Statement on Wisconsin Senate Bill 228:
Relating to the Eligibility Criteria and Amount of the
Academic Excellence Higher Education Scholarship

August 12, 2015

A state's ability to retain its most talented students is critical to its economic development and security. Wisconsin's Academic Excellence Higher Education Scholarship (AES) provides monetary incentives to high-achieving high school graduates to persuade them to remain in the state for college, and hopefully beyond. Arguing that the program is not achieving its goals, legislators recently introduced Senate Bill 228, which proposes to adjust the eligibility criteria and amount of the scholarship (Stroebel, 2015).

While we share legislators' concerns for the economic health of Wisconsin, we believe that the proposed changes are unlikely to achieve the intended goals of convincing many additional students to attend Wisconsin postsecondary education or to remain in Wisconsin following college graduation. At the Wisconsin HOPE Lab, we study policies and programs aimed at making college more affordable and accessible. Our conclusions about the proposed changes to AES are based on some simple calculations about the proposal, as well as research on similar programs in other states.

Background on the Program and Proposed Revisions

For the past 20 years, the current AES scholarship has provided grants to students who graduate at the very top of their high school classes (roughly one scholarship per 100 graduates), and who enroll full-time the following fall at a public or private Wisconsin college or university. The grant provides $2,250 each academic year to defray tuition, fees, and living expenses, covering up to four continuous academic years. Recipients must maintain a 3.0 GPA through college. Senate Bill 228 proposes to (1) increase the scholarship amount to 50% of total tuition and fees at the recipient's chosen college in Wisconsin, capped by UW-Madison tuition and fees, (2) for college graduates, offer nonrefundable tax credits to match the scholarship amount received, that can be claimed for 5 years of living and working primarily in Wisconsin, and (3) require a minimum ACT score of 30 for all AES recipients. In order to achieve revenue neutrality with larger scholarship awards, the proposal would (4) reduce the number of scholarships awarded by approximately half.

The Numbers

The proposal would reduce the number of scholarships at most high schools, effective

immediately for current high school seniors. While unexpected withdrawal of scholarships could be jarring for certain students, many who are offered the AES do not take it up in the first place. According to the Wisconsin Legislative Fiscal Bureau, 769 freshmen received an AES in 2013–14, and of them 230 were alternates. In that same year a total of 2,931 AES scholarships were paid to enrolled college students, totaling $6 million, while 551 budgeted scholarships went unused.

There has never been a rigorous evaluation of AES that tracks the choices of students that are offered the scholarship, including those that do not take it up, in order to measure where they apply, where they are accepted, and where they choose to enroll.

Simply weighing the number of awards against their possible impact, we can conclude that whatever the current economic impact per AES award, the proposed AES would have to roughly double that impact in order to offset the reduced number of awards. The proposed AES is therefore depending on larger scholarships attracting enough of the students who now turn down the AES or leave after initially receiving it, and these students being sufficiently productive in the economy, to offset the lost impacts of the AES grants that are being cut.

Students who can receive the current AES but would not be eligible under the proposed bill include those who are second or third in GPA at larger high schools, and any student with lower than a 30 on the ACT. Nationally just 5% of students score 30 or above. To receive the tax credit, students would have to graduate "on-time," which, for example, just over half of Wisconsinites attending UW–Madison accomplish (Office of the Provost, 2013). The on-time graduation rate of AES recipients is surely higher, but is not tracked and published.

Another simple calculation reveals that few students will earn enough to reap the entire tax credit benefit. Fifty percent of annual in-state tuition and fees at UW–Madison is approximately $5,200 (most AES recipients attend UW–Madison or private colleges with higher tuition). The maximum tax credit for graduates is worth this amount for the years enrolled, or $20,800 for a four-year AES recipient. This would be divided over 5 years of earnings for a maximum credit of $4,160 each year. The credit is nonrefundable, meaning that it reduces taxes owed, and cannot be paid out to workers as a benefit. Recipients would need to owe at least $4,160 to capture the entire credit. For a single head of household, this requires earning at least $71,000.

According to the National Association of Colleges and Employers survey of 140 bachelor's degree granting schools, the 2014 class of college graduates averaged a starting salary of $48,100 when employed. In one of the most lucrative majors, engineering, the 75th percentile earner made $69,100. Students who choose to enroll in grad school, a common path for high achievers, make far less. This means that AES graduates that work in Wisconsin will not pay any Wisconsin income tax, but since they are unlikely to make $71,000 per year and owe $4,160 in taxes, the amount they save will be unlikely to match the amount of the direct scholarship.

Research on Student Decisions

The rationale for the proposed changes to AES is that increasing the scholarship amount would alter potential recipients' college-going decisions and stem "brain drain." In order for this to occur, money must be a deciding factor in students' enrollment choices, and the additional money provided by the scholarship proposal must be enough to sway their decisions.

Is money a deciding factor in college choice for high achievers? In a long-running survey of American freshmen, the Higher Education Research Institute at UCLA found that the top criterion among all college-goers is the college's academic reputation. The size of the college, its job placement record, and social activities also rank highly, alongside the price and available financial aid.

To isolate the effect of financial aid, researchers try to find groups of similar students who are offered different amounts of aid, and compare their choices. We examined research studies of programs as similar as possible to the proposed new version of AES, where analysts measured the effect of aid on choosing to attend college in-state. This was difficult, because few state programs target such a small group at the very top of their high school classes.

Most state merit aid programs target a broader population of high-achievers. The students who just make the cutoff for the scholarship aid may otherwise not go to college at all. There is some evidence that merit aid programs increase initial enrollment in college in these cases (reviewed in Deming & Dynarski, 2010). The AES targets very high achievers, who are highly likely to be college-bound. For them the most important impact to look for is attraction to stay in state for college. The evidence on effectiveness of merit aid programs in this respect is more mixed.

In Tennessee, students who earn an ACT score of 21 and GPA of 3.0 can receive a HOPE scholarship of up to $6,000 at four-year institutions in the state, or $3,000 at two-year institutions. A program evaluation found no impact on in-state enrollment for students who just made the score cutoffs, and suggestive evidence of no effect for higher achieving students (Bruce & Carruthers, 2014). The Adams Scholarship waives tuition at public institutions in Massachusetts, for residents scoring in the top 25% on sophomore-level standardized tests. A study found that eligible students are more likely to choose in-state public universities, and enroll at higher rates, but achieve lower graduation rates than similar students who just miss the eligibility cutoff (Cohodes & Goodman, 2014). This merit-based program has the unintended consequence of steering high achievers to lower quality schools than they would have otherwise attended.

As for the AES requirement (both currently and proposed) to maintain a 3.0 during college, West Virginia's PROMISE scholarship and Georgia's HOPE scholarship share this requirement. PROMISE uses similar initial criteria to the Tennessee HOPE and targets the top 23% of high school graduates in West Virginia. An impact evaluation found

no evidence that the 3.0 requirement increases grades of those enrolled in college, but did find PROMISE's 30-credit-per-year renewal requirement shortens time to degree (Scott-Clayton, 2009). AES requires only that students enroll full-time (24 credits per year). Another study found that recipients of Georgia's HOPE scholarship who are in danger of falling below the required GPA threshold attempt fewer college credits, undermining the goal of promoting academic achievement (Cornwell, Lee & Mustard, 2005).

Can tax credits affect college choices? The federal government gives tax breaks to college students while they are enrolled. These programs are sometimes effective at increasing college enrollment, but not in all cases (Long, 2004; LaLumia, 2010; Turner, 2011). We do not know of another program that delivers tax breaks after college, with demonstrated success at changing student decisions. Tax credits do boost income, and when people are deciding where to move, income can play a major role (Kennan & Walker, 2011). However as discussed above, the value of the nonrefundable tax credit is limited both by the four-year college graduation requirement and the likely incomes of graduates.

The most important outcome for the state's economy is additional degrees. A comprehensive review of the introductions of 25 state merit aid programs found that they had no meaningful impact on college completion, and did not raise the number of highly educated citizens in their states (Sjoquist & Winters, 2015a).

In each of these studies, the program rules, the available colleges in the state, and the population of high school graduates all vary, and these things affect program impacts. The consensus in the field is that changing the decisions of high-achieving students using monetary incentives is unpredictable and difficult. In comparison, the general consensus is that need-based financial aid does impact student decisions and increases enrollment (Deming & Dynarski, 2010). In Wisconsin, we found that a need-based financial grant successfully boosted bachelor's degree attainment of students at the 13 public universities (Goldrick-Rab et al., forthcoming).

Ways Forward

Wisconsin boasts a strong, well-regarded higher education system that produces the types of workers business leaders say that they need. Keeping talented individuals in Wisconsin requires continued investment in public education as well as investment in communities and infrastructure that catalyze business growth.

The questions raised by this proposal are complex but of great concern to all Wisconsinites. To fully understand the impacts of the current AES or of the proposed changes, the state needs rigorous, independent evaluation. The Wisconsin HOPE Lab has the capacity to provide quick research reviews like this one, as well as in-depth evaluations of policy changes in higher education.

UPDATE AND ADDENDUM TO
Statement on Wisconsin Senate Bill 228:
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February 29, 2016

Substitute Amendment 1 has removed the proposed tax credit and lowered the academic requirement to a 28 ACT, but maintained the 3.5 high school GPA minimum. This will make more students academically eligible, and allow for a larger pool of alternates should the highest achieving students turn down the scholarship. This will restore potential eligibility to the highest ranking students at about 30 additional high schools, where the maximum ACT score is typically 28 or 29. The bill is no longer revenue-neutral, since it increases the amount of the award while allowing for the same number of awards by high school rank—provided the highest ranking students meet the test score and GPA requirements and decide to take up the grant.

Since the bill was first introduced in summer 2015, additional research has emerged on merit scholarships. Two interesting studies come to different conclusions.

Researchers found that Missouri's Bright Flight Scholarship program increased the likelihood of working in Missouri 8 years after high school graduation, from 59% to 63% (Harrington, et al., 2015). Bright Flight is similar to the proposed scholarship in Wisconsin in that it provided about half of tuition and fees at public four-year universities in the state, during the period of the study. The ACT requirement is more stringent at 30, but many more Bright Flight scholarships are available since the program does not limit eligibility based on high school rank.

A multi-state analysis showed that the introduction of state merit aid programs with college GPA maintenance requirements actually induced fewer students to major in science, technology, engineering, and mathematics, often called STEM (Sjoquist & Winters, 2015b). An unintended consequence of attaching performance requirements to financial aid is that students may choose avoid challenging majors like STEM majors, in order to ensure they get good enough grades to keep their financial aid. This can happen even among the best and brightest students coming out of high school.

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