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We investigated the long-term effects of birthplace favoritism by top-ranking politicians on the quality of education in Vietnam. We used over 1 million test scores from the 2009 and 2014 Vietnamese national university entrance examinations. We examined both the different timing of political terms and the total years of birthplace favoritism. Using the school fixed effects, we found that birthplace favoritism did not have any significant impacts, regardless of the timing and duration of such favoritism. The results also suggest that national entrance examinations were unaffected by birthplace favoritism up to 2014.

Keywords: Favoritism; Test scores; Education; Regional favoritism; Vietnam

JEL Codes: I21, I28, H75

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1. Introduction

Top-ranking national politicians tend to favor their birthplace when they hold office (Hodler and Raschky, 2014). In birthplace favoritism, office holders often divert their country's resources to their home region. Do et al. (2017) found that birthplace favoritism in Vietnam was associated with improved infrastructure in the home commune of Vietnamese officials. Such birthplace favoritism might also attract more private firms into a politician's home district (Vu and Yamada, forthcoming).

Meanwhile, investment in education has been well documented as an important part of East Asian culture for many generations. For example, Chen et al. (2020) found that the effects of imperial examinations for selecting civil servants in China have continued through to the present day via kinship transmission. Descendants of successful test takers had a persistent positive attitude toward the importance of education and its effect on their social status (Chen et al., 2020). Similar, Vu and Yamada (2021) found that the culture of learning can prolong both the quantity and quality of education in regions that were home to the most successful test takers of Vietnamese imperial examinations from 1075 to 1919.

Therefore, it is plausible that top-ranking politicians in East Asian countries would facilitate and boost the education systems in their home districts. If this is indeed the case, then the possible outcomes of birthplace favoritism can be both quantity of education (more years of schooling) and quality of education (better human capital development). Theoretically, years of schooling can be increased by easing the supply side, for example, by building more schools and improving school capacity (Kramon and Posner, 2016). Similarly, subsidies for educational costs and firm expansion in the home districts of these politicians might lead to increases in the demand for education. Even without such a shift in supply, the quality of education may be improved locally by allocating funds or offering incentives to attract better teachers to the region or by providing advanced teacher training. If that is the case, we could expect long-term effects of birthplace favoritism on the quality of education in a given region.

In this study, we investigated whether birthplace favoritism would have a long-term impact on the quality of education in Vietnam, an autocratic East Asian country. The selection (terms) of top-ranking Vietnamese politicians was used as a quasi-natural experiment and reverse causality was very unlikely (Vu and Yamada, forthcoming). Using household surveys conducted between 2002 and 2008, Do et al. (2017) found that birthplace favoritism led to 0.23 new infrastructure categories, but no significant evidence for educational infrastructure. In the

present study, we directly investigated birthplace favoritism over an 18-year period by examining recent high school graduates and the quality of educational outcomes. In addition, we contributed to the literature by comparing the timing of various instances of favoritism during a student's life, for example whether the impact during primary school might differ from that during high school.

We analyzed the test scores of 1.1 million students from two national university entrance examinations in 2009 and 2014. We matched the location of the students' high schools with the home communes of top-ranking Vietnamese politicians in five consecutive political terms from 1991 to 2016 and employed fixed effect models at the high school level.

We found that both the number of years and the timing of birthplace favoritism did not have any significant long-term impacts on the test scores of high school graduates. The findings suggest the autocracy has not maintained a long-term inequality in education in favor of birthplace, which is a good thing for Vietnamese society. The results might also suggest that the national entrance examinations were relatively fair up to 2014.

2. Data and Method

We used two main sources of data, which we combined based on commune identity. The first was a list of top-ranking Vietnamese politicians, specifically, members of the Central Committee of the Communist Party of Vietnam (CPV) with a 5-year political term.[1] We were able to identify 377 home communes[2] of 440 politicians who were active during from 1991 to 2016 (terms 7 to 11) along with their specific terms of office.

The second source of data was the test scores of the National Entrance Examinations to Universities (NEEU) from 2009 and 2014 (see Vu and Yamada, 2021 for detailed data descriptions). We selected recent high school graduates who were born in 1991 for the 2009 NEEU and in 1996 for the 2014 NEEU. They accounted for about 81% and 73% of all test takers in 2009 and 2014, respectively. Their years of birth coincided with the start of political terms 7 (June 1991) and 8 (July 1996) of the CPV Central Committee. The timing of birthplace favoritism was comparable between the two cohorts. We further restricted the sample to test takers who self-selected into testing groups A, B, C, and D during their time in high school (see Vu and Yamada, 2021 for detailed group descriptions). Each testing group comprised

[1] We obtained the list from the official website of the CPV. See Vu and Yamada (forthcoming) for a description of the CPV and why the list contained the most influential politicians.
[2] About 30% of the home communes had at least one high school (1.14 schools in average), while 32% of non-home communes did (1.29 schools in average).

different test subjects for the entrance exams; however, the subjects and the score weight per group were the same for both the 2009 and 2014 NEEU. These four testing groups were chosen by the largest proportion of test takers (about 71%–87% of the sample of test takers born in 1991 or 1996). The other seven testing groups (i.e., N, H, M, T, V, S, and R) were not selected because some test subjects were not included in the general education curriculum and because the length of time, the contents, and the score weight of each test subject were not homogenous. The test score data contained limited information; therefore, we had to assume that students lived in their home commune prior entering to their high schools.

We matched the commune[3] where the student's high school was located with the home communes of top-ranking politicians. Finally, we obtained the data on about 1.1 million test takers from 2,351 high schools located in 1,825 communes, 77 of which were home communes of the abovementioned politicians (see Tables 1 and 2).

TABLE 1. FREQUENCY OF COMMUNES UNDER BIRTHPLACE FAVORITISM BY POLITICAL TERM

		Term 9			
		0		1	
		Term 8		Term 8	
		0	1	0	1
Term 10 = 0; Term 11 = 0					
Term 7	0	1,748	1	2	3
	1	9	7	1	3
Term 10 = 0; Term 11 = 1					
Term 7	0	18			
	1				
Term 10 = 1; Term 11 = 0					
Term 7	0	7		2	
	1				3
Term 10 = 1; Term 11 = 1					
Term 7	0	14	1	2	2
	1		1		1

Note: N communes = 1,825. Term 7: 1991-1996. Term 8: 1996-2001. Term 9: 2001-2006. Term 10: 2006-2011. Term 11: 2011-2016.

We used the total scores of the three subjects as the main outcomes ($scores$). The $scores$ had a theoretical maximum of 30 points. We created a set of dummies corresponding to

[3] A commune is the third level of the administrative system and has a population of 8,000 people and an area of 30 km^2 on average. There were about 11,000 communes in Vietnam in the period 2009–2014.

both birthplace favoritism and the age cohorts 0–4, 5–9, 10–14, and 15–17 ($age04T$, $age59T$, $age1011T$, and $age1517T$). For example, in the corresponding year from 1991–1996 (age cohort 0–4) of students in the 2009 group, the dummy $age04T$ took 1 if the commune where school j is located was also the home commune of any concurrent top-ranking politician. We summed the total years under the treatment—birthplace favoritism to create the variable $yearsT$ for each test taker.

TABLE 2. DESCRIPTIVE STATISTICS

Variables	Mean	Std. Dev.	Min	Max
score	13.244	4.407	0.25	29.25
age04T	0.006	0.076	0	1
age59T	0.006	0.078	0	1
age1014T	0.008	0.088	0	1
age1517T	0.017	0.128	0	1
Duration in the treatment ($YearsT$)	0.245	1.605	0	18
Testing group A	0.476	0.499	0	1
Testing group B	0.276	0.447	0	1
Testing group C	0.068	0.251	0	1
Testing group D	0.181	0.385	0	1

Notes: N=1,111,958. Number of identical high schools is 2,351.

We examined the long-term effect of birthplace favoritism (α_1 - α_5) as follows.

(1) $scores_{ijt} = \alpha_1.age04T_{jt} + \alpha_2.age59T_{jt} + \alpha_3.age1014T_{jt} + \alpha_4.age1517T_{jt} + \alpha_5.yearsT_{jt} + \alpha_6.school_j + \alpha_7.t + \beta_m GROUP_{mit} + \varepsilon_{ijt}$

The high school fixed effects ($school_j$) captured time-invariant factors within the school and the corresponding commune. The dummy t ($t = 1$ if $year = 2014$) captured the time trend difference between the samples in 2009 and 2014. α_1 - α_5 served as differences-in-differences estimators. $GROUP$ was a set of dummies corresponding to the testing group of each test taker i.

3. Results and Discussion

We found no long-term impacts of birthplace favoritism on the quality of education. The coefficient of $YearsT$ was negative and not statistically significant in specifications (1) and (2) of Table 3. Also, there were no significant coefficients of the under-treatment age-cohort dummies $age04T$, $age59T$, $age1014T$, and $age1517T$. The joint test results (H0: $age04T = age59T = age1014T = age1517T = 0$) cannot reject the null hypotheses.

TABLE 3. LONG-TERM IMPACTS OF BIRTHPLACE FAVORITISM ON QUALITY OF EDUCATION

VARIABLES	(1) score	(2) score	(3) score	(4) score
Duration in the treatment ($YearsT$)	–0.047	–0.019	–0.033	–0.080
	(0.039)	(0.054)	(0.076)	(0.154)
age04T		0.194		0.626
		(0.328)		(0.608)
age59T		0.015		–0.361
		(0.315)		(0.416)
age1014T		–0.171		0.450
		(0.396)		(0.922)
age1517T		–0.158		0.069
		(0.331)		(0.652)
High school fixed effects	Yes	Yes	Yes	Yes
F-Statistics	1,406.23	784.53	1,364.16	763.98
Adjusted R-squared	0.286	0.286	0.287	0.287
Observations	1,111,958	1,111,958	1,091,810	1,091,810
Number of identical high school	2,351	2,351	2,322	2,322
H0: $age04T = age59T = age1014T = age1517T = 0$				
$Prob > F$		0.967		0.177

Notes: Clustered standard errors at high school level in parentheses: *** p<0.01, ** p<0.05, * p<0.1. All estimations included dummies for testing groups and t dummy.

The results were similar in other sample selections. Vu and Yamada (forthcoming) suggested that birthplace favoritism might be stronger in cases where politicians hold the top position in their home provinces. We followed this direction and excluded observations corresponding to politicians who did not hold such positions. However, birthplace favoritism did not show any significant long-term impacts either, as indicated in columns (3) and (4) of Table 3.

The results suggested that birthplace favoritism may not have an impact on the quality of education and/or that birthplace favoritism is simply not strong enough to have such long-lasting effects. Also, the supply of education in home communes might still lag behind (see

footnote 2). These results may be due to effects on the quality of education that would take time to manifest, and thus neither help nor hurt the politicians during their political terms.

4. Conclusion

We investigated the long-term effects of birthplace favoritism by top-ranking politicians on the quality of education in their home communes. We did not find any statistically significant evidence for such effects existing in Vietnam. The results might also suggest the national entrance examination were immune to birthplace favoritism until 2014.

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