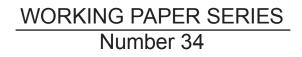# Southern Africa Labour and Development Research Unit

**SALDRU**

# The Effects of the Kalamazoo Promise on College Choice

*by*

*Rodney J. Andrews, Stephen DesJardins and Vimal Ranchhod*

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# The Effects of the Kalamazoo Promise on College Choice

Rodney J. Andrews[1]
Robert Wood Johnson Scholar in Health Policy Research
Harvard University
randrews@rwj.harvard.edu

Stephen DesJardins
Center for the Study of Higher and Postsecondary Education
University of Michigan
sdesj@umich.edu

Vimal Ranchhod
University of Capetown
vimal.ranchhod@gmail.com

# Introduction

To the surprise of the residents of Kalamazoo, Michigan, the Kalamazoo Promise was announced on November 10, 2005. Fully funded by anonymous donors, the Kalamazoo Promise offers to pay both the tuition and mandatory fees of graduates of Kalamazoo public high schools at any public college or university located in Michigan. To be eligible for the scholarship program students must graduate from a Kalamazoo public high school, reside in the school district, and have been enrolled in the Kalamazoo Public School (KPS) district for four years or more. Enrollment and residency must be continuous to be eligible for the financial support. Students must gain admission to and enroll in a public State of Michigan community college, or four-year college or university. They must make regular progress toward a degree or certification and maintain a 2.0 grade point average at their postsecondary institution. Students must complete a minimum of 12 credit hours per semester, and if their cumulative grade point average drops below 2.0, they lose the funding, but it may be reinstated if the student is able to bring her grade point average up to at least a 2.0.[1]

However, the Kalamazoo Promise (henceforth, The Promise) is more than just a college scholarship program. It is a multi-faceted approach, one component of which is the tuition support for KPS high school graduates. The Promise is intended to spur urban renewal by attracting new residents who are interested in having their children's college subsidized; the scholarship program component is designed to offer the KPS graduates the opportunity to attend college and hopefully return to work and live in Kalamazoo. The Kalamazoo Promise represents a substantial philanthropic investment in the citizens of Kalamazoo and it is designed to continue indefinitely.

The urban development aspects of the program are interesting. However, examining the potential of The Promise as a catalyst for development is not the primary focus of this paper. Herein, we focus on the effect of the scholarship on college access. The unexpected announcement of The Promise, the significant size of the subsidy, and the short time between the announcement of the program and its implementation presents an opportunity to identify the causal effects of the program on student college choice. To do so, we examine the ACT score report sending behavior of the first cohort of students

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[1]The source of the eligibility criteria is the official Kalamazoo Promise Website: https://www.kalamazoopromise.com/

who are eligible for the scholarship. We follow Card and Krueger (2005) in using score reports as a proxy for a college application and do so because data detailing the early enrollment decisions of students was unavailable early in the life of the program.[2]

The Promise subsidizes public colleges and universities in Michigan under the premise that locally educated citizens are more likely to contribute to the local economy. In the short period since its inception, The Promise has garnered the attention of other communities and philanthropists. For example, there are "Promise-like" programs in other locales such as Pittsburgh, Pennsylvania; El Dorado, Arkansas and Denver, Colorado.[3] Also, the state of Michigan is considering creating "Promise Zones" that would encourage public and philanthropic college financing initiatives modeled after The Promise. Given the interest in these types of programs, this paper provides a crucial step toward determining the effectiveness of such programs to influence prospective college students' choice of postsecondary institution.

## Background

Economists have exploited many sources of variation to identify the effects of changes in college price on college access and attendance.[4] For example, within state changes in tuition (Kane, 1994) and the GI Bill (Bound and Turner, 2002) have been examined for their effects on college attendance. However, the studies most directly related to our situation are the evaluations that examine how subsidies to students in specific geographic locations affect postsecondary attendance decisions. For example, Dynarski (2000) examines the impact of Georgia's HOPE Scholarship on college attendance. Funded by proceeds from state sanctioned gambling, the HOPE scholarship pays the tuition and fees of residents to Georgia's public colleges and uni-

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[2]Using data from the University of California System and The College Board, Card and Krueger (2005) regress the log of the number SAT score reports sent to one of eight UC campuses by members of a racial/ethnic group in a year on the log of the number of applications to the same UC campus by members of the the same ethnic group-year cell. The result of the regression is the amount of attenuation from score reports to applications. Their findings indicate that score reports are a good proxy for applications.

[3]See the following URL hosted by the Upjohn Institute for a complete list of communities with "Kalamazoo Promise" style programs:
http://www.upjohninst.org/promise/communities.html

[4]Dynarski (2002) provides a nice summary of some of this literature

versities or pays a fixed amount towards the tuition at a private colleges or university in Georgia. To qualify, Georgia residents must have a 3.0 grade point average in high school and maintain a cumulative 3.0 grade point average in college. Dynarski finds that the HOPE Scholarship increased college attendance among 18- and 19-year-olds by 7 to 8 percentage points. Cornwell, Mustard, and Sridhar (2006) find that over the 1988-1997 period the HOPE Scholarship increased college enrollment by 5.8 percent or 2,889 students per year, with enrollment in four-year colleges accounting for most of the enrollment gains.

Abraham and Clark (2006) examine the effects of the District of Columbia Tuition Assistance Grant (DCTAG) program. Initiated in 1999, the program subsidies District of Columbia residents' attendance at public colleges and universities in the United States. The authors find that the program increases the probability that students apply to eligible institutions and increases college enrollment among recent D.C. high school graduates. Kane (2007) also analyzed the DCTAG program, and his results indicate that between the years 1998 and 2000 the number of District residents attending public institutions in Maryland and Virginia more than doubled. He also examines the enrollment effects on public institutions in other states and finds that the number of D.C. residents attending these institutions nearly doubled.

Following these scholars lead, we exploit a sharp change in the price of Michigan's public colleges and universities for qualified high school graduates of the KPS District and use this policy change to identify the effects of the scholarship on college choice. Although our estimation strategy is similar to those employed in the papers mentioned above, there are important differences. The papers that analyze Georgia's HOPE Scholarship rely on other states to provide the counterfactual to Georgia. That is, these other states act as a comparison group of what educational outcomes in Georgia would have been absent the HOPE Scholarship. In our paper we use ACT test-takers in public high schools in Michigan that did not receive The Promise scholarship ("the treatment") as the counterfactual. The Georgia HOPE Scholarship also requires that recipients both finish high school with a 3.0 grade point average and maintain a cumulative 3.0 in college. The Promise imposes a lower academic standard (simply graduate from high school) and is therefore more likely to affect the choice sets of students of lower socioeconomic status.

The DCTAG requires a minimum of twelve consecutive months of residency prior to the applicants first time in college and continued residency throughout the applicant's college attendance. It is open to high school

graduates—both public and private—and GED recipients. Recipients of the subsidy offered by the DCTAG program are not required to attend high school in the District but they must be residents, and the program applies to a larger set of postsecondary institutions relative to The Promise. In contrast, The Promise subsidizes tuition at any of Michigan's public colleges and universities for KPS high school graduates who have been enrolled in the district's schools and been residents of the district for at least four consecutive years. The percent of tuition covered depends on the length of enrollment in KPS schools. Promise recipients who entered the KPS system in kindergarten will have one hundred percent of their tuition covered. Promise recipients who entered the KPS system in either the first grade, second grade, or third grade will have ninety-five percent of their tuition covered. For Promise recipients who entered the KPS system in grades four through nine, the following formula describes the percentage of tuition that is covered: $.95 - .05(G - 3)$ where $G$ is the grade the student entered the KPS system. For example, if a promise eligible student entered in grade nine, then the percentage of tuition covered is sixty-five percent. Students who enter the KPS system in grades ten through twelve are not eligible for the subsidy.

The Promise is similar to Georgia's HOPE Scholarship and the DCTAG in that it reduces the price of some colleges for qualified residents. However, The Promise offers the price subsidy to students in public high schools in a relatively small geographic area, and the academic performance criteria are not stringent. We believe our evaluation will add to the general knowledge of how students respond to price subsidies and provide more specific knowledge about effects of The Promise on the postsecondary access of recipients. We know of no other research that examines the effects of the Kalamazoo Promise on student access to college.

# Data

The primary source of data used in this study consists of unit record data from ACT's Student Profile Questionnaire for every ACT test taker in the state of Michigan for the years 1996-2006. The information collected by the Student Profile Questionnaire (SPQ) is provided by the test taker when the prospective college student registers for the ACT examination. It contains information on educational plans, interests, and needs; special educational needs, interests, and goals; college extracurricular plans; financial and de-

mographic information; out-of-class accomplishments; and high school extracurricular activities. Our unit record data not only contains a wealth of information from the SPQ, we also have each test taker's sub-scores on the English, mathematics, science, and reading sections, as well as their overall or composite test score. We also know the set of (up to six) institutions that the test-taker designates ACT to send score reports to. We know the identity of these institutions and the test-takers order of preference—that is, whether the institution is the test-taker's first choice, second choice...sixth choice.

To add more detail about the high schools students attend, we merge in high school level data from the National Center for Education Statistics' Common Core of Data. The observations are indexed by a unique high school identifier and year, so we add yearly information about the high school the ACT test-takers attended. Added to the SPQ and ACT score data is information on the number of full time equivalent teachers in the student's high school, the pupil-to-teacher ratio, the percentage of students that are eligible for free lunch, and the racial composition of the high school. These data act as controls in our regressions, allowing us to account for both individual and contextual factors that affect the outcome.

For an observation to be included in the effective sample we require the following: valid ACT scores, information on the set of institutions designated to receive score reports, family income data from the SPQ, race/ethnicity information, and non-missing values for the annual high school data from the Common Core of Data. As the Common Core of Data only has information on public schools, this means that only students who attended public schools in Michigan are included in the sample. Our sample includes 430,702 test-takers from 591 public high schools in Michigan over the 1996 to 2006 time period.

# Methodology

We employ difference-in-differences and difference-in-differences-in-differences research designs to estimate the effects of The Promise on student college choice. The unexpected announcement of the program, the substantial size of the subsidy, and that we consider only the first cohort of students eligible for The Promise allow us to identify the causal effects of the price subsidy on student college choice. The unexpected announcement of the program means that students could not have taken actions to prepare for college in antici-

pation of receiving the subsidy. The size of the subsidy is large enough to ease the cost of attending college—for example, the subsidy could have been as large as 10,573 dollars, the cost of attending the University of Michigan-Ann Arbor as a lower division student for the 2005–2006 academic year.[5] The short time frame that we analyze means that we need not worry about the confounding effects of either students who migrate into the Kalamazoo School District to take advantage of The Promise or the effects of actions that the community has taken to complement the Kalamazoo Promise.[6] In the two paragraphs that follow, we discuss how The Promise affects the college choice set.

Consider a hypothetical student in Kalamazoo who has just discovered that she is eligible to receive the tuition subsidy offered by The Promise. Further, suppose that the student is a senior in high school. How might the tuition subsidy influence her behavior? Given the timing of the announcement of the program (November 2005), and the fact that our student has already started her senior year in high school, she has little ability to alter her academic preparation for college. Nonetheless, the subsidy should make college more affordable than prior to the initiation of the program and in-state public institutions relatively more attractive than out-of-state colleges. If our hypothetical student is interested in attending a four-year institution, then she will have to submit a standardized examination score (such as the ACT) to any institutions to which she applies.

After attempting the ACT, she selects the optimal set of colleges given her preferences and the cost of attendance. Upon receiving the information that she is eligible to receive the subsidy offered by the Kalamazoo Promise, the in-state public colleges and universities are more attractive to her than they would have been absent the price subsidy. This change in the relative attractiveness of in-state public institutions means that the probability that she and other eligible students in public high schools in Kalamazoo will apply

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[5]see http://sitemaker.umich.edu/obpinfo/files/umaa_tuitfee_history.pdf for the cost information.

[6]Enrollment in the Kalamzoo Public school district increased in 2006 after declining for 17 years. The number of students enrolled in Kalamazoo Public Schools was 10,217 in September of 2005. That number had increased to 11,203 by September of 2006. (see http://www.upjohninst.org/promise/index.htm) The district also passed a eighty-five million dollar bond request for infrastructure due to increased enrollment in May of 2006. The number of volunteers for Big Brothers Big Sisters of Kalamazoo doubled in the years following the announcement of the Kalamazoo Promise.(see Evergreen and Miron, 2008)

to Michigan's public colleges and universities increases.

We can estimate these changes at the high school level with the following framework. Let $Y_{ST}$ represent the percentage of students at high school $S$ in period $T$ who send a score report to Western Michigan University (located in Kalamazoo). $S$ takes on two values, $K$ and $N$ for Kalamazoo Promise high schools and Non-Kalamazoo Promise high schools, respectively. $T$ also takes on two values, 0 for the period before the initiation of The Promise and 1 for the period after. The difference-in-differences estimate of the effect of the program on the likelihood of sending ACT test scores to Western Michigan University is:

$$\Delta = (\overline{Y_{K1}} - \overline{Y_{K0}}) - (\overline{Y_{N1}} - \overline{Y_{N0}}) \tag{1}$$

The difference in the terms $\overline{Y_{N1}}$ and $\overline{Y_{N0}}$, the means of the percentage of students from Non-Promise high schools sending scores to Western Michigan University in the periods before and after the Kalamazoo Promise, estimates the score sending behavior in the Kalamazoo Promise Schools in the absence of the policy change. Subtracting the difference between the terms above from the difference between $\overline{Y_{K1}}$ and $\overline{Y_{K0}}$—the means of the percentage of students from Promise schools sending scores to WMU from the periods before and after The Promise, respectively—removes the effects of events that are common to both types of high schools. The difference in the differences provides an estimate of the "true" impact of The Promise on ACT score sending to Western Michigan University. This estimator is easily extended to estimating the effects of score sending behavior to other colleges and universities.

Individual characteristics also influence the choice of college. For example, a student who earns a high ACT score is more likely to apply to a more selective college than a student who does less well on the ACT test. Failing to account for the influence of individual characteristics on the decision of where to send score reports can lead to biased estimates of the effects of The Promise on our measure of college choice.

High school level characteristics also influence choice. Students from high schools with populations that have low socio-economic status are less likely to attend college. The difference-in-differences estimator relies on the assumption that the comparison schools are comparable; by controlling for confounders that influence choice, we improve the consistency of the estimate. We estimate models of the following form to account for the impact

of high school and individual attributes in estimating the impact of The Promise on college choice:

$$Y_{ist} = \alpha + X'_{ist}\beta_1 + X'_{st}\beta_2 + \gamma POST + \eta KP + \delta KP \times POST + \varepsilon_{ist} \quad (2)$$

$Y_{ist}$ is an indicator variable for test-taker $i$ in high school $s$ in year $t$ that assumes a value of one if the test-taker designates a particular school (or set of schools) to receive a score report and takes on a value of zero otherwise. $X_{ist}$ is a vector of attributes for test-taker $i$ in school $s$ in year $t$—for example, the test-taker's ACT scores and an indicator for the test-taker's family income category. $X_{st}$ is a vector of covariates for high school $s$ in year $t$ such as the number of full time equivalent teachers and the percentage of the high school on free lunch. $POST$ is an indicator variable that assumes a value of one for the year that The Promise began, the 2005–2006 academic year. $KP$ is an indicator variable that assumes a value of one if the student is in a high school that is eligible for the Kalamazoo Promise. This variable does not change over time; that is, if a student is in one of the two high schools that are eligible for The Promise in either the years before or the year following the implementation of The Promise, $KP$ takes on a value of one. $POST \times KP$ is an interaction term; it is operationalized as an indicator variable that assumes a value of one for students in high schools that are eligible for The Promise in the year it was announced.

We are interested in the value of $\delta$, the coefficient associated with the interaction term $POST \times KP$, as it represents the difference-in-differences estimate of the impact of the price subsidy on the likelihood of sending a score report—our proxy for applying to college—to a particular set of institutions and is the regression adjusted analogue of $\Delta$ in equation (1). We estimate a series of linear probability models with the standard errors clustered at the high school level to deal with the aggregation issues raised by Moulton (1990) and the serial correlation issues raised by Bertrand et al. (2004).

Test-takers from families of limited means are more likely to be sensitive to a subsidy to the cost of college than test-takers from richer families (see Leslie and Brinkman, 1987; Heller, 1997; Gallet, 2007). The difference in sensitivity to the price of college means that the effects of The Promise on application behavior will vary by family income. To test this hypothesis, we estimate models of the following form:

$$
\begin{aligned}
Y_{ist} \;=\;\; & X'\beta + \gamma POST + \eta KP + \rho FI + \delta_1 POST \times KP + \delta_2 POST \times FI \\
& + \delta_3 KP \times FI + \delta_4 POST \times KP \times FI + \varepsilon_{ist} \tag{3}
\end{aligned}
$$

$Y_{ist}$ is defined above. $X$ is a vector of characteristics that contains all the elements of $X_{ist}$ and $X_{st}$. $POST$, $KP$, and $POST \times KP$ are defined above. $FI$ is an indicator variable that assumes a value of one if the test-taker's family income is less than \$ 50,000 per year. In these specifications we collapse the income indicators to the binary variable $FI$. We do this for two reasons. First, a total family income of \$ 50,000 per year is about the limit for Pell Grant eligibility; therefore, we view \$ 50,000 in income as a good benchmark for families who may find it difficult to pay for college. The second reason deals with estimation problems. There are ten income categories. Attempting to estimate triple interactions for each of the income categories means that our estimates would be based on very small cell sizes, increasing the likelihood of obtaining imprecise estimates. By collapsing the categories, we lose the ability to estimate effects for the impact of the Promise on all the income classifications, but we can more accurately estimate effects for a meaningful aggregate—that is, test takers from families that earn less than \$ 50,000.

$POST \times FI$ is an interaction term; it is operationalized as an indicator variable that assumes a value of one if a test-taker's family income is less than \$ 50,000 and the observation comes from the 2005–2006 academic year. The coefficient associated with the interaction term, $\delta_2$, is the difference in the likelihood of submitting a score report to a particular college for a test-taker with a family income that is less than \$ 50,000 in the 2005–2006 academic year. $KP \times FI$ assumes a value of one for students in Kalamazoo Promise high schools with families that earn less than \$ 50,000. The coefficient associated with $KP \times FI$, $\delta_3$ is the difference in the probability of submitting a score report to a college for a test-taker in the eligible high schools from families who earn less than \$ 50,000 per year. The coefficient of interest is $\delta_4$, the difference-in-difference-in-differences estimate (DDD); it estimates the change in the likelihood of a test-taker in a Kalamazoo Promise high school from a family with less than \$ 50,000 in income sending a score report to a particular college relative to to test-takers in Kalamazoo Promise high schools from families who earn more than \$ 50,000 in income. (The test-takers who earn more than \$ 50,000 in income are the control group.)

Testing the hypothesis of differences in price sensitivity amounts to inference on $\delta_4$. In the following section, we discuss the results of the empirical investigations.

# Results

## Difference-in-Differences

Table 1 summarizes the characteristics of the test takers in the sample. After the establishment of the program there is a decline in performance on the ACT within KPS (Promise) high schools—average scores drop on all four sections of the ACT examination, with the drop ranging from 12 percent of a standard deviation in the pre-period for Reading to a 25 percent of a standard deviation in the pre-period for Science. The English and Math scores for Non-Promise test takers are unchanged over time; whereas, the Science and Reading scores for Non-Promise test-takers exhibited very small, but statistically significant, declines. The average GPA for test-takers in the Promise schools declined by .04 points but rose by .08 points in the Non-Promise high schools. These data are consistent with a story that the Kalamazoo Promise incentivized students of lower academic ability to take the ACT test, consider sending scores to, and applying to more selective colleges.

[**Table 1 about here**]

The racial/ethnic profile of the test-takers from the high schools that received the subsidy differ greatly from the state average. The Promise schools have a smaller fraction of white students and a larger fraction of black prospective college students relative to the averages in the Non-Promise schools. The Promise and Non-Promise schools are nearly identical with respect to the fraction of test-takers who identify as being Latino. Kalamazoo Promise schools have higher proportions of students from families that earn less than $ 50,000 per year.

Table 2 summarizes the characteristics of the high schools of the test-takers. Kalamazoo Promise high schools have more full time equivalent teachers and lower pupil-to-teacher ratios relative to the average of the Non-Promise Schools. The Promise high schools have student bodies that have far higher fractions of black students, Hispanic students, and students who

receive free meals.

[**Table 2 about here**]

Table 3 contains the first set of difference-in-differences estimates, with the column headings indicating the respective institution or combination of institutions where score reports were sent to by students in the sample. For example, the U of M heading provides the results for changes in score sending behavior to the University of Michigan-Ann Arbor campus. In this regression, the outcome is a binary variable that assumes a value of one if a test-taker sends a score report to the University of Michigan and assumes a value of zero otherwise. The table displays the estimates of the coefficients that are associated with the variables of interest: $POST$, $KP$, and the interaction of these two variables (indicated by $POST \times KP$).

[**Table 3 about here**]

The second column of Table 3 contains the estimates for the University of Michigan-Ann Arbor (denoted U. of M.). The estimated coefficient associated with $POST$ means that on average test-takers in the period following the announcement of the program are 4.24 percentage points more likely to send a score report to the U. of M than before the provision of the Promise scholarship. Also, test-takers from the high schools that are eligible for the Kalamazoo Promise are no more likely to send a score report to the U. of M than their Non-Promise counterparts. The estimate is small (approximately .06 percentage points) and statistically insignificant. The difference-in-differences estimate of the impact of the Kalamazoo Promise on the likelihood of sending a score report to the U. of M. is 7.84 percentage points and is statistically significant at the .1 percent level. This estimate is roughly a 25 $\left( \frac{.0784}{.32} \right)$ percent gain relative to the mean percentage of test-takers at Kalamazoo Promise schools who sent score reports to the University of Michigan-Ann Arbor in the years prior to the announcement of the Kalamazoo Promise.

Next, we estimate whether there were changes in score sending behavior to Michigan State University. Test-takers are nearly 5 percentage points more likely to send a score report to Michigan State University in the Post-Promise period. Test-takers who attended Kalamazoo Promise high schools before the announcement of the Promise are nearly 3 percentage points less

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likely to send a score report to Michigan State University, but this difference is measured imprecisely and is not statistically significant. The difference-in-differences estimate of the impact of the Promise on the probability of sending a score report to Michigan State University is 12.5 percentage points or nearly 35 percent relative to the mean percentage of score reports sent to Michigan State University by students from Kalamazoo Promise high schools in the years prior to the Promise. The estimate is statistically significant at the 1 percent level.

The fourth column contains the estimates for the probability of sending a score report to Western Michigan University (WMU), the four-year research institution located in Kalamazoo. All test-takers in the Post-Promise period increased their likelihood of sending a score report WMU by slightly more than 2 percentage points. This estimate is significant at the .1 percent level. Test-takers from Kalamazoo Promise high schools in the years prior to the program are 34.8 percentage points more likely to send a score report to WMU. Given the close proximity of WMU to KPS students, and given that students are more likely to attend colleges that are close to home, this large estimate is not surprising. The difference-in-differences estimate of the impact of the program on the likelihood of sending scores to WMU is 12.2 percentage points or 23 percent of the mean percentage of students from Promise high schools that submitted a score report to WMU in the years prior to the beginning of The Promise. But there is a caveat. In the first year of The Promise, WMU initiated a program that offered to pay room and board for Kalamazoo Promise recipients matriculating to the institution. Thus, the difference-in-differences estimate is conflated with the effects of Western Michigans living arrangement subsidy.

The likelihood of test-takers in the post-period sending score reports to any of the public universities in Michigan (Pub. U in MI) is both small (approximately .2 percentage points) and statistically insignificant. Test-takers from Kalamazoo Promise high schools are 4 percentage points less likely to send a score report to these institutions (but this estimate is not significant at conventional levels). The difference-in-differences estimate of the Promise on the likelihood of sending to any of the public colleges and universities is 6.3 percentage points which is 8 percent of the mean percentage of test-takers in Kalamazoo Promise high schools who sent score reports to such institutions in the years before The Promise was announced.

Test-takers are approximately 1.5 percentage points less likely to send a score report to Wayne State University (WSU), which is located in De-

troit, Michigan. Test-takers in Promise eligible high schools prior to the announcement are 14.2 percentage points less likely to send a score report to Wayne State University. The difference-in-differences estimate is 6.5 percentage points, which is more than three times the mean percentage of test-takers from Promise high schools who sent score reports to WSU. Like Western Michigan University, WSU began a program that offered to pay the room and board of Kalamazoo Promise recipients who enrolled at this institution. Thus, the difference-in-differences estimate, in part, picks up the effects of Wayne States complimentary funding.

The next outcome we examine is the likelihood of sending a score report to Kalamazoo College. Kalamazoo College is a private liberal arts college located in Kalamazoo. Kalamazoo College provides a good contrast to the local public institutions. It is located in close proximity to Kalamazoo Promise recipients, so it is comparable to local public institutions with respect to distance. However, Kalamazoo College is private, so recipients of The Promise cannot apply the subsidy towards tuition at Kalamazoo College. We find a small, .1 percentage point, increase in the likelihood of all test takers sending a score report to Kalamazoo College following the announcement of The Promise. Test takers from Kalamazoo Promise Schools are roughly 12.7 percentage points more likely to send a score report to Kalamazoo College in the years before the announcement of The Promise, which is sensible given Kalamazoo College's proximity. The estimate of the impact of The Promise on the likelihood of sending to Kalamazoo College is -2.2 percentage points. The estimate is consistent with the hypothesis that The Promise reduces the attractiveness of private institutions; however, the estimate is not statistically significant.

The next two outcomes are particularly interesting. The eighth column provides estimates for Kalamazoo Valley Community College (KVCC) which is also located in Kalamazoo. There is virtually no change in the likelihood of all test-takers in the post-period sending a score report to KVCC. However, test-takers from Promise high schools in the years prior to the program are 16 percentage points more likely to send a score report to KVCC This result is statistically significant at the .1 percent level. The difference-in-differences estimate is 2.4 percentage points or about 13 percent of the mean percentage of test-takers in Promise eligible high schools before the Kalamazoo Program. KVCC is open enrollment, that is, a high school diploma or its equivalent is all that is required for admittance. That the Kalamazoo Promise program increases the probability of sending a score report to a community college

implies that the Promise affects a set of students who, perhaps, are not prepared for an academically rigorous institution such as WMU or prefer to experiment with college at an institution that provides the type of academic courses offered by a community college.

The final column contains estimates for the flagship universities located in Michigan. The "Flagship" variable assumes a value of one if a test-taker sends a score report to both the University of Michigan and Michigan State University. Test-takers in the year after The Promise began are roughly 3.3 percentage points more likely to submit score reports to both flagship institutions. Test-takers in Promise schools in the years prior to The Promise are roughly 1.72 percentage points less likely to to submit score reports to both universities; however, this estimate is statistically insignificant. The difference-in-differences estimate is 11.3 percentage points and is statistically significant at the .1 percent level. The estimate is relatively large at roughly seventy two percent of the Pre-Promise mean.

Thus far, the results provide strong evidence that The Promise affects the choice set of potential applicants. However, the above estimates do not include some covariates that may affect student decisions about where to submit a score report. For instance, ones race and family income may affect an applicants propensity to send scores to particular institutions thus controlling for these factors may be important. We do so, and the results are presented in Table 4. The results produced when we control for the race and income of the test-taker are very similar to the results discussed above in Table 3.

[**Table 4 about here**]

## Difference-in-Difference-in-Differences

In this section, we discuss the results from estimating the model detailed in (3). For the sake of brevity, we focus the discussion on $\delta_4$, the coefficient associated with the triple interaction term $POST \times KP \times FI$. The DDD estimate of the impact of the Kalamazoo Promise on the likelihood of a test-taker from a family that earns less than \$ 50,000 per year submitting a score report to the University of Michigan-Ann Arbor is 3.4 percentage points and significant at the .1 percent level. This is a 13.8 percent gain relative to the mean percentage of test-takers who sent score reports to the

U of M and meet the following criteria: a) from families that earn less than $ 50,000 per year, b) attend one of the Promise eligible high schools, c) submitted a score report in the years prior to the announcement of the Promise.[7]

[**Table 5 about here**]

The DDD estimate of the effects of The Promise on the likelihood of submitting a score report to Michigan State University is 7.8 percentage points and is statistically significant at the .1 percent level. This is nearly a twenty-five percent gain relative to the Pre-Promise of score reports sent to Michigan State University. With respect to Western Michigan University, the DDD estimate the impact of the Promise is 2.9 percentage points. This is a 5.6 percent gain relative to the Pre-Promise mean. We should be careful, however, in attributing this effect solely to the Kalamazoo Promise. Recall that Western Michigan University implemented a program that offers to pay room and board for Kalamazoo Promise recipients who are admitted. This implies that the DDD estimate is likely biased upwards as Kalamazoo Promise recipients are eligible for the funds and the provision of the additional support by WMU increases the likelihood of applying to the institution.

The DDD estimate of the effects of The Promise on the likelihood of submitting a score report to a Public University in Michigan is approximately 3.2 percentage points and is statistically significant at the five percent level. This is roughly a 4.1 percent gain relative to the to the Pre-Promise mean.

Next, we consider the DDD estimate for Wayne State University. The DDD estimate for the impact of the Kalamazoo Promise on sending to WSU is 5.4 percentage points. The estimate is statistically insignificant but large relative to the Pre-Promise mean; the estimate is 1.8 times as large as the Pre-Promise mean. Recall that WSU also instituted a program that offered to pay room and board for Promise recipients, so this estimate is also probably biased upward for reasons similar to the bias that likely contaminates the estimate for Western Michigan University. The estimate of the effects of The Promise on sending to the local private four-year institution, Kalamazoo College, for students from families that earn less than $ 50,000 is small, $\approx$-.5 percentage points, and statistically insignificant.

Results for Kalamazoo Valley Community College are interesting. First,

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[7]These criteria define the population that is used to compute the Pre-Promise mean for this sub-section.

test-takers who earn less than fifty thousand dollars per year in Kalamazoo Promise schools are 8.3 percentage points more likely to submit a score report to KVCC, ceteris paribus. After the Promise is implemented, however, test-takers in Kalamazoo Promise Schools who earn less than $ 50,000 per year are 10.3 percentage points *less likely* to submit a score report to KVCC. This is a 49 percent decline relative to the Pre-Promise mean.

The DDD estimate for the impact of The Promise on sending score reports to both the University of Michigan-Ann Arbor and Michigan State University is small and statistically insignificant.

Overall, the estimates from our DDD estimates provide evidence that test-takers from families that earn less than $ 50,000 respond differently to treatment than their counterparts who are from families with incomes above fifty thousand dollars per year.

# Conclusion

We provide evidence that test-takers respond to price incentives. Our results demonstrate that the Kalamazoo Promise incentivizes students to include Michigans public colleges and universities in their college choice sets after the implementation of the program. Moreover, we show that the effects are fairly large for Michigans most selective public universities, the University of Michigan-Ann Arbor and Michigan State University, which also are the institutions whose graduates are likely to be the most mobile. We find that the Promise also generates interest in two of Kalamazoos public colleges, Western Michigan University and Kalamazoo Valley Community College. Given the urban development focus of the Kalamazoo Promise program, the findings that show that the the recipients of the Kalamazoo Promise are more likely to consider local institutions is welcome news as Groen and White (2004) show that in-state students who are educated by public institutions are more likely to remain in-state. Still, if the the job opportunities are not available in the city of Kalamazoo, then citizens, whether educated locally or not, will go elsewhere.

The DDD estimates provide evidence that ACT test takers from families that earn less than $ 50,000 that receive The Promise respond differently than their more affluent counterparts; they are more likely to send score reports to public universities in Michigan and we find little evidence that The Promise affects the likelihood of such students considering a local private

school, Kalamazoo College. Promise recipients that earn less than $ 50,000 are more likely to send score reports to the University of Michigan, the most expensive public institution in the state. However, Promise recipients are less likely to send score reports to Kalamazoo Valley Community College, a cheaper option. Taken together, these estimates suggest that The Promise allows test-takers who are financially constrained to consider institutions that are higher priced and more selective.

The goal of The Promise is to revitalize the city of Kalamazoo by securing the benefits of an educated citizenry—for example, high-tech industries may be more likely to locate in Kalamazoo if there is an appropriately skilled labor force that is readily available. By subsidizing the cost of public post-secondary institutions in Michigan, the Promise aims to attract families who are interested in securing these benefits for their children and increasing the likelihood that educated citizens remain in the area. This realization relies on families and students being interested in considering local institutions. This paper demonstrates that the Promise, at a minimum, has stimulated interest in Michigan's local institutions.

We use exogenous variation in the price of college to identify the effects of price on the college choice set. We add to the literature by demonstrating that a localized program that is wholly funded by philanthropy is capable of changing the college choice set. As these programs are being considered and diffuse across the rest of Michigan and across the country, objective evaluation of the effects of programs like these is key to ensuring that the benefits of such large gifts are maximized.

# References

Abraham, K. G. and M. A. Clark (2006). Financial aid and students college decisions: Evidence from the district of columbia tuition assistance grant program. *Journal of Human Resources 41*(3), 578–210.

Bertrand, M., E. Duflo, and S. Mullainathan (2004). How much should we trust difference in differences estimates? *Quarterly Journal of Economics 119*(1), 249 – 275.

Bound, J. and S. Turner (2002). Going to war and going to college: Did world war ii and the g.i. bill increase educational attainment for returning veterans? *Journal of Labor Economics 20*(4), 784–815.

Card, D. and A. Krueger (2005). Would the elimination of affirmative action affect highly qualified minority applicants? evidence from california and texas. *Industrial and Labor Relations Review 56*, 416 – 434.

Cornwell, C., D. B. Mustard, and D. J. Sridhar (2006). The enrollment effects of merit-based financial aid: Evidence from georgia's hope program. *Journal of Labor Economics 24*(4), 761–786.

Dynarski, S. (2000, September). Hope for whom? financial aid for the middle class and its impact on college attendance. *National Tax Journal 53*(3), 629–662.

Dynarski, S. (2002). The behavioral and distributional implications of aid for college. *American Economic Review 92*(2), 279–285.

Evergreen, S. and G. Miron (2008, February). Community group response. Evaluation of the Kalamazoo Promise Working Paper #2, Western Michigan University.

Gallet, C. (2007). A comparative analysis of the demand for higher education: Results from a meta-analysis of elasticities. *Economics Bulletin 9*(7), 1–14.

Groen, J. A. and M. J. White (2004, August). In-state versus out-of-state students: the divergence of interest between public universities and state governments. *Journal of Public Economics 88*(9-10), 1793–1814.

Heller, D. (1997). Student price response in higher education: An update to leslie and brinkman. *Journal of Higher Education 68*(6), 624–659.

Kane, T. J. (1994, October). College entry by blacks since 1970: The role of college costs, family background, and the returns to education. *Journal of Political Economy 102*(5), 878–911.

Kane, T. J. (2007). Evaluating the impact of the d.c. tuition assistance grant program. *Journal of Human Resources 42*(3), 555–582.

Leslie, L. L. and P. T. Brinkman (1987). Student price response in higher education. *Journal of Higher Education 58*(1), 181–204.

Moulton, B. R. (1990). An illustration of a pitfall in estimating the effects of aggregate variables on micro units. *The Review of Economics and Statistics 72*(2), 334 – 338.

**Table 1: Summary of Test Taker Characteristics**

| | Promise | | | Non-Promise | | | |
|---|---|---|---|---|---|---|---|
| | Pre | Post | Post−Pre | Pre | Post | Post−Pre | Difference[a] |
| ACT English | 21.1 | 20.1 | −1.1 | 20.5 | 20.5 | 0.0 | −1.1 |
| | (5.7) | (5.9) | (.4) | (5.4) | (5.4) | (.02) | (.38) |
| ACT Math | 21.9 | 20.8 | −1.1 | 21.3 | 21.3 | 0.0 | −1.1 |
| | (5.5) | (5.3) | (0.4) | (5.0) | (4.9) | (0.0) | (.35) |
| ACT Science | 22.1 | 20.9 | −1.2 | 21.7 | 21.6 | −0.1 | −1.1 |
| | (4.8) | (4.8) | (.3) | (4.5) | (4.4) | (.02) | (.31) |
| ACT Reading | 22.4 | 21.6 | −0.8 | 21.7 | 21.6 | −0.1 | −0.6 |
| | (6.3) | (5.9) | (.4) | (5.9) | (5.7) | (.03) | (.40) |
| GPA | 3.35 | 3.31 | −.04 | 3.24 | 3.32 | .08 | −0.12 |
| | (.57) | (.60) | (.04) | (.59) | (.58) | (.00) | (.04) |
| Proportion White | .57 | .55 | −.02 | .78 | .76 | −.02 | .00 |
| | (.49) | (.50) | (.03) | (.41) | (.43) | (.00) | (.03) |
| Proportion Black | .25 | .26 | .01 | .10 | .12 | .02 | −.01 |
| | (.43) | (.44) | (.03) | (.30) | (.32) | (.00) | (.02) |
| Proportion Latino | .02 | .02 | .00 | .01 | .02 | .00 | .00 |
| | (.13) | (.13) | (.01) | (.12) | (.13) | (.00) | (.00) |
| Proportion w/ Family Income<$50k | .49 | .51 | .03 | .44 | .41 | −.03 | .06 |
| | (.50) | (.50) | (.03) | (.50) | (.49) | (.00) | (.03) |

Notes: The sample consists of ACT Test Takers with valid from public high schools in the state of Michigan for the years 1996–2006 with no missing values for any of the covariates included in the table. The parentheses in column 2, column 3, column 5, and column 6 contain standard deviations. Proportion White, Proportion Black, and Proportion Latino refer to the proportion of ACT test takers who report being a member of that particular racial/ethnic group; they do not refer to the demographics of the high school that the test takers attended. The parentheses in column 4, column 7 and column 8 contain standard errors. There are some discrepancies in the differences due to rounding.

[a] The columns labeled Difference contains the values for the difference in the Post-Pre differences for ACT test takers in Kalamazoo Promise and Non-Kalamazoo Promise Schools.

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**Table 2: Summary of High School Characteristics**

| | Promise | | | Non-Promise | | | |
|---|---|---|---|---|---|---|---|
| | Pre | Post | Post−Pre | Pre | Post | Post−Pre | Difference[a] |
| Classroom Teachers | 78.0 | 70.0 | −8.0 | 42.1 | 42.3 | 0.2 | −8.2 |
| | (4.4) | (4.7) | (3.3) | (25.2) | (26.9) | (1.1) | (18.9) |
| Pupil/Teacher Ratio | 17.3 | 18.8 | 1.5 | 20.0 | 19.2 | −.8 | 2.2 |
| | (1.1) | (1.6) | (1.4) | (25.6) | (3.8) | (1.1) | (18.1) |
| Proportion White | .51 | .44 | −.07 | .84 | .82 | −.03 | −.04 |
| | (.04) | (.02) | (.03) | (.25) | (.26) | (.01) | (.19) |
| Proportion Black | .40 | .45 | .05 | .10 | .12 | .02 | .03 |
| | (.05) | (.05) | (.03) | (.24) | (.25) | (.01) | (.18) |
| Proportion Hispanic | .06 | .07 | .01 | .03 | .03 | .00 | .01 |
| | (.02) | (.03) | (.01) | (.05) | (.06) | (.00) | (.04) |
| Proportion on Free Meals | .35 | .45 | .10 | .20 | .25 | .05 | .04 |
| | (.05) | (.06) | (.05) | (.18) | (.19) | (.01) | (.14) |

Notes: This table summarizes the high school characteristics for the set of ACT test takers. The sample of high schools is drawn from the National Center for Education Statistics's Common Core of Data. As such, the Data spans the set of Public High Schools in Michigan. There are some discrepancies due to rounding.

[a] The columns labeled Difference contains the values for the difference in the Post−Pre differences for ACT test takers in Kalamazoo Promise and Non-Kalamazoo Promise Schools.

**Table 3: Difference-in-Differences Estimates of The Effects of The Kalamazoo Promise Program on College Choice**

| | U of M | MSU | WMU | Pub. U. in MI | WSU | KC | KVCC | Flagships |
|---|---|---|---|---|---|---|---|---|
| Post | 0.0424*** | 0.0496*** | 0.0204*** | 0.00176 | -0.0149*** | 0.00199* | 0.000457 | 0.0330*** |
| | (0.00358) | (0.00423) | (0.00389) | (0.00372) | (0.00318) | (0.00100) | (0.00151) | (0.00292) |
| Kalamazoo Promise | 0.000599 | -0.0293 | 0.348*** | -0.0402 | -0.142*** | 0.12667*** | 0.161*** | -0.0172 |
| | (0.00692) | (0.0198) | (0.0219) | (0.0244) | (0.0132) | (0.00561) | (0.0540) | (0.0150) |
| Post×Kalamazoo Promise | 0.0784*** | 0.125*** | 0.122*** | 0.0634*** | 0.0654*** | -0.0224 | 0.0238*** | 0.113*** |
| | (0.00938) | (0.0236) | (0.00869) | (0.00772) | (0.0190) | (0.03524) | (0.00535) | (0.00604) |
| Pre-Promise Mean | .32 | .36 | .52 | .77 | .02 | .14 | .16 | .16 |
| $R^2$ | 0.139 | 0.046 | 0.020 | 0.006 | 0.054 | 0.014 | 0.018 | 0.083 |
| $N$ | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 |

**Notes:** Standard errors in parentheses: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ The models are linear probability specifications with standard errors that are clustered at the high school level. The sample includes all ACT test takers from public high schools in Michigan with valid information on the following variables: high school demographics, the ACT scores, High School GPA, the set of school selected to receive score reports, race/ethnicity data, and family income data. The above models include as controls the scores on the four components of the ACT, the test taker's high school grade point average, a linear trend, a quadratic trend, the percentage of the high school that is eligible for free lunch, the percentage of the high school that is black, the percentage of the high school that is white, the percentage of the high school that is Hispanic, the pupil-to-teacher ratio, and the number of full time equivalent teachers. The dependent variables are binary variables that assume a value of one if the test taker includes the institution in the choice set. The following abbreviations are used: U of M = University of Michigan-Ann Arbor, MSU = Michigan State University, WMU = Western Michigan University, Pub. U. in MI = Public Universities in Michigan, WSU = Wayne State University, KC = Kalamazoo College, KVCC = Kalamazoo Valley Community College, Flagships = University of Michigan-Ann Arbor and Michigan State University. The variable Post assumes a value of one if the test-taker is from the 2005-2006 academic year. The variable Kalamazoo Promise assumes a value of one if a test taker is from one of the high schools that is eligible for the Kalamazoo Promise Program. The Pre-Promise Mean is the portion of test takers from Kalamazoo Promise High Schools in the years before the program who submitted a score report to the institution(s) listed in the column headings.

**Table 4: Difference-in-Differences Estimates of The Effects of The Kalamazoo Promise Program on College Choice: Race/Ethnicity Indicators and Family Income Indicators Included**

| | U of M | MI St. | WMU | Pub. U. in MI | WSU | KC | KVCC | Flagships |
|---|---|---|---|---|---|---|---|---|
| Post | 0.0423*** | 0.0487*** | 0.0195*** | 0.00209 | -0.0139*** | 0.00194 | 0.000501 | 0.0326*** |
| | (0.00353) | (0.00420) | (0.00385) | (0.00370) | (0.00310) | (0.00100) | (0.00151) | (0.00288) |
| Kalamazoo Promise | 0.00699 | -0.0299 | 0.336*** | -0.0437 | -0.137*** | 0.1262*** | 0.160*** | -0.0144 |
| | (0.00609) | (0.0200) | (0.0219) | (0.0231) | (0.0125) | (0.00551) | (0.00541) | (0.0148) |
| Post×Kalamazoo Promise | 0.0808*** | 0.127*** | 0.120*** | 0.0625*** | 0.0640*** | -0.02261 | 0.0235*** | 0.115*** |
| | (0.0101) | (0.0223) | (0.0103) | (0.00997) | (0.0187) | (0.0349) | (0.00502) | (0.00689) |
| Pre-Promise Mean | .32 | .36 | .52 | .77 | .02 | .14 | .16 | .16 |
| $R^2$ | 0.145 | 0.050 | 0.026 | 0.008 | 0.073 | 0.015 | 0.019 | 0.088 |
| $N$ | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 |

**Notes:** Standard errors in parentheses: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ The models are linear probability specifications with standard errors that are clustered at the high school level. The sample includes all ACT test takers from public high schools in Michigan with valid information on the following variables: high school demographics, the ACT scores, High School GPA, the set of school selected to receive score reports, race/ethnicity data, and family income data. The models include as controls the scores on the four components of the ACT, the test taker's high school grade point average, indicators for family income, race/ethnicity indicators, a linear trend, a quadratic trend, the percentage of the high school that is eligible for free lunch, the percentage of the high school that is black, the percentage of the high school that is white, the percentage of the high school that is Hispanic, the pupil-to-teacher ratio, and the number of full time equivalent teachers. The dependent variables are binary variables that assume a value of one if the test taker includes the institution in the choice set. The following abbreviations are used: U of M = University of Michigan-Ann Arbor, MSU = Michigan State University, WMU = Western Michigan University, Pub. U. in MI = Public Universities in Michigan, WSU = Wayne State University, KC = Kalamazoo College, KVCC = Kalamazoo Valley Community College, Flagships = University of Michigan-Ann Arbor and Michigan State University. The variable Post assumes a value of one if the test-taker is from the 2005-2006 academic year. The variable Kalamazoo Promise assumes a value of one if a test taker is from one of the high schools that is eligible for the Kalamazoo Promise Program. The Pre-Promise Mean is the portion of test takers from Kalamazoo Promise High Schools in the years before the program who submitted a score report to the institution(s) listed in the column headings.

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**Table 5: Difference in Differences in Differences Estimates of The Effects of The Kalamazoo Promise Program on College Choice**

| | U of M | MSU | WMU | Pub. U. in MI | WSU | KC | KVCC | Flagships |
|---|---|---|---|---|---|---|---|---|
| Post | 0.0364*** | 0.0431*** | 0.0129** | -0.00141 | -0.0183*** | 0.00128 | 0.00165 | 0.0310*** |
| | (0.00395) | (0.00465) | (0.00427) | (0.00400) | (0.00335) | (0.00118) | (0.00178) | (0.00320) |
| Kalamazoo Promise | 0.0194* | -0.0325 | 0.306*** | -0.0490* | -0.131*** | 0.14505*** | 0.120*** | -0.00501 |
| | (0.00945) | (0.0292) | (0.0247) | (0.0221) | (0.0134) | (0.00312) | (0.00792) | (0.0187) |
| FI<$50k | -0.00942*** | -0.0434*** | -0.0410*** | 0.00245 | 0.0135*** | -0.00316*** | 0.00159* | -0.0170*** |
| | (0.00166) | (0.00225) | (0.00223) | (0.00203) | (0.00230) | (0.00048) | (0.000725) | (0.00135) |
| Post×Kalamazoo Promise | 0.0624*** | 0.0853*** | 0.102*** | 0.0450** | 0.0354*** | -0.0193 | 0.0753*** | 0.1160*** |
| | (0.00721) | (0.00765) | (0.0127) | (0.0152) | (0.00432) | (0.0378) | (0.00161) | (0.0169) |
| Post×FI<$50k | 0.0147*** | 0.0141** | 0.0165** | 0.00799 | 0.00985** | 0.0016 | -0.00284* | 0.00443 |
| | (0.00406) | (0.00472) | (0.00462) | (0.00419) | (0.00362) | (0.0010) | (0.00130) | (0.00311) |
| Kalamazoo Promise×FI<$50k | -0.0259* | 0.00636 | 0.0643*** | 0.0117 | -0.0141 | -0.0387*** | 0.0827*** | -0.0191 |
| | (0.0118) | (0.0217) | (0.00427) | (0.00638) | (0.0104) | (0.00415) | (0.00192) | (0.0108) |
| Post×Kal Prom×FI<$50k | 0.0344*** | 0.0778* | 0.0293*** | 0.0317* | 0.0543 | -0.0046 | -0.104*** | -0.00281 |
| | (0.00414) | (0.0383) | (0.00614) | (0.0138) | (0.0364) | (0.0052) | (0.0131) | (0.0233) |
| Pre-Promise Mean for FI<$50k | .25 | .32 | .53 | .77 | .03 | .12 | .21 | .12 |
| $R^2$ | 0.144 | 0.048 | 0.014 | 0.006 | 0.072 | 0.040 | 0.019 | 0.087 |
| $N$ | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 | 430702 |

**Notes:** Standard errors in parentheses: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ The models are linear probability specifications with standard errors that are clustered at the high school level. The sample includes all ACT test takers from public high schools in Michigan with valid information on the following variables: high school demographics, the ACT scores, High School GPA, the set of school selected to receive score reports, race/ethnicity data, and family income data. The models include as controls the scores on the four components of the ACT, the test taker's high school grade point average, race/ethnicity indicators, a linear trend, a quadratic trend, the percentage of the high school that is eligible for free lunch, the percentage of the high school that is black, the percentage of the high school that is white, the percentage of the high school that is Hispanic, the pupil-to-teacher ratio, and the number of full time equivalent teachers. The dependent variables are binary variables that assume a value of one if the test taker includes the institution in the choice set. The following abbreviations are used: U of M = University of Michigan-Ann Arbor, MSU = Michigan State University, WMU = Western Michigan University, Pub. U. in MI = Public Universities in Michigan, WSU = Wayne State University, KC = Kalamazoo College, KVCC = Kalamazoo Valley Community College, Flagships = University of Michigan-Ann Arbor and Michigan State University. The variable Post assumes a value of one if the test-taker is from the 2005-2006 academic year. The variable Kalamazoo Promise assumes a value of one if a test taker is from one of the high schools that is eligible for the Kalamazoo Promise Program. The variable FI<$50k is an indicator variable that assumes a value of one if family income is reported as being less than $ 50,000 annually. The Pre-Promise Mean for FI<$50k is the proportion of test takers from Kalamazoo Promise High Schools in the years before the program who both reported that their families earned less than $ 50,000 annually and submitted a score report to the institution(s) listed in the column headings..

# The Southern Africa Labour and Development Research Unit

The Southern Africa Labour and Development Research Unit (SALDRU) conducts research directed at improving the well-being of South Africa's poor. It was established in 1975. Over the next two decades the unit's research played a central role in documenting the human costs of apartheid. Key projects from this period included the Farm Labour Conference (1976), the Economics of Health Care Conference (1978), and the Second Carnegie Enquiry into Poverty and Development in South Africa (1983-86). At the urging of the African National Congress, from 1992-1994 SALDRU and the World Bank coordinated the Project for Statistics on Living Standards and Development (PSLSD). This project provide baseline data for the implementation of post-apartheid socio-economic policies through South Africa's first non-racial national sample survey.

In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. In line with its historical contribution, SALDRU's researchers continue to conduct research detailing changing patterns of well-being in South Africa and assessing the impact of government policy on the poor. Current research work falls into the following research themes: post-apartheid poverty; employment and migration dynamics; family support structures in an era of rapid social change; public works and public infrastructure programmes, financial strategies of the poor; common property resources and the poor. Key survey projects include the Langeberg Integrated Family Survey (1999), the Khayelitsha/Mitchell's Plain Survey (2000), the ongoing Cape Area Panel Study (2001-) and the Financial Diaries Project.

Southern Africa Labour and Development Research Unit
School of Economics
University of Cape Town
Private Bag, Rondebosch, 7701
Cape Town, South Africa

Tel: +27 (0) 21 650 5696
Fax: +27 (0) 21 650 5697

Email: brenda.adams@.uct.ac.za
Web: www.saldru.uct.ac.za

SALDRU
School of Economics
UNIVERSITY OF
CAPE TOWN