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### Merit-Aid and the Distribution of Entering Students Across Ontario University

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# Merit-Aid and the Distribution of Entering Students Across Ontario Universities\*

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## **Abstract**

Tuition levels at Ontario universities have risen along with the value of merit-based entry scholarships provided by the nineteen institutions in this relatively closed system. We use data on entering students from 1994 through 2005 and find that merit awards have at most a small effect on a university's share of academically strong registrants. Such aid, however, is strongly associated with an increase in the ratio of students from low-income neighbourhoods to students from high-income neighbourhoods. Finally, although more advantaged students are more likely to attend university, merit aid is not strongly skewed towards the more advantaged conditional upon registration.

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## Executive Summary

The past decade witnessed steady increases in the real cost of tuition and fees at Ontario universities especially in professional programs such as Commerce and Engineering. These cost hikes were accompanied by large increases in financial aid often in the form of merit-based entry scholarships. This form of financial aid was not the norm at Ontario universities in the mid-1990's but now is offered by most of these institutions. Over this period there have been increases not only in the average value of such scholarships but in the variation among universities in the value of such merit aid. Virtually all Ontario universities are publicly funded and the system is quite self-contained. The main purpose of these scholarships is to attract academically strong students to the individual institution by lowering the net cost of attendance. This "sticker price" strategy may be especially appealing to lower income students but will also divert expenditures from other institutional features (class size, program diversity, etc.) that may hold more appeal for higher income students. Hence, we hypothesized that this strategy may end up altering the mix of students who register at a university.

We use data from the Ontario Universities Application Centre on student registrations from 1994 through 2005 to examine three questions. Does a lower net cost enable an Ontario university to attract a greater share of academically strong high school students? Does the impact of net cost on attendance vary by the socioeconomic background of the student? Is merit aid of disproportionate benefit to students from more privileged socioeconomic backgrounds?

Our regression estimates indicate no significant relationship between the net cost (tuition minus merit aid) of attending a given university relative to its competitors and the overall share of high school applicants with a high school grade average in the 80-90 range that the university is able to attract. For students in the 90-100 grade range, however, we find a statistically significant but very modest-sized impact for students in Arts, Science, and Commerce. For the Engineering students in this top grade range, however, the effect is substantially larger. Hence the answer to our first question is that, with one exception, merit scholarships have at most a small effect on the ability of a university to increase its share of academically strong students.

To answer our second question, we also estimated our regressions with interactions between net cost and the average income level of the neighbourhood in which the student's family resides. In the majority of cases, we find higher net cost is associated with a decrease in a university's share of students from low-income areas and an increase in the share from high-income areas. Our interpretation of the positive effect of higher costs on students from high-income neighbourhoods is that guaranteed entry scholarships channel funds away from other services that high-income students value more greatly, e.g., smaller classes, better facilities, etc. Our common finding is that a higher net cost is associated with an increase in the proportion of students from high-income areas relative to the proportion from low-income areas. In other words, merit aid influences not so much the number as the type of academically strong students that a university can attract.

To answer our final question, the data reveal that university registrants do indeed come disproportionately from higher income neighbourhoods. Conditional upon university registration, however, the differences in the proportions of students from low-income and high-income neighbourhoods that qualify for a merit-based entry scholarship at a given university is only one or two percentage points. Hence, among those students who make it to university, merit aid does not appear to be of disproportionate benefit to those from more economically advantaged backgrounds.

Further research on this topic is well warranted. Our findings would clearly be enhanced by additional controls for the characteristics of both universities and the characteristics of students and their families. It would also be very helpful to have data beyond registration that permitted one to assess the impact of merit aid on student progress once in university.