Original Article

School urbanicity and financial generosity: Can neighborhood context predict donative behavior in spite of the economy?

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ABSTRACT This article contributes new research to the literature on the relationship between institutional-level factors and financial generosity. In the framework of the existing research on how school-level attributes correspond to donor behavior, no study has examined the relationship between the institutional neighborhood context and private giving. The purpose of this article is to examine this relationship. Specifically, this article has assessed the degree to which school urbanicity and other neighborhood contextual factors are related to alumni, corporate and foundation generosity. Controlling for commonly employed institutional predictors, such as school endowment, as well as holding constant the state, year and unique state-year economic environment over the period 1998–2008, the results have pointed toward significant correlations between a university's neighborhood context and private donations. *International Journal of Educational Advancement* (2010) 9, 220–233. doi:10.1057/ijea.2009.42

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INTRODUCTION

Donations have always been a significant source of funding for college and

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Wharton Business School, Applied Economics Group, University of Pennsylvania, 1400 Steinberg Hall-Dietrich Hall, 3620 Locust Walk, Philadelphia, PA 19104, USA universities in the United States. In 2004 alone, institutions of higher education raised more than US\$25 billion in voluntary support (Council of Aid to Education). Schools are particularly dependent on financial generosity to cover operating expenses, support capital campaigns and fund endowments. In the face of a declining economy, donations have become more important than ever, particularly as government appropriations, including federal, state and local, continue to decrease (Wunnava and Lauze, 2001). In other words, private donations, including alumni, corporate and foundations, have had to heavily supplement the downfalls of shrinking endowments, budget cuts and waning government support.

Given the important role that alumni and other private donors play in financing higher education, it is not surprising that colleges and universities expend substantial effort and financial resources to woo dollars from these donors. Because the amount of time spent on these campaigns is so great, institutions of higher education would benefit from increased insight into the predictors of donative behavior. Much research in the field of philanthropy has examined the socioeconomic, demographic and psychological factors that shape alumni charitable giving (Okunade, 1996). Several studies have also examined the relationship between institutional-level attributes and donative behavior (Belfield and Beney 2000; Litan et al, 2003; Orzag and Orzag, 2005; Holmes, 2009). For instance, some research has examined the association between athletic success and alumni contributions (Grimes and Chressanthis, 1994; Baade and Sundberg, 1996a; Rhoads and Gerking, 2000; Holmes 2009). Other studies have focused on the relationship between alumni contributions and academic prestige, such as receiving Carnegie Research I status (Rhoads and Gerking, 2000). Finally, the field has examined the relationship between institutional contribution efforts (that

is, solicitation) and donated dollars. Baade and Sundberg (1996a, b) demonstrated positive correlations between solicitation and alumni donations.

In the framework of this research on how school-level attributes are related to donor behavior, no study has particularly honed in on the empirical relationship between the institutional neighborhood context and private giving. The purpose of this article is to examine the precision of this relationship.

The neighborhood context is particularly useful to evaluate. Because most major college and universities in the United States were founded over 75 years ago, their campus locations are often related to past population traits rather than contemporary ones (Bromley and Kent, 2006). For instance, many US colleges and universities operate in the 'Rust-belt' region of the country, which was once characterized by thriving industry but now can be classified as aging, deteriorating and highly urban. Recent economic downturns have exacerbated neighborhood problems for urban universities, including a halt on revitalization efforts and half-complete building projects as well as a decline in school employment opportunities for local residents (New York Times, 2009). This deteriorating urban context has been particularly poignant over the past decade in which there as been a decline in national economic indicators, low or halted levels of construction, and drops in the real estate market.

In this context, the neighborhood surrounding a higher education institution often provides insight into the educational experiences of the students (that is, 'town-gown' relations), needs of the university (that is, efforts to integrate with the surrounding neighborhood), as well as charitable interests by corporations and foundations (that is, general efforts at urban revitalization). Thus, donations can be directly tied to a school's neighborhood, as, for example, a student's educational experience has been shown to be linked directly to charitable giving (Okunade, 1993). Moreover, from the university's perspective, an increase in donations relating to the surrounding neighborhood can be used to improve the school neighborhood and a subsequent increase in its institutional image. Doing so may further future research funding and improve a school's institutional, cultural and ethnic diversity, including the recruitment of more desirable students and faculty - and several of these improvements themselves may spur further donative behavior (Gottfried, 2008).

Given these trends in both the declining urban neighborhood and deteriorating economy, it seems evident that those who solicit donations from alumni and other sources should have a more in-depth understanding of what predicts donor behavior. Doing so enables university offices to understand the mechanisms behind solicitation and improve the efficiency of the use of these scarce institutional resources in a state of economic decline. Thus, this study contributes unique research, by means of a descriptive empirical analysis, to the study of new institutional characteristics and how they relate to alumni, corporate and foundation giving.

METHOD

To evaluate the relationship between a university's neighborhood and donor generosity, this study employs an empirical econometric model using panel data. There are three dependent variables explored in this article: total alumni dollars, total corporate dollars and total foundation dollars. A general specification of the relationship between these dependent variables and the set of independent variables is expressed as follows:

$$Y_{ist} = \beta_0 + \beta_1 U_{ist} + \beta_2 N_{it} + \gamma_{ist} \quad (1)$$

where Y is either alumni, corporate or foundation dollars for school i in a US state s in year t. In this linear model, U is a vector of university-level characteristics for school i in state s in year t. N includes the set neighborhood variables characteristics for school i in state s in year t. It is in the error term where state and year effects (that is, those pertaining to the status of the economy) are identified.

A multilevel approach is taken in these data in which the error structure is decomposed as follows:

$$\gamma_{ist} = \Pi_s + \Pi_t + \Pi_{st} + \varepsilon_{ist} \tag{2}$$

where (Π_s) are state fixed effects, (Π_t) are year fixed effects, (Π_{st}) are state-by-year fixed effects and (ε_{ijkt}) is a random error capturing individual state variations over time. Empirically, this error structure is estimated with a dummy variable for state and year as well as for its interaction.

State fixed effects (Π_s) control for common state influences by capturing systematic differences across each state. By holding constant those time invariant state-specific characteristics, such as regional location, the principal source of variation used to identify effects of neighborhoods occurs across schools within each state. In other words, by controlling for the state-level environment, the state fixed effect allows for a focus on withinstate and between-school differences. Similarly, Π_t are year fixed effects that account for common influences in a given year that are non-specific. The year fixed effect controls for influences that impact the entire sample of schools in a particular year. A year fixed effect controls for the national economic downturn in a particular year. It is through this year fixed effect that it will be possible to hold constant the economy in examining the prediction of neighborhood context on private donations.

 Π_{st} is essentially an interaction term between the two main fixed effects state and year. The rationale behind this model input is that state-by-year fixed effects account for systematic year-to-year changes in the state-level environment, such as changes in state leadership and policies, decreases in state funding to universities and a declining state-specific economic climate. In other words, any pattern that is unique to a particular state in a given year will be held constant, and estimates can be identified solely on within-state, across-university variation.

The approach of fixed effects is compelling in this model. Because the data in this study are multilevel, there is within-state variation at the university-level in those variables of interest on the prediction of neighborhood status on donor behavior. Unlike this study, many empirical models have had to rely on state or national averages, and thus school-specific neighborhood variables would lack within-state variation. As a result, it would not be possible to assess the within-state, within-year effect of neighborhood variables, as there would be no variation when variables are aggregated to the state level. Analytically, under these circumstances the fixed effects would absorb variation in school variables, as they would be the same for every school in the state. However, given the multilevel structure of the data set employed in this article, it is possible to estimate the effect of neighborhoods for each school within a state.

DATA

The data on generosity values and other university attributions are sourced from the Voluntary Support of Education Survey program, developed by the Council for Aid to Education (CAE). The CAE is a national non-profit organization and is the sole source of empirical data on private giving to education for all US colleges and universities. An affiliate of the RAND Corporation from 1996 to 2005, CAE became an independent non-profit organization in October of 2005. The Wharton Geospatial Initiative Office at the University of Pennsylvania aided in the linking of institutional-level data with neighborhood information. Specifically, neighborhood data were obtained from the Census flat files at the zip-code level for each institution. Based on university zip codes, the merging of neighborhood data with the school-level database was achieved by a geo-coding process.

In sum, the analytical sample includes N=2533 observations from the 48 contiguous United States over the period 1998-2008. This includes all institutions of higher education. To begin, it is possible to describe the overall characteristics of the sample.¹ Of the sample, approximately 52 percent of the institutions are public, and 48 percent are private. Further, 30 percent of the institutions are 2-year or community colleges, and 48 percent are bachelors and graduate degree-granting institutions. The remainder of the institutions are specialized (that is, strictly a medical school).

As for the dependent variables, alumni donations are those defined as dollars contributed by former students who have earned some credit toward one of the degrees, certificates or diplomas offered by the school. Dollars from corporations include gift donors from not only for-profit corporate entities but also from partnerships, cooperatives, companysponsored foundations (that is, a gift from Ford Motor Company would be corporate whereas Ford Foundation would not be) and industry trade associations. Finally, foundation donations include personal and family foundations and other foundations and trusts that are private tax-exempt entities operated exclusively for charitable purposes. It does not include company-sponsored foundations, which fall under the category of corporations. Note that not all grant-making organizations that use the word 'foundation' in their titles are included in this category. For example, the National Science Foundation and the Empire State Foundation are not *private* tax-exempt

entities and, therefore, their grants are not included in a report of private voluntary support such as a foundation.

Second are the independent variables implemented in this evaluation. For every school in a given year, the data set contains institutional-level information concerning school characteristics. To control for the possibility that donations in a given vear are related to specific qualities of a particular institutions such as a higher solicitation effort (Gottfried and Johnson, 2006), the school-level variables include annual alumni solicitation measures. As a proxy for the quality of the educational experience, the model also includes a school's per pupil expenditure. Finally, overall institutional quality is measured as total endowment and total enrollment in a given year.

From the process of geo-coding, the data set used in this study also contains information pertaining to each school's neighborhood, based on zip-code information. Thus, each university's neighborhood is based on the census tracts within the zip code in which the institution resides. For each institution, the data employed in this study include five variables. First, average household size and total household units together serve as measures of neighborhood density and hence urbanicity. A larger measure of either of these two variables suggests higher urbanicity. Second, the household vacancy rate of a university's neighborhood will serve as a proxy for residential quality. This measures the percentage of vacant houses in the census tract in which the university resides. An increase in the vacancy rate is assumed to signal

	Mean	SD
N	2533	_
Donation total dollars (in millions)		
Alumni	10.20	25.10
Corporate	310.00	1260.00
Foundation	6.13	14.90
Neighborhood information		
Average household size	4.17	13.80
Total housing units	15696.49	9513.52
Percentage of block, vacant	6.80	4.38
Number of black residents	6356.79	9797.13
Average household income	61662.06	32168.40
Urban (per cent)	45.49	49.80
Suburban (per cent)	50.70	50.00
Rural (per cent)	3.81	19.15
Other school-level covariates		
Total alumni solicited	45 185	60274
Per pupil expenditures (in millions)	5.54	18.90
Student enrollment	21133	59088
Endowment (in millions)	190.00	951.00

Table 1: Descriptive statistics for sample of US colleges and universities

decreased neighborhood quality. Third, the number of black residents provides a measure of neighborhood racial composition. Finally, average household income indicates the level of neighborhood financial resources.

In addition, the analysis includes binary indicators, designating an institution as urban, suburban or rural. This categorization was based on the location of the university, according to the metropolitan statistical area (MSA): if a school was located within the central city of an MSA, it was considered urban: if a school was located within an MSA but not in the central city of the MSA, it was considered suburban; and if a school was not located within an MSA, it was considered rural. This classification was included to control for educational experiences based on geography - for instance, students in large metropolitan

areas may commute to school (that is, University of Minnesota) and consequently may not experience a campus life in the same way that students in suburban schools do.²

Table 1 provides summary statistics for the dependent variables as well as the institutional- and neighborhoodlevel characteristics over the period analyzed in this study – 1998–2008. Note that for the purpose of empirical analysis, the covariates in the model going forth have been transformed to have mean 0 and standard deviation 1. As such, the interpretation in the proceeding sections is based on standardized regression coefficients as a measure of the effect size.

Table 2 presents correlation coefficients between school urbanicity and institutional characteristics. Overall, the table suggests fairly low correlations. Thus, the degree of

	Urban	Suburban	Rural
Donation total dollars (in millions)			
Alumni	0.06	-0.10	0.08
Corporate	0.01	-0.06	0.06
Foundation	-0.05	-0.13	0.15
Other school-level covariates			
Total alumni solicited	-0.06	-0.21	0.24
Per pupil expenditures (in millions)	-0.02	-0.10	0.10
Student enrollment	0.01	-0.08	0.08
Endowment (in millions)	-0.01	-0.05	0.05

Table 2: Correlation coefficients based on urbanicity

urbanicity (urban versus suburban versus rural) does not appear to be systematically related to other attributes of the university. That said, it may be hypothesized nonetheless possible that schools with larger endowments may be capable of soliciting more funds than schools with smaller endowments. However, the correlation between endowment in year t and alumni solicited in year t is only 0.19. This suggests a relatively low correlation between these two institutional characteristics, thereby providing little support for that hypothesis based on the data in this sample.

RESULTS

Alumni generosity

Table 3 provides the regression results for alumni donations, based on the aforementioned econometric model. Recall that the outcome here is a school's total alumni dollar donations in a given year *t*. Each regression includes state-by-year (and state and year) fixed effects. Both dependent and independent variables have been standardized so that the interpretation of the effect on dollars donated is based upon a one standard deviation increase in a given predictor.

In all regressions in Table 3, the key parameters are the neighborhood effects. The final model in the table provides a full estimation model of the empirical specification. Previous models in the table examine various combinations of neighborhood inputs, while simultaneously controlling for other institutional characteristics as well as state, year and state-by-year fixed effects. Nonetheless, the proceeding analyses of results is based on the fully, realized model of alumni donations seen in the last column of the table.

Note that except for two neighborhood results, there is a general lack of statistical significance on the neighborhood covariates in the alumni model. Specifically, the statistically significant neighborhood coefficient in the full alumni model indicates that a one standard deviation in the total household units in a school's neighborhood is associated with a 0.06 standard deviation decrease in total dollars donated. In other words, this measure of neighborhood density, or urbanicity, suggests that schools in increasingly urban neighborhoods tend

	1	2	3	4	5	6
Neighborhood information						
Average household size	-0.005	-0.004	-0.004	-0.002	-0.001	-0.002
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Total housing units		-0.076***	-0.065**	-0.064*	-0.064**	-0.063**
0		(0.020)	(0.028)	(0.028)	(0.028)	(0.028)
Percentage of block, vacant			-0.017	-0.050	-0.051	-0.043
0 ,	_	_	(0.030)	(0.037)	(0.037)	(0.038)
Number of black residents	_	_	_	0.047	0.044	0.049
	_	_	_	(0.030)	(0.030)	(0.030)
Average household income	_	_	_	_	-0.011	-0.013
C C	_	_	_	_	(0.020)	(0.021)
Suburban	_	_	_			-0.180
	_	_	_	_	_	(0.115)
Rural	_	_	_	_	_	-0.234**
	—	—	—	—	—	(0.117)
Other school-level covariates						
Total alumni solicited	0.221***	0.234***	0.234***	0.235***	0.235***	0.241***
	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.021)
Per pupil expenditures	0.605***	0.608***	0.609***	0.609***	0.610***	0.608***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Student enrollment	0.025	0.030	0.037	0.055	0.060	0.064
	(0.071)	(0.071)	(0.072)	(0.073)	(0.074)	(0.074)
Endowment	0.397***	0.397***	0.398***	0.397***	0.397***	0.397***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
State-year, state and year fixed effects	Y	Y	Y	Y	Y	Y
n	2533	2533	2533	2533	2533	2531
R^2	0.61	0.62	0.62	0.62	0.62	0.62

Table 3: Standardized regression coefficients predicting alumni dollars donated

***P < 0.01; **P < 0.05; *P < 0.10.

to have smaller levels of alumni donations, controlling for all else in the model. Second, the results also indicate that rural schools tend to have fewer alumni donations than do urban schools (though no significant relationship exists between suburban versus urban).

Other than this particular relationship, however, there are no significant contributions within the vector of neighborhood covariates on alumni donations. The lack of association of these variables suggests that for the most part, the neighborhood context of the university does not appear to be systematically related to alumni donations. In other words, alumni are not highly sensitive to the university neighborhood. From the remainder of the model, it is evident that other school-level factors play a more important role in their relationship to alumni dollars donated than does a school's neighborhood context. In fact, this interpretation holds true in all models in this table, in which various combinations of neighborhood effects are implemented.

Briefly, turning to the statistically significant relationships between alumni dollars and the school-level control variables in the model demonstrates various significant relationships between the school-level environment and donor behavior. Again focusing on the full model in Table 3, the results suggest the following several interpretations. First, a one standard deviation increase in the number of alumni solicited is related to a 0.24 standard deviation increase in total alumni dollars donated. That is, schools with higher solicitation efforts have higher alumni donations, holding all else equal. This positive relationship between university efforts of alumni solicitation and alumni dollar donations confirms previous research (Gottfried and Johnson, 2006).

Second, serving as a proxy of the quality of the general educational experience, per pupil expenditures are positively related to alumni donations. The fact that a one standard deviation increase in school quality is associated with a 0.61 standard deviation increase in alumni dollars donated implies schools with higher educational inputs have higher alumni donations³. Finally, endowment is positively related to alumni donations: a one standard deviation increase in endowment tends to be associated with an approximate 0.40 increase in alumni dollars donated in a given school. Schools with larger endowments tend to have higher alumni donations, and this relationship corresponds to previous empirical literature on donative behavior (Gottfried and Johnson, 2006; Gottfried, 2008).

Corporate generosity

A similar econometric model is employed, now with corporate

donations for school i in state s in year t as the dependent variable. As before, each regression includes state-by-year, state and year fixed effects in order to control for common factors affecting all universities, such as the downturn in state and national economies. Also, recall that all variables have been standardized so that the interpretation of the effect on corporate dollars donated can be assessed in terms of a one standard deviation increase in a particular covariate.

The full empirical specification is expressed in the final column of Table 4. Unlike the model for alumni donations, however, several neighborhood predictors in this table are statistically significant. First, there is a negative relationship between household vacancy rates in the school's neighborhood and corporate generosity. Specifically, a one standard deviation increase in the school's neighborhood household vacancy rate is related to a 0.12 decrease in corporate donations. Thus, along with a decrease in neighborhood residential quality, there is an associated decline in corporate donations.

Second, as the number of black residents in the school's neighborhood increases, there is an increase in corporate dollars donated – holding all else equal. In other words, as the number of minorities increase in a school's neighborhood, so do corporate donations, holding constant all other variables in the model (including other neighborhood variables). Finally, a one standard deviation increase in average neighborhood income is related to a 0.04 standard deviation increase

	1	2	3	4	5	6
Neighborhood information						
Average household size	-0.001	0.000	0.000	0.004	0.008	0.010
C	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Total housing units	_	-0.060***	-0.043*	-0.041*	-0.042*	-0.038
	_	(0.018)	(0.025)	(0.025)	(0.025)	(0.025)
Percentage of block, vacant	_	_	-0.025	-0.111***	-0.116***	-0.121***
	_	_	(0.028)	(0.033)	(0.033)	(0.034)
Number of black residents	_	_	_	0.122***	0.111***	0.111***
	—	—	_	(0.027)	(0.027)	(0.028)
Average household income	—	—	_	—	0.036**	0.036**
	—	—	_	—	(0.018)	(0.019)
Suburban	—	—	—	_	—	-0.104
	—	—	_	—	—	(0.105)
Rural	—	—	_	—	—	-0.076
	—	—	—	—	—	(0.107)
Other school-level covariates						
Total alumni solicited	0.024	0.035*	0.034*	0.038**	0.036**	0.034*
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.019)
Per pupil expenditures	0.611***	0.613***	0.616***	0.615***	0.618***	0.618***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Student enrollment	0.405***	0.409***	0.420***	0.465***	0.482***	0.482***
	(0.064)	(0.064)	(0.065)	(0.065)	(0.066)	(0.066)
Endowment	-0.004	-0.004	-0.003	-0.005	-0.004	-0.004
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
State-year, state and year fixed effects	Y	Y	Y	Y	Y	Y
n	2475	2475	2475	2475	2475	2473
R^2	0.51	0.51	0.51	0.52	0.52	0.52

Table 4: Standardized regression coefficients predicting corporate dollars donated

***P < 0.01; **P < 0.05; *P < 0.10.

in total corporate dollars donated. Controlling for all other factors in the model, an increase in neighborhood income is associated with the accumulation of additional dollars from the university.

Briefly addressing the control variables in the model begins with alumni solicitation. As a measure of the extent to which the university attempts to bring in dollars, the coefficient of total alumni solicited suggests a positive relationship between solicitation and donation. Similarly, schools with higher per pupil expenditures also have higher levels of corporate donations. This corresponds to the results in Table 4, in which expenditures per student were positively related to alumni donations. In other words, there is a consistency across models in relation to the prediction of the quality of the educational experience. Finally, larger schools receive more corporate donations. This final result may be related to the fact that larger schools have more elaborate sports programs (Okunade, 1993; Gottfried and Johnson, 2006).

Foundation generosity

A final econometric model examines the relationship between foundation dollars donated to school *i* in state s in year t and the set of independent variables as defined in Tables 3 and 4. Consistent to all other models, the regressions here also incorporate state-by-year, state and year fixed effects in order to control for non-institutional factors that could be affecting the level of donations. Finally, all continuous variables have again been standardized so that the interpretation of the effect on foundation dollars donated can be assessed in terms of a one standard deviation increase in a particular independent (Table 5).

Starting with an evaluation of the neighborhood covariates in the final column of the table (that is, the full model), schools in neighborhoods with larger average family sizes tend to receive fewer foundational dollars. Specifically, a one standard deviation increase in the neighborhood average household size is associated with a 0.03 decline in donated dollars. Second, as consistent with alumni and corporation models, there is a negative relationship between one aspect of a school neighborhood's urbanicity and foundation donations: a one standard deviation increase in neighborhood density is associated with a 0.05 decline in foundation dollars. Third, unlike corporation dollars, the coefficient on neighborhood household vacancy rate suggests a positive relationship to foundation dollars. That is, with a decrease in a school's neighborhood quality by one standard deviation, there is a 0.21 standard deviation increase in foundation dollars donated to the school. Finally,

controlling for all other variables indicates a positive relationship between average neighborhood income and foundation dollars donated. The coefficient of 0.05 suggests a quantitatively similar relationship to that of the full corporate model from Table 4. Thus, as neighborhood income rises, so do foundation donations.

The coefficients on school-level control variables provide similar explanations as in the previous two models. As a measure of university solicitation efforts, the parameter estimate of alumni solicited in a given year is positive and statistically significant. The standardized coefficient suggests that a one standard deviation in the number of alumni solicited in a given year is correlated with a 0.46 increase in foundation dollars donated. Second, as with alumni and corporation models, total expenditures per student is positive and significant. Schools with higher per pupil expenditures tend to have higher levels of dollars donated by foundations. Finally, schools with larger endowments are associated with more dollars from foundations: a one standard deviation increase in endowment size is associated with a 0.28 increase in foundation donations. All of these results, recall, are based on controlling for state-by-year environment, which includes attributes relating to macroeconomic events.

CONCLUSIONS

This study has contributed new research to the literature on the relationship between institutional-level

	1	2	3	4	5	6
Neighborhood information						
Average household size	-0.018	-0.019	-0.019	-0.022	-0.029**	-0.030**
0	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Total housing units	_	0.052***	-0.052**	-0.054**	-0.053**	-0.056**
0	_	(0.019)	(0.027)	(0.027)	(0.027)	(0.027)
Percentage of block, vacant	_		0.162***	0.204***	0.210***	0.219***
	_	_	(0.030)	(0.036)	(0.036)	(0.037)
Number of black residents	_	_		-0.058*	-0.041	-0.038
	_	_	_	(0.029)	(0.030)	(0.030)
Average household income	_	_	_	_	0.054***	0.049***
	_	_	_	_	(0.020)	(0.020)
Suburban	—	_	_	—	—	0.006
	—	_	_	—	—	(0.113)
Rural	—	—	_	—	—	-0.049
	—	—	—	—	—	(0.115)
Other school-level covariates						
Total alumni solicited	0.467***	0.457***	0.460***	0.459***	0.462***	0.467***
	(0.019)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Per pupil expenditures	0.237***	0.235***	0.219***	0.220***	0.216***	0.215***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Student enrollment	0.014	0.010	-0.060	-0.081	-0.106	-0.102
	(0.069)	(0.068)	(0.069)	(0.070)	(0.070)	(0.071)
Endowment	0.292***	0.292***	0.284***	0.285***	0.284***	0.284***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
State-year, state and year fixed effects	Y	Y	Y	Y	Y	Y
n	2440	2440	2440	2440	2440	2438
R^2	0.54	0.54	0.55	0.55	0.55	0.55

Table 5: Standardized regression coefficients predicting foundation dollars donated

***P < 0.01; **P < 0.05; *P < 0.10.

factors and financial generosity. In particular, this article has assessed the degree to which school urbanicity and other neighborhood contextual factors are related to alumni, corporate and foundation donations. Controlling for commonly employed institutional predictors, such as school endowment, as well as holding constant the state, year and unique state-year (economic) environment over the period 1998–2008, the results have pointed toward significant correlations between a university's neighborhood context and private donations. In each model presented in this study, there are statistically significant relationships between neighborhood and donations – though the results for each donor group differ slightly from one another. For instance, save for the significant result of the degree of urbanicity (as measured by density and by rural versus urban), neighborhood characteristics do not relate significantly to alumni generosity. This implicates that other a measure of how urban a school is, the neighborhood context does not significantly relate to alumni donor behavior. On the other hand, both corporate and foundation donations have multiple significant relationships to the university's neighborhood context. As an example, foundations may be interested in revitalizing university neighborhoods – hence the positive relationship between vacancy and foundations.

Although this study has employed a large, comprehensive data set of US universities, there are nonetheless further avenues for research. For example, though this article has controlled for several institutional characteristics, it has not explicitly differentiated between institutional type. Future research may entail parsing out the prediction of neighborhood on giving based on subsamples of institutions. Furthermore, whereas this study has controlled for region (urban, suburban, rural and state), additional lines of inquiry may examine the distribution of institutional type by region type. For example, some may find interest in knowing the effects of neighborhood solely on the public institutions in urban areas. Finally, further research might entail examining a sub-sample of universities that are in a single city and thus have competing neighborhoods (that is, UCLA and USC, University of Pennsylvania and Temple, Columbia and NYU).

Nonetheless, over the past decade of economic downturn in which school endowments have been shrinking, government contributions have waned, budgets have tightened and private donations to universities have been more important than ever in their support of higher education. Thus, this article has provided additional insight into the relationship

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between school environment and generosity over a decade of severe economic decline. Doing so can enable both researchers and practitioners to be more precise about the underpinnings of donor behavior, particularly within the realm of how school relates to neighborhood, and neighborhood to school.

NOTES

- 1 Note that these university characteristics are not linked to individual institutions. Instead, they are from a secondary database that solely describes the characteristics of the total sample.
- 2 In the regression analyses to follow, the urban classification is the omitted reference group.
- 3 Note that lagged measures of expenditures per student also provided similar results.

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