassination attempt. In Table-4.6, the results from the linear probability model are presented that considers all these factors simultaneously. Accordingly, I regress the following equation:

$$SUCCESS_{i,} = \alpha + \beta X_i + \delta AgricultureWage_{d,t} + \gamma_p + \zeta_D + \acute{\varepsilon}_i (3)$$

Where $X_i$is a set of individual characteristics for leader (i), and $SUCCESS_{i,t}$ is a indicator variable equal to one if a leader (i) died in a assassination attempt in period (t). The variable $AgricultureWage^{204}_{d,t}$is the average daily wage (without food) of agricultural labour in a given division (d) in period (t). This is incorporated to see if economic characteristics in a division (d) and period (t) predict successful assassinations in the same district (d) in the period (t). Additionally, γ_p and$\zeta_D$controls for party and division fixed effects, and ε_i is the random error term. From all six columns, it can be seen that being a member of the parliament (MP) appears to lower one's chances of dying in an assassination attempt as the coefficient for *MP* is negative and significant at 1% or 5%. A possible rationale underlying this phenomenon is that members of parliament are more likely to enjoy higher level of securities. This, however, fails to explain the insignificant coefficients for *Minister* and positive coefficients for *PM-President*, which is significant at 10% in all columns except column-2.[205] On the importance of being a dynastic leader, it is shown in column-3 that the

[204]A rational for focusing on Divisional level data is provided in Appendix- 4B

[205] This hints the possibility that the intensity of the assassination attempt faced by political leaders who were Prime Ministers or Presidents might be different from the intensity of assassination attempt faced by political leaders who never attained such portfolios in the political landscape of Bangladesh. The

relevant coefficient fails to attain significance once party and divisional fixed effects are introduced. This also remains true when I control for common political shocks to all assassination attempt in a given year by incorporating the POLITY2 score of Bangladesh in column-4.[206] Finally, in line with the cross-national findings of Jones and Olken (2009), the results do suggest that the choice of weapon can predict whether an assassination attempt will be successful or not.[207]

Therefore, the principal message that one can derive from the results in Table-4.6 is that the identification assumption employed by Jones and Olken (2009) holds (to an extent) in our sub-national data set. More specifically, in line with findings of Jones and Olken (2009), the results do indicate that assassination attempts, which depends on guns for execution are more likely to be successful than attempts depending on any other means. Yet, in contrast to Jones and Olken (2009), few other variables (such as being a *MP* or *PM-President*) do in fact predict *SUCCESS*. This, in some degree, undermines the identification assumption that the variation between *success* and *failure* of an assassination attempt is a product of pure chance. Nonetheless, to address this issue, I control for these factors while regressing the base-line specifications. On the other hand, given that a leader's dynastic identity fails to predict successful assassination, it reduces the risk that members of political families face assassination attempt of different intensity. In the following section, I perform some additional tests to see if successful assassination attempts are mutually exclusive, and thus I further scrutinize the identification assumption.

4.4.3 Are assassination attempts mutually exclusive?

So far, I have examined whether various observable individual and divisional characteristics predict the variation in success with sufficient precision. In this section, I conduct some additional tests to examine the strengths of the employed identification assumption. More specifically, the identification strategy is heavily dependent on the assumption that for a given assassination attempt, the failure or success of the attempt is determined by an element of chance. Consequently, in an ideal scenario, all assassination attempts must take place on

issues, however, is addressed while I perform some robustness checks for the mentioned base-line specifications.

[206]The POLITY2 variable is taken from the Polity IV DATA set. (See: Marshalland Jaggers, 2004)

[207] To address this issue while estimating the base-line specifications, the robustness checks uses weapon fixed effects.

all the leaders at the same point in time to avoid any possible spill-over effects. In other words, an assassination attempt in period (t) in a given country can determine the likelihood whether an assassination attempt in period (t+1) in the same Division will succeed or not by changing security concerns. If this is true, then it will fundamentally undermine the capacity of the employed identification strategy to pinpoint causality. Hence, to see if such spill-over effects exist, I estimate the two linear probability models (detailed out below) in panel A and B of Table-8.

$$SUCCESS_{i,\,d} = \alpha + \mu PrecedingAssassinationAttempt_{Ij,d} + \beta X_i + \gamma_P + \zeta_D + \acute{\varepsilon}_i \quad (4)$$

$$SUCCESS_{i,\,d} = \alpha + \mu PrecedingSuccessfulAssassination_{j,d} + \beta X_i + \gamma_R + \zeta_D + \acute{\varepsilon}_i \quad (5)$$

The first equation (equation-4) attempts to identify if assassination attempt on a leader (j) in period t in a given division (d) predicts successful assassination attempts on any other leader (i) in future periods in the same division (d). The second equation (equation-5) also addresses a similar question by investigating whether successful assassination attempts in a given period (t) on leader (j) in division (d) predicts successful assassination in future periods in division (d) on any leader (j).

The results from Table-4.7, however, provide limited evidence in support of any such spillover effects. That is, from Panel-A one can see that preceding assassination attempt on a leader (j) in a division (d) fails to predict SUCCESS for leader (i) in division (d) for future period (up to 4) years). This finding remains consistent even when I control for division effects, party effects, common political shocks, and weapon fixed effects. In Panel-B, the results remain qualitatively similar when I check if preceding successful assassination of leader (i) in division (d) explains SUCCESS for future assassination attempt on leader (j) in division (d). Moreover, this finding to an extent strengthens the reliability of the adopted empirical strategy by showing that there is almost no evidence of such spill-over effects of assassination attempts. To sum up, results from table 4.6 & 4.7 do direct us towards the possibility that an element of luck is present in determining whether a leader dies in assassination attempt or not once an assassination attempt takes place. As a result, I now turn to estimating the effects of political assassinations on the emergence and endurance of political dynasties.

4.4.4 Results and Robustness Checks

In equation-2, if β is significantly different than zero, then one can assert that there is a causal relationship between the outcome of an assassination attempt and the probability that a political leader will *later* have a relative in office. The results are shown in Table-4.8.In column-1, the variable $SUCCESS_{i,}$ maintains a positive coefficient significant at 1%. This indicates that successful assassination increases the likelihood that a political leader will later have a relative in office. The magnitude of the coefficient is 0.29, which means that successful assassination attempts increases the likelihood of an eventual dynastic transmission of power by approximately 29 percentage point

.

Column-2, introduces multiple individual characteristics that might determine the likelihood that a leader will start or continue a political dynasty. Besides, controlling for factors such as *MPs*, *Minister*, *PM-President* also allows the examination to acknowledge that individuals who attain such portfolios in their respective political careers can entertain different security arrangements than others. So for $SUCCESS_i$ to remain exogenous, we must condition the analysis on such observable characteristics. Nonetheless, as it can be see, the coefficient β remains both positive and significant at 1%. In addition to this, the coefficient for *PM-President* is positive and significant at 1%, and it highlights that political leaders who attained such offices are associated with a higher likelihood of establishing their political dynasty in Bangladesh. This is, to some degree, in line with Dal Bo et al (2009) which find that political leaders with better career pattern are more likely to start or continue a political dynasty. Column-3 shows that the result remain qualitatively similar when I incorporate $Agriculture\ Wage_{d,t}$ to see if economic characteristics in a division at the time of an assassination predict posterior dynastic attainment or not. This is also essential because there is some indication that divisions' with higher agricultural wage rate at the time of assassination attempt have a lower likelihood of witnessing a successful assassination. Hence, incorporating for such factor allows the analysis to control for security conditions that can vary across divisions. Lastly, in column-4, I introduce party dummies to control for the party fixed effects. Nonetheless, the primary message remains consistent: successful assassination increases the likelihood that leader will later have a relative in office.

Table-4.9 provides some robustness checks to verify the strength of the primary finding. In coloumn-1, divisional dummies are introduced to isolate the role of facing an assassination in

any particular division on the likelihood that a political leader will later have a relative in office. This is also important sincefigure – 4.2 is indicative that there is some variation in the number of successful assassination across the six divisions. So, controlling for such factors allows the analysis to accommodate time invariant division specific effects. Column-2 controls for common political effects - with the help of POLITY2 indicator- that were present during the time of the assassination attempt to isolate the possible relationship between facing a life threatening assassination attempt during certain political climate and the likelihood that a political leader will have a posterior relative in office.[208]The results, however, suggest that the outcome of the assassination attempt matters in determining the emergence of political dynasties. The specification in column-3introduced weapon fixed effects. This is very important since earlier results have suggested that the type of weapon used in an assassination attempt significantly predicts successful assassinations. On the other hand, the computed estimates remain similar and the coefficient βremains both positive and significant at 1%.[209]From column-4, one can see that the result remains qualitatively similar when I restrict the sample to political leaders who are born before 1965 to account for the possibility that younger political leaders have less time to establish dynasties. Finally, in column-5, I use a Probit regression to examine if the finding is sensitive to changes in econometric model, but the basic finding remains suggestive that assassinations matter in facilitating the emergence of political dynasties.

Table-4.10 reports further robustness checks by imposing few restrictions that enhances the comparability of observations. That is, I try to see if the results remain robust when I compare political leaders who faced similar assassination attempts. Thus, in column-1 I omit members from the Sheikh and Zia dynasty to see whether the estimated results are driven from the presence of two national political dynasties.[210] Even so, the primary message remains unaltered. Column-2 excludes individuals who faced assassination attempts during a Coup d' Etat, and the estimations point out that the relevant coefficient is positive and significant at 1%. This exclusion helps the analysis to compares leaders who faced

[208]The POLITY2 indicator provides a positive score when the country is entertaining a democratic format of government and negative otherwise.

[209] The magnitude of the coefficient β has increased to 0.46 highlighting an even stronger role of outcome of an assassination attempt in facilitating the emergence of political dynasty.

[210]This is because both these dynasties only came into existence after the assassination of Bangabandhu and Zia.

assassination attempts of similar intensity, since it is probable that assassinations during Coup d' Etat are of high intensity.[211]In column- 3, I restricts the sample to political leaders who were at least MP once (in their life time) to improve the comparability of the unit of observations. Moreover, this restriction is particularly important for two reasons. First, table - 4.5 is indicative that there is some imbalance between leaders who died in an assassination attempt and those who survived on this particular dimension. Second, the data on MPs (or ex MPs) has a lower likelihood of suffering from any missing information since assassination attempts on MPs (or ex-MPs) are subject to wide public and media attention. As it can be seen, the results remain qualitatively similar even though the restrictions have resulted in the loss of large number of observations. In addition, the size of the coefficient is indicative that successful assassination of an MP (or an ex-MP) almost certainly ensures that their posterior relative will be eventually elected to office. In column-4, the key message also holds when I check an alternative restriction by omitting political leaders who are born after 1950 to further address the concern that younger political leaders in our data set have less time to establish dynasties.[212]

Consequently, the results taken together indicate that outcome of an assassination attempt does, in fact, facilitate the emergence and endurance of political dynasties by increasing the likelihood that a leader will later have a relative in office. The message remains consistent for various econometric specification and inclusion of important covariates. This is also true when I impose multiple restrictions to address various econometric and conceptual concerns. Furthermore, the identification assumption –that *success* or *failure* of an assassination attempts is determined by pure luck- holds to some extent in our data set. This allows one to state (with some degree of prudence) that there is a causal role of assassination in increasing the probability that leader will start or continue a political dynasty.

[211]Even though it is probable that luck has a role in determining whether a coup d' etat is successful or not in assassinating or toppling the target. For example, Hitler narrowly survived multiple assassination attempts in failed coups during the World War II (See: Fest, 1994).

[212] In appendix Table-A4, I check further by omitting dynastic leaders (Pre-relative = 1) to avoid the possible problem of correlation of error terms of the same family. I also introduce *preceding successful assassination* to control for any possible spill-over effect of previous assassinations. The results, however, remain unchanged.

4.5 Conclusion and Caveats

This paper presents empirical evidence on the possible role of political assassinations in aiding dynastic transmission of political power within the political class of Bangladesh. This is interesting since political dynasties reflect considerable inequality in the distribution of political power, and their presence is felt strongly at the local and national levels. Besides, the factors that guide 'dynastic inheritance of political power' are of interest to those who are concerned with the legitimacy of the process by which democratic representation is obtained. Hence, to empirically examine if assassinations facilitate de facto inheritance of political power, two broad steps are taken. First, the paper documents the biographies of 536 leaders who were elected to the office of a Member of Parliament either in the 8^{th} or 9^{th} National Parliament. Additionally, it finds that leaders who are descendants of assassinated leaders are associated with a higher likelihood of continuing the political dynasty. The results also show that being a descendant of a non-assassinated politician is also associated with a higher likelihood of having a posterior relative in office. In terms of the modifying role of assassination, there are some indications (even though very weak) that the relationship is stronger for descendants of assassinated lawmakers. I interpret these estimations as correlation because it is possible that these results are driven by unobserved family or individual heterogeneity.

To isolate a possible causal role of assassination in dynasty formation, the paper adopts the identification strategy employed by Jones and Olken (2009). More specifically, the mentioned paper studies the effects of political assassination by employing an identification assumption that although attempts on a political leader's life may be driven by historical circumstances, unobserved individual ability or etc, conditional on trying to kill a leader, the *failure* or *success* of assassination attempt can be treated as exogenous. That is, pure chance has role in determining whether a leader barely survives or dies when a bomb explodes or a gun is shot to assassinate him or her. Thus, if this holds true, then by comparing political leaders who barely survived with those who died, one can identify the possible effects of assassination. Therefore, to execute this estimation technique, a historical data set on assassination attempts is compiled for post 1971 Bangladesh. This new data set has information on 97 political leaders from all six Divisions in post 1971 period who had *at least one* serious assassination attempt on their life. Furthermore, the aim here is to check if a leader who died in an assassination attempt in comparison to a leader who barely survived an

assassination attempt is on average more or less likely to start or continue a political dynasty. That is, whether the outcome of an assassination attempt determines the likelihood that political dynasty will emerge or not.

Overall, the results show that assassinations do in fact matter. More specifically, the estimations are indicative that successful assassinations can increase the likelihood of dynastic succession by approximately 30% to 45%.[213] Likewise, the estimations remain significant after multiple robustness check. This finding also has numerous important implications. First, it shows that political events can have persistent effects in determining the composition of political class. Second, it suggests that dynastic leaders are not necessarily a product of superior genetic endowment of individual leaders. Rather, the evidence is indicative that political shocks in the form of successful assassinations can facilitate such *de fact* inheritance of political power. Third, while Dal Bo et al (2009) identifies that *positive* exogenous shocks to a leader's political power (in the form of winning re-election) matter in facilitating future dynastic succession, the present study notes that *negative* exogenous shocks to a leader's life (in the form of death in an assassination attempt) can too increase the likelihood that a leader will start or continue a political dynasty. This highlights that the *context* of the shock is fundamental in shaping posterior dynastic attainment. In terms of its resemblance with earlier empirical work on political dynasties, the paper complements the findings of Dal Bo et al (2009) by showing that tenure in public office is associated positively with the likelihood that a leader will start or continue a political dynasty. The data set on political leaders with at least one assassination attempt also shows that political leaders with better career pattern are associated with a higher likelihood that a political leader will start or continue a political dynasty, which is also echoed in the analysis of Dal Bo et al (2009).

In terms of caveats, the study relies on a smaller sample size in comparison to Jones and Olken (2009). Nonetheless, given that the study uses a sub-national data set, it enjoys a better comparability of data across different unit of observations. Another key limitation of the present study is that it fails to distinguish separately between the impact of successes and failures of assassination attempt. That is, it might be natural to presume that the successes-

[213]This range is, coincidently, within the estimates of Chapter-5: "Assassination and Political Dynasties" which addresses the same question on a cross national data set. Hence, taken together, the results from these two inquiries of the same intellectual question do make it pragmatic to argue that political assassinations do in fact facilitate the emergence of political dynasties.

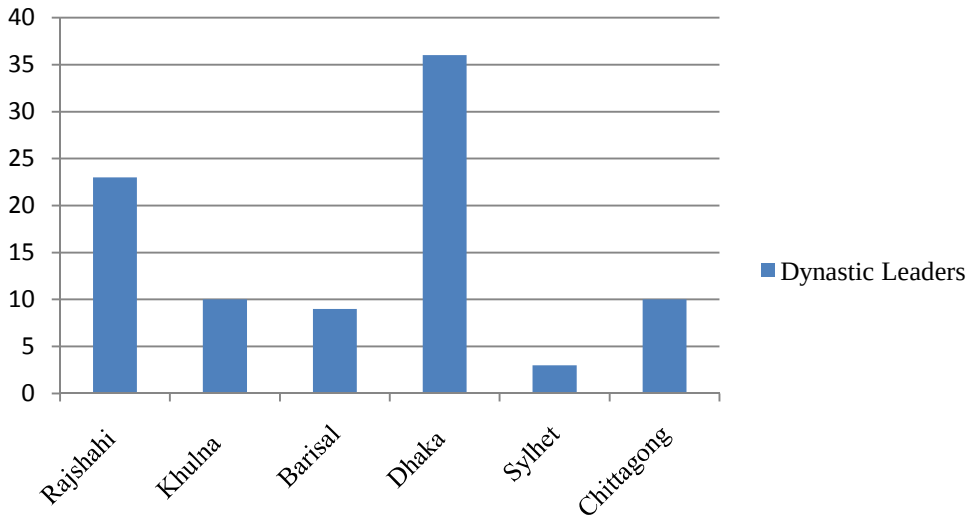
where a leader dies- are more important drivers of the result, but one can argue that failing to die in an assassination attempt can have important implications if such phenomenon is associated with lowering the likelihood that leader will later have a relative in office. Although the present analysis has not rigorously dealt with this issue but it is plausible to intuitively infer that successful assassinations attempts are the major drivers of the computed results. This is because the primary message has support from both the data sets used in this work. Besides, the mentioned brief historical narrative and existing qualitative studies on political assassinations (Ritcher, 1990; Thompson, 2002) do hint that martyrdom of the assassinated leaders might have played an instrumental role in facilitating dynastic successions.

Lastly, the structure and the empirical methodology of the overall analysis provide limited scope for pinpointing the exact causal mechanisms underlying the relationship between political assassinations and the existence of political families. Stated otherwise, are there *conditions* that make an assassination a triggering event for facilitating a dynastic succession? That is, do political leaders need to posses political capital above certain threshold for their assassinations to matter? More importantly, what is the exact role of political parties in aiding dynastic successions after an act of assassination? Thus, future work can shed further insights on the political process that guides dynastic transmission of political power in the event of an assassination, so that a better understanding of the topic is achieved.

Box-4.1: Description of Families producing Three Generations of Leaders	
Chowdhurys	Kafiluddin Chowdhury was a political leader in Awami League and Minister in the provincial government of East Pakistan (Now Bangladesh). His son Dr A.Q.M Badruddoza Chowdhury was the 15th President of Bangladesh. His grandson Mahi B Chowdhury is a former MP.
Mohammed Monsur Alis	Monsur Ali was a Minister from 1972-1975. His two sons - Mohammed Nasim and Mohammed Selim - were also MPs. At present his grandson Mohammed Tanvir Shakil Joy is an MP.
Mollahs	Yusuf Uddin Mollah was a Member of the Legislative Assembly before independence. His son Ahsanul Huq Mollah was also a MP. His grandson Reza Ahmed Bachu Mollah was an MP in the 8th National Parliament.
Osmans	Khan Shaheb Osman Ali was a Member of the Legislative assembly before independence. His son AKM Shamsur Rahman was also an MP. His grandson Nasim Osman is currently an MP from Awami League.
Sheikhs	Bangabandhu Sheikh Mujibur Rahman was the First President of Banladesh. His daughter Sheikh Hasina is the current Prime Minister. His nephew Sheikh Selim and Sheikh Helal are MPs. His grandnephew Sheikh Fazle Noor Taposh is also an MP.
Source: Rashid and Feroz (2002); Interviews	

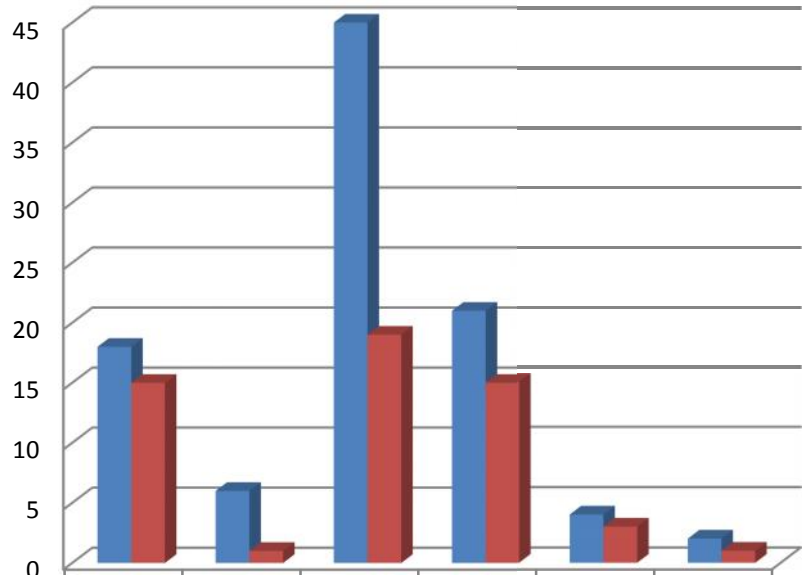
Box-4.2: Politicians from the Sheikh Dynasty and their encounters with Assassination Attempts	
Bangabandhu Sheikh Mujibur Rahman. First President of Bangladesh and Chairperson of Awami League (AL)	Bangabandhu , his sons (Sheikh Kamal, Sheikh Jamal and Sheikh Russel), and his wife were assassinated in a military coup on the 15th of August 1975
Abdur Rab Serniabat Brother in law of Sheikh Mujibur Rahman Minister in AL Government (1971-75)	Serniabat, his daughter and grandson were assassinated in a military coup on the 15th of August 1975.
Sheikh Fuzlul Huq Moni Nephew of Sheikh Mujibur Rahman Founder of the Youth League of AL Editor of the daily newspaper *Banglarbani*	Moni and his wife Arzu were assassinated in a military coup on the 15th August 1975.
Sheikh Hasina Wajed Daughter of Sheikh Mujibur Rahman Chairperson of Awami League (AL) Prime Minister of Bangladesh	Hasina faced a major life threatening assassination attempt on her on the 21st August 2004 when 13 grenades were hurled on her public meeting. Twenty four people died in the incident and more than one hundred people were critically injured.
Sheikh Helal Nephew of Sheikh Mujibur Rahman Member of Parliament (MP)	Helal faced a bomb attack on his election rally on the 22nd September 2001. The incident killed eight people.
Sheikh Fazlul Karim Selim Nephew of Sheikh Mujibur Rahman Member of Parliament (MP)	Selim was with Sheikh Hasina during the grenade attacks of 21st August 2004. He was injured (not critically) after the incident. He also faced an assassination attempt in 1979.
Sheikh Fazle Noor Taposh Nephew of Hasina & son of Sheikh Moni Member of Parliament	Taposh survived bomb attack on him on the 22nd October 2009. His car was damaged, but he escaped without any major injury.
Abul Hasnat Abdullah Nephew of Sheikh Mujib and son of Serniabat Former MP	Hasnat survived the coup of 15th August 1975. He did, however, loose his son (Arif Serniabat) during this event.
Noor-E-Alam Chowdhury Nephew of Sheikh Hasina and Sheikh Selim Member of Parliament (MP)	No recorded assassination attempt on him.

Figure - 4.1: Spatial Distribution of Dynastic Leaders



Source: Author's Computation

Figure - 4.2: Spatial Distribution of Assassination Attempts & Successful Assassination in post 1971 period.



	Barisal Division	Chittagong Division	Dhaka Division	Khulna Division	Rajshahi Division	Sylhet Division
Number of Assassination Attempt	18	6	45	21	4	2
Successful Assassination	15	1	19	15	3	1

Source: Author's Computation

Table- 4.1: Summary Statistics

	N	Mean	Standard Deviation	Min	Max
Post-Relative	536	0.050	0.219	0	1
Pre-Relative	536	0.169	0.376	0	1
Pre-Relative Assassinated	536	0.032	0.175	0	1
Pre-Relative Not Assassinated	536	0.138	0.345	0	1
Lawyer	537	0.138	0.345	0	1
Businessman	537	0.572	0.495	0	1
Military	536	0.065	0.442	0	1
Age*	514	59.2	9.23	30	85
Female	538	0.043	0.203	0	1
Number of Times MP	536	2.24	1.38	1	7
Minister	538	0.236	0.425	0	1
Awami League	538	0.457	0.499	0	1
Bangladesh Nationalist Party	538	0.399	0.490	0	1
Distance from Dhaka	537	176.1	96.6	0	443
Integrated**	538	0.509	0.500	0	1

*The summary statistics for AGE present the estimates for leaders who were alive till 2010

**Integrated is a dummy variable if a parliamentary seat is geographically contiguous to Dhaka or Chittagong

Table- 4.2: Base-Line Results

Dependent Variable: Post-Relative

	1	2	3	4	5
Pre-Relative	0.138***				
	{0.039}				
Pre-Relative Assassinated		0.269**	0.239**	0.236**	0.238**
		{0.111}	{0.099}	{0.099}	{0.098}
Pre-Relative Not Assassinated		0.124***	0.102**	0.101***	0.099**
		{0.042}	{0.038}	{0.038}	{0.037}
Num. Times MP			0.029***	0.029***	0.029***
			{0.008}	{0.008}	{0.008}
Female			0.029	0.029	0.032
			{0.059}	{0.059}	{0.059}
Businessman			0.006	0.0069	0.011
			{0.024}	{0.024}	{0.024}
Lawyer			(-)0.033	(-)0.033	(-)0.029
			{0.029}	{0.029}	{0.029}
Military			(-)0.064**	(-)0.064**	(-)0.061**
			{0.028}	{0.028}	{0.029}
Minister			0.045	0.045	0.047
			{0.029}	{0.029}	{0.029}
Distance from Parliament				(-)0.00005	(-)0.0001
				{0.0001}	{0.0001}
Integrated				(-)0.011	(-)0.009
				{0.021}	{0.02}
Awami League					(-)0.033
					{0.026}
BNP					(-)0.023
					{0.03}
Constant	0.027***	0.0247***	(-)0.047**	(-)0.033	(-)0.0089
	{0.008}	{0.0065}	{0.025}	{0.036}	{0.038}
N	536	536	533	533	533
Adjusted R-square	0.06	0.08	0.12	0.12	0.19
$\delta = \pi$		Prob > F= 0.22	Prob > F = 0.20	Prob > F = 0.21	Prob > F = 0.19

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Table- 4.3: Robustness Checks

Dependent Variable: Post-Relative

	1	2	3	4
Pre-Relative Assassinated	0.231**	0.179*	0.237**	0.323***
	{0.097}	{0.097}	{0.094}	{0.116}
Pre-Relative Not Assassinated	0.097***	0.098**	0.092**	0.113***
	{0.037}	{0.037}	{0.036}	{0.045}
Num. Times MP	0.027***	0.028***	0.025***	0.023***
	{0.008}	{0.009}	{0.009}	{0.009}
Female	0.023	(-)0.011	0.013	0.002
	{0.059}	{0.062}	{0.062}	{0.068}
Businessman	0.008	0.004	0.016	0.017
	{0.023}	{0.025}	{0.021}	{0.023}
Lawyer	(-)0.023	(-)0.021	0.003	0.011
	{0.03}	{0.031}	{0.028}	{0.0318}
Military	(-)0.064**	(-)0.088**	(-)0.072**	(-)0.078**
	{0.029}	{0.035}	{0.035}	{0.037}
Minister	0.046	0.031	0.04	0.0398
	{0.03}	{0.031}	{0.029}	{0.031}
Distance from Parliament	0.000016	(-)0.0007***	(-)0.0007***	(-)0.0007
	{0.0001}	{0.0001}	{0.0001}	{0.0008}
Integrated	(-)0.116**	(-)0.268***	(-)0.266***	(-)0.258
	{0.074}	{0.341}	{0.344}	{0.339}
Awami League	(-)0.037*	(-)0.017	(-)0.023	(-)0.026
	{0.026}	{0.029}	{0.029}	{0.031}
BNP	(-)0.022	(-)0.0007	(-)0.023	(-)0.027
	{0.03}	{0.034}	{0.033}	{0.035}
Constant	0.091	0.223***	0.22***	0.225
	{0.076}	{0.342}	{0.345}	{0.339}
Division Effect	YES	NO	NO	NO
District Effect	NO	YES	YES	YES
Dead Excluded	NO	NO	YES	YES
Born after 1965 Excluded	NO	NO	NO	YES
N	533	533	513	471
Adjusted R-square	0.12	0.12	0.18	0.19
$\delta = \pi$	Prob > F = 0.20	Prob > F = 0.43	Prob > F = 0.15	Prob > F = 0.09*

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Table – 4.4: Summary Statistics for Leaders with at least one Assassination Attempt

	N	Mean	Standard Deviation	Min	Max
Post-Relative	97	0.278	0.450	0	1
SUCCESS	97	0.557	0.499	0	1
Pre-Relative	97	0.144	0.353	0	1
Female	97	0.031	0.174	0	1
Lawyer	97	0.113	0.319	0	1
Military	97	0.031	0.174	0	1
MP	97	0.454	0.5004	0	1
Minister	97	0.206	0.407	0	1
PM-President	97	0.082	0.277	0	1

NOTE: A 'leader' is defined as someone who was either a member of a 'Central Committee' or 'District Committee' of a Political Party.

Table – 4.5: Conducting pair-wise t-test to see group similarity				
	Barely Survived 1	Died 2	Difference 3	P-Value 4
Post-Relative	0.139 {0.054}	0.389 {0.067}	(-)0.249 {0.089}	0.006***
Pre-Relative	0.256 {0.067}	0.056 {0.032}	0.200 {0.069}	0.005***
Female	0.047 {0.033}	0.018 {0.019}	0.028 {0.036}	0.434
Lawyer	0.139 {0.054}	0.111 {0.043}	0.028 {0.068}	0.677
Military	0 {0.000}	0.056 {0.035}	(-)0.056 {0.035}	0.119
MP	0.721 {0.069}	0.241 {0.059}	0.48 {0.09}	0.000***
Minister	0.279 {0.069}	0.148 0.049	0.131 {0.083}	0.116
PM-President	0.069 {0.039}	0.093 {0.039}	(-)0.029 {0.057}	0.689
The table reports the means of each listed individual characteristics for leaders; Standard errors are in parenthesis P-values on differences in the mean are from a two sided un-paired t-test Individual Characteristics are on leaders with at least one assassination attempt (*), (**) & (***) denote significance at 10%, 5% and 1% respectively				

Table – 4.6: Testing Identification Assumption

	Dependent Variable: SUCCESS					
	OLS	OLS	OLS	OLS	OLS	Probit^
	1	2	3	4	5	6
Pre-Relative	(-)0.212*	(-).226**	(-)0.154	(-)0.138	(-)0.137	(-)0.511
	{0.118}	{0.102}	{0.105}	{0.105}	{0.084}	{0.487}
Female	(-)0.016	0.031	(-)0.033	(-)0.079	0.018	0.692
	{0.313}	{0.254}	{0.311}	{0.313}	{0.394}	{1.089}
Lawyer	0.139	0.082	0.054	0.019	0.139	1.53**
	{0.107}	{0.109}	{0.120}	{0.134}	{0.113}	{0.652}
Military	0.105	0.158	0.357***	0.379**	0.653***	
	{0.109}	{0.117}	{0.141}	{0.156}	{0.219}	
MP	(-)0.384***	(-)0.43***	(-)0.424***	(-)0.441***	(-)0.328**	(-)1.59***
	{0.125}	{0.114}	{0.128}	{0.145}	{0.142}	{0.592}
Minister	(-)0.077	(-)0.057	0.041	0.035	(-)0.087	(-)0.413
	{0.111}	{0.097}	{0.119}	{0.134}	{0.134}	{0.673}
PM-President	0.283*	0.185	0.257*	0.288*	0.279*	1.12*
	{0.156}	{0.138}	{0.150}	{0.159}	{0.146}	{0.608}
Avg. Agricultural Wage	(-).004**	(-)0.006***	(-)0.006**	(-)0.005*	(-)0.0002	(-)0.004
	{0.0019}	{0.002}	{0.0023}	{0.002}	{0.002}	{0.009}
Gun					0.591***	3.071***
					{0.143}	{0.859}
Constant	0.848***	0.899***	0.467***	0.338*	(-)0.459	(-)9.21***
	{0.0699}	{0.094}	{0.163}	{0.376}	{0.277}	{1.217}
Party Effect	NO	YES	YES	YES	YES	YES
Divisional Effect	NO	NO	YES	YES	YES	YES
Political Effect	NO	NO	NO	YES	YES	YES
N	94	94	94	86	86	82
Adj. R-square	0.28	0.33	0.38	0.37	0.49	0.55*

(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in the braces

^ Probit estimations dropped the variable Military; *Pseudo R-square

Table – 4.7: Are Assassination attempts mutually exclusive?				
Panel-A				
Dependent Variable: SUCCESS				
	1	2	3	4
Prec. Assassination Attempt T-1	(-)0.074 {0.138}			
Prec. Assassination Attempt T-2		0.084 {0.123}		
Prec. Assassination Attempt T-3			0.002 {0.145]	
Prec. Assassination Attempt T-4				(-)0.239 {0.171}
Party Effect	Y	Y	Y	Y
Divisional Effect	Y	Y	Y	Y
Political Effect	Y	Y	Y	Y
Weapon Effect	Y	Y	Y	Y
N	83	83	79	79
(*), (**)& (***) denote significance at 10%, 5% and 1%. Robust Standard Errors are in the parenthesis.				
Individual and Divisional Characteristics are controlled for in all columns				
Panel-B				
Dependent Variable: SUCCESS				
	1	2	3	4
Prec. Successful Assassination T-1	(-)0.075 {0.156}			
Prec. Successful Assassination T-2		0.047 {0.122}		
Prec. Successful Assassination T-3			(-)0.048 {0.14}	
Prec. Successful Assassination T-4				(-)0.119 {0.159}
Party Effect	Y	Y	Y	Y
Divisional Effect	Y	Y	Y	Y
Political Effect	Y	Y	Y	Y
Weapon Effect	Y	Y	Y	Y
N	83	83	79	79
(*), (**)& (***) denote significance at 10%, 5% and 1%. Robust Standard Errors are in the braces.				
Individual and Divisional Characteristics are controlled for in all columns				

Table – 4.8: Does Assassination Facilitate Emergence of Political Dynasties?				
Dependent Variable: Post-Relative				
	1	2	3	4
SUCCESS	0.291***	0.316***	0.312***	0.25***
	{0.086}	{0.097}	{0.112}	{0.111}
Pre-Relative	0.209*	0.160	0.168	0.143
	{0.121}	{0.134}	{0.132}	{0.124}
Female		(-)0.0317	(-)0.027	0.015
		{0.296}	{0.299}	{0.291}
Lawyer		0.162	0.172	0.142
		{0.127}	{0.132}	{0.123}
Military		0.249	0.244	0.278
		{0.272}	{0.275}	{0.248}
MP		0.077	0.088	0.029
		{0.116}	{0.129}	{0.133}
Minister		0.137	0.126	0.132
		{0.127}	{0.136}	{0.132
PM-President		0.447***	0.444***	0.388**
		{0.139}	{0.139}	{0.145}
Avg. Agricultural Wage			(-)0.0007	(-)0.002
			{0.002}	{0.002}
Constant	0.086	(-)0.048	(-)0.03	0.086
	{0.059}	{0.087}	{0.115}	{0.144}
Party Effect	NO	NO	NO	YES
Division Effect	NO	NO	NO	NO
N	97	97	94	94
Adj. R-square	0.08	0.23	0.21	0.23
(*), (**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Errors are in the braces in all four columns				

Table- 4.9: Robustness Checks

Dependent Variable: Post-Relative					
	OLS - 1	OLS - 2	OLS - 3	OLS- 4	Probit- 5
SUCCESS	0.345***	0.384***	0.465***	0.465***	3.09***
	{0.126}	{0.132}	{0.109}	{0.109}	{0.929}
Pre-Relative	0.115	0.123	0.133	0.139	1.07***
	{0.129}	{0.132}	{0.132}	{0.142}	{0.523}
Female	0.031	(-)0.015	(-)0.048	(-)0.055	(-)2.22*
	{0.259}	{0.293}	{0.283}	{0.287}	{1.185}
Lawyer	0.125	0.117	0.067	0.077	0.093
	{0.100}	{0.108}	{0.111}	{0.125}	{0.445}
Military	0.009	(-)0.021	(-)0.163	(-)0.158	(-)1.27
	{0.274}	{0.281}	{0.347}	{0.35}	{1.503}
MP	0.014	0.129	0.119	0.122	0.441
	{0.125}	{0.133}	{0.134}	{0.137}	{0.572}
Minister	0.005	(-)0.129	(-)0.082	(-)0.088	(-)0.128
	{0.136}	{0.137}	{0.133}	{0.143}	{0.5}
PM-President	0.302**	0362**	0.341*	0.343*	1.779***
	{0.169}	{0.192}	{0.182}	{0.184}	{0.623}
Avg. Agricultural Wage	(-)0.003	(-)0.004	(-)0.005	(-)0.005	(-)0.021
	{0.002}	{0.002}	{0.003}	{0.005}	{0.016}
Constant	0.44	0.423	0.716	(-)0.693	2.076
	{0.234}	{0.236}	{0.376}	{0.436}	{1.59}
Party Effect	YES	YES	YES	YES	YES
Division Effect	YES	YES	YES	YES	YES
Political Effect	NO	YES	YES	YES	YES
Weapon Effect	NO	NO	YES	YES	YES
Born after 1965 Excluded	NO	NO	NO	YES	YES
Sheikhs & Zias Excluded	NO	NO	NO	NO	NO
N	94	86	86	85	82
Adj. R-square	0.28	0.28	0.29	0.28	0.43*

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces in all five columns: *Pseudo R-square

Table- 4.10: Further Robustness Checks

Dependent Variable: Post-Relative				
	OLS - 1	OLS - 2	OLS - 3	OLS - 4
SUCCESS	0.423***	0.422***	0.836**	0.484***
	{0.105}	{0.119}	{0.236}	{0.136}
Pre-Relative	0.222	0.275	0.038	0.163
	{0.158}	{0.164}	{0.179}	{0.167}
Female	0.197*	0.126	(-)0.293	(-)0.42
	{0.116}	{0.108}	{0.29}	{0.481}
Lawyer	(-)0.024	(-)0.182	0.037	(-)0.021
	{0.143}	{0.149}	{0.146}	{0.155}
Military	(-)0.067			(-)0.223
	{0.484}			{0.412}
MP	0.156	0.171		0.066
	{0.136}	{0.146}		{0.179}
Minister	(-)0.122**	(-)0.227*	(-)0.157	(-)0.121
	{0.149}	{0.136}	{0.141}	{0.166}
PM-President	0.547***	1.08***	0.341	0.378
	{0.178}	{0.1}	{0.228}	{0.179}
Avg. Agricultural Wage	(-)0.005	(-)0.004	(-)0.004	(-)0.004
	{0.005}	{0.005}	{0.005}	{0.005}
Constant	0.619	0.71	1.135**	0.764
	{0.419}	{0.449}	{0.398}	{0.499}
Party Effect	YES	YES	YES	YES
Division Effect	YES	YES	YES	YES
Political Effect	YES	YES	YES	YES
Weapon Effect	YES	YES	YES	YES
Born after 1965 Excluded	YES	YES	YES	YES
Sheikhs & Zias Excluded	YES	YES	NO	NO
Exclude Coups	NO	YES	NO	NO
Exclude non-MPs	NO	NO	YES	NO
Born after 1950 Excluded	NO	NO	NO	YES
N	79	70	41	63
Adj. R-square	0.27	0.16	0.59	0.29

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces in all four columns

5. Assassination and Political Dynasties

Abstract

This paper investigates whether political assassination of national leaders facilitates the emergence and endurance of political dynasties. To this end, the paper uses biographical data on 442 national leaders from 65 countries who have ruled (at least once) as an executive head of their respective country in post 1950 to 2005 period. Moreover, the base-line results suggest that assassinated leaders are on average associated with a higher likelihood that they will later have a relative enter office. This association is robust for various changes in the econometric specifications. Furthermore, in order to identify causality, the paper employs the data set of Jones and Olken (2009) which has information on more than 190 national leaders from 93 countries in post 1875 to 2003 period who had *at least one* serious assassination attempt on their life. I use their identification assumption, that although attempts on a national leader's life may be driven by historical circumstances, conditional on trying to kill a national leader, the *failure* or *success* of assassination attempt can be treated as exogenous. Consequently, the results indicate that successful assassinations do in fact facilitate the emergence of political dynasties by increasing the likelihood that a leader will later have a relative in office. These findings remain consistent when multiple robustness checks are conducted. I also check for the possibility that successful assassination facilitates certain kind of dynastic successions. The estimations suggest that assassinations strongly explain immediate dynastic succession at the highest political office. Lastly, in line with Dal Bo et al, 2009, the results provide some support for the self-perpetuation hypothesis: that is, leaders with a longer tenure are on average associated with higher likelihood of having a relative later in office.

Key words: Assassination, Immediate Dynastic Succession, Martyrdom.

5.1 Introduction: Does political assassination matter?

"On the street of New Delhi a women wails that they have killed mother India…why not kill us too" reports a journalist while capturing the aftermath of Mrs. Indira Gandhi's assassination- the first female Prime Minister of India. Indira Gandhi and members of her family (her father and son) not only ruled India for 36 years, but two members of this family have been unfortunate enough to have a violent end. Political assassination, brutal it maybe, is an event that has shaped the political history of various countries. From Julius Caesar to John F Kennedy, from Abraham Lincoln to Mahatma Gandhi - statesman of great influence and power have often fallen victim to conspiracies that have resulted in their assassination, and many others have survived assassination attempts narrowly. In fact, it is shown that a national leader has been assassinated in nearly two out of every three years since 1950, and its impact on institution and intensity of war is significant (Jones and Olken, 2009).

Despite these facts, what remains little understood in political economy is how such political phenomenon shapes the composition of the political class. This is because a political segment masterminding such an act often intends to induce a shift in power by terminating the ruler. However, whether bringing an end to the King's life ultimately delivers the plotter their desired outcome depends on various unforeseen factors. To be more specific, it is observed on various occasions that the impact of assassination is often neutralized by implementing a dynastic succession which provides continuity to the ruling coalition. For example, after the assassination of Mrs. Gandhi, her son Rajiv was immediately sworn in as the Prime Minister of India making him the youngest person ever to occupy the post (Katherine, 2001). Similarly, heirs of assassinated leaders are playing a pivotal role in the political decision making process of various countries. Hence, this makes it interesting to investigate if political assassinations contribute toward the emergence and endurance of political dynasties by allowing *de facto* inheritance of political power.

It is relevant to mention that, identifying the effects of political assassination on the likelihood that a leader will start or continue a political dynasty is both theoretically and empirically difficult. More specifically, the relationship between political assassination and political dynasties is ambiguous. That is, a political assassination may either facilitate or hinder the chances that political dynasty will emerge. As a result, the overall impact of political

assassination (if there is any at all) depends on two opposing forces. I call this the *martyrdom-effect* and the *disruption-effect*. The martyrdom-effect suggests that assassination can often create a martyr out of the assassinated leader. This, in effect, can evolve into a *political asset* for the victim's family as it can facilitate a dynastic succession by drawing sympathy from key political groups (such as voters) and etc. Conversely, political assassination can also hinder the emergence of political dynasties if the overall force is dominated by the disruption-effect. This effect notes that political assassination of a national leader might disrupt the potential dynastic heir's entry to political stream through inducing fear of a career in public life. Thus, as these forces (martyrdom-effect & disruption-effect) are likely to trigger different behavioral pattern, the overall relationship between political assassination and the emergence of political dynasties remains a subject of empirical examination.

Consequently, in this paper, I compile a core data set on 442 leaders in 65 countries who held office[214] at least once between 1950 and 2005.To pinpoint a baseline list of national leader for each country in post 1950 period, I use the Archigos dataset, v2.5 (Goemans et al, 2007), which identifies the primary national leader for each country at each point in time from 1950 to 2004. The purpose here is to see if leaders who died in assassination are associated with a higher likelihood of starting a political dynasty. This strategy, however, fails to pinpoint a causal link between the variables of interest. This is because the relationship between assassination and the probability that a leader will start a political dynasty might suffer from unobserved individual or family heterogeneity, since political leaders with influential family connections and charisma (i.e. traits that can be conducive to dynasty building) can attract assassination attempts. This makes it difficult to isolate empirically whether there is a casual impact of assassination on the emergence of political dynasties or the results display a mere correlation.

To overcome this problem, the paper employs the empirical strategy and the data used by Jones and Olken (2009) to identify the potential impact of assassination on institution and war. That is, the paper exploits the inherent randomness in the *success* or *failure* of assassination attempts to identify the effects of assassination. Moreover, the identification assumption is that, although attempts on a national leader's life may be driven by political circumstances or individual ability, conditional on trying to kill a national leader, the failure or success of an assassination

[214] By leaders I am referring to (I) Prime Ministers in Parliamentary regimes, (II) Presidents in Presidential system, (III) Chairman of the Party in communists states (IV) Kings in Monarchies, (V) De facto leaders in special circumstances (Example- Omar Torrijos of Panama)

attempt can be treated as exogenous.[215] In other words, pure chance has a role in determining if a leader barely survived or died in an assassination attempt. To this end, this work uses data from Jones and Olken (2009) on more than 190 national leaders with at least one assassination attempt between 1875 and 2003, and it tries to pinpoint that conditional on an attempt taking place, whether or not the outcome of the attempt (which is a product of chance) partially determines the likelihood that a leader will start or continue a political dynasty. In that sense, it examines (to an extent) if a negative exogenous shock to national leaders' political life has persistent effects by shaping posterior dynastic attainments.

The remainder of the paper is organized as follows. The next section gives an overview of the literature on the causes and consequences of political assassination, and some studies surrounding political dynasties. It also provides a brief discussion of the possible mechanisms through which assassination can influence the prevalence of political dynasties. Section 5.3 discusses data and the empirical model that I have used initially for the analysis plus some base-line results. Section 5.4 will present the identification strategy, results from the regressions, and conduct robustness checks. In section 5.5, I explore some insightful extension to the overall analysis. Lastly, section 5.6 concludes and provides direction for future work.

[215] For Example, Hitler's early departure from the beer hall in 1939, which may have saved his life from the waiting bomb, came only because bad weather prevented him from flying back to Berlin, forcing him to leave early for a train (See Jones and Olken (2009) for more examples).

5.2 Literature Review and Theory

5.2.1 Literature Review

In 1957, Anthony Downs wrote a path-breaking book titled*An Economic Theory of Democracy* in which he argued that two parties competing in a perfectly competitive democracy will end up proposing same policies in order to attain the highest prize of politics- the office. The outcome is not only the Nash Equilibrium[216] of the two-party game in a right-left policy world, but it essentially means that if the incumbent party fails to form a government by winning an electoral majority, the contending party will pursue the same program in the median of citizens' preference distribution. If this proposition holds, then one can assert that there is no real incentive for a killer to undertake an act of assassination if the sole purpose is to induce a shift in policy by implementing the violent measure. This notion, however, merits little acknowledgement if one carefully analyses important historical events where political assassinations of national leaders have a fair share of representation. For example, famous instances of assassination in ancient Europe are the murder of Athenian ruler Hipparox (514 BC), Great Phillip II of Macedonia (336 BC), Julius Caesar (44 BC), and a large number of Roman Emperors.[217] In more recent times, we witnessed the assassinations of four American presidents (Abraham Lincoln 1865, James A. Garfield 1881, William McKinley 1901, and John F. Kennedy 1963). Other notable political assassinations include the Spanish Prime Minister Luis C. Blanco in 1973, the Egyptian president Anwar al-Sadat in 1981, the Indian PM Indira Gandhi in 1984, the Swedish PM Olof Palme in 1986, former Indian PM Rajiv Gandhi 1991, the Israeli Prime Minister Yitzhak Rabin in 1995, the Serbian PM ZoranDjindjic in 2003, and former Pakistani PM Benazir Bhutto in 2007.[218] Hence, the mentioned list of assassinated

[216] Nash Equilibrium is a solution concept in game theory. A game is at Nash Equilibrium when each player is choosing the strategy that maximizes her return, given the strategies of the other player in the game. For a better understanding of the concept, please see: Nash (1951).

[217] Just to name a few: Caligula (41 AD), Claudius (54 AD), Vitellius (69 AD), Galba (69 AD), Domitian (96 AD), Commodus (192 AD), Didius Julianus (193 AD), Geta (212), Caracalla (217 AD). For more information,
please see http://www.allempires.com/article/index.php?q=fate_of_roman_emperors

[218] This list does not include several other significant assassinations such as Mahatma Gandhi (1948), Martin Luther King (1968), Robert Kennedy (1968), Aldo Moro (1978) and Piet Fortuyn (2002).

leaders display that political assassinations[219] of national leaders have occurred across space and time.[220]Even so, in empirical literature very few systematic social-scientific analysis of political assassination exists.

On the causes of political assassinations, few studies have emerged which examine the role of domestic political systems. That is, the likelihood of political assassination can be explained in part by the manner in which an executive rises to and remains in office, the amount of power he or she wields, and the level of repressiveness with which he or she rules. In particular, weak leaders with repressive nature in nondemocratic systems are at greater risk of assassination (Iqbal and Zorn, 2006). In addition to this, it is also noted that extended institutional and government quality significantly lowers the probability of politicians being killed (Frey and Torgler, 2008). In contrast, assassinations are also explained by some scholars as a random act of violence (Freedman, 1965; Slominich and Kantor, 1969; Wilkinson, 1970).

This paper, on the other hand, belongs to the stream in the literature that aims to understand the political consequences of assassinations. But, before this is done it is important to understand whether national leaders[221] at all influence the course of events in a country's political arena. On this topic, professional historians and political thinkers have emerged with diverging opinions. For example, Tolstoy's historical theory perceives leaders as an insignificant entity, making the historical figures look like mere ex-post justifications for events wholly beyond any individual's influence (Berlin, 1978). Karl Marx, in a relatively less dismissive approach, argues that leaders must choose from a historically determined set of choices, which implies that they have much less freedom to act than they think they do (Marx, 1852).

The "Great Man" hypothesis, alternatively, points out that the evolution of history is largely determined by the idiosyncratic, causative influences of certain individuals. To be more specific, Thomas Carlye coined this terminology while studying the French Revolution (Caryle,

[219] Political Assassination is generally defined as the killing of a public figure for political reasons; although it is an assault against an individual, the motives surrounding an act of assassination are necessarily of a political nature (Khatchadourian 1974).

[220] The first significant noted assassination victim was probably the Egyptian pharaoh Amenemhet I, who founded the Twelfth Egyptian Dynasty in 1986 B.C. Amenemhet gained his power by an act of usurpation, thus perhaps setting an example for a group of courtiers who conspired in his killing. For more information, please see http://www.reshafim.org.il/ad/egypt/history12-17.htm

[221] Throughout this article, the term *national leader* is used to refer to the individual in whom executive power rests; this might in actuality be a King, president, prime minister (in a parliamentary system), or other effective chief executive. This definition is thus similar to other contemporary studies (e.g., Jones and Olken 2009; Goemans, Gleditsch, and Chiozza 2007; Iqbal and Zorn 2006).

1837, 1859). Weber, along similar lines, saw a role for 'charismatic' leaders in specific circumstances (Weber, 1947). That is, leaders can matter when national bureaucracy or social norms allows them to make a difference.[222]

Hence, if leaders matter, then their assassination can contribute to important changes in a country's political sphere, and historical analysis of individual cases has often suggested that it very much does. For example, the murder of Archduke Ferdinand in 1914 by a Serbian nationalist is often described as the triggering event of World War I. Besides, the assassination of President Habyarimana may have unleashed the Rwandan genocide, and historians have argued that the Vietnam War was prolonged by the assassination of President John F Kennedy (Halberstam, 1972; Jones, 2003). However, empirical analysis of this respective topic is still in its embryonic form. This is not to say that political assassinations have gone unnoticed by social scientists; in fact existing work on assassination of politicians takes on a wide range of form. That is, in addition to historical analysis of the events themselves (Haykal1983; Posner 1993; Raj 2001; De Witte 2001), systematic social-scientific analysis on the causal effect of political assassination has tended to examine the social impact of assassination on public opinion (Greenberg, 1964; Hartnett and Libby, 1972; Angermeyer and Matschinger, 1995; Esaiasson and Granberg, 1996; Yuchtman-Yaar and Hermann, 1998; Raviv et al, 1998; Peri, 2000; Kilingman, 2001), crime (Berkowitz and Macauley, 1971) and political socialization (Orren and Peterson, 1967; Siegel, 1977).

In terms of empirical work, AsafZussman and Noah Zussman (2006) find evidence that assassinations of senior members of Palestinian organizations affect the returns from Israeli capital markets. Likewise, ZaryabIqbal and Christopher Zorn (2008) analyse all assassinations of heads of state between 1952 and 1997, and state that assassinations' effects on political stability are greatest in systems in which the process of leadership succession is informal and unregulated. Similarly, Benjamin F. Jones and Benjamin A. Olken (2009) used a new data set of assassination attempt on all national leaders from 1875 to 2004 to identify the effect of assassinations on institutions and war. Thus, this work belongs to the empirical literature on the consequences of political assassination as it complements existing literature by trying to understand whether such events contribute in shaping the composition of the political class by

[222]Some contemporary studies also allow national leaders to matter for facilitating economic growth (Jones and Olken 2005), but their actions are perceived to be constrained by institutions and electoral pressure (see, for example, Lee et al, 2004; Levitt, 1996; Poole and Rosenthal, 1984; Kalt and Zupan, 1984).

facilitating the rise of political dynasties (Casseli and Morelli, 2004; Dal Bo and Di Tella 2003; Dal Bo et al. 2009; Besley, 2005). On a broader note, this paper also speaks about the literature investigating the consequences of political conflict (Collier and Hoeffler, 2002; Alesina and Perotti, 1996; Alesina et al, 1996; Mauro, 1995; Barro, 1991).

The paper is also related to the literature on hereditary succession in political arena (Brownlee, 2007; Schatz, 2004; Thomson, 2002; Richter, 1990), and the self perpetuation of political dynasties (Dal Bo et al, 2009; Hess, 1997; Brandes et al, 1997; Camp 1982). Besides, since econometric analysis has primarily focused on the role of institutions and an individual characteristics in explaining the variation in the endurance of political dynasties, the possible influence of political events (such as assassination) in determining dynastic transmission of political power is probably absorbed by the error term. Therefore, this studycontributes to the existing literature on political dynasties by scrutinizing the role of political assassination of national leaders in determining their emergence and continuing existence. Finally, the paper also speaks about the role of chance in history. That is, in wide historical assessment, an idea has emerged that small element of luck may have the capacity to change national political system, and contribute to other outcomes (Merriman, 1985; Boorstin, 1995; Ferguson, 1999). This paper also shares some resemblance with earlier work that points out the role of historical chance in the initial shaping of institutions, whether it is the wind pattern (Feyrer and Sacerdote, 2006) or disease environment (Acemoglu et al. 2001).

5.2.2 Theory: Political Assassination *or* Political Asset?

Assassinations of national leaders have occurred throughout time in diverse political landscapes. This makes it interesting to inquire how such events shape composition of the political class, and what consequences it bears for the victim's family. This is because it is observed on numerous occasions that dynastic heirs of assassinated national leaders often play a pivotal role in their country's political arena. Besides, the impact of a political assassination is also often neutralized by implementing an immediate dynastic succession so that the incumbent coalition prevails.[223] In contrary to these outcomes, successful assassinations of national leaders have also sealed off the political life of many families.[224]

[223] After the assassination Mrs Indira Gandhi, her son Mr Rajiv Gandhi was immediately sworn in as the Prime Minister of India-making him the youngest person ever to occupy such post. This is also true for Laurent Kabila of DR Congo, whose assassination also triggered an immediate dynastic succession.

As a result, in order to identify the effects of assassination on the political fortune of a victim's family, it is important to disentangle and examine the possible forces that come into action after an act of assassination. More specifically, if the consequences of a political assassination on the political future of a deceased leader's family are to be studied, then it is important to identify the *emotion* that emerges among the electoral or in key political groups after a national leader is assassinated. This is because if the assassination of the national leader makes him or her a martyr among key political player(s), then such a political image can work as a *political asset* for the deceased leader's family as it might allow them to ensure a dynastic succession. I, thus, call it a 'martyrdom-effect'. This argument is also reflected in the qualitative analysis of female dynastic leadership in South and Southeast Asia, which highlights that martyrdom of male counterparts (husband or father), has played a pivotal role in facilitating the rise of female dynastic leaders (Ritcher, 1990; Thompson, 2002).

Dynastic successions of such nature are also facilitated if the deceased leader (before his demise) attempted to solve the "crown-prince problem". That is, according to Herz (1952), the "crown prince problem" arises when by grooming a successor a ruler creates a potential rival in his own power coalition. This is because as the ruler's high-ranking associate (who is groomed to be successor) accrues more power, he becomes more capable of mounting a successful challenge and potentially more tempted to venture such a move. To neutralize such threats, Tullock (1987) in his book-length treatment of autocratic rule hypotheses that by grooming his son for succession, the dictator may resolve the crown-prince problem, affording mutual security to incumbent and appointee while dispelling the surrounding elite's apprehension of a power vacuum. Rulers, thus, prefer sons over alternative figures who might be more inclined to hasten the succession through coup attempts or assassination. If this rationale holds true, then assassinating a leader (who has already groomed a potential successor from the family) might bear little success since the potential heir from the deceased leader's family will immediately occupy the top office to neutralize the adverse consequences of the incident.[225] So, if this line of

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[224] For example, in Togo, Sylvanus Olympio's family members have never returned to state power after he was assassinated in 1963.This was probably due to the fact that GnassingbéEyadéma (who toppled SylvanusOlympio's government) ruled Togo for 38 years. And after his demise, his son Faure Gnassingbé immediately succeeded him for the top office.

[225] This argument presumes that the assassination is not coupled with a successful coup which topples the existing power coalition.

reasoning holds, then one can expect political events such as assassinations of national leaders to 'back-fire' in the sense that rather than eliminating the influence of the national leader, the event only re-boosts the political life of the deceased leader's family.

In contrary to the previous arguments, political assassination can also hinder the continuing existence of political dynasties if the overall force is dominated by what I call the disruption-effect. In other words, the act of assassination might disrupt the injection of dynastic successors into the political stream as the violent incident-the assassination of the national leader- might discourage the future heir from taking up political life. Additionally, this disruption-effect might be particularly strong if the assassination is coupled with a coup that topples the existing power coalition. This is because the new regime can potentially seal off the return of the dynastic successor if they are able to consolidate their power to facilitate a long tenure in office. For example - after the assassination of Rafael Trujillo (who led Dominican Republic for three decades) in May 1961, the CIA interfered extensively to ensure that Trujillo's family would not retain power. This ultimately made Trujillo's son Ramfis (who was the head of the armed forces) to resign and leave for a gilded exile. (Chehabi and Linz, 1998).

Thus, to find out the net effect of assassination on the dynastic transmission of political power, the following sections undertake the required empirical effort.

5.3 Data and Methodology

5.3.1 Data Description.

The aim of this paper is to see whether political assassination in any way facilitates or hinders the emergence or endurance of political dynasties. To this end, I look into the biographies of 442 national leaders from 65 countries who ruled as an executive head of their respective countries in post 1950 period. To establish a baseline list of national leader for each country in post 1950 periods, I use the Archigos dataset, v2.5 (Goemans et al, 2007), which identifies the primary national leader for each country at each point in time from 1950 to 2004. This data set identify the manner by which rulers enter and leave political power, the post-tenure fate of the ruler, as well as other personal characteristics (such as their relation to other past leaders and whether or not did they die in an assassination). Information on individual characteristics and the political events faced by a national leader during their lifetime are also taken from a wide range of e-sources listed in Appendix-3B. The aim is to identify the exact combination of

individual characteristics and political events faced by a national leader during their lifetime that facilitates the emergence of political dynasties. Figure-5.1 presents the spatial distribution of dynastic[226] leaders across various regions. It can be seen that most dynastic leaders are from Asia (both *South Asia* and *Rest of Asia*), and no dynastic leaders are from the continent of Australia. This is also true for the number of assassinated leaders, with the exception that no national leaders (covered in the sample) from the region of Rest of Asia were assassinated.

To characterize political dynasties, two indicator variables are created. *Pre-Relative* and *Post-Relative.*[227] The former is equal to one whenever a national leader had a relative[228] entering office before he or she did, and zero otherwise. The latter is equal to one whenever a national leader has a relative entering office afters he or she did, and zero otherwise. From Appendix Table-A5, we can see roughly 13.5 % percentage of national leaders had a previous relative in office (Pre-Relative=1), and 14.2 % had a posterior relative in office (Post-Relative =1). This table also shows that approximately 6% of national leaders in the sample were assassinated, which is measured by a dummy variable *Assassinated.*[229] This variable is equal to one if the leader (i) died in an assassination an zero, otherwise. To study other characteristics, the following indicator variables are used. Long-Term is a dummy variable equal to one if a leader cumulatively stayed in power for more than 10 years, and zero otherwise. *Authoritarian* is an indicator variable equal to one if the national leader was a military dictator or a civilian premier who ruled as a *de facto* ruler. *Female* is an indicator variable equal to one is the national leader is a woman. *First-President/PM* is an indicator variable equal to one if the national leader is the first president/prime-minister of his or her country. *Toppled in Coup* is an indicator variable equal to one if the national leader was toppled in coup d'etat during his or her tenure.[230]*War*

[226] A dynastic leader is an individual who belongs to a family which has at least two members who occupied the office of the executive head of the state.

[227] This method was previously employed by Dal Bo et al (2009) to see empirically whether self perpetuation exists among political dynasties of United States Congress.

[228] Anyone with a biological or social connection to the leader is considered a relative, For example- Wife, Brother, Son, Daughter, Cousin, Grandson, Son-in-Law, Brother-in-law, etc

[229] A list of all assassinated leaders is provided in Box-5.1. Moreover, a list of all natural deaths or accidents in office is displayed in Box-5.2 Note that the case of President Zia-ul-Huq of Pakistan is coded as an accident, even though his death in a plane crash has raised suspicions of a possible assassination. Furthermore, Jones and Olken (2005) also classified Zia-ul-Huq's death as an accident in their analysis of the question: do leader matter?

[230] Information on coups are taken from the following source: http://www.jonathanmpowell.com/coup-detat-dataset.html

Leader is an indicator variable equal to one if the national leader led his or her country through a state of war/civil war. *Lawyer* is an indicator variable equal to one if the national leader had a law degree from university. *Military* is an indicator variable equal to one if the national leader had any exposure to military training or participated in any sort of combat, such as guerrilla warfare, actual war, armed independence struggle etc.[231]

5.3.2 Methodology.

As mentioned above, theoretically the overall relationship between political assassination and political dynasties is ambiguous, as it depends on two opposing forces: martyrdom-effect versus disruption-effect. The paper approaches to model the variation in the emergence or endurance of political families across national leaders of various countries as a function of individual characteristics of the national leaders across countries. This is done so that one can detect the possible effects of political assassination on the likelihood that a national leader will start or continue a political dynasty. Therefore, the following base-line linear probability model[232] is estimated:

$$Post\text{-}Relative_i = \alpha + \delta Assassinated_i + + \beta \underline{X}_i + \gamma_C + \zeta_T + \acute{\varepsilon}_i$$

As stated earlier, $Post\text{-}Relative_i$ is a dummy variable equal to one if national leader (i) has a relative in the office of the executive head of state in the future, and zero otherwise. The variable $Assassinated_i$ is a binary variable which is equal to one if the leader was assassinated, and zero otherwise.[233] Moreover, δ is the key parameter of interest, which links endurance of political dynasties to the assassination of national leaders. X_i is a vector of other covariates measuring the variation in individual characteristics across national leaders and the political

[231] To provide an idea about the structure of the data, a small segment of the employed data set is depicted in Appendix Table-A8.

[232] Note: To test the robustness of the results, I have also employed Probit model to see whether the results survive the change in econometric modelling.

[233] This definition constitutes assassination of leader while they are in office, or when they are not in office.

events faced by them during their life time. The coefficients γ_C are country fixed effects and ζ_T are five-year macro effects.[234] Lastly, ε_i is the random error term.[235]

Furthermore, it is important to note that the mentioned empirical strategy can only detect a correlation between the assassination and the endurance of political dynasties. This is because the employed empirical technique is not capable enough to ensure that the variation that is witnessed in the explanatory variable is completely exogenous. Hence, any relationship detected between *Assassinated*$_i$ and *Post-Relative*$_i$ can simply display a correlation driven by unobserved family heterogeneity which is not controlled by the employed econometric specification. Nevertheless, identifying a strong correlation between the variables of interest remains crucial before any quest for identifying causality is initiated.

5.3.3 Base - Line Results.

I now turn to estimating the stated base-line econometric specification, the results of which are shown in Table-5.1.[236] Column-1 shows that there is a strong positive association between being assassinated and the likelihood that a national leader will *later* have a relative office. The coefficient for *Assassinated* is positive and significant at 1%, displaying that national leaders who die in an assassination are on average more likely to have a relative later in office. The magnitude of the coefficient is 0.356, which indicates that assassinated national leaders are on average associated with an approximately 35 percentage point greater likelihood of having a posterior relative in office. This lends some support to the notion that political assassination can often turn into a political asset for the deceased leader's family as the incident becomes a political tool which can help an heir to achieve a political succession. However, this does not mean that observed relationship is in anyway causal. This is because the results are likely to exhibit a simple correlation which can be driven by unobserved family heterogeneity. Column-2 provides a qualitatively similar result when I control for additional individual characteristics

[234] In essence, there are 5-year time dummies controlling for common time shocks at the time of first entry of the leader to the office.

[235] The empirical design uses a 'national leader' as a unit of observation.

[236] In order to carry out the empirical examination, I omit three observation where there exists a possibility (or evidence) that 'in-house' rivalry between family members existed. These are, (I) King of Saudi Arabia Faisal bin Abdul- Aziz Al Saud was assassinated by his nephew Faisal bin Musaid. (II) Former President of Togo, Sylvanus Olympio, was apparently toppled by his brother-in-law, Nicolas Grunitzky (III) President of Bolivia, Lidia Gueiler Tejada, was toppled by her cousin, Luis Garcia Meza Tejada

like age at entry, gender, first-President/PM, authoritarian etc. In column-3, the regression incorporates 5-year specific time effects, which controls for common macro shocks to all leaders entering office for the first time during each five year interval since 1950. Additionally, in column-4, I control for country specific effects, and the coefficient for *Assassinated* remains positive and significant at 1%,

On the role of other factors, the coefficient for *Long-Term* is positive and significant at 1% in column-1 & 2, and 5% in column-3. This provides some support to earlier findings of Dal Bo et al (2009), which suggests that holding power longer increases the possibility of having a relative later in office. This result, however, fails to find significance in column-4 when I incorporate country specific effects. A similar pattern also exists for dynastic descendants of national leaders, indicating that dynastic national leaders (i.e Pre-Relative=1) are associated with a higher likelihood of having a relative later in office. This finding is also in line with Dal Bo et al (2009) which views that dynastic congressmen in U.S are more likely of continuing the political dynasty by having a posterior relative in office.

In Table-5.2, I conduct some robustness checks to see the strength of the computed estimations. In all regressions in Table-5.2, I limit the sample by only focusing on leaders with a cumulative tenure of less than 10 years. This has two rationales. First, it helps address (to an extent) a possible mechanical relationship between *Assassinated* and *Long-Term*, since it is conceptually clear that assassinations will restrict the total tenure a leader might have availed.[237]Second, it allows better comparability of the unit of observations as the regressions use data on leaders with similar exposure to state power. From column-1, one can see that the coefficient for *Assassinated* remains positive and significant at 1%. In column-2, I omit national leaders born after 1930 to account for the censoring that occurs because national leaders at the end of the sample period have less time to form their own political dynasties. With this changethe coefficient for *Assassinated* remains positive, but it is no longer significant at 10%. Column-3 further addresses this concern by omitting leaders who are alive (as of 2010), since dynastic successions at the highest political office are (by convention) more likely for leader who

[237] In practice, however, this concern is mitigated by the fact that some national leaders are assassinated when they are no longer in state power. For example, former President of Argentina Pedro Aramburu was assassinated in 1970, even though his political career was virtually over after his *de facto* rule of Argentina between 1955-1958. Besides, Appendix Table-A6 also shows that the simple correlation between Long-Term and Assassinated is not significant at 5%.

ceasesto exist.[238] The relationship between the variables of interest is now significant as the relevant coefficient is positive and significant at 5%. To address problems surrounding possible correlation of error terms of national leaders from the same family, in column-4 I omit national leaders who are dynastic descendants of past national leaders.[239] The results, however, remain qualitatively unchanged. Column-5 shows that similar estimations arises from a probit specification. Lastly, in column-6, I control for additional individual characteristics like professional affiliation (lawyer & military), previous public office experience, and war leader.[240] The results, nonetheless, remain similar.

Hence, a key message that one can infer from the base-line results is that leaders who are assassinated are on average associated with a higher likelihood that they will have a posterior relative in office. This message remains consistent for various econometric specification and inclusion of important covariates, and it provides some support to the notion that assassinations matter in shaping dynastic outcomes. As argued above, the computed results can be driven by unobserved family or individual heterogeneity. To address this, the paperin the following section uses the data set and the identification strategy of Jones and Olken (2009) to isolate the possible causal role of assassination in determining dynastic attainments in political domain.

4. Identification Strategy.

4.1 Empirical Approach and Data

The econometric identification of a causal relationship between political assassination and the likelihood that a national leader will have a posterior relative in office is complex. This is because individual leaders with the qualities (or abilities) conducive to dynasty formation can attract assassination attempts. This makes it difficult to find out empirically if there is a causal impact of assassination on the emergence of political dynasties since the results may simply display a mere correlation which can be driven by the unobserved family heterogeneity. To overcome this problem, the paper adopts a simple empirical strategy employed by Jones and

[238] This statement however is violated in many instances. For example, President George Bush endorsed his son's George W Bush's campaign for office. This is also true for President Nestor Kirchner who moved aside to pave way for his wife Cristina Kirchner, which ultimately resulted in an immediate dynastic succession at the highest political office of Argentina. For more information see: http://www.globalpost.com/dispatch/argentina/101027/nestor-kirchner-dies).

[239] In some cases both are covered in the sample.

[240] These variables are constructed after reviewing multiple e-sources listed in Appendix- 3B

Olken (2009) to identify the potential impact of assassination of national leaders on institution and war. In other words, the paper exploits the inherent randomness in the *success* or *failure* of assassination attempts to identify the effects of assassination on the probability that a leader will start or continue a political dynasty.

Moreover, the identification assumption is that, although assassination attempts on a national leader's life may be an outcome of unobserved individual traits, conditional on trying to kill a national leader, the failure or success of assassination attempt can be treated as plausibly exogenous. For example, Jones and Olken (2009) argued that Hitler's early departure from the beer hall in 1939, which may have saved his life from the waiting bomb, came only because bad weather prevented him from flying back to Berlin, forcing him to leave early for a train. Similarly, Ronald Reagan only survived the assassination attempt on him in 1981 because the bullet missed his heart by less than one inch (Reeves, 2005).Hence, if pure luck has some role determining if a leader survives an assassination attempt or not, then one can test the impact of dying in an assassination attempt in comparison to barely surviving an assassination attempt on various socio-political phenomenon while controlling for relevant covariates. To this end, this work uses data[241] on a large number of publicly reported assassination attempts on national leaders (previously used by Jones and Olken (2009)).More precisely, it tries to identify that conditional on an attempt taking place, whether or not the outcome of the attempt partially determines the likelihood that a national leader will later have a relative enter office. This new data set has information on more than 190 national leaders from 93 countries in post 1875 period who had *at least one* serious assassination attempt on their life. Therefore, in the main specification, I estimate an OLS regression of the form:[242]

$$Postrelative_i = \alpha + \delta Success_i + \partial X_i + \gamma_r + e_i$$

[241] This data set on assassination attempts was constructed after consulting the archives of three major newspaper: *The New York Times*, *The Washington Post*, and *The Wall Street Journal*. Excluded cases are coup d'etat in which the murder or attempted murder of the leader was conducted by an individual and or group in an attempt to seize power for themselves. 'Uncovered plots" to assassinate national leaders are also excluded, limiting the data set to cases in which the would-be actually undertook the attempt. Furthermore, the Data set is also restricted to only "serious attempts" which is defined as those cases in which the weapon (gun, bomb) was actually discharged, as opposed to cases where the attempt was thwarted prior to the weapon being used. For more information on the data see Jones and Olken (2009).

[242] To provide an idea about the structure of the data, a small segmented of the employed data set is depicted in Appendix Table-A9.

where (*i*) indexes a leader-year in which an assassination attempt occurred. The dummy variable $SUCCESS_i$ is equal to one if the national leader (i) dies from the assassination attempt and is zero otherwise. As noted earlier, $Post\text{-}Relative_i$ is a dummy variable equal to one if national leader i has a posterior relative in the office, and zero otherwise. The identification assumption used suggests that the indicator variable $SUCCESS_i$ can be treated as exogenous conditional on observables (controlled in the vector X_i).

Then E (e / SUCCESS, $\underline{X}$) = 0, and the average treatment effect can be writ/ritten as:

$$\delta = E(Postrelative|\ Success = 1, X) - E(Postrelative|SuSuccess = 0, X) \quad X)$$

The identification assumption is (to a degree) supported by the data because it is shown in Jones and Olken (2009) that conditional on an attempt taking place, whether the attack succeeds or fails in killing the national leader appears uncorrelated with observable economic and political features[243] of the national environment. Nevertheless, in the next section, I perform some additional tests to see whether the stated identification strategy is plausible or not.

4.2 Is *success* exogenous conditional on attempts?

In order for the identification strategy to be effective, the key identification assumption must remain true. In Appendix Table-A7, descriptive statistics are provided on the data set used by Jones and Olken (2009).[244]This new data set has information on leaders with at least one assassination attempt.[245]In Table 5.3, I investigate whether individual characteristics predict

[243] It is shown in Table 4 of Jones and Olken (2009) that economic variables such as, *Log of Energy Use per capita, Log of population* and political variables such as *democracy dummy, war dummy, Change in democracy dummy,* fail to predict the variation of SUCCESS in the data.

[244] Jones and Olken (2009) excluded assassinations or assassination attempts that took place during a coup d'etat. This made them only focus on national leaders who faced similar assassination attempts. The authors also excluded "uncovered-plot" to assassinated leaders. This makes the analysis dependent on cases where the assassin actually undertook the attempt.

[245] There is a confusion concerning the deaths of Zia in Pakistan and Boris III in Bulgaria. While Jones and Olken (2009) have classified them as assassination, doubts exist whether Zia's death is due to an accident or the one of Boris III is for natural causes (Please see: http://forum.pakistanidefence.com/lofiversion/index.php/t77604.html). Hence, to avoid misspecification I drop these two observations from the regression analysis (The results do not meaningfully change even if I consider authors' categorization of their deaths). Furthermore, I also drop Habibullah Gazi of Afghanistan, Barrios of Guatemala, Rajiv Gandhi of India, and Mussolini of Italy because they were ultimately assassinated, even though they survived the assassination attempt that Jones and Olken (2009) considered in their analysis.

successful assassinations by comparing the mean of individual characteristics across leaders who barely survived with those who barely died. The results show that the data is fairly balanced between the two groups. More specifically, across the eleven individual characteristics that I examined, the difference between successes and failures is statistically significant for four variables. That is, leaders who have died in assassination attempt have a significantly higher proportion of national leaders with a posterior relative in office. This provides motivation for the principle question of the paper: does assassination of national leaders facilitate the emergence of political dynasty? On the relative predictive capacity of other factors, three other individual characteristics seem to matter (at 10%) in explaining success. First, on average leaders who died in assassination attempts enter office relatively young. This raises concern that veteran politicians (who enter the highest office relatively late in the career) are more capable in handling their security. Second, national leaders who have led their respective nations in times of war (i.e war leaders) are significantly less likely to die in an assassination attempt. Third, leaders who have barely survived assassination attempts also display a significantly greater number of cases where leaders are ultimately removed through a coup de'etat.[246] In table-5.4, the results from a linear probability model are presented that considers all these variables simultaneously. Hence, I estimate the following equation:

$$SUCCESS_i = \alpha + \beta X_i + \delta C_i + \gamma_R + \zeta_D + \acute{\varepsilon}_i$$

where X_i is a vector that consists of a set of individual characteristics and C_i incorporates country characteristics at the time of assassination attempts. Additionally, γ_R and ζ_D controls for region and decade fixed effects, and ε_i is the random error term. Besides, from all four columns one can see that *Pre-Relative*$_i$ has failed to attain significance at even 10%. This, to an extent, suggests that dynastic relationship with previous leaders fails to explain the variation of $SUCCESS_i$ in the data set, and it strengthens the idea that dying an assassination attempt is not predicted by one's dynastic heritage. In terms of individual characteristics, the variable *WAR-LEADER* maintains a negative and significant coefficient (at 10%) in all four columns. This can reflect that national leaders providing leadership during a state of war are better equipped to survive assassination attempts through enhanced security measures. This makes the following analysis control for this individual trait in all base-line specifications. On the role of other

[246] There is a chance that this relationship (to an extent) is mechanical since leaders who survive assassination attempts have a higher chance of facing coup d'etat.

individual characteristics, none of them attain significance in all four columns. It is important to note, however, that the coefficient for *LONG-TERM* is negative and is significant at 10% in column-4 (when I control for the type of weapon used in the assassination attempt). This reflects our earlier concern that successful assassination in office has a mechanical relationship with a leaders' tenure in office. That is leader's who die in assassination attempt are less likely to have a cumulative tenure of 10 years or more. To address this issue in the basic specification, I show results from restricted sample for leaders with different overall tenure length. Table-5.4 also shows that a country's political climate at the time of the assassination attempt (reflected by the *Polity* score of a country in the year of the assassination attempt) fails to predict successful assassination. This is also true for economic conditions at time of the assassination attempt (captured by the *ENERGY* variable) on a national leader from a given country.[247]In terms of the usefulness of the overall model, in all four columns, the R- square varies from 0.10 to 0.28 which shows that the overall model weakly explains the variation of $SUCCESS_i$ in the mentioned data set. This relative lack of predictability of $SUCCESS_i$ combined with the comparability of leaders across two group helps suggest that the identification assumption employed might be reasonable.

5.4.3 Are assassination attempts mutually exclusive?

So far, the paper presented results from multiple econometric specifications to see if various observable individual and country characteristics predict the variation in success with sufficient precision. The results, taken together, do pinpoint towards an element of luck in determining whether assassination attempts fails or succeeds. In this section, I conduct some further test to examine the strength of the employed identification assumption. To be more elaborative, the identification strategy is dependent on the assumption that for a given assassination attempt –the failure or success of the attempt is determined by an element of chance. Hence, in an ideal scenario all assassination attempts must take place on all the leaders at the same point of time to avoid any possible spillover effects. That is, an assassination attempt in period (t) in a given country can determine the likelihood whether an assassination attempt in period (t+1) in the same country will succeed or not by changing security concerns. If this is true, then it will undermine the capacity of the employed identification strategy to find out causality. As a result,

[247] To proxy this, Jones and Olken (2009) use energy consumption measure which comes from Correlates of War National Material Capabilities data set version 3.02 (J. David Singer et al 1979, 1987). The authors use this measure because data on per capita income is not available for countries prior to 1950.

to test if such spillover effects exist, I estimate the two linear probability model (detailed out below) in panel A and B of Table-5.6.

$$SUCCESS_{i,\,c} = \alpha + \mu PrecedingAssassinationAttempt_{Ij,c} + \beta X_i + \gamma_R + \zeta_D + \acute{\epsilon}_i$$

$$SUCCESS_{i,\,c} = \alpha + \mu PrecedingSuccessfulAssassination_{j,c} + \beta X_i + \gamma_R + \zeta_D + \acute{\epsilon}_i$$

The first equation attempts to identify whether assassination attempt on a leader (j) in period t in a given country (c) predicts successful assassination attempts on any other leader (i) in future periods in the same country (c). The second equation also addresses a similar question by investigating whether successful assassination attempts in a given period (t) on leader (j) in country (c) predicts successful assassination in future periods in country (c) on any leader (j).

The results from table-5.5, however, provide limited evidence in support of any such spillover effects. That is, from Panel-A we can see that preceding assassination attempt on a leader (j) in a country (c) fails to predict SUCCESS for leader (i) in country (c) for future period (up to 10 years). Likewise, this finding remains consistent even when I control for region, decade and weapon fixed effects. In Panel-B, the coefficient for $PrecedingSuccessfulAssassination_{j,c}$ remains negative in all four columns indicating that previous successful assassination attempts in a given country is associated with a lower likelihood that future assassination attempts in the same country will be successful. Even so, the coefficient for the variable of interest is only significant for column-3 &4 at 5% and 1% when time period is lagged by five and ten years. This makes me incorporate these factors in the regressions when I conduct robustness checks for the base-line specifications.[248]To sum up, results from table 5.4 & 5.5 do direct us towards the possibility that an element of luck is present in determining whether a leader dies in assassination attempt or not once an assassination attempt takes place. Hence, in the next section I address our key research question: does assassination determine de facto inheritance of political power?

[248] In Appendix Table-A10, I also check for the possibility whether the total number of assassination attempt faced by a leader predicts success of the final assassination attempt on the respective leader. The results, however, do not suggest that a national leader's overall experience with assassinations attempts determines the success of the final assassination attempt on him or her. It is important to mention, nonetheless, that these regressions use the assumption that Jones and Olken (2009) produce all known assassination attempts on all national leaders in their data set.

5.4.4 Results and Robustness Checks

Till now, the paper examined the identification assumption that an element of luck is involved in determining if a leader barely survives or dies in an assassination attempt. And, the estimation is suggestive that conditional on trying to kill a national leader, the failure or success of assassination attempt can be treated as plausibly exogenous. Hence, a causal relationship between the key variables of interest can simply be inferred by estimating the linear probability model of the form:

$$Postrelative_i = \alpha + \delta\, SUCCESS_i + \theta X_i + \gamma_r + \varepsilon_i$$

If δ is significantly different than zero, then one can assert that there is a causal relationship between the outcome of an assassination attempt and the probability that a leader will *later* have a relative in office. The results are shown in Table-5.6. In column-1, we can see the variable $SUCCESS_{i,}$ which is an indicator variable equal to one if the leader died in an assassination attempt, has positive coefficient significant at 1%. This indicates that successful assassination increases the likelihood that a national leader will later have a relative in office. The magnitude of the coefficient is 0.16, which means that successful assassination attempts increase the likelihood of an eventual dynastic transmission of power by 16 percentage point. In addition to this, indicator variables *Long-Term* and *Pre-relative* have a significant positive coefficient suggesting that leaders with a previous relative in office or a long tenure (more than 10 years) are associated with a higher likelihood that they will later have a relative in office.

In column-2, variables proxying for various individual characteristics and political events faced by a national leader are incorporated into the econometric model. It also controls for political climate and economic conditions at the time of the assassination attempt (with the help of the *POLITY* and *ENERGY*[249]variable). Moreover, we can see that the coefficient for $SUCCESS_{i,}$ is both positive and significant at 1%. Besides, in line with the base-line results from Table-2, being *Authoritarian* is significantly associated with a lower likelihood of having a posterior relative in office. This is also true for national leaders with previous public office experience. Column-3 tests this finding further by introducing decade fixed effects, and in column-4, I also

[249] I have used *energy consumption* to proxy for per-capita income because data on per- capita income is not available for world sample prior to 1950. The energy consumption measure comes from the Correlates of War National Material Capabilities data set version 3.02 (J. David Singer et al. 1972, 1987). Jones and Olken (2009) have used the same variable to capture the role of economic conditions.

incorporate region fixed effects. Overall, the results provide support for the claim that assassinations do, in fact, facilitate the emergence of political dynasties.

In Table-5.7, I undertake more robustness checks. Hence, in column-1, I omit national leaders who are born after 1930 or are alive (as of 2010). This is done to account for the censoring that occurs since national leaders at the end of the sample period have less time start their political dynasties. I also include weapon fixed effects because the type of weapon used is an important predictor of successful assassination attempt. The results, however, remain qualitatively similar. Column-2, introduces additional restrictions by only focusing on national leader who had a cumulative tenure of more than ten years. As noted earlier, this is done to minimize the mechanical relationship that can appear between a national leader's tenure in office and whether or not he died or not in an assassination attempt. Plus the results show that the coefficient increases in size, and is significant at 1%. On the other hand, the results from column-3 suggest that this relationship is not significant at 10%, when I look at national leaders with less than 10 years of cumulative tenure.[250] This, to an extent, might hint at the possibility that the outcome of an assassination has a significantly higher marginal effect on the likelihood of dynastic succession for national leaders with long-term exposure to political power.

In column-4, I limit the data set to leaders who have faced serious attempts (where the weapon was actually used in the attempt to assassinate the leader). This is done to further strengthen the identification assumption-that pure luck determines whether a national leader survives an assassination attempt or not. Additionally, we can see that the results remain qualitatively similar, even though the coefficient reduces in absolute size. Column-5 further factors in the phenomenon that a national leader in the data had leaders before him assassinated. This is analysed because the only factor that predicts *SUCCESS* strongly is preceding successful assassinations (as noted in Table-5 (Panel B). Nonetheless, the coefficient for *SUCCESS* remains positive and significant at 5%. Lastly, in column-6, I exclude national leaders with previous relatives in office to avoid a possible correlation of error term for national leader from the same family. This results in the loss of some observations, and the relevant coefficient remains positive but not significant at 10%.[251]

[250] This, however, is not in line with the findings that emerge from the base-line data set in Table-5.2.

[251] In Appendix Table A11, I have conducted further robustness check by excluding leaders who are not alive at present (and also since 1990). This however has no material effect on the result. Besides,

To conclude, the results from Table-5.6 and Table -5.7 do highlight that the outcome of an assassination attempt matters for the emergence of political dynasties. Furthermore, when these results are compared with the original base-line results from Table-5.1 &5.2 (which is based on an alternative data set), it makes it prudent to suggest that there is a causal role of assassination in increasing the likelihood that a national leader will start or continue a political dynasty.Hence, in the following section, I extend this analysis to improve our understanding of the process in which assassination can help shape the rise of political dynasties.

5.5 Extending the Analysis.

5.5.1 Heterogeneous nature of dynastic succession

So far, the paper investigated if political assassination determines the likelihood that a leader will later have a relative in office. The results point out that assassination facilitates the possibility that a national leader will start a political dynasty. In this section, the analysis acknowledges that there is considerable heterogeneity in the political process that guides dynastic successions in political realms. To be more elaborative, a close scrutiny of political dynasties across countries suggests that namely two types of 'dynastic-successions' are possible for dynastic leaders to emerge at the top political office. One, there can be an '*immediate-dynastic successions*' at the top political office. This is certainly true for Indira Gandhi and Rajiv Gandhi in India. In more recent times, this also happened in Argentina, when Nestor Kirchner voluntarily stepped aside to make way for his wife Cristina Kirchner. Two, dynastic successions at the highest political office can also be 'non-immediate' in nature. For example, Megawati Sukarnoputri became Indonesia's first female President in 2001, which was approximately three decades after her father's (Sukarno) government was overthrown in a military coup in 1970.

As a result, to account for this heterogeneity in the process that guides dynastic succession, I introduce two dependent variables to see if successful assassinations drive certain kind of dynastic political successions. In other words, I construct a binary dependent variable '*immediate-dynastic-succession*', which is equal to one if a national leader (i) is succeeded in office by his relative within a time span of one year, and zero otherwise. I also construct an

I have also dropped observations from India, Pakistan, Sri Lanka & Nepal to avoid the possibility that the results are driven by a 'South-Asia' phenomenon. The results, nonetheless, stay qualitatively similar.

alternative binary dependent variable '*non-immediate succession*', which is equal to one if a national leader (i) had a posterior relative in office but the succession took place after a time interval of more than one year (and zero otherwise). I run separate regressions on these two different dependent variables to see if successful assassinations drive any particular type of dynastic successions. Moreover, from Table-5.8 (column-1 &2), it can be seen that outcome of an assassination attempt particularly matters for explaining the frequencies of immediate dynastic succession. In particular, the results from column-2 suggest that the outcome of an assassination attempt is particularly strong for sample restricted to leaders with at least ten year exposure to state power. On the other hand, the coefficients for *SUCCESS* in regressions in column-3-6 are negative but not significant.

Consequently, when the results from column-1 to column-6 are taken together, it is then pragmatic to suggest that the outcome of an assassination attempt influences the emergence of political dynasties by increasing the likelihood of an immediate dynastic succession.[252] This also makes the result difficult to square with the 'disruption-effect' hypothesis that highlights that potential successors of national leaders will opt out of political career when their political family member is assassinated.

5.5.2 Is it a 'Dying in Office' Phenomenon?

An important concern that still remains with the overall analysis is that the results are picking up a 'dying in office' effect (which in most cases assassinations in office are associated with). In other words, it is difficult to empirically verify whether the estimation strategy is isolating the effects of successful assassination or is it simply highlighting the overall effect of dying in office. Thus, to address this concern, I augment the used specification by adding an additional control$Naturally\ Died\ in\ Office_i$, which is an indicator variable if a national leader (i) in the data set died in office due to natural causes, and zero otherwise. So, Table-5.9 reports the results from the following regression:

$$Postrelative_i = \alpha + \delta Success_i + \Omega Naturally\ Died\ in\ Office_i + \partial X_i + \gamma_r + e_i$$

[252] This conclusion is particularly true for national leaders in the data set used by Jones and Olken (2009). Note, given that this data set only focuses on national leaders with at least one assassination attempt and it avoids leaders who faced assassination during coup d' etat, it makes it difficult to generalize this conclusion for all types of assassination.

If Ω is significantly not different from zero, then one can argue (to an extent) that results so far pinpoint that assassination increases the likelihood that a leader will start or continue a political dynasty (and not the general effect of dying in office). Unfortunately, the estimations from column-1 and column-2 show that both δ & Ω are positive and significant at 1%, even though it fails to attain significance when the sample is restricted to national leaders with less than ten year exposure to state office. Hence, the results fail to rule out the possible influence of the 'dying in office' phenomenon. It must be stated, however, that this empirical concern is somewhat mitigated if we acknowledge that the data set from Jones and Olken (2009) do not consider assassination attempt on national leaders who are not in office. This limits the capacity of the analysis to check the effect of assassination of national leaders, who are not in office, on the possibility of them starting a political dynasty. Focusing on this is important because there are numerous historical accounts of children or partners of slain opposition leaders who later emerge as important political actors within their respective political domain, and often rise to state power.[253] Unfortunately, the nature of the data set does not allow us to pursue this issue empirically, and with this caveat in sight, I proceed to the concluding remarks.

5.6 Conclusion and Caveats

This paper scrutinizes if political assassinations allows for the *de facto* inheritance of political power by facilitating the likelihood that national leader will start a political dynasty. In particular, the paper aims to see whether negative exogenous shocks to a national leader's life can have persistent effects by shaping posterior dynastic attainments. The study starts off by acknowledging that the net effects of assassinations depend on two opposing forces: *martyrdom-effect* versus the *disruption-effect.* This makes an empirical analysis instrumental in understanding the consequences of political assassinations. To this end, the paper uses biographical data on 442 national leaders across 65 countries who held office at least once in post 1950 period. Moreover, the key message that emerges from our base-line data set is that assassinated leaders are on average associated with a higher likelihood of starting or continuing a political dynasty. This association is robust for multiple econometric specifications and remains significant when various important covariates are controlled in the econometric model. Hence, the initial results are difficult to reconcile with the 'disruption-effect' story, but provides motivation for investigating if political assassinations are, in fact, a *political asset* for the

[253]For example, Corazon Aquino came to public life after her husband Senator Benigno Aquino Jr. was assassinated in 1983, and later become the symbol of opposition struggle against the authoritarian regime of Marcos in Philippines. She subsequently became the first female President of Philippines.

deceased leader's family as it facilitates their endurance in their country' political landscape. These results, however, merit no causal interpretation as the relationship may display a mere correlation which can be driven by unobserved family heterogeneity.

Consequently, to identify whether there is a causal relationship between these two political phenomena the paper borrows the data set of Jones and Olken (2009), which contains information on more than 190 national leaders in post 1875 period who had at least one assassination attempt on them. Furthermore, the identification assumption is that although attempts on a national leader's life may be driven by historical circumstances, conditional on trying to kill a national leader, the *failure* or *success* of assassination attempts can be treated as plausibly exogenous. This, therefore, helps to point out whether the outcome of an assassination attempt (which is determined by pure luck) partially determines the likelihood that a national leader will later have a relative in office. The results suggest that the identification assumption finds some support from the data.

In addition to this, the estimations from table-5.6 &5.7 suggest that the outcome of an assassination attempt facilitates the likelihood that national leader will start or continue a political dynasty. Plus, this primary message remains consistent even when we control for multiple covariates, and for multiple econometric specification (including the factors that predict *SUCCESS*). The magnitude of the coefficient ranges between 0.12 and 0.17[254] which means successful assassination attempts increases the likelihood of an eventual dynastic transmission of power by (at least 12) percentage points. In addition, the fact that the estimates from both the data sets provides non-contradictory results, it makes it pragmatic to argue that there is a causal role of assassination in facilitating posterior dynastic attainment of national leaders. This paper also investigates if successful assassinations drive certain types of dynastic succession, given that there is considerable heterogeneity in the process that guides political dynasties. The findings show that successful assassination primarily increases the likelihood that a national leader will be immediately succeeded by his or her relative. Apart from this, the paper also point out that those national leaders with longer tenure is associated with a higher likelihood that they will later have a relative in office. Besides, this is in line with the hypothesis that political dynasties self-perpetuate, and empirical investigation of this issue on a sub-national data does, in fact, support this claim (Dal Bo et al, 2009). The significance of factors –

[254] This range is true for sample which is not restricted by a national leader's cumulative tenure.

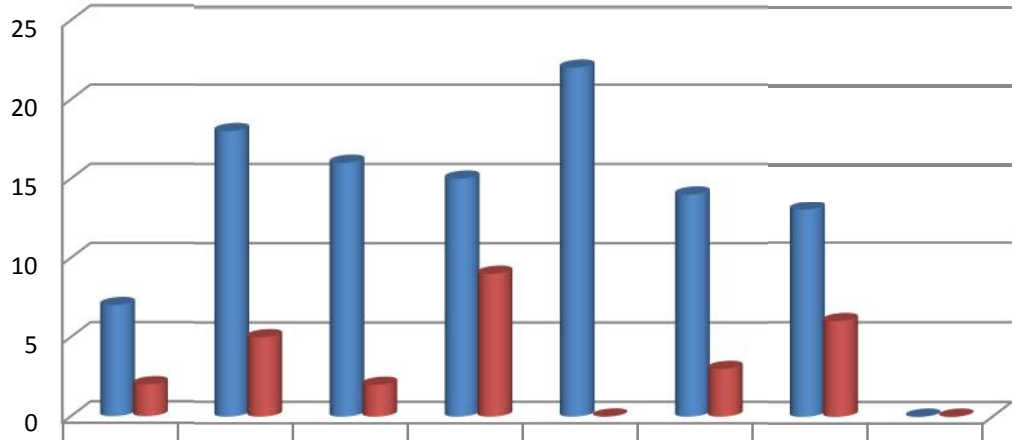
such as being authoritarian or first president- is sensitive to the econometric specification I employ, or other covariates which are incorporated into the analysis.

In terms of limitations, the present study provides little effort to distinguish separately between the impact of successes and failures of assassination attempt. That is, it might be natural to presume that the successes- where the national leader dies- are more important drivers of the result, but one can argue that failing to die in an assassination attempt can have important implications if such phenomenon is associated with a lower likelihood that leader will later have a relative in office. Although the present analysis has not rigorously dealt with this issue but it is not unwise to intuitively infer that it is more likely that successful assassination attempts are the major drivers of the computed results. This is because the primary message has support from both the data set.[255] Another important caveat is that the analysis has failed to rule out the possibility that the overall results simply reflect a 'dying in office' phenomenon. This issue, nonetheless, is somewhat mitigated if one observes the insights from qualitative literature which notes that political assassination has been a triggering factor for the rise of female dynastic leaders in Asia (Ritcher, 1990; Thompson, 2002).

Lastly, the structure and the empirical methodology of the overall analysis provide limited scope for pinpointing the causal mechanisms underlying the relationship between political assassinations and the existence of political families, and also shed no light on special cases where relatives plot to kill a leader to achieve a transmission of power. More specifically, future studies can examine the exact role of political parties in facilitating dynastic successions at the highest political office, with a specific attention to the intra party *norms* and *precedents* that are instrumental in guiding leadership succession. In addition, the results that assassinations perpetuate dynastic rule is counterintuitive and it provokes deeper thought on the effectiveness of violent strategies of displacing leaders

[255] Note: The base line data set is *not* constrained by national leader with at least one assassination attempt. Therefore, the strong correlation we witness in table-2 provides indication that assassination matters, and the likelihood that successful assassinations are the major driver of the results is higher.

Figure- 5.1
Spatial Distribution of Dynastic Leaders and Assassinated Leaders for 65 countries



	Europe	North America	South America	South Asia	Rest of Asia	Middle East	Rest of Africa	Australia
Dynastic	7	18	16	15	22	14	13	0
Assassinated	2	5	2	9	0	3	6	0

Box-5.1: List of Assassinated Leaders Post 1950 from 65 Countries		
Country Name	**Leader**	**Year of Assassination**
Algeria	Mohamad Boudif	1992
Argentina	Pedro Aramburu	1970
Bangladesh	Sheikh Mujibur Rahman	1975
Bangladesh	Zia ur Rahman	1981
Bolivia	Juan Jose Torres	1976
Bulgaria	Andrey Lukanov	1996
Democratic R Congo	Kabila	2001
Dominican Republic	Rafael Trujjilo	1961
Egypt	Sadat	1981
India	Indira Gandhi	1984
India	Rajiv Gandhi	1991
Nicaragua	Somoza	1956
Nicaragua	Anastasia Samoza Debayle	1980
Pakistan	Liaquat Ali Khan	1951
Pakistan	ZA Bhutto	1979
Pakistan	Bhutto	2007
Srilanka	Solomon Bandarnaike	1959
Srilanka	Ranasinghe Premadasa	1993
Syria	Abid al-shishakli	1964
Panama	Remon Cantera	1955
Saudi Arabia	Faisal	1975
Somalia	Ali Shermarke	1969
Somalia	Mohamad Farrah Aidid	1996
SouthAfrica	Hendrik Verwoerd	1966
Sweden	Olof Palme	1986
Togo	Sylvanus Olympia	1963
US	Kennedy	1963
Source: Jones and Olken (2009); Goemans et al (2007): Archigos Data Set		

Box- 5.2 Death in Office of National Leaders due to Natural Causes or Accidents Post 1950			
Country Name	**Leader**	**Year of Death**	**Cause**
Algeria	Houari Boumedienne	1978	Blood Disorder
Angola	Agostinho Neto	1979	Cancer of the Pancreas
Argentina	JD Peron	1974	Heart and Kidney Failure
Australia	Harold Holt	1967	Drowned
Barbados	John Adams	1985	No Cause announced
Barbados	Errol Barrow	1987	Heart Attack
Bolivia	Rene Barrientos	1969	Helicopter Crash
China	Mao	1976	Parkinson's Ailment
China	Deng Xiaoping	1997	Parkinson's Ailment
Egypt	Nasser	1970	Heart Attack
Gabon	Leon Mba	1967	Cancer
Gabon	Omar Bongo	2009	Cancer
Guyana	Forbes Burnham	1985	During Surgery
Guyana	Cheddi Jagan	1997	Heart Attack
Haiti	Francois Duvalier	1971	Heart Disease
India	J Nehru	1964	Stroke
India	Lalbahadur Shastri	1966	Heart Attack
Iran	Khomeini	1989	Following Surgery
Iraq	Abdul Salam Arif	1966	Helicopter Crash
Japan	Masayoshi Ohiro	1980	Heart Attack
Japan	Keizo Obuchi	2000	Stroke
Jordan	Hussein Ibn Talal El-Hashim	1999	Non-Hodgkin's lymphoma
Kuwait	Abdullah III	1965	Heart Attack
Kuwait	Sabah III	1977	Cancer
Kuwait	Jaber III As-Sabah	2006	Stroke
Malaysia	Tun Abdul Razak	1976	Leukemia
New Zealand	Norman Kirk	1975	Heart attack
Nicaragua	Luis Somoza Debayle	1967	Unknown condition
North Korea	Kim 11-sung	1994	Heart Attack
Pakistan	Jinnah	1948	Heart Failure
Pakistan	Zia-ul-Huq	1988	Plane Crash
Panama	Omar Torrijos	1981	Plane Crash
Philippines	Ramon Magasay	1957	Plane Crash
Source: Jones and Olken (2005); Goemans et al (2007): Archigos Data Set			

Box- 5.2 Death in Office of National Leaders due to Natural Causes or Accidents Post 1950 ctd…			
Country Name	**Leader**	**Year of Death**	**Cause**
Russia	Stalin	1953	Stoke
Russia	Leonid Brezhnev	1982	Heart Attack
Russia	Yuri Andropov	1984	Chronic Kidney Ailment
Russia	Konstantin Chervenko	1985	Heart Failure
Saudi Arabia	Khalid	1982	Heart Attack
Saudi Arabia	Fahd	2005	Unknown condition
Sieera Leone	Milton Margai	1964	After 'brief illness'
SouthAfrica	JG Strijdom	1958	Heart Disease
Spain	Francisco Franco	1975	Heart Failure
Srilanka	Don Stephen Senanayake	1952	Thrown from Horse
Syria	Hafez al-Assad	2000	Heart Attack
Taiwan	Chiang kai Shek	1975	Heart Attack
Taiwan	Chian Ching Kuo	1988	Heart Attack
Thailand	Sarit Thanarat	1963	Heart and Lung Ailment
Togo	Eyedema	2005	Heart Attack
Trinidad and Tobago	Eric Williams	1981	Complication form Diabetes
Turkey	Turgut Ozal	1993	Heart Attack
Uruguay	Luis Ganatasio	1965	Heart Attack
Uruguay	Oscar Diego Gestido	1967	Heart Attack
Source: Jones and Olken (2005); Goemans et al (2007): Archigos Data Set			

Table- 5.1: Base-Line Results

Dependent Variable: Post-Relative

	1	2	3	4
Assassinated	0.358***	0.358***	0.342***	0.337***
	{0.104}	{0.100}	{0.107}	{0.122}
Pre-Relative	0.158**	0.161**	0.152**	(-)0.036
	{0.068}	{0.074}	{0.075}	{0.065}
Long-Term	0.146***	0.13***	0.098**	0.067
	{0.045}	{0.044}	{0.045}	{0.046}
Female		(-)0.014	0.031	0.080
		{0.089}	{0.087}	{0.096}
Age of Entry		(-)0.001	(-)0.001	(-)0.005*
		{0.002}	{0.002}	{0.003}
First President/PM		0.244**	0.205**	0.093
		{0.098}	{0.097}	{0.133}
Authoritarian		(-)0.034	(-)0.036	(-)0.107
		{0.038}	{0.039}	{0.062}
Toppled in a Coup		(-)0.026	(-)0.052	(-)0.091
		{0.043}	{0.047}	{0.069}
Constant	0.062***	0.125	0.265**	0.594***
	{0.016}	{0.121}	{0.127}	{0.161}
Five Year Effect	NO	NO	YES	YES
Country Effect	NO	NO	NO	YES
N	442	442	442	442
R-square	0.12	0.15	0.18	0.37

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces, clustered at Country Level in all four columns

Table- 5.2: Robustness Checks

For Leaders with less than 10 years of Tenure.

	OLS - 1	OLS - 2	OLS - 3	OLS - 4	Probit - 5	OLS – 6
Assassinated	0.384***	0.189	0.267**	0.246**	22.48***	0.157*
	{0.138}	{0.134}	{0.128}	{0.108}	{0.632}	{0.092}
Pre-Relative	0.019	0.065	0.063		(-)0.034	
	{0.074}	{0.146}	{0.164}		{0.641}	
Female	0.017	(-)0.640	(-)0.789		22.7***	
	{0.112}	{0.125}	{0.306}		{1.89}	
Age Of Entry	(-)0.004	(-)0.005	(-)0.007	(-)0.004	(-)0.050	(-)0.005
	{0.003}	{0.005}	{0.006}	{0.004}	{0.038}	{0.005}
First President/PM	(-)0.019	0.073	0.059	(-)0.022	(-)0.551	0.039
	{0.21}	{0.316}	{0.325}	{0.308}	{1.77}	{0.308}
Authoritarian	(-)0.156***	(-)0.163	(-)0.213*	(-)0.183*	(-)22.6**	(-)0.22*
	{0.048}	{0.092}	{0.106}	{0.096}	{0.838}	{0.128}
Toppled in a Coup	(-)0.076	(-)0.042	(-)0.054	0.027	(-)0.961	0.0102
	{0.084}	{0.103}	{0.134}	{0.097}	{1.1}	{0.122}
Previous Public Office Experience						(-)0.007
						{0.068}
Military						0.065
						{0.133}
Lawyer						0.0198
						{0.071}
War-Leader						0.045
						{0.073}
Constant	0.565***	0.572**	0.622*	0.294	(-)3.56**	0.349
	{0.172}	{0.286}	{0.330}	{0.235}	{1.69}	{0.267}
Five Year Effect	YES	YES	YES	YES	YES	YES
Country Effect	YES	YES	YES	YES	YES	YES
Born After 1930 Excluded	NO	YES	YES	YES	NO	YES
At Present Alive Excluded	NO	NO	YES	YES	YES	YES
Members with Pre-Relative Excluded	NO	NO	NO	YES	NO	YES
N	336	229	191	171	122	168
R-square	0.33	0.34	0.39	0.44	0.48	0.48

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces, clustered at country level in all six columns

Table – 5.3: Conducting pair-wise t-test to see group similarity

	Barely Survived	Died	Difference	P-value
	1	2	3	4
Post-Relative	0.171	0.321	(-)0.15	0.021**
	{0.032}	{0.063}	{0.064}	
Pre-Relative	0.164	0.196	(-)0.032	0.594
	{0.031}	{0.053}	{0.060}	
Long-term	0.475	0.4	0.075	0.329
	{0.042}	{0.064}	{0.077}	
Age at Entry	48.04	44.81	3.23	0.089*
	{1.016}	{1.626}	{1.89}	
First President/PM	0.107	0.036	0.071	0.11
	{0.026}	{0.025}	{0.044}	
Authoritarian	0.359	0.356	0.003	0.973
	{0.041}	{0.065}	{0.076}	
Previous Public Office Experience	0.696	0.709	(-)0.013	0.855
	{0.039}	{0.062}	{0.073}	
Toppled in a Coup	0.187	0.089	0.098	0.092*
	{0.033}	{0.039}	{0.058}	
War Leader	0.441	0.309	0.132	0.09*
	{0.043}	{0.063}	{0.078}	
Military	0.397	0.518	(-)0.121	0.126
	{0.042}	{0.067}	{0.079}	
Lawyer	0.197	0.161	0.036	0.559
	{0.034}	{0.049}	{0.062}	

The table reports the means of each listed individual characteristics for leaders. Standard errors in braces.
P-values on differences in the mean are from a two-sided unpaired t-test.
Individual characteristics are on leaders with at least one assassination attempt.
(*), (**), & (***) denote significance at 10%, 5% and 1 %

Table – 5.4: Testing the Identification Assumption

Dependent Variable: Success				
	1	2	3	4
Pre-Relative	0.091	0.106	0.059	0.049
	{0.119}	{0.128}	{0.132}	{0.124}
Long Term	(-)0.131	(-)0.133	(-)0.145	(-)0.168*
	{0.088}	{0.095}	{0.099}	{0.093}
Female	0.129	0.136	0.059	0.108
	{0.288}	{0.357}	{0.332}	{0.287}
Age at Entry	(-)0.006	(-)0.005	(-)0.004	(-)0.005
	{0.004}	{0.004}	{0.004}	{0.004}
First-President/PM	(-)0.036	(-)0.023	(-)0.089	(-)0.060
	{0.116}	{0.130}	{0.136}	{0.127}
Authoritarian	0.070	0.091	0.058	0.046
	{0.093}	{0.097}	{0.103}	{0.103}
Toppled in a Coup	(-)0.207	(-)0.152	(-)0.120	(-)0.108
	{0.087}	{0.098}	{0.097}	{0.101}
Prev. Pub. Exp	0.027	0.027	0.036	0.035
	{0.073}	{0.073}	{0.076}	{0.072}
Military	0.086	0.123	0.148*	0.120
	{0.082}	{0.089}	{0.077}	{0.076}
Lawyer	(-)0.071	(-)0.073	(-)0.103	(-)0.070
	{0.079}	{0.082}	{0.075}	{0.074}
War Leader	(-)0.121*	(-)0.145*	(-)0.195**	(-)0.191***
	{0.068}	{0.081}	{0.083}	{0.077}
Energy	(-)1.11e-07**	(-)5.77e-08	(-)5.57e-08	(-)8.85e-08
	{4.90e-08}	{5.66e-08}	{8.13e-08}	{8.35e-08}
Polity	0.009	0.009	0.007	0.007
	{0.007}	{0.007}	{0.007}	{0.007}
Constant	0.626***	0.745***	0.847***	0.747**
	{0.200}	{0.236}	{0.290}	{0.298}
Decade Effect	NO	YES	YES	YES
Region Effect	NO	NO	YES	YES
Weapon Effect	NO	NO	NO	YES
Observations	181	181	181	181
R-square	0.10	0.15	0.22	0.28

(*),(**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces; adjusted for clustering at country level

Table- 5.5: Are assassination attempts mutually exclusive?

Panel-A

Dependent Variable: Success				
	1	2	3	4
Prec. Assassination Attempt T-1	(-).023 {0.096}			
Prec. Assassination Attempt T-2		0.030 {0.102}		
Prec. Assassination Attempt T-5			(-)0.053 {0.087}	
Prec. Assassination Attempt T-10				(-)0.029 {0.089}
Region Effect	Y	Y	Y	Y
Decade Effect	Y	Y	Y	Y
Weapon Effect	Y	Y	Y	Y
N	138	138	138	138

(*),(**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces; Adjusted for clustering at a country level

Individual and Country Characteristics are controlled in all the columns.

Panel-B

Dependent Variable: Success				
Prec. Successful Assassin (T-1)	-0.101 {0.138}			
Prec. Successful Assassin (T-2)		(-)0.122 {0.109}		
Prec. Successful Assassin (T-5)			(-)0.245** {0.094}	
Prec. Successful Assassin (T-10)				-0.256*** (0.096}
Region Effect	Y	Y	Y	Y
Decade Effect	Y	Y	Y	Y
Weapon Effect	Y	Y	Y	Y
N	174	174	174	187

(*),(**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error in braces; Adjusted for clustering at country level

Individual and Country Characteristics are controlled in all the columns

Table- 5.6: Identifying causal effect of political assassination

	Dependent Variable: Post-Relative			
	1	2	3	4
Success	0.165***	0.188***	0.196***	0.174***
	{0.053}	{0.059}	{0.061}	{0.063}
Pre-Relative	0.528***	0.381***	0.367***	0.321***
	{0.0766}	{{0.104}	{0.104}	{0.103}
Long-Term	0.202***	0.202***	0.216***	0.219***
	{0.051}	{0.052}	{0.055}	{0.054}
Female		(-)0.162	(-)0.061	(-)0.095
		{0.197}	{0.185}	{0.165}
Age at Entry		0.00003	0.001	0.001
		{0.002}	{0.002}	{0.003}
First-President/PM		(-)0.078	(-)0.145	(-)0.196*
		{0.097}	{0.105}	{0.111}
Authoritarian		(-)0.158**	(-)0.165**	(-)0.152**
		{0.071}	{0.072}	{0.076}
Toppled in a Coup		0.009	0.009	0.028
		{0.081}	{0.089}	{0.096}
Previous Public Office Experience		(-)0.137**	(-)0.132*	(-)0.119*
		{0.068}	{0.07`}	{0.071}
Military		(-)0.019	(-)0.032	(-)0.013
		{0.062}	{0.065}	{0.069}
Lawyer		(-)0.052	(-)0.085	(-)0.093
		{0.064}	{0.059}	{0.058}
War Leader		0.027	0.029	(-)0.005
		{0.049}	{0.049}	{0.048}
Energy		(-)1.86E-08	(-)1.91E-08	4.91E-08
		{3.59E-08}	{3.65E-08}	{6.00E-08}
Polity		(-)0.008	(-)0.009	(-)0.008
		{0.006}	{0.006}	{0.006}
Constant	(-)0.017	0.163	0.098	0.111
	{0.020}	{0.148}	{0.157}	{0.179}
Decade Effect	NO	NO	YES	YES
Region Effect	NO	NO	NO	YES
Observations	192	181	181	181
R-square	0.42	0.44	0.49	0.51

(*),(**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in braces- adjusted for clustering at country level

Table- 5.7: Robustness Checks

	ALL	Tenure>10	Tenure<10	ALL	ALL	ALL
	OLS - 1	OLS - 2	OLS – 3	OLS - 4	OLS – 5	OLS – 6
SUCCESS	0.121*	0.308*	0.015	0.127*	0.157**	0.096
	{0.064}	{0.157}	{0.078}	{0.072}	{0.077}	{0.087}
Pre-Relative	0.372***	0.619***	0.161	0.341***	0.315***	
	{0.098}	{0.207}	{0.137}	{0.109}	{0.107}	
Long Term	0.203***			0.217***	0.253***	0.224***
	{0.063}			{0.069}	{0.078}	{0.0839}
Female	0.236	0.324		0.352*	0.338	
	{0.204}	{0.378}		{0.207}	{0.209}	
Age Of Entry	0.0001	0.008	(-)0.006**	(-)0.0003	0.0004	(-)0.007**
	{0.003}	{0.008}	{0.003}	{0.004}	{0.004}	{0.004}
First President/PM	(-)0.097	0.167	(-)0.3*	(-)0.139	(-)0.192	(-)0.23
	{0.134}	{0.279}	{0.156}	{0.137}	{0.145}	{0.147}
Authoritarian	(-)0.091	0.071	(-)0.079	(-)0.114	(-)0.114	(-)0.136
	{0.069}	{0.206}	{0.085}	{0.09}	{0.095}	{0.087}
Toppled in a Coup	0.071	(-)0.052	0.083	0.075	0.109	0.109
	{0.085}	{0.321}	{0.051}	{0.099}	{0.099}	{0.071}
Previous Public Office Experience	(-)0.076	(-)0.191	(-)0.00001	(-)0.049	(-)0.043	(-)0.118
	{0.078}	{0.171}	{0.099}	{0.093}	{0.093}	{0.131}
Military	0.039	0.005	0.086	0.052	0.028	0.095
	{0.070}	{0.258}	{0.068}	{0.089}	{0.086}	{0.079}
Lawyer	(-)0.109*	(-)0.152	(-)0.040	(-)0.13**	(-)0.15**	(-)0.077
	{0.055}	{0.237}	{0.051}	{0.062}	{0.063}	{0.059}
War-Leader	(-)0.029	0.062	(-)0.146**	(-)0.054	(-)0.072	(-)0.132*
	{0.051}	{0.127}	{0.064}	{0.062}	{0.066}	{0.075}
Constant	0.038	(-)0.115	0.028	0.047	(-)0.007	0.25
	{0.208}	{0.472}	{0.284}	{0.047}	{0.259}	{0.367}
Decade Effect	YES	YES	YES	YES	YES	YES
Region Effect	YES	YES	YES	YES	YES	YES
Born After 1930 Excluded	YES	YES	YES	YES	YES	YES
At Present Alive Excluded	YES	YES	YES	YES	YES	YES
Weapon Fixed Effect	YES	YES	YES	YES	YES	YES
Serious Attempt	NO	NO	NO	YES	YES	YES
Preceding Successful Assassination	NO	NO	NO	NO	YES	YES
Members with Pre-Relative Excluded	NO	NO	NO	NO	NO	YES
N	144	62	82	124	121	98
R-square	0.59	0.65	0.52	0.58	0.58	0.41

(*),(**) and (***) denote significance at 10%, 5% and 1%. All regression includes Energy and Polity variable at the time of the assassination attempt

Robust Standard Errors are in braces, clustered at country level in all six columns

Table – 5.8: Heterogeneous Nature of Dynastic Succession

	DV: Immediate Succession			DV: NON-Immediate Succession		
	ALL	Tenure>10	Tenure<10	ALL	Tenure>10	Tenure<10
	OLS - 1	OLS - 2	OLS – 3	OLS - 4	OLS - 5	OLS – 6
SUCCESS	0.176**	0.298**	0.063	(-)0.027	(-)0.039	(-)0.011
	{0.074}	{0.127}	{0.082}	{0.051}	{0.104}	{0.046}
Pre-Relative	0.264**	0.18	0.247	0.014	0.196	(-)0.056
	{0.121}	{0.279}	{0.164}	{0.087}	{0.149}	{0.059}
Long Term	0.244***			0.0139		
	{0.069}			{0.029}		
Female	0.316*	0.726**		(-)0.0003	(-)0.102	
	{0.168}	{0.305}		{0.0503}	{0.135}	
Age Of Entry	0.001	0.004	(-)0.002	(-)0.001	(-)0.001	(-)0.001
	{0.003}	{0.007}	{0.002}	{0.001}	{0.004}	{0.002}
First President/PM	(-)0.244**	(-)0.419	(-)0.23	(-)0.097	0.068	(-)0.224
	{0.093}	{0.379}	{0.182}	{0.107}	{0.151}	{0.157}
Authoritarian	(-)0.229***	(-)0.333	0.011	0.032	0.323*	(-)0.115
	{0.08}	{0.247}	{0.069}	{0.064}	{0.179}	{0.121}
Toppled in a Coup	0.044	(-)0.216	0.119*	0.087	0.099	0.078
	{0.092}	{0.214}	{0.065}	{0.069}	{0.192}	{0.075}
Previous Public Office Experience	(-)0.044	(-)0.067	0.106	0.009	(-)0.071	0.011
	{0.078}	{0.163}	{0.064}	{0.045}	{0.11}	{0.053}
Military	0.086	(-)0.16	0.125	(-)0.044	(-)0.047	(-)0.001
	{0.076}	{0.35}	{0.071}	{0.037}	{0.135}	{0.0494}
Lawyer	(-)0.088	(-)0.527	0.031	(-)0.043*	(-)0.049	(-)0.024
	{0.067}	{0.357}	{0.052}	{0.026}	{0.145}	{0.040}
War-Leader	(-)0.024	0.05	(-)0.069	(-)0.015	(-)0.004	(-)0.040
	{0.066}	{0.136}	{0.051}	{0.035}	{0.071}	{0.052}
Constant	(-)0.077	0.772	(-)0.376	0.077	(-)0.195	0.002
	{0.217}	{0.558}	{0.235}	{0.128}	{0.338}	{0.144}
Decade Effect	YES	YES	YES	YES	YES	YES
Region Effect	YES	YES	YES	YES	YES	YES
At Present Alive Excluded	YES	YES	YES	YES	YES	YES
Weapon Fixed Effect	YES	YES	YES	YES	YES	YES
Serious Attempt	YES	YES	YES	YES	YES	YES
Preceding Assassination Attempt	YES	YES	YES	NO	YES	YES
N	136	61	75	136	61	75
R-square	0.6	0.72	0.66	0.2	0.43	0.36

(*), (**) and (***) denote significance at 10%, 5% and 1%;All regression includes Energy and Polity variable at the time of the assassination attempt;

Robust Standard Errors are in braces, clustered at country level in all six columns

Table- 5.9: Is it a 'Dying in Office' Phenomenon?			
DV: POST-RELATIVE	ALL	Tenure>10	Tenure<10
	OLS - 1	OLS – 2	OLS – 3
SUCCESS	0.222**	0.571***	0.049
	{0.089}	{0.177}	{0.097}
Natural Death In Office	0.218**	0.536***	(-)0.047
	{0.099}	{0.173}	{0.127}
Pre-Relative	0.228**	0.2773	0.193
	{0.102}	{0.2}	{0.135}
Long Term	0.243***		
	{0.076}		
Female	0.328**	0.590*	
	{0.154}	{0.297}	
Age Of Entry	(-)0.001	0.003	(-)0.002
	{0.003}	{0.005}	{0.003}
First President/PM	(-)0.349**	(-)0.388	(-)0.462***
	{0.133}	{0.309}	{0.172}
Authoritarian	(-)0.227***	(-)0.119	(-)0.094
	{0.085}	{0.213}	{0.112}
Toppled in a Coup	0.173*	0.146	0.193**
	{0.090}	{0.301}	{0.074}
Previous Public Office Experience	(-)0.022	(-)0.063	0.114
	{0.079}	{0.129}	{0.097}
Military	0.053	(-)0.216	0.115
	{0.079}	{0.313}	{0.085}
Lawyer	(-)0.165**	(-)0.638**	0.012
	{0.074}	{0.289}	{0.051}
War-Leader	(-)0.018	0.181	(-)0.105*
	{0.059}	{0.141}	{0.055}
Constant	(-)0.041	0.232	(-)0.37
	{0.243}	{0.232}	{0.324}
Decade Effect	YES	YES	YES
Region Effect	YES	YES	YES
At Present Alive Excluded	YES	YES	YES
Weapon Fixed Effect	YES	YES	YES
Serious Attempt	YES	YES	YES
Preceding Assassination Attempt	YES	YES	YES
N	136	61	75
R-square	0.59	0.73	0.64
(*), (**) and (***) denote significance at 10%, 5% and 1%. All regression includes Energy and Polity variable at the time of the assassination attempt Robust Standard Errors are in braces, clustered at country level in all six columns			

6. Concluding Remarks

This thesis is a collection of four essays, each of which tries to understand issues concerning political dynasties. In particular, the four papers collectively tried to offer insights on two issues. One, the thesis provided empirical investigations on the role of 'dynastic-identity' in influencing the behaviour of political actors. This, in essence, tried to recognize if dynastic politicians behave any differently in comparison to non-dynastic politicians. Two, the empirical examinations attempted to isolate whether political assassinations facilitate de facto inheritance of political power by promoting dynastic successions. The aim, in this respect, was to see if exogenous shocks to a leader's political or physical fate can have persistent effects through shaping the composition of political class. Overall, the papers that followed have produced key insights on the two mentioned themes of the undertaken research. Hence, in the following sections, I try to summarize the essential findings of the papers, and pinpoint the manner in which they relate to general debate in the field.

6.1 Theme-1: What motivation governs the behaviour of *dynastic* politicians?

The first two papers in chapter-2 and chapter-3 offered empirical investigations from both sub-national and cross-country data sets. The principle aim here is to see whether dynastic identity matters in influencing the behaviour of politicians. This is insightful for two main reasons. First, in standard political economy analysis, there is an implicit assumption that politicians behave in a similar manner under specific institutional arrangements, no matter who they are. That is, most previous work overlooks the possibility that individual identity of politicians can also determine their behaviour in democratic policy making process. In recent times, however, some studies have emphasised on the role of leader-identity in explaining policy choices. For example, Rehavi (2007) and Chattopadhyay and Duflo (2004) study how women representation affects policy formulation in U.S and states in India. Similarly, Pande (2003) notes that reservation for scheduled tribes and scheduled castes at the state level in India influenced policies towards these groups. On the role of dynastic identity, Asaka et al (2010) examine the behaviour of dynastic legislators in Japanese *Diet* between 1997 and 2007. It finds that dynastic candidates enjoy a higher probability of winning and larger vote share in comparison to non-dynastic candidates. Besides, it also pinpoints that fiscal transfers initiated by dynastic politicians do not necessarily result in higher economic performance. Second, political dynasties reflect inequality in the distribution of political power (Dal Bo et al, 2009).

This is because dynastic politicians inherit political capital in the form personal ties with a pre-established donor network, important political figures, bureaucrats, military personalities from their parents. Dynastic leaders are also likely to enjoy a "brand-name advantage", which can produce barriers to entry for potentially more competent entrants with no brand-names (Lott, 1987a & 1987b). Furthermore, such effects of brand-name were noted by Feinstein (2010), which finds dynastic politicians receive an additional 4 percentage increase in the two-party U.S congressional elections.

The mentioned literature raises multiple important queries, which will help improve our understanding of political dynasties. Above all, the literature provides sufficient scope for scrutinizing if dynasty-identity matters in determining the behaviour of politicians. It also makes it insightful to investigate socio-economic phenomenon that are associated with the prevalence of dynasty politics across different polities. Consequently, the first paper in chapter-2 contributed to this general enquiry by focussing on the political profile of legislators (dynastic and non-dynastic) in the 8th and 9th National Parliament of Bangladesh. The analysis started off by discussing various incentives that can dominate the behaviour of dynastic politicians. It stated that in order to understand the behaviour of dynastic leaders, it is useful to assume that dynastic politicians have in their objective function an additional objective to promote dynastic successions. This indicates that dynastic leaders entertain a desire that their political dynasty endures in their respective political arenas. As a result, if this holds true, then such concerns can trigger two opposing incentives: reputation-building versus stockpiling-wealth.

In brief, reputation-building incentive implies that dynastic leaders will devote their career to generate a positive reputation for their family, so that future dynastic successions have a greater likelihood of being seen legitimate and acceptable due to their family's goodwill in the political arena. In other words, if political positions are transferable from politicians to their children, then the last period enforcement problem (i.e. how one restricts politicians from shirking in the last period) is mitigated. Thus, if such mindset dominates the behaviour of dynastic politicians, then it is likely that dynastic identity can influence relatively more benign behaviour (or less shirking) from political actors. In contrast, stockpiling-wealth incentive suggests that dynastic politicians will invest in generating financial and political capital so that they can later use it to facilitate future dynastic successions. This means that dynastic politicians will use their inherited political wealth to ensure that their dynasty endures, even if

they do not serve public interest. Subsequently, if this incentive determines the behaviour of politicians to prominent dynasties, then one can expect dynastic leaders to shirk relatively more in comparison to leaders with non-dynastic identity.

Therefore, to shed insights on the possible effects of these two opposing incentives, the paper examined the parliamentary *attendance* records of legislators in the 8th and 9th National Parliament of Bangladesh. It also studied the personal affidavits of all parliamentarians in the 9th National Parliament to note whether they have ever faced *legal* or *corruption* charges. The idea here is to find out if a legislator's dynastic identity had any explanatory power in predicting the variation of such variables, once other relevant structural and individual characteristics are controlled for. The base-line results indicate that dynastic parliamentarians in 8th National Parliament on average have a lower level parliamentary attendance in comparison to non-dynastic parliamentarians.[256] Moreover, if the measure of attendance reflects a legislator's general involvement with everyday legislative business, then one can argue that dynastic identity among parliamentarians in the 8th National Parliament is associated with relatively more shirking. This also makes the finding difficult to square with the reputation–building hypothesis, which suggests that dynastic legislators will devote their professional life in generating a positive reputation for the family so that future dynastic successions are seen legitimate.

On the other hand, the results from the regressions on the data set from 9th National Parliament failed to find any significant relationship between a parliamentarian's dynastic identity and his or her attendance level.[257] Additionally, no significant relationship was also detected between a legislator's dynastic identity and the likelihood that he or she had faced a legal or corruption charge in their career. The factors that had some predictive capacity in explaining the variation of such charges or attendance level are a legislator's experience as a lawmaker or his or her professional affiliation. To be more specific, the paper highlighted that legislators with more experience (in both the 8th and the 9th National parliament) have lower levels of attendance. This echoes the recent findings of Besley et al (2011) which finds a similar phenomenon in the British House of Commons. The results also suggest that legislators of certain professions

[256]The relevant coefficient ranges between (-)0.066 to (-) 0.15, which suggests that dynastic parliamentarians on average have at least 6.5 percentage point lower attendance than non-dynastic parliamentarians.

[257] The relevant coefficient does hint a negative relationship, which is in line with the results from the data on the 9th National Parliament.

(military and lawyer) have a lower likelihood of having a criminal profile, even though dynastic identity plays no role in explaining its variation.

Overall, the findings provide scope for making some important inferences. To start with, the study offers some support to the notion that dynastic identity can matter in influencing the behaviour of politicians. This is consistent with contemporary research that shows that the *types* of politicians (or leader identity) play an instrumental role in the democratic political process (Pande, 2003; Chattopadhyay and Duflo, 2004; Rehavi, 2007; Asaka et al, 2010; Feinstein, 2010). The analysis also portrayed dynastic politicians as less-than altruistic personalities, if they are only judged by their parliamentary attendance records. Asaka et al (2010) also offer a similar view, since the study finds dynastic leaders in Japanese Diet are related to inefficient fiscal transfers.

The results taken together, raise numerous important questions and implications for future studies. First, the research offers sufficient inspiration for scrutinizing further the range of 'leader-identities' that matter in determining their respective behaviour. Second, given that some support exists for the notion that dynastic identity matters, any future investigation of the subject can attempt to isolate other behavioural patterns displayed by dynastic leaders. That is, do dynastic leaders perform better in business sectors that are relatively more dependent on government in comparison to non dynastic leaders? Are they relatively more acceptable to special interest groups as lobbyist? These enquiries are likely to improve our understanding of actions undertaken by dynastic politicians, and they will help pinpoint the factors that allow political dynasties to endure. Lastly, the paper identified dynasty identity to trigger some degree of shirking among legislators. This posits some unresolved issues. That is, do dynastic politicians relatively shirk more because they enjoy a ‘brand-name advantage’ in the form of greater electoral preference? Or, dynastic politicians behave in the mentioned manner since they entertain greater ‘campaign advantage’, which makes electoral competition relatively less costly for them due to their close links with pre-established donor networks and etc. There is some evidence from Argentina indicating that performance of legislators does not necessarily facilitate the chance that legislators will be able to facilitate future transfer of power to other members of their family (Rossi, 2010). Hence, it might be probable that returns to shirking (or asset accumulating while in office) are more effective for ensuring posterior dynastic attainment. This, however, remains an avenue for future research to scrutinize. One the whole, the discussed factors represent a *demand* and *supply* side phenomenon, and future studies

should attempt to isolate the possible role of such factors in shaping the behaviour of dynastic politicians.

The paper in chapter-3 provides a more macro-outlook of the subject. The idea here is to see if the prevalence of political dynasties in different degree explains partially the variation of corruption across different countries. This relationship is interesting because some sub-national studies reveal that dynastic identity among politicians can matter, and that such factors can motivate shirking or inefficient economic policies (Asaka et al, 2010) Besides, political dynasties also reflect inequality in the distribution of political power (Dal Bo et al, 2009), and their access to greater political capital and state resources might hinder the state of governance in their respective political landscapes. As a result, it remains essential to recognize whether the mentioned relationship between political dynasties and corruption holds across polities. Furthermore, given that corruption is detrimental for economic development (Mauro, 1995), it is crucial to pinpoint the exact combination of factors that make some countries more corrupt than others.

To this end, this work builds upon the date set of Treisman (2000), which studies the possible determinants of corruption across a large sample of countries. In order to quantify the variation in the degree of dynasty politics across political landscapes, the study constructs two measures. The dynasty-index ***DI***, which ranges between 0 and 1, and represents the time share that political dynasties were in power for each country in post 1950-2010 period (or after independence to 2010). Besides, a score of 1 reflects the absolute dominance of a political family (or families) for the entire period.[258] The base-line results are indicative of 'weak' correlation between dynasty-politics and corruption, which implies that higher degrees of dynasty-politics are associated with higher levels of corruption. The paper stated that this correlation is 'weak' because it only attains significance when I exclude Singapore and monarchies from the estimations. This, however, only results in a loss of three observations.

The second measure quantifies a very special phenomenon associated with dynasty politics, namely – immediate dynastic successions. To quantify this phenomenon, the paper uses a binary variable *Immediate Succession*, which is equal to one if there has been a dynastic succession at the top political office in one calendar year. In addition, the estimations point out

[258]For more clarity, please review Chapter-3.3.2 "Data: Sources of the variables and the Dynasty Index (DI)"

that countries which experienced immediate dynastic succession(s) at the highest political office are on average associated with higher levels of corruption. This finding remains robust for various measures of corruption and is significant when we control for important covariates. The paper also offered a disaggregated scrutiny of the issue by focusing on role of different types of 'immediate succession', since such political phenomenon can display considerable heterogeneity. To be more specific, immediate dynastic-successions were categorized into three broad types. First, the analysis introduced an indicator variable *Retirement-IS,* which is equal to one when a leader voluntarily retires (or chooses not to stand for re-election) in support of a member of the family for the top office. Second, it used a dummy variable *Natural Death-IS,* which is equal to one for countries where an immediate dynastic occurred after a leader died in office for natural causes. Lastly, a binary variable *Assassination-IS* is constructed, which is equal to one when a country entertains an immediate dynastic succession in the top political office after the assassination of its leader. Furthermore, the examination is suggestive that countries which experienced retirement driven immediate succession or assassination induced immediate dynastic succession are on average more corrupt. In contrast, immediate dynastic successions that occurred after the death of national leader have no substantive role in explaining cross-country variation in corruption. Hence, this opens up an interesting avenue for more in depth quantitative and qualitative scrutiny to identify the political norms and precedents that govern immediate dynastic succession, and how such conditions (in turn) determine corruption.

On the whole, the central message from chapter-3 is in line with the earlier findings from the sub-national study that political dynasties matter. The nature of the investigation, which studies the influence of political dynasties at a country level, indicated that issues surrounding political dynasties are serious, as the results highlight a significant correlation between dynasty-politics and corruption. In addition to this, given that greater prevalence of dynasty politics is associated with higher levels of corruption, the finding is not compatible with the reputation-building incentive since it views dynastic politicians as relatively more altruistic entities who will abstain from corruption or shirking to generate goodwill for their family. This also makes the results consistent with the sub-national estimations discussed in chapter-2, which points out that 'dynasty-identity' can influence higher levels of shirking among legislators. The evidence from this cross-country set up does call attention to some imperative questions. To start with, the cross-country evidence provides motivation for examining in future whether political dynasties have any causal role in facilitating the levels of corruption a country exhibits. In

doing so, future analysis can try to pinpoint the exact channels through which political dynasties can hinder the state of governance in a given political domain. Likewise, it is also crucial to inquire: are there *conditions* that can make some dynastic leaders relatively more or less benign than others? More specifically, can political competition play a role in determining how dynastic leaders behave? On the role of political competition, Dal Bo et al (2009) shows that political dynasties are less likely to emerge in places where political competition is high. The authors argue that when a political party safely controls a state, the state and the national leadership of the party can afford to favour "elite" candidates with whom they are related through family or social ties. This, nonetheless, keeps it open for investigation whether exogenous changes in the levels of political competition can shape the behavioural patterns of political dynasties.

To conclude, the evidence from chapter-2 and chapter-3 offered an important corrective to the common assumption that political actors will behave in a similar manner under common institutional arrangement no matter who they are. Rather, it suggested that dynastic identity of political actors can matter in influencing their behaviour. This allowed the thesis to complement the recent studies that acknowledges a role of leader-identity in democratic political process. The papers in chapter-2 and 3 also examined *how* politicians with inherited political wealth behave. Otherwise stated, the results from both the sub-national and cross-country studies presented no support for reputation-building hypothesis, which argues that dynastic politicians will abstain from shirking or corruption to generate goodwill for their respective families. In contrast, the papers are indicative that dynastic politicians are less attentive in daily legislative business, and their prevalence is correlated with corruption across countries.

6.2 Theme-II: What facilitates the emergence of political dynasties?

The papers in chapter- 4 and 5 examined factors that shaped the composition of political class by facilitating the emergence and endurance of political dynasties. In doing so, the papers primarily focused on the role of political assassinations in facilitating *de facto* inheritance of political power by promoting dynastic attainment in political landscapes. This is interesting because existing literature on political dynasties have mainly emphasised the importance of structural factors in determining the likelihood that political leaders will start or continue a political dynasty. For example, Sidel (2004) in his comparative analysis of '*bossism*" in

Philippines points out that when the structure of the state apparatus allows politicians to entertain monopolistic control over a state's resources, and when such monopolistic control is used by them to construct a solid base in propriety wealth outside the realm of the state intervention, then a dynasty formation becomes easier to implement. This, in essence, highlights that what politicians are able to accumulate in terms of their personal and political capital plays a crucial role in determining if a leader is likely to start a political dynasty. On a more macro sale, qualitative studies have analysed political precedents and party norms to see how such factors affect hereditary successions in modern autocracies. Brownlee (2007) provides an insightful investigation which notes that whether elites will assist dynastic succession depends on the precedent for leadership selection. To be exact, where rulers are predated by parties surrounding political elites will defer to the party as the recognized arbiter of succession. Then again, where rulers predate their parties and political elites lack an established precedent for an orderly transfer of power, hereditary succession offers a focal point for reducing uncertainty, achieving consensus, and forestalling a power vacuum. Some studies have also scrutinized political assassination to understand the conditions that have allowed the rise of female dynastic leaders in South and Southeast Asia. For instance, Ritcher (1990) and Mark R. Thompson (2002) argue that 'martyrdom' of their male leaders (father or husband) has played a pivotal role in making them a symbol of opposition struggle against autocratic regimes, and thereby promoting their counterpart (wife or daughter) as national leaders in their respective political landscapes.

Accordingly, the papers in this thesis contribute to this inquiry by empirically examining on sub-national and cross-country data sets whether assassination can trigger hereditary successions in political arenas. Also, given that there is a dearth of empirical work on the factors facilitating the rise of dynastic leaders, the papers in chapter- 4 & 5 added fresh insights to this growing pool of knowledge. The only notable empirical work on the factors determining the rise of political dynasties is Dal Bo et al (2009). More precisely, the authors study the evolution of political dynasties in U.S. Congress from 1789 to 1996, and it primarily identifies that political power is self-perpetuating. That is, politicians who hold power for longer become more likely to have relatives entering office in the future. In other words, the study finds that *positive* exogenous shock to a leader's political power has persistent effects through posterior dynastic attainment. Therefore, the papers in theme-II, which focused on *negative* exogenous shocks to a politician's political power (in the form of randomness associated with

assassination attempts) complement this earlier enquiry through its analysis of a different scenario.

The paper in chapter - 4, in particular, scrutinized if political assassinations aided the rise of dynastic politicians across the political landscape of Bangladesh. This is appealing since Bangladesh hosts numerous dynastic leaders, out of which some are descendants of assassinated politicians. So, it provides an appropriate venue for carefully examining if assassinations had a causal role in promoting the rise of dynastic politicians. Thus, the study used biographical information of all political leaders who were elected to the office of a Member of Parliament either in the 8^{th} or 9^{th} National Parliament. Moreover, it noted that legislators who are descendants of assassinated leaders are associated with a higher likelihood of continuing the political dynasty. The estimations also showed that being a descendant of a non assassinated politician is also associated with a higher likelihood of having a posterior relative in office. Besides, on the relative importance of being a descendant of an assassinated leader, the analysis found some indications (even though the inference is very weak) that the relationship is stronger for descendants of assassinated lawmakers. I interpret these results as correlation because it is possible that these results are driven by unobserved family or individual heterogeneity. This, nonetheless, provides motivation for investigating if there is an underlying causal role of political assassination in triggering de facto inheritance of political power.

Hence, to identify a possible contributory role of assassination, the paper employs the identification strategy used by Jones and Olken (2009) to isolate the effects of political assassinations. The authors argue that while attempts on a political leader's life may be driven by historical circumstances, unobserved individual ability or etc, conditional on trying to kill a politician, the *failure* or *success* of an assassination attempt can be treated as exogenous. That is, chance has role in determining if a leader survives the gun shot (or explosion from a bomb) after the incident has occurred. Furthermore, if this rational holds true, then the effects of political assassination can be studied by comparing dynastic outcomes for political leaders who barely survived an assassination attempt in comparison to political leaders who died in an assassination attempt after controlling for key covariates.

As a result, to employ this identification strategy, the paper constructed a historical data set on assassination attempts in Bangladesh in post 1971 period. This new data set has information on

97 political leaders from all six Divisions in post 1971 period – who had *at least one* serious assassination attempt on their life. Besides, this allows the paper to scrutinize if leader who died in an assassination attempt in comparison to a leader who barely survived an assassination attempt is on average more or less likely to start or continue a political dynasty. And, the base-line estimations showed that political assassinations do, in fact, matter for facilitating dynastic attainments. This finding remains consistent for multiple robustness checks, and the magnitude of the relevant coefficient is suggestive that successful assassinations can increase the likelihood of dynastic succession by approximately 30% to 45%. Additionally, this is in line with the 'martyrdom' hypothesis, which argues that assassination facilitate dynastic succession by enhancing the appeal of the slain leader among core political groups (Ritcher, 1990; Mark R. Thompson, 2002). The results also provided some support to the notion that political leaders with better career pattern are associated with a higher likelihood that they will start or continue a political dynasty. This is also echoed in the analysis of Dal Bo et al (2009).

Taken as a whole, the results from both the data sets in Bangladesh convey a consistent message that assassinations can have a modifying role in shaping the composition of political class by triggering the rise of dynastic leaders to political office. This, to an extent, explains *why* some political dynasties have emerged across the political arena of Bangladesh. Yet, the issues that are not properly addressed are the causal channels or mechanisms that allow political assassinations to matter for aiding the rise of political dynasties. This brings to attention some important concerns about the process in which dynastic successions in political office occur following political assassinations. To start with, it is imperative to recognise that political assassinations are neither necessary nor sufficient for promoting the emergence of political dynasties. As a result, certain conditions can exist that allow some assassinations to trigger dynastic successions in political office. More specifically, do political leaders need political capital above certain threshold for their assassination to produce a dynastic succession in their political office/constituency? That is, do they need to be of any rank within the party hierarchy? Or, must they dictate followership above certain critical level for their assassination to bear any consequence?[259] These are essential issues to which future studies must pay consideration if one needs to understand the political machineries that are instrumental in facilitating dynastic transmission of political power after an act of assassination.

[259] Some studies have identified 'leader-follower' relationship as fundamental for understanding why certain leaders can catalyze change and others do not. See: Majumdar and Mukand (2008).

In addition, specific concerns also exist on the possible role of political parties. For example, it is crucial to examine if political parties accept a dynastic successor of an assassinated legislator since this gives them the best chance to retain the constituency. That is, the 'martyrdom' of the assassinated leader works as an important asset for political parties to maintain their authority in a leader's respective constituency. On the contrary, it is also probable that dynastic successions following an assassination are only possible if a party safely controls a seat. In other words, if political competition is low and a party has a strong control over a parliamentary seat, then national leadership of the party can afford to favour a dynastic successor of an assassinated leader[260] with whom they are related through social ties. Thus future work can delve into these specific explanations, and scrutinize the exact set of factors that allows assassinations to facilitate *de facto* inheritance of political power by aiding subsequent dynastic attainments.

The paper in chapter – 5, examined the same hypothesis on two cross country data sets. The purpose is to see if political assassinations aided dynastic transmission of political power at the highest political office across the globe. To this end, paper used biographical data on 442 national leaders across 65 countries who held office at least once in post 1950 period. The aim is to note whether assassinations have any association with dynastic politicians who had a posterior relative in office. Likewise, base-line results pinpoint that assassinated leaders are on average associated with a higher likelihood that they will later have a relative enter office. This inference remains robust for various changes in the econometric specifications and inclusion of essential covariates. It is, nevertheless, important to note that the observed relationship is in no respect causal. This is because charismatic national leaders (with traits that can be conducive to dynasty formation) can also attract assassination attempt.

Consequently, the paper used an alternative data set from Jones and Olken (2009), which has information on more than 190 national leaders from 93 countries in post 1875 period who had *at least one* assassination attempt on their life.The idea is to exploit the inherent randomness in the *success* or *failure* of assassination attempts to identify the effects of assassination on the likelihood that a national leader will start a political dynasty. Thus, OLS regressions on this

[260] A similar view is noted earlier, which is found in Dal Bo et al (2009). That is, the study also shows dynastic legislators are less common in more politically competitive states. This indicates that dynastic legislators may rely on their familiarity with political machineries (in the form contacts with party elites etc) to secure political positions in states that the party safely controls.

new data set confirmed that outcomes of assassination attempts have significant modifying role in shaping dynastic existence and persistence. The range of the coefficients is indicative that successful assassinations increase the probability of an eventual dynastic succession at the highest political office by at least 12 percentage points.[261] The analysis further examined if political assassinations drive any specific type of dynastic succession, namely – immediate dynastic succession or non-immediate dynastic succession. Moreover, the findings are suggestive that political assassinations are relatively more instrumental in determining the possibility of an immediate dynastic succession. This is interesting as it brings to attention an important avenue for future studies that intends to shed light on the exact process that guides dynastic transmission of political power after an act of assassination. In particular, future analysis can scrutinize the role of party norms and the level of intra-party democracy in facilitating such immediate succession.[262]

The results also show that the magnitude of the effect of political assassination on the likelihood of posterior dynastic attainment is probably stronger for national leaders with longer tenure in public office. This echoes a concern mentioned earlier. More specifically, if political assassinations are relatively more effective in triggering dynastic successions for leaders with at least ten or more years in office, then it is crucial to investigate why such exposure to political power matters. Is it because the level of political capital a national leader accumulates (while in power) has an important role in ensuring that assassinations of national leaders are

[261] Note, the marginal effect of assassination is less strong in comparison to what is seen from the sub-national data sets.

[262] Two cases are particularly worth noticing. One, after the assassination of President John F. Kennedy in 1963, he was immediately succeeded by Vice President Lyndon B Johnson. Moreover, even though Robert F Kennedy had aspiration to run for Presidency (See:http://bioguide.congress.gov/scripts/biodisplay.pl?index=k000114), the constitutional arrangement in United States dictates that Vice President is the first person in the presidential line of succession and will rise to the Presidency upon the resignation, death, or removal of the President (See: United States Constitution) Two, in India, when Prime Minister Indira Gandhi was assassinated in 1984, she was immediately succeeded by her eldest son Rajiv Gandhi –who was only a Member of Parliament – and it portrayed the level of influence that Gandhi family exerted on Indian National Congresses (Katherine, 2001). Now, this simple comparison provokes some important questions. That is, while Robert F Kennedy's ambition to become President came to a closure when he was assassinated during his election campaign in 1968, what exactly stopped him from immediately succeeding his brother in 1963? Is it the constitutional arrangement that demands the Vice President ascends to the post when such events occur? Or, did the level of intra-party democracy (that exists in U.S) create this constitutional arrangement? Furthermore, if the Indian political landscape had precise norms and precedents that guide leadership succession, would the political elites in Indian National Congress still give into such form of power transfer? Likewise, with a higher level of intra-party democracy, would such succession have taken place? Thus, future qualitative and quantitative scrutiny of such form of dynastic transmission of political power can attempt to isolate the exact role of such factors in aiding the rise of dynastic leaders.

countered by facilitating immediate dynastic successions by the incumbent coalition of political actors? Likewise, what is the exact *nature* of this 'political capital' that national leaders accumulate? Is it goodwill or financial wealth? Or, is it key contacts with government and political party machineries that one acquires from long exposure to political power? Additionally, does this nature of political capital vary across different types of national leader? To be more specific, do autocratic national leaders accumulate a different kind of political capital in comparison to democratic national leaders? Lastly, does the death of a national leader in an assassination attempt mean that the required level of political capital to start a political dynasty is now lower, given that his or her potential dynastic successor now benefits from his or her martyrdom? Thus, future research on political dynasties can offer more insights on these individual questions through detailed empirical examination of sub-national data sets from different polities.

Therefore, the data sets from the cross-country set up provide sufficient indication that political events – in the form of assassination of national leaders – matter in facilitating the rise of political dynasties. This assists in understanding why dynastic national leaders have emerged across diverse political landscapes. In addition, the principle message fits well with the overall results from the data sets in Bangladesh, and this consistency enhances the general confidence in the finding that assassination of political leaders can have significant causative role in aiding dynastic transmission of political power.

Taken together, the evidence from chapter-4 and chapter -5 provides an interesting outlook to an established cause of political dynasties. That is, while Dal Bo et al (2009) find that *positive* exogenous shocks to a leader's political power (in the form of winning re-election) matter in facilitating posterior dynastic attainment, the present thesis identifies that *negative* exogenous shocks to a leader's life (in the form of death in an assassination attempt) can too increase the likelihood that a leader will start or continue a political dynasty. This highlights that the *context* of the shock to political power is fundamental in shaping posterior dynastic attainment. Lastly, both papers in chapter-4 and chapter -5 have mostly relied on an empirical strategy that compares dynastic outcomes of political leaders who barely survived an assassination attempt in comparison to political leaders who died in an assassination attempt. This makes it suggestive that small elements of chance can have persistent effects in determining the composition of political class.

6.3Final Thought

James Madison (1788[1961]), an architect of the U.S Constitution wrote in the Federalist Papers (#57): "The aim of every constitution, or ought to be, first to obtain for rulers men who possess most wisdom to discern, and most virtue to pursue, the common good of the society; and in the next place, to take the most effectual precautions for keeping them virtuous whilst they continue to hold public trust." The first concern that the former U.S President indentifies – that we need a political class that is competent and truthful enough to execute its duties – has implicitly raised a demand for institutional arrangements that allows the most meritorious and public service oriented individuals to find representation in modern democratic policy making process. Yet, what the papers in Theme-II indicated that randomness associated with political events (such as political assassination) can have persistent effects by shaping the composition of political class. In particular, the papers showed that political assassinations can facilitate dynastic transmission of political power, and that such dynastic successions are not always a product of superior fixed endowments (leader gene, ability or merit etc).

The second concern – that we need to get institutional arrangements right so that the incentive structure allows politician to act in public interest – has produced a vast body of literature in political economy which focuses on the role of various institutional structure in determining economic development, democratic consolidation and policy choice. Nonetheless, almost all work in this stream of intellectual inquiry makes an implicit assumption that under a common institutional set up, political actors behave in a similar manner no matter who they are. Thus, the papers in Theme-I provided an essential corrective to this assumption by suggesting that leader identity matters, and that there is a sufficient scope for 'dynastic identity' to trigger sub-optimal behaviour among politicians. This contributed to the recent body of empirical work that focuses on 'leader-identity' in explaining how such attributes determines political behaviour or policymaking.

To end with, the essays in this thesis have not attempted to provide a grand theory of political dynasties. Rather, their objective has been to undertake substantive empirical scrutiny, so that we enhance our general understanding of the subject. In that sense, it has provided some key insights on the potential causes and consequences of political dynasties, and has opened an interesting avenue in political economy for future research endeavour.

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Appendix

Chapter-2: Motivations of Dynastic Leaders

Definition of Variables and Sources

Dependent Variables

1. **Parliamentary Attendance Ratio**: For the 8th National Parliament, the attendance ratio is computed by dividing the number of parliamentary days attended by the number of days a legislator can attend in all 23 sessions. For the 9th National Parliament, the ratio is computed by repeating the same procedure for first five sessions since the parliament is still in progress. This information is collected from the Legal Office of the National Parliament of Bangladesh

2. **Legal Charges:** It is binary dependent variable equal to one if a legislator in the 9th National Parliament has a legal charge on his or her personal affidavit, or zero otherwise. This information is compiled from reviewing all the affidavits which were made available by the Bangladesh Election Commission [BEC] in June 2009.

3. **Corruption Charges:** It is binary dependent variable equal to one if a legislator in the 9th National Parliament has a corruption charge on his or her personal affidavit, or zero otherwise. More specifically, two kinds of charges are categorized as corruption charges. (I) political leaders charged under "Prevention of Corruption Act, 1947" (II) political leaders charged under "Anti-Corruption Act 2004". This information is compiled from reviewing all the affidavits which were made available by the Bangladesh Election Commission [BEC] in June 2009.

Explanatory Variables

1. **Pre-relative**: It is an indicator variable equal to one whenever a legislator as or had a relative who was also a legislator. The definition of relative is for example- Wife, Brother, Son, Daughter, Cousin, Grandson, Son-in-Law, Brother-in-law, etc. This information is primarily taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MPs biological or social link with other politicians. Interviews were also used to address any missing information.

2. **Son-Daughter**: It is an indicator variable equal to one if a legislator is a son or daughter of a current or past legislator. This information is primarily taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MPs biological or social link with other politicians. Interviews were also used to address any missing information.

3. **Female**: It is an indicator variable equal to one if the leader is not a male, and zero otherwise.

4. **Num. of Time MP**: It is the total number of times a leader is elected to the office of an MP. This information is taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MPs in the 8th National Parliament. For the 9th National Parliament, I use the *Member Directory* on the 9th National Parliament produced by National Democratic Institute for International Affairs (NDI). For more information, see http://www.ndi.org/

5. **Minister**: It is an indicator variable equal to one if the leader is in the cabinet of the present government (or was in the cabinet in last government). This information is taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MPs in the 8th National Parliament. For the 9th National Parliament, I use the *Member Directory* on the 9th National Parliament produced by National Democratic Institute for International Affairs (NDI). For more information, see http://www.ndi.org/

6. **Businessman**: It is an indicator variable equal to one if the leader is or was businessman by profession, and zero otherwise. This information is taken from the *Documentary on the Parliament* by Rashid and Feroz (2002) which provides detailed information on an MPs in the 8th National Parliament. For the 9th National Parliament, I use the *Member Directory* on the 9th National Parliament produced by National Democratic Institute for International Affairs (NDI). For more information, see http://www.ndi.org/

7. **Non-Marginal Seat**: It is a binary variable equal to one if the legislator won the election by difference of more than twenty percentage points, and zero. This information is taken from **Bangladesh Election Commission [BEC].** For more information see: http://www.ecs.gov.bd/English/index.php

8. **Valid-Voter**: It is a constituency characteristics, which represents the number of legal votes a parliamentary seat had in elections for the 8^{th} and 9^{th} National Parliament. This information is taken from **Bangladesh Election Commission [BEC].** For more information see: http://www.ecs.gov.bd/English/index.php

9. **Distance-from-Dhaka**: It is measure of distance in kilometres of constituencies from the district of Dhaka. This is used as a crude proxy to measure how far a constituency is from the parliament. This information is collected from the **Office of the Ministry of Communication, Government of Bangladesh.**

Appendix- Box 2: List of some Newspapers Archives Used	
The Daily Star (English)	www.thedailystar.net
The New Age (English)	www.newagebd.com
The Independent (English)	www.theindependentbd.com
Dainik Jugantor (Bengali)	http://www.onlinebanglanewspaper.com/daily-jugantor-bangladesh-newspaper-online.html
Dainik Ittefak (Bengali)	http://www.bangladeshnews24.com/ittefaq/

Appendix Table-A1

Dependent Variables

	Data: 2001-06	Data: 2009-10		
	Attendance	Attendance	Legal Charges	Corruption Charges
	1	2	3	4
Son-Daughter	(-)0.101*	0.002	0.101	(-)0.042
	{{0.057}	{0.046}	{0.114}	{0.111}
Num. Times MP	(-)0.027***	(-)0.022**	0.053	0.07***
	{0.009}	{0.011}	{0.036}	{0.025}
Minister	0.019	(-)0.076**	(-)0.113	(-)0.005
	{0.037}	{0.035}	{0.109}	{0.083}
Age	0.003	0.002*	(-)0.003	0.003
	{0.002}	{0.001}	{{0.005}	{0.003}
Female	(-)0.066	0.039	(-)0.042	0.058
	{0.074}	{0.043}	{0.158}	{0.158}
Businessman	0.011	0.056*	0.125	(-)0.141
	{0.044}	{0.03}	{0.143}	{0.088}
Lawyer	0.111**	0.071*	0.013	(-)0.216**
	{0.049}	{0.043}	{0.158}	{0.091}
Military	0.038	0.092	(-)0.224	(-)0.342
	{0.061}	{0.079}	{0.149}	{0.134}
Distance	0.003***	(-)0.001***	(-)0.001***	0.001**
	{0.001}	{0.0001}	{0.0004}	{0.0004}
Valid-Voters	1.60E-07	(-)7.17E-08	(-)1.12E-06	(-)1.43E-07
	{2.65E-07}	{3.29E-07}	{8.25E-07}	{4.46E-07}
Non-Marginal Seat	0.058	(-)0.012	0.062	0.124
	{0.037}	{0.033}	{0.092}	{0.067}
Constant	(-)0.211	0.85	1.02	(-)215
	{0.278}	{0.11}	{0.368}	{0.169}
Party Effect	YES	YES	YES	YES
District Effect	YES	YES	YES	YES
N	271	285	276	276
Adjusted R-square	0.49	0.55	0.1	0.15

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Districts with one parliamentary seats are included; District and Party dummies are randomly chosen

Robust Standard Errors are clustered at District Level in all columns

Chapter-3: Corruption and Dynasty Politics

Definition of Variables and Sources

Dependent Variables

1. **Control of Corruption**:This index is produced by the World Bank since 1996 in its publication "Governance Indicators 1996-2005" (Kaufmann et al. 2006). It lies between -2.5 and 2.5 for almost all countries, with highly corrupted countries scoring towards -2.5. Please see: http://info.worldbank.org/governance/wgi/index.asp

2. **Corruption Perception Index-CPI**: This index is produced by Transparency International.[263] This index ranges from 10 (representing least corrupt) to 0 (representing most corrupt). Please see: www.transparency.org

3. **Corrupt**: This variable is taken from La Porta et al (1999). It ranges between 0 and 10, where low scores indicate "senior government officials are likely to demand special payments" and "illegal payments are generally expected in lower levels of government" in the form of "bribes connected with imports and export licenses, exchange controls, tax assessment, policy protection, or loans.

Explanatory Variables

1. **Economic Development:**I use the PPP GDP per capita in 2000 produced by the Penn World Tables.

2. **Openness**: I use the measure 'Openness' to foreign trade in 2000 produced by the Penn World Tables. Openness is measured by sum of export and import as a share of GDP for the year 2000

3. **Ethno-linguistic fractionalization**: The variable ranges from (0) to (1), where (0) reflects ethnically homogeneous regions. Ithas been taken from the Easterly and Levine (1997).

[263] For further information on Corruption Perception Index (CPI), visit the website:

4. **Common Law**: The variable identifies if the legal origin of Company Law or Commercial Code of the country is Englishor not. Data on legal origin is taken from La Porta et. al (1997, 1999).

5. **Former British Colony**: The variable identifies if a country has Britishcolonial heritage. The information was collected fromLa Porta et. al (1997, 1999).

6. **Federal**: The variable identifies if a country has a federal structure. The definition of Elazer (1995) is used in understanding if a country is federal or not. The data was collected from Treisman (2000).

7. **Uninterrupted Democracy**: This variable measures if a country witnessed un-interrupted democracy between 1950-2010 (or, since its independence if independence is achieved after 1950). This measure is based on a classification that is similar to the one provided by Alvarez et al. (1996), where they consider a country to be democratic if: (i) the chief executive is elected, (ii) the legislature (at least the lower house) is elected, (iii) [at least] two party contests election. The data was collected from Treisman (2000).

8. **POLITY**: This variable is taken from the POLITY IV dataset. The POLITY variable has 21 categories, ranging from -10 to +10, where -10 reflects extreme autocracies.For more information, see: http://www.systemicpeace.org/polity/polity4.htm

Appendix Box-3A: Summary Statistics for Independent Variables					
	N	Mean	Standard Deviation	Min	Max
Log GDP per Capita PPP 2000	132	8.54	1.178	6.16	10.78
Openness	132	84.25	53.8	2.02	377.68
Latitude	127	0.303	0.199	0.0111	0.7222
Protestant population as a % of total population	130	12.73	21.36	0	97.8
Roman Catholic population as % of total population	130	32.83	36.29	0	97.3
Muslim population as % of total population	131	21.65	34.34	0	99.9
Other population as % of total population	130	33.22	31.66	0	100
English Legal Origin	131	0.305	0.462	0	1
Socialist Legal Origin	131	0.176	0.382	0	1
French Legal Origin	131	0.435	0.498	0	1
German Legal Origin	131	0.0458	0.2099	0	1
Scandinavian Legal Origin	131	0.0382	0.192	0	1
Former British Colony	132	0.318	0.468	0	1
Never a Colony	127	0.173	0.379	0	1
Ethno-linguistic Fractionalization	113	0.335	0.306	0	0.89
Un-interrupted Democracy	131	0.252	0.436	0	1
Average Polity (1950-2000)	125	0.52	6.31	(-)10	10
Polity 2000	124	4.105	6.008	(-)10	10
GDP and Openness measures were taken from Penn World Tables 6.2 Legal Origin, Religious & Ethno-linguistic variables were taken from La Porta et al (1999) Colonial and Democracy variables were taken from Treisman (2000)					

Appendix Box - 3A: Summary Statistics for Independent Variables *continued*					
	N	Mean	Standard Deviation	Min	Max
Federal	132	0.129	0.336	0	1
Public Sector Employment % of Population	100	4.434	3.375	0.4	17.4
Fuel, metal & mineral as a share of merchandise export 1978 or 1979	85	26.15	30.19	0	100
Federal Variable is taken from Elzar (1995) Fuel, metal & mineral variable is taken from World Development Report 1982 Public Sector Employment variable is taken from La Porta et al (1999)					

Appendix-3B: List of e-sources

1. www.answer.com
2. www.bbc.co.uk
3. www.biographybase.com
4. www.brittanica.com
5. www.consortiumnews.com
6. www.cnn.com
7. www.datamass.net
8. www.europeanhistory.about.com
9. www.famousamericans.net
10. www.great-leaders.incredible-people.com/
11. www.guide2womenleaders.com/women_state_leaders.htm
12. www.infoplease.com
13. www.rulers.org
14. www.nationmaster.com
15. www.nytimes.com
16. www.thedailystar.net
17. www.timesofindia.com
18. www.timesherald.com
19. www.washintonpost.com
20. www.wordiq.com
21. www.worldbiography.net
22. www.worldpresidentsdb.com
23. www.worldstatesmen.org
24. Australian Dictionary of Biography (http://adbonline.anu.edu.au/adbonline.htm)

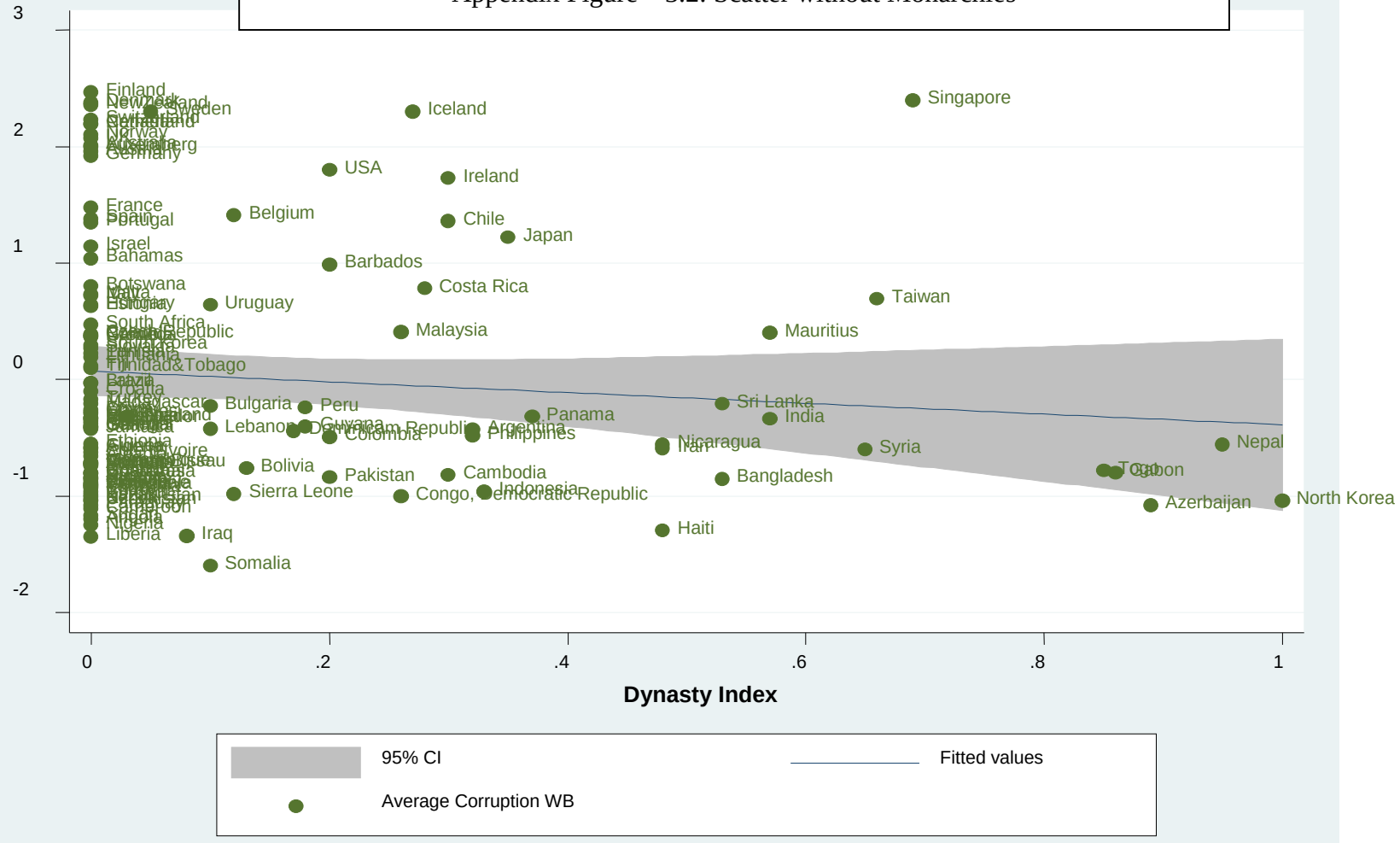
Table-A2: First Stage Regressions for Table-3.3A & 3.3B

	Dependent Variable: Log of GDP	
	Table 3.3A Column-6	Table 3.3B Column-6
	1	1
Common Law	(-)0.13	(-)0.148
	{0.265}	{0.269}
Former British Colony	(-)0.036	(-)0.047
	{0.255}	{0.258}
Never Colony	0.176	0.188
	{0.227}	{0.231}
Protestant	0.0001	(-)0.001
	{0.004}	{0.004}
Ethno-linguistic Frac.	(-)0.994***	(-)0.984***
	{0.253}	{0.264}
Federal	0.52***	0.525***
	{0.193}	{0.196}
Un-interrupted Dem	0.942***	0.941***
	{0.199}	{0.205}
Openness	0.007***	0.006***
	{0.001}	{0.001}
Latitude	1.938***	1.945***
	{0.488}	{0.496}
Constant	7.476***	7.486***
	{0.212}	{0.217}
N	110	107
Adjusted R-square	0.67	0.67
Prob> F	0	0

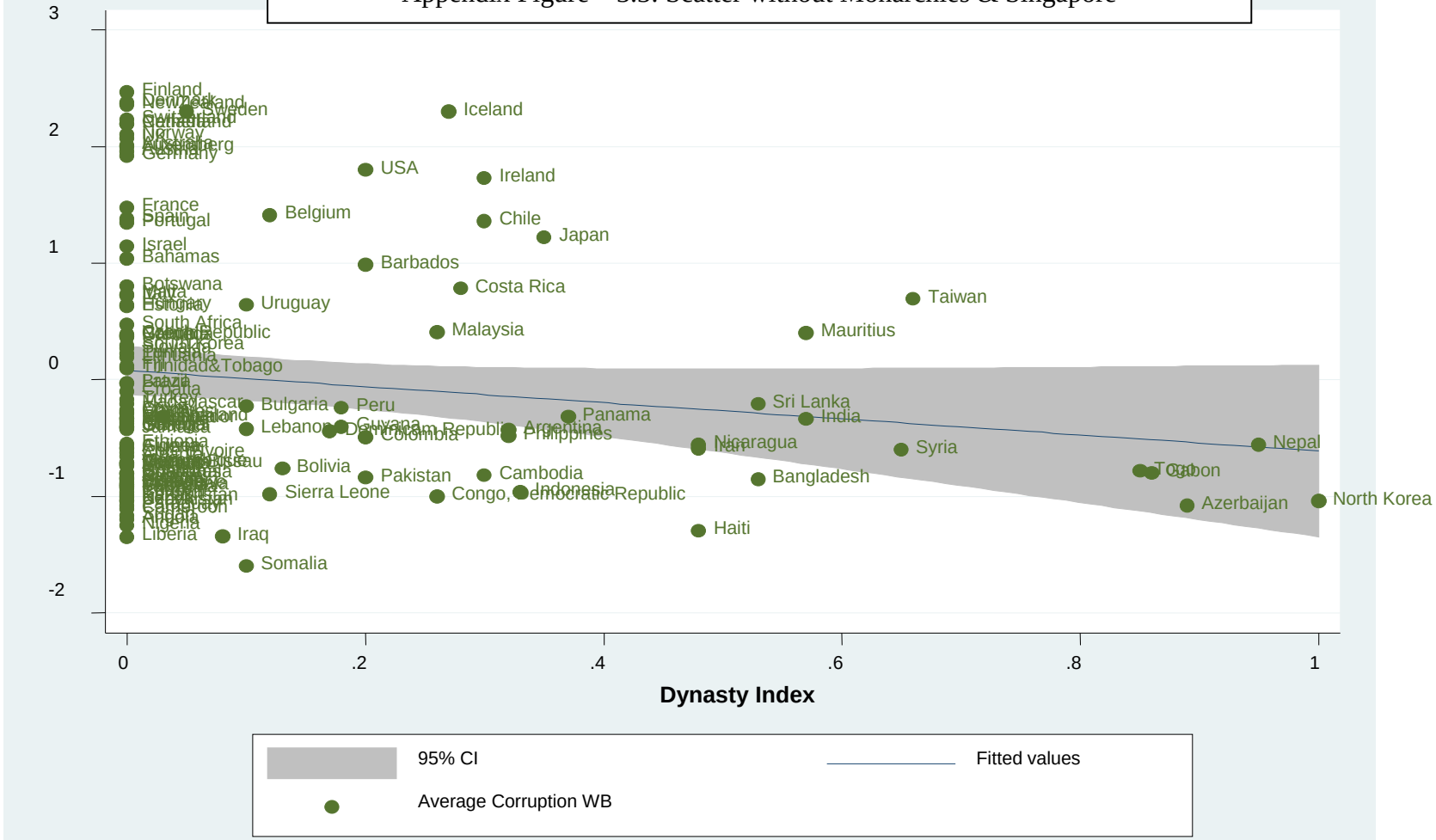
(*),(**) and (***) denote significance at 10%, 5% and 1%. Robust Standard Error are in the parenthesis

Appendix Figure – 3.1: Scatter All Countries in the Sample

Appendix Figure – 3.2: Scatter without Monarchies



Appendix Figure – 3.3: Scatter without Monarchies & Singapore



Chapter-4: The Composition of Political Class in Bangladesh: The Role of Assassinations.

Appendix Box-4A: Data Collection Methodology

This appendix describes the method for collecting data on assassination attempts on political leaders. A 'political leader' is defined as an individual (i) who is (or was) a member of the Central or District Committee of a registered Political Party. The purpose here is to code any close encounter of a political leader with an assassination attempt. To find assassinations and assassination attempts, extensive keyword searches on the archives of major newspapers listed in appendix Box-2B were made. The search scrutinized if words for assassination type events appeared in close proximity to a political leader.

The keywords employed to capture the events were: assassination, assassin, assassinated, wound, wounded, injure, injured, kill, killed, attack, attacked, attempt, attempted, bomb, bombed, murder, murdered, shot, shoot, stab, stabbed, assault, assaulted, escape, escaped, dies, died, slain, poisoned. The search results are then scrutinized to determine if an assassination attempt or assassination had occurred. The revealed information is then studied to note : (i) date of the event, (ii) outcome for the political leader, (iii) weapon(s) used, (iv) location of the attack. For obtaining information between 1971-1990, the newspaper *Dainik Ittefak* was also instrumental. This is because, the *Dainik Ittefak* is one of the oldest newspaper in the country –publishing first on 24 December 1953. Ithas also played a pivotal role during movement for national independence, and was often dubbed as the 'voice of East Pakistan'. Moreover, this is the only newspaper which has uninterrupted publication from 1972 till present date.A large number interviews were also conducted (the list is provided in Appendix -2A) to address any missing information on a political leader in the data set. This helped verify any information obtained from both the newspapers and the archives of the newspapers.

Appendix-4B: Why Focus on Divisional Level Data?

After Independence in 1971, the country was divided into four administrative Divisions. These four administrative divisions were: Dhaka, Rajshahi, Khulna and Chittagong. These four administrative divisions were further subdivided into 20 districts. At present there are six administrative Division since in 1993 Barisal division was created by splitting off Khulna, and in 1995 Sylhet division was created by splitting it from Chittagong. Moreover, the number of districts has also risen from 20 to 64. Now, according to the methodology of **Bangladesh Bureau of Statistics**, *divisional* parameters are formed from *district* parameters. This, in practice, allows the computation of economic characteristics (ex-*agricultural wage rate*) of Sylhet and Barisal Division for periods between 1971 and 1998 even though they did not exit officially during the specified time span. On the other hand, due to the lack of availability of sufficient sub-district level data for periods between 1971 and 1981, the computation of economic characteristics of the 44 districts that did not exist between 1971-1981is not possible. This has, to an extent, compelled the analysis to use divisional level data and not district level data.

Appendix Table-A3

Dependent Variable: Post-Relative

	OLS	Probit
	1	2
Pre-Relative Assassinated	0.322**	1.867***
	{0.14}	{0.464}
Pre-Relative Not Assassinated	0.111	1.138***
	{0.052}	{0.278}
Num. Times MP	0.023	0.289***
	{0.009}	{0.092}
Female	(-)0.0004	0.408
	{0.083}	{0.451}
Businessman	0.014	0.16
	{0.027}	{0.324}
Lawyer	0.008	0.259
	{0.036}	{0.463}
Military	(-)0.078	
	{0.048}	
Minister	0.039	0.598
	{0.036}	{0.302}
Distance from Parliament	(-)0.0007	0.001
	{0.0001}	{0.002}
Integrated	(-)0.107	(-)0.92
	{0.017}	{0.49}
Constant	0.249***	(-)2.23
	{0.065}	{0.978}
Party Effect	YES	YES
Division Effect	NO	YES
District Effect	YES	NO
Dead Excluded	YES	YES
Born after 1965 Excluded	YES	YES
N	471	392
Adjusted R-square	0.18	0.4
$\delta = \pi$	Prob > F = 0.15	Prob> chi2 = 0.12

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces clustered at district level

Appendix Table-A4

Dependent Variable: Post-Relative

	OLS	OLS
	1	2
Success	0.334***	0.488***
	{0.122}	{0.11}
Pre-Relative		0.193
		{0.152}
Female	0.014	(-)0.101
	{0.169}	0.308
Lawyer	0.129	0.158
	{0.147}	{0.129}
Military	(-)0.09	(-)0.208
	{0.387}	{0.358}
MP	0.192	0.179
	{0.138}	{0.145}
Minister	(-)0.149	(-)0.145
	{0.154}	{0.155}
PM-President	0.505***	0.373*
	{0.176}	{0.188}
Avg. Agricultural Wage	(-)0.007	(-)0.001
	{0.005}	{0.005}
Constant	0.693	0.505
	{0.49}	0.438
Party Effect	YES	YES
Division Effect	NO	YES
Political Effect	YES	YES
Weapon Effect	YES	YES
Born after 1965 Excluded	YES	YES
Leaders with Pre-Relative Excl.	YES	NO
Prec. Assassination T-1	NO	YES
N	72	82
Adjusted R-square	0.32	0.29

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces

Appendix Table-A5: Summary Statistics for the Base-Line Data Set

	N	Mean	Standard Deviation	Min	Max
Post-Relative	445	0.142	0.349	0	1
Pre-Relative	445	0.135	0.342	0	1
Assassinated	445	0.061	0.239	0	1
Long-Term	445	0.24	0.428	0	1
Female	445	.0404	0.197	0	1
Authoritarian	445	0.261	0.439	0	1
First-President / Prime-Minister	445	0.065	0.247	0	1
Age of Entry	445	53.7	9.77	17	81
Toppled in a Coup	445	0.137	0.344	0	1
Lawyer	443	0.255	0.436	0	1
Military	442	0.355	0.479	0	1
Previous Public Office Experience	445	0.8292	0.377	0	1
War-Leader	445	0.238	0.426	0	1

All summary statistics are for leaders who held the position of an Executive Head State at least once between 1950 - 2004 for all 65 countries in the sample.

Appendix Table-A6: Correlation between main independent variables

	Assassinated	Long-Term	Pre-Relative	Female	Authoritarian	First-President/PM	Age-of-Entry	Lawyer	Military	Prev-Public…	War-Leader
Assassinated	1										
Long-Term	0.01	1									
Pre-Relative	0.04	0.07	1								
Female	0.04	0.018	0.29*	1							
Authoritarian	0.13*	0.25*	(-)0.07	(-)0.12*	1						
First-President/PM	0.05	0.13*	(-)0.05	(-)0.05	(-)0.01	1					
Age-of-Entry	(-)0.1*	(-)0.21*	(-)0.19*	(-)0.06	(-)0.22*	(-)0.03	1				
Lawyer	(-)0.08	(-)0.05	(-)0.02	(-)0.09*	(-)0.24*	0.03	0.03	1			
Military	0.09	0.11*	(-)0.11*	(-)0.15*	0.52*	(-)0.06	(-)0.09	(-)0.3*	1		
Previous Public Office	(-)0.06	(-)0.05	0.09	0.03	(-)0.44*	(-)0.05	0.26*	0.19*	(-)0.34*	1	
War-Leader	0.08	0.25*	(-)0.00	(-)0.01	0.19*	0.05	(-)0.05	(-)0.05	0.29*	(-)0.1*	1

(*) represents significance at 5%

Appendix Table-A7: Summary Statistics for Leaders in Jones and Olken (2009) - Data Set.

	N	Mean	Standard Deviation	Min	Max
Post-Relative	196	0.2143	0.4114	0	1
Pre-Relative	196	0.1735	0.3796	0	1
SUCCESS	201	0.2985	0.4587	0	1
Long-Term	201	0.4527	0.499	0	1
Female	196	0.0153	0.1231	0	1
Authoritarian	195	0.3589	0.4809	0	1
First-President / Prime-Minister	196	0.0867	0.2822	0	1
Age of Entry	199	47.1	12.21	16	76
Toppled in a Coup	195	0.1589	0.3666	0	1
Lawyer	193	0.1865	0.3905	0	1
Military	192	0.4323	0.4967	0	1
Previous Public Office Experience	193	0.6995	0.4597	0	1
War-Leader	191	0.4031	0.4918	0	1

Personal information on all the National Leaders in Jones and Olken (2009) data set is collected from the e-sourceslisted in Appendix - 3B.

Appendix Table A8: A small segment of the Base-Line Data.

Country Name	Leader	Year of first entry	Post-Relative	Assassinated	Pre-Relative	Polity at Entry	…….
Argentina	JD Peron	1950	1	0	0	-9	
Argentina	Eduardo Lonardi	1955	0	0	0	-6	
Argentina	Pedro Aramburu	1957	0	1	0	-1	
Argentina	Aruro Frondizi	1958	0	0	0	-1	
Argentina	Jose Guido	1962	0	0	0	-1	
Argentina	Arturo Illia	1963	0	0	0	-1	
Argentina	Juan C Ongania	1966	0	0	0	-9	
Argentina	Alejandro Lanusse	1971	0	0	0	-9	
Argentina	Hector J Campora	1973	0	0	0	6	
Argentina	Raul Lastiri	1973	0	0	0	6	
Argentina	Isabel Peron	1974	0	0	0	6	
Argentina	Jorge R Videla	1976	0	0	0	-9	
Argentina	Robert E Viola	1981	0	0	0	-8	
Argentina	Leopoldo F Galtieri	1981	0	0	0	-8	
Argentina	Rennaldo Bignone	1982	0	0	0	-8	
Argentina	Raul Alfonsin	1983	0	0	0	8	
Argentina	Carlos Menem	1989	0	0	0	7	
Argentina	Fernando de la Rua	1999	0	0	0	8	
Argentina	Eduardo Duhalde	2002	0	0	0	8	
Argentina	Nestor Kirchner	2003	1	0	0	8	
Australia	Robert Menzies	1950	0	0	0	10	
Australia	Harold Holt	1966	0	0	0	10	
Australia	John Gorton	1968	0	0	0	10	
Australia	Willaim McMahon	1971	0	0	0	10	
Australia	Gough Whitlam	1972	0	0	0	10	
Australia	Malcolm Fraser	1975	0	0	0	10	
Australia	Bob Hawke	1983	0	0	0	10	
Australia	Paul Keating	1991	0	0	0	10	
Australia	John Howard	1996	0	0	0	10	
Bangladesh	Sheikh Mujib	1972	1	1	0	8	
Bangladesh	Khondokar Mushtaq	1975	0	0	0	-7	
Bangladesh	Abu Sayem	1975	0	0	0	-7	
Bangladesh	Zia ur Rahman	1977	1	1	0	-7	
Bangladesh	Abdus Sattar	1981	0	0	0	-4	
Bangladesh	HM Ershad	1982	0	0	0	-7	
Bangladesh	Khaleda Zia	1991	0	0	1	6	
Bangladesh	Sheikh Hasina	1996	0	0	1	6	
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

Appendix-Table A9: The small segment of the data from Jones and Olken (2009)

Country of Leader	Year of Assassination/Attempt	Name of Leader	SUCCESS	Post-Relative	Pre-relative	……
Afghanistan	2002	Hamid Karzai	0	0	0	...
Afghanistan	1933	Hashim Khan	0	1	1	...
Afghanistan	1933	Nadir Shah	1	1	1	...
Afghanistan	1929	HabibullahGazi	1	0	0	...
Afghanistan	1919	Habibullah Khan	1	1	1	...
Afghanistan	1880	AbdurRahman Khan	0	1	1	...
Albania	1931	Zogu	0	0	0	...
Algeria	1968	Boumediene	0	0	0	...
Algeria	1992	Boudiaf	1	0	0	...
Argentina	1908	Alcorta	0	0	0	...
Argentina	1916	de la Plaza	0	0	0	...
Argentina	1929	Irigoyen	0	0	0	...
Argentina	1977	Videla	0	0	0	...
Australia	1916	Huges	0	0	0	...
Australia	1975	Frazer	0	0	0	...
Austria	1920	Rener	0	0	0	...
Austria	1924	Seipel	0	0	0	...
Austria	1934	Dollfuss	1	0	0	...
Belgium	1902	Paul de Smet de Nayer	0	0	0	...
Bhutan	1965	Wangchuk, JigmeDorji	0	1	1	...
Bolivia	1946	Tomas Monje Gutierrez	0	0	0	...
Bolivia	1965	BarrientosOrtuna	0	0	0	...
Brazil	1897	de Moraes Barros	0	0	0	...
Bulagaria	1915	Ferdinand I	0	1	0	...
Bulagaria	1943	BorisIII	1	1	1	...
Burundi	1994	Ntaryamira	1	0	0	...
Cambodia	1959	Sihanouk	0	0	1	...
Cambodia	1973	Lon Nol	0	0	0	...
Cambodia	1998	Hun Sen	0	0	0	...
Chad	1976	Malloum	0	0	0	...
Canada	1995	Chretien	0	0	0	...
.	.	.	.	.	.	..
.	.	.			.	..

Appendix Table-A10

Dependent Variable: Success

	OLS	Probit
	1	2
Pre-Relative	0.046	0.262
	{0.125}	{0.492}
Long-Term	(-)0.161*	(-)0.619*
	{0.093}	{0.321}
Female	0.102	(-)0.093
	{0.282}	{0.996}
Age of Entry	(-)0.004	(-)0.019
	{0.004}	{0.013}
First President/PM	(-)0.058	(-)0.439
	{0.126}	{0.59}
Authoritarian	0.036	0.129
	{0.103}	{0.354}
Toppled in Coup	(-)0.101	(-)0.452
	{0.101}	{0.446}
Prev. Pub Experience	0.043	0.419
	{0.072}	{0.271}
Military	0.129*	0.585**
	{0.078}	{0.299}
Lawyer	(-)0.067	(-)0.228
	{0.073}	{0.279}
War Leader	(-)0.202**	(-)0.951
	{0.079}	{0.319}
Energy	(-)8.63e-08	(-)4.05e-07
	{8.53e-08}	{3.38e-07}
Polity	0.008	0.031
	{0.007}	{0.025}
Constant	0.673**	0.525
	{0.322}	{1.1}
Decade Effect	YES	YES
Region Effect	YES	YES
Weapon Effect	YES	YES
Total Number of Assassination Faced	YES	YES
N	181	180
R-square	0.29	0.29

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces clustered at country level

Appendix Table-A11

Dependent Variable: Post-Relative

	OLS	OLS	OLS	OLS
	1	2	3	4
Success	0.126*	0.211**	0.144*	0.136*
	{0.065}	{0.099}	{0.077}	{0.075}
Pre-Relative	0.337***	0.302**	0.308***	0.309***
	{0.098}	{0.118}	{0.101}	{0.102}
Long-Term	0.232***	0.268***	0.267***	0.242***
	{0.067}	{0.097}	{0.074}	{0.07}
Female	0.163		0.405	
	{0.184}		{0.285}	
Age of Entry	(-)0.0001	0.003	0.001	0.001
	{0.002}	{0.003}	{0.003}	{0.003}
First President/PM	(-)0.246**	(-)0.369**	(-)0.201	(-)0.21
	{0.124}	{0.142}	{0.139}	{0.144}
Authoritarian	(-)0.187**	(-)0.223**	(-)0.155**	(-)0.121
	{0.074}	{0.096}	{0.081}	{0.079}
Toppled in Coup	0.125	0.202**	0.155	0.132
	{0.086}	{0.084}	{0.104}	{0.1}
Prev. Pub Experience	(-)0.049	(-)0.059	(-)0.028	(-)0.023
	{0.075}	{0.095}	{0.083}	{0.082}
Constant	(-)0.067	(-)0.342	(-)0.143	(-)0.086
	{0.192}	{0.236}	{0.208}	{0.202}
Decade Effect	YES	YES	YES	YES
Region Effect	YES	YES	YES	YES
Weapon Effect	YES	YES	YES	YES
At Present Dead	YES	YES	.	.
Dead since 1990	NO	NO	YES	YES
Total Number of Assassination Faced	YES	NO	YES	YES
Preceding Assassination T-10	NO	YES	NO	NO
Number of Assassination Attempt=1	NO	YES	NO	NO
South Asia Excluded	NO	NO	NO	YES
N	161	113	137	130
Adjusted R-square	0.45	0.41	0.44	0.44

(*), (**) and (***) denote significance at 10%, 5% and 1%.

Robust Standard Errors are in braces clustered at country level;

Factors such as as Military, Lawyer, War Leader, Energy and Polity are controlled for in all regressions