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Displacement in Bengal, Revisited

Takashi KUROSAKI*,
Abu SHONCHOY**,
and Kenmei TSUBOTA**

March, 2018

Abstract

Bengal was divided twice in the 20th century. At the first occasion, both sides were still within British India. Then, on the second occasion, Bengal split the two into different countries, India and Pakistan. We examine the displacements in Bengal after the partition in 1947 with the finest geographical level at thana. The results show that there were significantly negative impacts on population growth on the region which changed their side from East in 1905 to West in 1947. They also experienced an increase in the share of literate population, suggesting the impact of population exchange in different levels of literacy.

Keywords: Displacement, Forced Migration, Partition of Bengal,

JEL classification: F15, N95, R12, R23

* Professor at Hitsotsubashi University, Institute of Economic Research, kurosaki@i-hit.ac.jp

** Research fellow at Institute of Developing Economies-JETRO, shonchoy_abu@ide.go.jp

***Research fellow at Institute of Developing Economies-JETRO, kenmei_tsubota@ide.go.jp
(corresponding author.)

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INSTITUTE OF DEVELOPING ECONOMIES (IDE), JETRO
3-2-2, WAKABA, MIHAMA-KU, CHIBA-SHI
CHIBA 261-8545, JAPAN

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Bengal was divided twice in the 20th century. At the first occasion, both sides were still within British India. Then, on the second occasion, Bengal split the two into different countries, India and Pakistan. We examine the displacements in Bengal after the partition in 1947 with the finest geographical level at thana. The results show that there were significantly negative impacts on population growth on the region which changed their side from East in 1905 to West in 1947. They also experienced an increase in the share of literate population, suggesting the impact of population exchange in different levels of literacy.

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(corresponding author.)

1. Introduction

There are little theoretical and empirical agreements on the impact of partition on spatial population distribution. In the 20th Century, we had the partition of Cyprus, Ireland, Israel, Germany, Poland, and many countries in Africa. However, there are only a handful studies on such impacts. In terms of the spatial scale and the size of population, British India deserves more attention as it was later divided into current Bangladesh, India, and Pakistan¹.

In a seminal paper by Redding and Sturm (2008), the partition of Germany after WWII brought a decline of population growth within cities in the borderlands of West Germany, which can be explained by the decline of market access. In a similar set up, where the end of the WWII brought new international borders within the previous territories, Nakajima (2008) showed the decline of cities in Western Japan, explaining that it was due to the decline of market accessibility to former Japanese colonies in Taiwan and Korea. The migration associated with the newly emerged international border and the loss of external territories forced mass migration in Europe and Asia.²

This paper adds another piece of evidence from Bengal, South Asia to the literature. There are a few studies on the impact of the partition of British India in 1947, such as Bharadwaj, Khwaja and Mian (2008) and Bharadwaj, Khwaja and Mian (2014). A first look of the results is striking, because after the partition, the population grew faster in the border regions of Bengal and in Punjab than in other regions. Contrary to Redding and Sturm (2008) and Nakajima (2008), the Indian case showed the growth in borderlands. By using finer geographical units at thana level, whose average is 350 km,² this paper examines the mechanism of changes before and after the partition. For this analysis, we utilize the unique experience of Bengal as it was divided twice in 1905 and in 1947.

The purpose of this paper is to show a detailed account of changes before and after the partition of India. Having a unique setting, we examine how border regions changed in their population growth, religious composition, and literacy after the partition.

Until May 1947, it was in discussion as to whether India needed to be divided or united in federalism. After the parliamentary votes in Bengal and Punjab, it was decided they would be partitioned. Until the announcement, however, no one can precisely imagine the shape of post-independent India. While there were various maps drawn by different parties, all of them didn't completely match the final line, and

¹ See for example Khan (2007).

² There were those who found themselves in the wrong side of the border at the end of the war, and had to move to their origin or new home. See Reinisch and White (2011) for German expellees and see Watt (2009) for Japanese repatriation.

neither did the line that divided Bengal in 1905. Furthermore, while the cause of division was the desire for separation by the religious majority in West and East Pakistan, many more disaggregated regions remained on the wrong side. Namely, there were and are still Hindu majority regions in East Bengal (Bangladesh) and Muslim majority regions in West Bengal.

The reminder of the paper is organized as follows. In section 2, we explain the historical background and our data. Section 3 offers our empirical strategy. In Section 4, we show and discuss the results, and Section 5 follows as conclusion.

2. Background and the Data

2.1. Partition of Bengal in 1905

From the time of indirect British rule by the East India Company, Calcutta (now Kolkata) of Bengal was the capital. In the late 19th century, the territory of the Bengal Presidency included current Assam, Bihar, Bengal and Orissa. Bengal was divided into two in 1905; at one hand, a new province called Bengal Province including the western half of Bengal proper, Bihar and Orissa, and another province called Eastern Bengal and Assam Province at the other.

The reason of this partition can be briefly summarized by Lord Curzon's statement: "the administration of Bengal was becoming more and more onerous and this burden was too much for the Lt. Governor to bear."³ As he clearly said, the increasing demand for independence movements against colonial government was one important reason; he executed "divide and rule" by dividing the region based on religious majority.⁴ However, it should be noted that this was not the first time discussions emerged on the partition of Bengal. The first appeared at least by 1868 and pointed out the level of ineffective attention during emergency, such as famine.⁵

However, the partitioned provinces did not last long. From its beginning, there were opposing opinions on the partition of Bengal.⁶ After the partition, politics as well as economies were heavily disrupted due to the advancements of non-cooperation movements and agitation for anti-partition – an important momentum in the struggles for the independence of India. After all, the partition was finally reformulated in 1911 by separating Bihar and Orissa as one province, Assam as another, and reunifying Bengal as one province. The capital of direct British Raj was located at Calcutta from 1905 to 1911, when the capital shifted to Delhi.

³ See Saxena (1987, ix).

⁴ See also McLane (1965) and Das (1991).

⁵ Orissa famine in 1866 was the discussion at the time. See Saxena (1987, p1).

⁶ The Nawab Salimulla of Dacca who was the most influential in the city at the time described the partition as "beastly" in February 1904, implying that the partition was not at all and cannot be supported by the people. However, later, the Nawab changed his opinion and the partition was eventually proceeded. See Saxena (1987, 4-12).

2.2. Partition of Bengal in 1947

In August 1947, the Indian Subcontinent was divided into Pakistan (independence ceremony was held on August 14th) and India (August 15th). However, on these independence days, the exact borders separating the two countries were not yet announced. The international border emerged on August, 17th 1947, splitting Bengal Province into newly created West Bengal and East Bengal (from 1947 this was named as East Pakistan and starting in 1971 as Bangladesh). Although the process to reach this partition was not short and simple, the brief explanation is as follows. In the course of independence movements, the foundation of the new nations becomes an important issue. Some of the Muslim communities asserted the separation from India for their own constitution. WWII brought another factor to India as a contributor to the Allied forces. While there were strong intention to keep India within the British Colony, or at least within British Dominion in the form of a federation. The Muslim League, under the leadership of Muhammad Ali Jinnah, strongly and continuously rejected such forms. WWII shifted the situation of politics in the UK as well as the relations between India and the UK. Finally, the two major parties in India agreed on the partition plan by asking each side their decision on the provincial parliaments. If one of the parties sought partition, the province would be divided. In a telegram to Viceroy:

“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.”⁷

While the birth of Pakistan was led by the Muslim League, the partition of Bengal in 1947 was not supported by members of the Muslim Assembly, but decided instead by Hindus. Yet, this demarcation line was not uncovered until the announcement.

2.3. Expectations and Mechanism

The actual boundary was not announced until the last moment. In such circumstances, people expected the boundary based on their available information such as their past experiences when Bengal was once partitioned in 1905, assuming there may be some resemblance in the new boundary to the previous one. Since the new boundary was different from the previous one, people who found themselves on a wrong side (the Hindu majority area in the Pakistan and vice versa) were forced to migrate or take other action. Thus, if the region changed their affiliation from one side

⁷ 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).

to the other, people in these regions may have been affected severely. This intuition is the starting point for empirical analysis in this paper.

This exercise follows the work of Bharadwaj and Fenske (2012), but will progress further in the line of a more neatly defined identification strategy on the partition's impact and its intensity using a natural experiment framework. The natural experimental set-up we will use here will be based on the similarities (and differences) between the partition line that was executed in 1947 and 1905. As we know, Bengal was divided into East Bengal (then East Pakistan, now Bangladesh) and West Bengal (now in India). However, historically there was an earlier partition of Bengal that was announced in July 1905 by the Viceroy of India, Lord Curzon. That partition took place on October, 16th 1905 and separated the largely Muslim eastern areas from the largely Hindu western areas. However, Bengal was reunited in 1911 in an effort to both appease the Bengali sentiment and have easier administration. Later, after the end of the British Raj, Bengal was divided again, a division which still exists.

Comparing both the 1905 and 1947 lines of divide, we can see an interesting pattern in the partitions' execution. (See Figure 1 on the next page.) This is our apparatus for the natural experiment led through a difference-in-difference (DID) set-up. As Chatterji (1999) noted, the Boundary Commission led by Sir Cyril Redcliffe announced the award on August, 17th 1947 was interpreted fairly, although representatives of the Muslim League and Hindu Co-ordination Committee have been demanding different boundaries based on their own political and economic agendas. Despite this, ordinary citizens located in the bordering zone had no clear idea or information as to where the line would be drawn and which side of boarder they would belong. With this in mind, we use the line awarded by the Boundary Commission as one identification to understand the impact of partition.

Nevertheless, one can reasonably argue that, although partition in 1947 came as a shock to the bordering regions, and residents in these regions were unsure where the line would be drawn, people residing in the previous 1905 bordering area (depicted as the red line in Figure 1) may have had a priori that the old line of partition would prevail. Interestingly, the line was not entirely the same, and we see from Figure 1 that there are some overlaps (between the red and orange line and the old and current partition). Using this framework, we can derive a finer understand of the impact of the partition, where the partition could come as "anticipated" or as a "shock". So for districts where there is an overlap between the 1905 and 1947 lines, the partition was anticipated, and subsequently for these overlapping portions, bordering districts and

sub-districts may be considered as “control” regions from the impact evaluation jargon.

Similarly, for the portion of the line where there is no overlap between the 1905 and 1947 line, due to the conflict/ disagreement between Hindu and Muslim parties or due to Sir Radcliffe/the independent commission’s decision), people residing in these districts and sub-districts viewed the partition decision as a shock. They found themselves on the wrong side of the boarder. As a result, partitioned districts and sub-districts of bordering regions with no overlap are considered “treatment” regions.

=Figure 1 comes around here.=

2.4. The data

We constructed our database from the Census of India and the Census of Pakistan. For 1931 and 1941, we take the Provincial Tables which show the figures at thana level, including religious composition and literacy. For the post-partition periods, both countries keep the periodical implementation for every ten years, in 1951 and 1961. We use the total population and population by gender for both regions from 1951 and 1961. For the other variables, such as population by religion and by literacy, data availability differs from census to census. Though India conducted the 1971 Population Census, Pakistan postponed theirs due to the Bangladesh war of independence that year. For West Bengal, we use the population by religion table for the 1971 Census, and for East Bengal, we use data from the 1961 Census. Thus, when we estimate religious composition, we annualize growth. Table 1 shows the summary statistics.

=Table 1 comes around here.=

3. Empirical Strategy

Our empirical strategy centers on comparing growth rates in the two groups. Based on our hypothesis in the previous section, we focus on regions that experienced changes in their affiliation. Namely, we regard regions as “changed” if their affiliation was to either East or West Bengal in 1947 and to the opposite side under the 1905 demarcation line. The default category in such regression setting is "no change in the border" in the 1947 partition from the 1905 demarcation line. We estimate the following equation;

$$gvar_{rt} = \alpha_0 + \beta change_r + \epsilon_{rt} \quad (1)$$

where $gvar_{rt}$ is a growth variable such as population growth, growth of gender ratio,

or growth in the share of muslim and hindu at thana r during census year t . Here, $change_r$ is a dummy variable at the level of thana r taking the value of 1 for such region which experienced changes in its side between 1905 and 1947, and zero otherwise.

In the second specification, we further separate this $change_r$ dummy variable if the change was from East to West or vice-versa. Specifically, we estimate the following equation;

$$gvar_{rt} = \alpha_0 + \beta_1 change_EW_r + \beta_2 change_WE_r + \epsilon_{rt} \quad (2)$$

where $change_EW_r$ is a dummy variable taking the value of 1 if thana r changed its side from East in 1905 to West in 1947 and $change_WE_r$ if vice versa.

In all regressions we control for East Bengal in 1947 and for the distance to the border in 1905 and in 1947. Due to the availability of data mentioned above, we use annualized growth rates when we analyze religious shares as the dependent variable.

4. Results and Discussion

Table 2 summarizes our main regression results. The first set of regressions were done on population growth reported in Columns (1)-(2). In Column (1), we have the regression specification of equation 1. As we can see, the “change of side” variable is negative and statistically significant. This shows that after partition in 1947, those thanas that faced a shock of a sudden boarder change from the previous 1905 demarcation line, suffered more in terms of population growth compared to the thanas of those who did not face this unexpected change. The impact of such a shock is large for these regions; we see a .07% reduction in the population growth compared to unchanged areas. Through further separate and following the specification of equation 2, we see that this impact predominantly stems from the sudden shock of the boarder change from East to West. Residents that migrated-out from these regions resulted in a large negative shock in the regional population, a 0.21% reduction in population growth. Our regression also reported that overall partition has a negative bearing on East Bengal, stimulating a large reduction of population growth, than compared to West Bengal. This exemplifies that more people migrated out of East Bengal than West, which resulted in a larger drop in population growth in the East.

=Table 2 comes around here.=

In the regressions depicted in Column (3)-(4), we inquired more about this pattern

of population movement in those sudden changed areas. Our results show almost no statistical discernable impact on the sex ratio,, providing evidence that population movement was more homogenous and that no gender gap emerged, resulting in systematic sex-ratio growth in the affected regions. Interestingly, the “distance to border” variables, both for the 1905 and 1947, are statistically significant but of opposite signs. It appears as though the further that thana is located from the 1905 demarcation line, the lesser is sex-ratio growth, however, for the case the of 1947, the sign is reversed.

Now, focusing on the religion dimension of this movement and the resultant population growth, we see the change of side from East to West in 1947 created a Hindu population growth (Column (8)), however, no such systematic pattern was observed for Muslim populations (Column (5)-(6)). It is evident from these regressions that the unanticipated change from the previous 1905 demarcation line to the 1947 line in the case of the East to West boarder may have triggered a greater Hindu population to migrate to the West, which could explain this disproportionate Hindu population growth in the West for those “shocked” thanas of West previously being in the East. These finding are further supported in the regressions reported in Column (9)-(10), where we used the literacy growth rate as the dependent variable. Similar to our Hindu population growth, we see the literacy rate growth is higher in the change in the side of East to West. Since the literate population mostly belonged to the Hindu population, this finding further strengthens our argument.

5. Discussions and Conclusion

We estimate the impact of partition and the gap between expectations based on the past division and actual realized revision. By using two historical partition lines of 1905 and 1947 in Bengal and identifying the regions of overlapping (anticipated) and un-overlapping (shock) lines, we found a significant decline in population growth in those thanas where residents were previously assigned to East Bengal in 1905 but assigned to West Bengal in 1947. Looking closer at religion and literacy-based analyses in this setting, we see an increase in Hindu population growth and an increase in literacy rates for regions where the thanas changed side from East in 1905 to West in 1947.

Combining these results, we see that the regions that changed their side from East to West experienced more out-migration of Hindus, who were relatively more literate, than Muslims. However, net migration was relatively smaller than in the other regions, as shown in the negative coefficient for population growth.

These findings call to question why we observe such asymmetry? If the impact of

partition had been symmetric, the regions that changed their side from West to East would have also experienced more out-migration of literate Hindus and received illiterate Muslims, yet this effect was not statistically significant. It could be the case that as Hindus in Bengal were more literate than Muslims before the 1947 partition, they perhaps were more adept in adjusting to the “change” in borders, resulting in the asymmetry. This is only speculative and needs to be explored further in following research.

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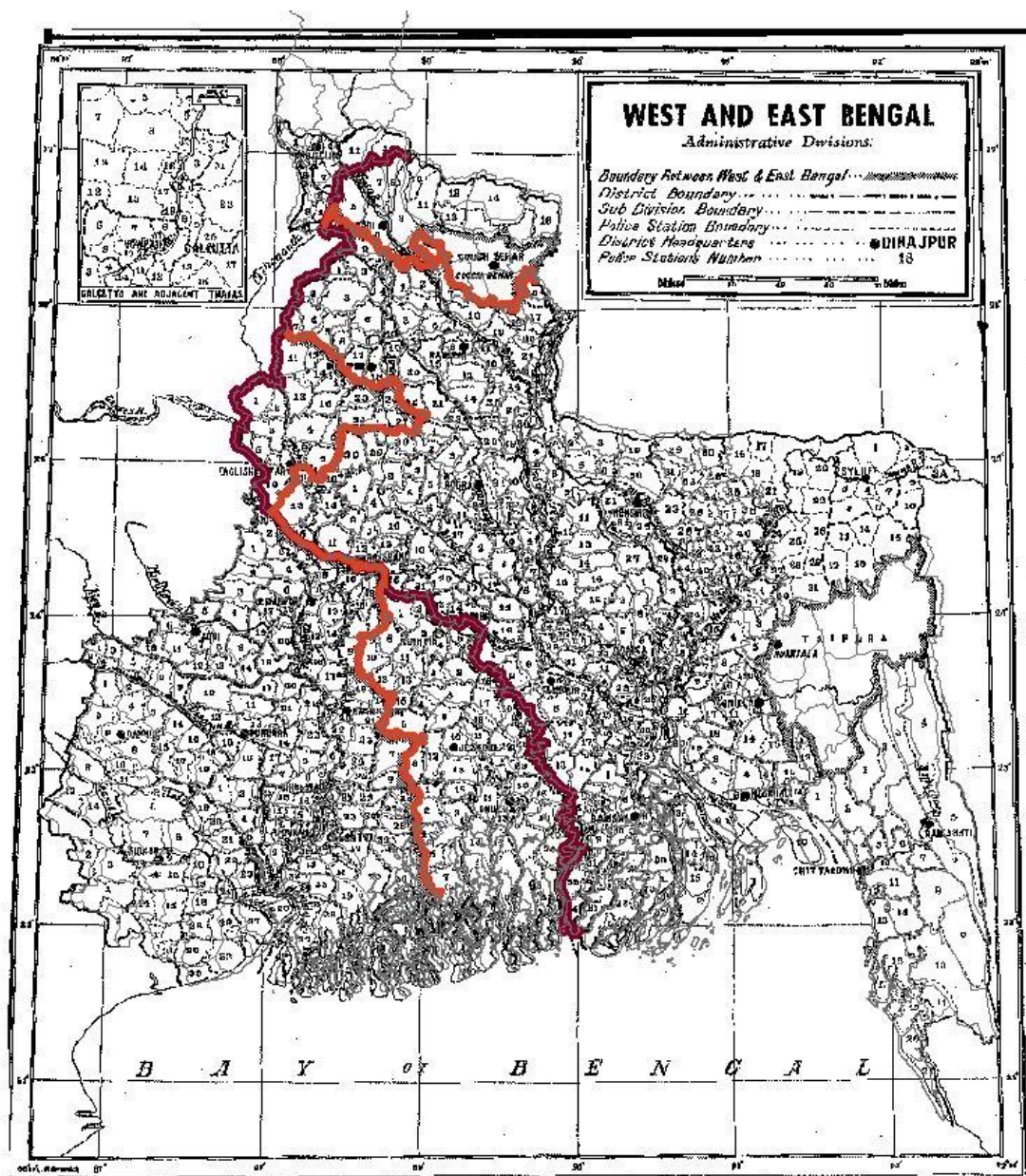


Figure 1: The Bengal Partition in 1905 (shown in red), the reunification in 1911, and the second division in 1947 (shown in orange).

Source: Authors' cartography based on Chatterjee (1947) p7.

Table 1. Summary Statistics

Side	variables	Observations	Mean	Std. Dev.	Min	Max
West to West						
	population growth	205	1.491536	1.08577	0.5757104	12.79181
	gender ratio growth	205	1.005786	0.078349	0.7172221	1.329238
	religion share growth (muslim)	196	0.0235158	0.0106126	0.0004936	0.0909937
	religion share growth (hindu)	197	0.0294486	0.0225484	0.0194143	0.3279094
	literacy rate growth	196	0.2257131	0.1861098	0.0428054	1.572592
West to East						
	population growth	57	1.179336	0.2651583	0.3893159	2.550376
	gender ratio growth	57	0.9933235	0.084966	0.3905963	1.062288
	religion share growth (muslim)	56	0.058648	0.0102251	0.0485638	0.1058263
	religion share growth (hindu)	56	0.0360752	0.014267	0.0030357	0.0511716
	literacy rate growth	54	0.1522141	0.0766217	0.0659307	0.5197722
East to West						
	population growth	40	1.237369	0.161201	0.9090703	1.725616
	gender ratio growth	40	1.023688	0.0403552	0.9400008	1.135024
	religion share growth (muslim)	40	0.0197426	0.011468	0.0017024	0.0598792
	religion share growth (hindu)	40	0.0311154	0.0065466	0.0179534	0.0480157
	literacy rate growth	37	0.3434059	0.2236334	0.0856244	0.9013188
East to East						
	population growth	346	1.194626	0.2862446	0.4217148	3.87661
	gender ratio growth	346	1.028517	0.0595103	0.882512	1.314557
	religion share growth (muslim)	317	0.0814108	0.3755683	0.04017	6.716398
	religion share growth (hindu)	317	0.0371082	0.0100591	0.0039083	0.0835758
	literacy rate growth	314	0.1337811	0.073534	0.0127552	0.53

Table 2. Regression results

VARIABLES	(1) population growth	(2)	(3) sex ratio growth	(4)	(5) Religious share growth (muslim)	(6)	(7) Religious share growth (hindu)	(8)	(9) literacy rate growth	(10)
Change of the side between 1905 and 1947	-0.073** (0.036)		0.001 (0.005)		0.007 (0.011)		0.002 (0.001)		0.046** (0.018)	
Change of the side from East in 1905 to West in 1947		-0.210*** (0.063)		0.015* (0.008)		0.032 (0.037)		0.004** (0.001)		0.107*** (0.039)
Change of the side from West in 1905 to East in 1947		0.020 (0.039)		-0.008 (0.005)		-0.009 (0.008)		0.001 (0.002)		0.006 (0.012)
Distance to the boundary in 1905	0.001 (0.001)	0.001 (0.001)	-0.000*** (0.000)	-0.000*** (0.000)	0.000 (0.000)	0.001 (0.001)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Distance to the boundary in 1947	-0.000 (0.000)	-0.000 (0.000)	0.000*** (0.000)	0.000*** (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
East Bengal dummy	-0.228*** (0.044)	-0.272*** (0.055)	-0.008* (0.005)	-0.004 (0.006)	0.072** (0.035)	0.080* (0.044)	0.007*** (0.001)	0.008*** (0.001)	-0.108*** (0.013)	-0.087*** (0.013)
Constant	1.402*** (0.045)	1.433*** (0.052)	1.014*** (0.006)	1.010*** (0.006)	-0.020 (0.044)	-0.026 (0.051)	0.027*** (0.001)	0.027*** (0.001)	0.255*** (0.016)	0.240*** (0.017)
Observations	646	646	646	646	609	609	609	609	601	601
R-squared	0.039	0.042	0.113	0.117	0.017	0.017	0.056	0.057	0.157	0.172

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1