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Partition, Independence, and Population Geography in Bengal

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Abstract

This study quantitatively explores the changing population geography in Bengal, with a particular focus on Partition in India in 1947 and Independence of Bangladesh in 1971. Based on decadal census data from 1901 to 2001 at the district level, this paper explores how trends in regional population growth evolved with such historical events. Following Redding and Sturm (2008), Differences-in-Differences estimation is also employed. Estimation results show that there were different shocks on both sides and from both events. In West Bengal, the change in the regional population trends occurred in 1947 and remained similar thereafter. On the other hand, in East Bengal, the population growth became statistically significant after 1971. Further robustness checks show that the impacts were not uniform with respect to the distance from the border. Overall analyses show that the emergence of the international border in Bengal had asymmetric impacts on both sides.

Keywords: regional population dynamics, border regions, partition and independence,
JEL classification: F15, N95, R12, R23

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Partition, Independence, and Population Geography in Bengal

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Abstract

Bengal Province in British India was partitioned in 1947 based on a broadly-defined religion-based ruling. While West Bengal remained in India, which is a Hindu majority area, East Bengal became a part of Pakistan, a predominantly Muslim region. This emergence of an international border in the middle of Bengal not only resulted in a change in the name of the eastern part to East Pakistan, but caused substantial changes in migration, economic flows and population distribution. Subsequently, East Pakistan became independent in 1971 as Bangladesh.

This study quantitatively explores the changing population geography in Bengal, with a particular focus on the events of 1947 and 1971. Based on decadal census data from 1901 to 2001 at the district level, this paper explores how trends in regional population growth evolved with such historical events. Following Redding and Sturm (2008), Differences-in-Differences estimation is also employed here and the events of 1947 and 1971 are taken as the subjects of the test.Estimation results show that there were different shocks on both sides and from both events. In West Bengal, the change in the regional population trends occurred in 1947 and remained similar thereafter. On the other hand, in East Bengal, this did not occur in 1947, but did occur in 1971. Further robustness checks show that the impacts were not uniform with respect to the distance from the border. Overall analyses show that the emergence of the international border in Bengal had asymmetric impacts on both sides of the population geography. The results suggest that changes in the population geography reflect the degree of tensions over the border.

Keywords: regional population dynamics, border regions, partition and independence,
JEL classification: F15, N95, R12, R23

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1. Introduction

The birth of a new country is often the outcome of negotiations, struggles, violence, and wars. International borders are sometimes redrawn at the time of independence and split spaces into different countries. They create obstacles to economic transactions over borders within regions which were once under a single administration. Increase in trade costs and transport costs over the international border result in decrease in accessibility of the border regions. The resulting regional structures may marginalize the border regions as periphery areas of the divided regions. The erection of international borders on the Indian subcontinent in 1947 can be seen as one such event. It caused substantial changes in economic flows, migration, and residential choice, particularly in provinces such as Punjab and Bengal, which were split between the emergent nations, India and Pakistan.

The purpose of this study is to quantitatively analyze the impacts of the partition on the distribution of population using decadal census data for Bengal districts over a period of 100 years. While West Bengal remained in India, East Bengal became East Pakistan and subsequently Bangladesh. The analysis covers the partition in 1947 as well as the independence of Bangladesh in 1971. The international border remains the same after 1947 but may have had different impacts after 1971. There is a testable hypothesis that border regions are negatively affected due to the loss of neighbor markets. The partition of Bengal brought about the emergence of the international border, increased trade and transport costs over the border, and decreased accessibility to the border regions.

There are two studies that have examined population geography and international borders, such as Redding and Sturm (2008) on Germany and Nakajima (2008) on Japan. Both studies show that there were negative impacts on border regions due to the emergence of international borders within the previous territories. However, neither of the two studies examined the impacts on both sides of the border. This paper is the first to examine the impacts of an international border from both sides.

Estimation results show that there were different shocks on both sides and from both events. In West Bengal, the change in regional population trends occurred in 1947 and remained similar thereafter. On the other hand, in East Bengal, a change in regional population trends did occur in 1971 and remained

similar thereafter. Further robustness checks show that the impacts were not uniform with respect to the distance from the border. Overall analyses show that the emergence of the international border has asymmetric impacts on the population geography on both sides. The results suggest that changes in the population geography reflect the degree of the tensions over the border.

2. Background

In this section, an overview of studies on the partition of Bengal which look at both sides together is given and it is shown that there are few such studies. In the following subsections, notable events in Bengal during the 20th century, partition and independence, are briefly reviewed.

2.1. Previous studies on Bengal

Studies on the partition of Bengal began to appear at the time of its partition – for example see Chatterjee (1949) – which basically shows many maps of Bengal as a whole with available information. However, due to the nature of these maps, the descriptions did not include any quantitative analysis. Vakil (1950), on the other hand, is a set of seminal works on a variety of relevant topics including sectoral analysis. Davis (1951) is another early study on population linked to partition. However, these two important analyses are at the state level and cannot explain the geographical impacts of partition in detail. Most of the studies on partition considered the political discourse between Hindus and Muslims as the main topic of discussion.

One exception is van Schendel (2004), who pointed out partition studies based on the current national territory. He proposed *borderland studies*, a unified approach on regions partitioned or adjoining borders. Geographical separation of regions by borders may or may not separate culture, society and economic activities. He pointed out that studies on the Bengal region are also divided by the national border. This study shares the same scope as van Schendel (2004) and fills out the gaps in the knowledge on the changing population distribution in Bengal after the establishment of the border. Having consistent geographical units throughout the period, the regional structural changes in East and West Bengal are examined. It is found that the impacts in 1947 and 1971 differ between East and West. This suggests that the results show the asymmetric

impacts of the creation of the international border on the population geography.

Bharadwaj, Khwaja and Mian (2014) is an exception that quantitatively examines the impacts of partition in India and Pakistan between 1931 and 1951.[1] They compared the composition of population on education, occupation and sex ratio in each district. Since the time period for this study is around the time of partition, the results capture the immediate impacts, not the long-term impacts. Compared to Bharadwaj et al. (2014), this work examines the regional dynamics in the long term and the geographical proximity to the border is examined in detail.

2.2. Partition of Bengal

There have been two significant events in Bengal, the partition from India in 1947 and the independence of East Pakistan as Bangladesh in 1971. The partition of India finalized the international border in Bengal and forced many people to move across the frontier. The independence of Bangladesh did not alter the international border as fixed in 1947.

The partition of India was the result of the independence movement which began in the 19th century and domestic politics between Hindus and Muslims. However, it was not the initial goal for the independent India that the regions were to be divided by the two religious groups. Political and public support for the partition of India by religion became prominent from the 1940s, and one of the critical events may have occurred in 1936.[2]

The partition of Bengal was determined in July 1947 at the Bengal Assembly. "The provisional West Bengal Legislative Assembly resolved, by 58 to 21 votes, that the province should be partitioned and that West Bengal should join India's Constituent Assembly. At a separate meeting later on the same day, members of the East Bengal Assembly voted against partition by 106 to 35."[3]

The border was demarcated by the Bengal Boundary Commission lead by Sir Radcliffe and the inclusion of Sylhet followed a referendum.[4] The instructions

[1] East Bengal was East Pakistan from 1947 until 1971, as it was in their analysis.

[2] See for example, Singh (1987) on the political support in various states, Chatterji (2011) for Bengal, and Collins and Lapierre (1982) for reflections on the last moments of British India by the last viceroy, Louis Mountbatten.

[3] Burrows to Mountbatten, telegram dated 20 June 1947 in Mansergh, Nicholas (1970) Constitutional relations between Britain and India. The transfer of power, 1942-1947, vol. XI, No. 278, p536, London, which is quoted in Chatterji (2011:20).

[4] Viceroy's Personal Report No.17, L/PO/6/123:ff245-63

for demarcation were specified as "*the boundaries of the two parts of Bengal on the basis of ascertaining the contiguous majority areas of Muslims and non-Muslims. In doing so it will also take into account other factors.*"[5]

There were only eight weeks before 15th August, when the demarcation line was published. Since the Bengal Boundary Commission was not able to reach one agreed demarcation line, the final decision was fully left up to the chairman of the commission, Lord Radcliffe.

2.3. Independence of Bangladesh

Pakistan was united by Muslims based on their religious belief, but it was soon found that cultural differences between East and West Pakistan were not negligible. In 1948, the Pakistani government declared the national language to be Urdu, which is not a common language in East Pakistan. This aroused Bengali language movements in East Pakistan. In February 1952, deaths occurred during demonstrations. The movement became intensified and came to be represented as Bengali nationalism. In 1966, the Awami League, the major party in East Pakistan, put forward a *six point demand*, including regional self-governance, based on the frustrations caused by unequal public spending and taxation. However, Sheikh Mujibur Rahman, party leader of the Awami league, was arrested and this resulted in political strikes across the regions. In 1970, the first general election in Pakistan resulted in dominance by the Awami League, seizing 160 seats out of 300. However, the central government prolonged the opening of the parliament. In March, Sheikh Mujibur Rahman declared the independence of Bangladesh and subsequently the internal war between the Pakistani army and freedom fighters was provoked. Since most of the freedom fighters were not well trained, the Indian army supported the training of the fighters. In December 1971, the Indo-Pakistani War broke out and it ended within two weeks with the surrender of the Pakistani army in Dhaka, East Pakistan,[6]

From the above historical events, the 20th century can be divided into three periods; British colonial period until 1947, the East Pakistani period from 1947 to 1971, and the Bangladeshi period from 1972-2001.

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[5] Viceroy's Personal Report No.17, L/PO/6/123:ff245-63

[6] See Raghavan (2013) for details.

3. Data and Methodology

3.1.Methodology

Following Redding and Sturm (2008), the Differences in Differences method is employed here. The treatment group in the analysis is the regions which adjoin or are near to the borders. This is based on predictions regarding changes in trade costs and associated changes in market accessibility. Emergence of international borders can imply an increase in trade costs and transport costs due to newly-incurred procedures associated with crossing international borders, such as documents required for imports and exports to cross the border and persons passing through border checkpoints. Customs procedures for international shipments of goods are required and some documents also need to be attached to goods and carried by persons. These preparations incur additional transaction costs, which are included in non-tariff barriers, and inevitably increase trade costs. Due to these increases in trade costs, the regions in the treatment group may face the loss of markets on the other side of the border.

The underlying assumption for this method is that the regions compared must have a common trend. Since both regions were separated into different countries, there may be systematic differences in regional trends. In order to ensure that the common trend assumption holds, the estimation is restricted to samples from East and West.

Following the specification in Redding and Sturm (2008), the equation to be estimated is as follows;

$$Popgrowth_{rt} = \beta Border_r, + \gamma(Border_r \times Division_t) + \delta_t + \epsilon_{rt}\,, \qquad (1)$$

where *Popgrowth* is the growth of the regional population share of region r between time t and t-10 and is written as in $Popgrowth_{rt} = Share_{rt}/Share_{rt-10}$. *Border* is the dummy variable of regions which adjoin the international border dividing Bengal, which is shown as a red line in Figure 1,[7] and *Division* is the

[7] The East-West border in Bengal, which is a part of the international border between Bangladesh and India has been selected for use here. There are two main reasons for this choice. Firstly, the geographical focus of this paper is the partition of *Bengal*. Accordingly, the border divides the region called Bengal. To larger extent, the regional government of Bengal included Assam and the North Eastern Indian States. However, these regions were always separate states

time dummy of an event; either partition or independence. We include fixed effects for year, δ, and district, ν, and have error term as ϵ.

This empirical specification allows us to compare the trends in regional population growth between possibly affected regions and others for before and after the events. Firstly, the coefficient of *Border* shows the overall trends of the border regions. Since *Division* captures the time trend after the event, if there are no changes in trends after the event, the interaction of *Border*×*Division* may be insignificant.

For further examination of the relations with proximity to the border, the *Border* dummy is replaced by distance ring dummies, $Distance_k$, where k has five thresholds at intervals of 20km up to 80km and beyond 80km. The equation is rewritten as follows;

$$Popgrowth_{rt} = \sum_{k=1}^{5} \beta_k \, Distance_{kr} + \sum_{k=1}^{5} \gamma_k (Distance_{kr} \times Division_t) + \delta_t + \epsilon_{rt} \quad (2)$$

3.2.Data

The data is taken from historical population data published by the Office of the Registrar General and Census Commissioner, India for West Bengal and statistical yearbooks published by the Bangladesh Bureau of Statistics, Bangladesh. There are 19 districts in West Bengal and 17 districts in East Bengal. From 1901 until 2001, 11 censuses were held in both Bengals. The census years in the colonial period are the same across the regions, being 1901, 1911, 1921, 1931, and 1941, but differ for the post-colonial period. For the post-colonial period, while West Bengal follows the same decadal census year, East Bengal delayed one census in 1971, which was carried out in 1974 instead.

Figure 1 is a map of Bengal Province and Sylhet from Assam Province in British India, which comprises the current territory of Bangladesh. Sikkim and Tripura, which were princely states, are excluded from the following analysis. Also, Purulia merged from Bihar in 1956 is excluded.

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or provinces and there are no reasons for considering them as parts of Bengal. The remainder of the Bangladesh-India international border was not within Bengal but delineated Assam, Tripura State, and Upper Burma in colonial times and delineates Assam, Meghalaya, and Tripura at present.

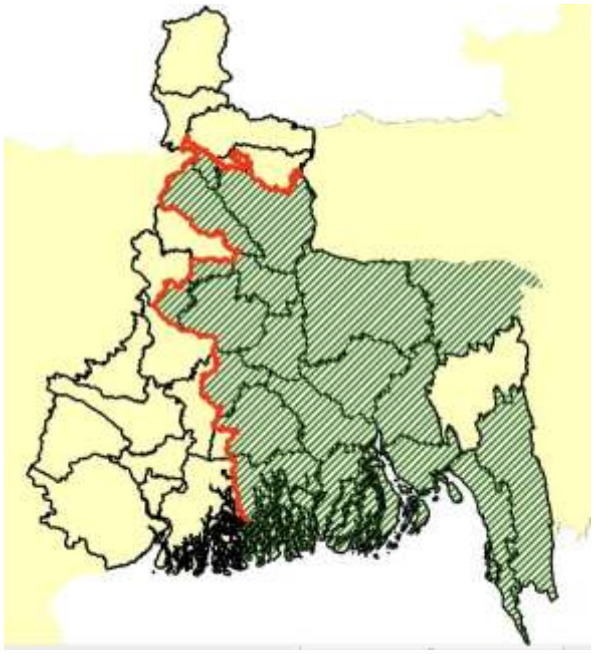

Figure 1. District boundary of Bengal in 1947

Source: Author's cartography

4. Estimation results

4.1. East Bengal

Estimation results for East Bengal are shown in Table 1. There are three specifications for each event in the analysis. Samples are selected for the relevant period. Specifically, the first three columns examine the impacts of the partition of India in 1947 and during the Pakistani period until 1971, compared to the colonial period from 1901 to 1947. The second three columns are the results of the analysis on the impacts of the independence of Bangladesh. The post-independence period, from 1972 to 2001, is chosen for the analysis. Finally, the last three columns show the analysis for the entire period throughout the 20th century. The period of the data includes the colonial period from 1901 to 1947, the Pakistani period from 1947 to 1971, and the Bangladeshi period from 1972 to 2001.

The first column shows that the average population growth in the border regions is lower than the national average. The second column shows that there was positive growth in border regions in the Pakistani period, but this is not statistically significant. The third column controls for district fixed effects and shows the same results as in the second column. From these results, the analysis for the colonial period and Pakistani period shows that border regions had relatively lower population growth and that there were no statistically significant changes in regional population growth trends.

The fourth column shows that border region populations grew less than the average. The fifth column shows that changes in regional population growth trends were statistically significant and that border region population growth increased after independence. The net effect on the border regions after independence can be the sum of the border dummy and the interaction term of border and time. This net effect is found to be negative, but significant, and this suggests that the change in trend was not sufficient to alter population growth to become higher than the sample average. The sixth column has been controlled for district fixed effects and shows the same trend. These results confirmed that for the colonial period and Bangladeshi period, the regional trend in the border regions changed in the direction of increases in population.

For the analysis of the entire period from 1901 to 2001 in Bengal, both periods and both event dummies are combined in the estimations. The results are listed in the seventh to ninth columns. The seventh column shows that average population growth in the border regions was not lower than the national average, but not significantly so. The eighth column shows that regional population growth in the Pakistani period and Bangladeshi period are higher than those in the colonial period. The level of coefficient is the same for the Pakistani period, 7.16%, and this becomes larger, 10.4%, for the Bangladeshi period. The net effects of border regions are positive in the Pakistani and Bangladeshi period. When the district fixed effect is included, as in the 9th column, the Pakistani period dummy disappears but the Bangladeshi period dummy remains and the levels of coefficients are the same as in the 8th column. These results are still in line with the above-mentioned results by separated period.

	PAK 1951-71			BGD 1974-2001			Both period: 1947-2001		
East Bengal	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Adjoin to border	-0.0545**	-0.0784***		-0.0328*	-0.0784***		-0.0225	-0.0784***	
	[0.0250]	[0.0228]		[0.0179]	[0.0227]		[0.0154]	[0.0237]	
Border*Division(1947-1971)		0.0716	0.0716					0.0716*	0.0716
		[0.0628]	[0.0650]					[0.0411]	[0.0639]
Border*Division(1972-2001)					0.0820**	0.0820**		0.104***	0.104***
					[0.0341]	[0.0352]		[0.0336]	[0.0274]
Constant	1.029***	1.015***		1.010***	0.999***		1.019***	1.015***	
	[0.0180]	[0.0214]		[0.0121]	[0.0126]		[0.0226]	[0.0238]	
Fixed effect in year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effect in district	No	No	Yes	No	No	Yes	No	No	Yes
Observations	102	102	102	153	153	153	170	170	170
R-squared	0.062	0.085	0.991	0.032	0.072	0.993	0.019	0.077	0.994

Table 1: Estimation results for East Bengal

Source: Author's calculation

4.2.West Bengal

Table 2 shows the results for West Bengal. The first column shows that the average growth rate of border regions is higher than the average. With an insignificant coefficient for border dummy and significance in the border-division dummy, the second column shows that such higher growth rates in border regions occurred after 1947 and the rate of growth was on average 8.6%. The independence of Bangladesh is not a direct event in India, but may have had some impact due to its proximity. Similarly to the analysis for East Bengal, different time dummies can explain the shocks in each time period. The third column shows that the trend changes in population growth occurred in 1947 and that after 1972 the trends remained the same. There is no statistical difference between the two coefficients for the border and time interaction terms. The fourth and fifth columns introduce district fixed effects to control district level characteristics such as location of natural geography, climate, urbanization, and other factors. These results are also similar to those discussed above. Overall results show that in border regions after 1947, there were changes in the growth trend of regional population shares, which increased by about 8.6 percent. This is in line with the observations by Bharadwaj and Fenske (2012).

West Bengal	(1)	(2)	(3)	(4)	(5)
Adjoin to border	0.0282***	-0.0235	-0.0235		
	[0.0101]	[0.0178]	[0.0179]		
Border*Division(1947-)		0.0862***		0.0862***	
		[0.0207]		[0.0200]	
Border*Division(1947-1971)			0.0867***		0.0867***
			[0.0314]		[0.0296]
Border*Division(1972-2001)			0.0860***		0.0860***
			[0.0201]		[0.0198]
Constant	0.992***	0.993***	0.986***		
	[0.0105]	[0.0350]	[0.0186]		
Fixed effect in year	Yes	Yes	Yes	Yes	Yes
Fixed effect in district	No	No	No	Yes	Yes
Observations	190	190	190	190	190
R-squared	0.052	0.141	0.141	0.996	0.996

Table 2: Estimation results for West Bengal

Source: Author's calculation

5. Robustness check

Two points are examined for the robustness of the results. One is on the data quality of the 1941 Census and the other is the redefinition of the border dummy.

5.1. Reliability of the 1941 Census

The Census Report of 1941, and Chatterjee (1947) pointed out that the 1941 Population Census may have been affected by difficulties in the wartime period and the political discussion on the majority of residents by religion. Some regions may have reported inflated numbers of residents. Chatterjee (1947) reestimated the possible number of residents. Based on this critique, the quality of the Population Census may cause a possible bias. In order to avoid any biases stemming from of this quality issue, the 1941 data has been excluded.

The results without the 1941 Census are shown in Table 3. All the estimates are similarly significant and have the same signs. There are marginal increases in R-squared except in column (4), and this may suggest that the critique by Chatterjee (1947) is validated.

	West Bengal					East Bengal		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Adjoin to border	0.0394***	-0.00738	-0.00738			-0.0267*	-0.110***	
	[0.00914]	[0.0157]	[0.0158]			[0.0159]	[0.0264]	
Border*Division(1947-2001)		0.0701***		0.0701***				
		[0.0189]		[0.0183]				
Border*Division(1947-1971)			0.0706**		0.0706**		0.103**	0.103
			[0.0303]		[0.0287]		[0.0418]	[0.0626]
Border*Division(1972-2001)			0.0699***		0.0699***		0.135***	0.135***
			[0.0182]		[0.0176]		[0.0349]	[0.0282]
Constant	0.987***	0.978***	0.986***			1.008***	0.993***	
	[0.0100]	[0.0101]	[0.0186]			[0.0223]	[0.0219]	
Fixed effect in year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effect in district	No	No	No	Yes	Yes	No	No	Yes
Observations	171	171	171	171	171	153	153	153
R-squared	0.113	0.187	0.187	0.998	0.998	0.025	0.122	0.995

Table 3: Robustness check: Excluding the 1941 Census

Source: Author's calculation

4.2. Redefinition of the border dummy

For a further robustness check, the dummy variable for the borders is altered to the distance ring dummies of direct distance from the headquarters of the district to the nearest international border, instead of being adjacent to the border. This change may be in line with Delgado and Florax (2015), which pointed out a possible bias stemming from an inappropriate specification of spatial linkages. This may increase the rationale of proximity to the border if some of the non-adjacent districts are near the border or some of the adjacent districts have their headquarters far from the border. The thresholds are set at as 20km up to 80km and beyond 80km. The baseline is set to be beyond 80km. The equation to be estimated is as shown in (2). Note that the data for 1941 are again excluded.

	West Bengal		East Bengal	
	(1)	(2)	(3)	(4)
Distance: < 20km	0.0156		-0.151***	
	[0.0227]		[0.0393]	
Distance: 20 - 40km	-0.0252		-0.102***	
	[0.0180]		[0.0335]	
Distance: 40 - 60km	0.0373*		-0.0620	
	[0.0205]		[0.0393]	
Distance: 60 - 80km	0.0604***		-0.0191	
	[0.0169]		[0.0529]	
Distance: < 20km	0.0440	0.0440	0.148**	0.148
* Division(1947-1971)	[0.0338]	[0.0327]	[0.0621]	[0.137]
Distance: 20 - 40km	0.124**	0.124**	0.0725	0.0725
* Division(1947-1971)	[0.0520]	[0.0501]	[0.0529]	[0.0512]
Distance: 40 - 60km	0.0585**	0.0585**	0.00569	0.00569
* Division(1947-1971)	[0.0296]	[0.0233]	[0.0621]	[0.0474]
Distance: 60 - 80km	-0.0112	-0.0112	-0.0139	-0.0139
* Division(1947-1971)	[0.0604]	[0.0640]	[0.0837]	[0.0383]
Distance: < 20km	0.0550**	0.0550**	0.185***	0.185***
* Division(1972-2001)	[0.0247]	[0.0250]	[0.0519]	[0.0554]
Distance: 20 - 40km	0.0766***	0.0766***	0.124***	0.124***
* Division(1972-2001)	[0.0213]	[0.0244]	[0.0443]	[0.0273]
Distance: 40 - 60km	0.0134	0.0134	0.0701	0.0701***
* Division(1972-2001)	[0.0232]	[0.0194]	[0.0519]	[0.0256]
Distance: 60 - 80km	-0.0854**	-0.0854***	0.0168	0.0168
* Division(1972-2001)	[0.0342]	[0.0291]	[0.0700]	[0.0238]
Constant	0.976***		0.992***	
	[0.00799]		[0.0233]	
Fixed effects in year	Yes	Yes	Yes	Yes
Fixed effects in district	No	Yes	No	Yes
Observations	171	171	153	153
R-squared	0.308	0.998	0.157	0.995

Table 4: Robustness check: Redefinition of border dummy

Source: Author's calculation

Table 4 shows the results for each region both with and without district fixed effects. Results for East Bengal appear in the first and second columns. The first column shows that there were changes in the growth of regional population share after 1941 that continued after 1971, which is in line with the discussion in the previous sections. However, there are two additional findings to the previous sections; the shape of the spatial decay and statistical significance. When the level of coefficients by each set of dummy variables were compared,

it was found that they are almost in the order of distance from the border. For the dummies after 1947, with that for 20-40km as the highest, the remaining dummies become gradually lower. For the dummies after 1971, the trend with distance from the border is exactly the same as with those after 1947. As the significance appears in different distance rings, the locations of growth in population share were slightly different after 1947 and 1971. The second column confirmed the same results.

The third and fourth columns are for East Bengal. Both results similarly follow the previous discussions with no or slight changes after 1947 and changes after 1971. One notable addition from these results is that the magnitudes of the coefficients clearly show a gradual decline with distance from the border for the dummies for both periods. For both regions, the current specification enables us to find that the relations between the growth in regional population share are a function of distance from the border.

6. Discussion

In this paper, with particular focus on the partition of India in 1947 and the independence of Bangladesh in 1971, the changes in the regional trends of population growth in Bengal are examined quantitatively. The Bengal region has had unique border experiences because it was divided in 1947, followed by the independence of East Bengal from Pakistan in 1971. Using the Differences in Differences method as in Redding and Sturm (2008), the impacts of each event on population geography were tested. The results show that there were shocks in both the East and West, but the timings were different, which suggests that the impacts of the partition of Bengal were not symmetric. Since previous studies, such as Redding and Sturm (2008) and Nakajima (2008) examined only one side of the border, this paper is the first to show the impacts from both sides of the border. The results show that the impacts of the international border on population geography are asymmetric. Specifically, while the regional population share of border regions increased in West Bengal after 1947 and remained the same, the trend in East Bengal did not change after 1947, but population growth in the border regions increased after 1971.

The increase of regional population share in the border regions of West Bengal is largely explained by migrants from East Bengal at one time just after

1947, at the time of partition. Since the population movement from East to West was larger than that in the other direction, the pressure on limited lands may have been higher in the West. Due to the large in-migration to India, people who could not afford to move into urban areas chose to move into border regions. On the other hand, border regions in East Bengal did not grow during the Pakistani period, but increased their presence after independence. The shift of population distributions to the border regions in East Bengal may be explained by changes in the political atmosphere over the international border, which reflected the associated trade costs. Inter-governmental relationships between India and Pakistan became tense as several wars and war-like conflicts occurred. Compared to this, the relationship between India and Bangladesh was much more favorable. For example, the independence army was trained by the Indian Army and the Independence War came to an end with the defeat of the Pakistani Army due to heavy support by the Indian Army. The increase of population in the border regions after 1972 may reflect the lowered trade costs over the international border.

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Appendix

	West Bengal		East Bengal	
Adjoining to border	No	Yes	No	Yes
Distance: < 20km	0	4	0	2
Distance: 20 - 40km	0	3	0	3
Distance: 40 - 60km	2	1	2	0
Distance: 60 - 80km	2	0	1	0
Distance: >80km	7	0	6	3
Total	11	8	9	8

Table A1. Districts by distance from the border