

# WHAT'S IN AN ATAR? HOW UNIVERSITY ADMISSION SCORES PREDICT FUTURE INCOMES

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How do ATAR scores translate to earnings? We answer this question by using new taxation data to look at the relationship between university admissions ranks and long-run earnings outcomes.

- University graduates with higher ATARs earn higher median salaries. For example, at the age of 30, the median graduate with an ATAR above 98 earned \$33,000 more than the median graduate with an ATAR below 70.
- Having a high ATAR does not guarantee a high salary. People who have similar ATARs earn different wages.

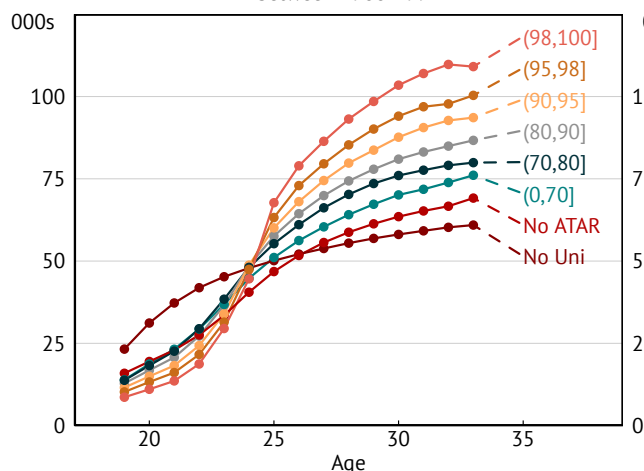
Australian universities use tertiary admissions ranks (ATARs) as the main part of their admissions process. It helps universities to select which students to admit into competitive university courses. Many high school students, their parents and their schools worry about achieving a high ATAR. However, there is little evidence on what ATARs actually mean for lifetime earnings. We compare the earnings of people with different ATARs (who enrolled in university) with:

- people who never enrolled in university over this time period ('No Uni')
- people who enrolled in university using an alternate pathway ('No ATAR').<sup>1</sup>

After the age of 25, **median incomes vary between people who received different ATARs** (Figure 1). At age 30, we find that the **median salary for people with an ATAR over 98 is \$33,000 higher than the median salary for people with ATARs below 70.**<sup>2</sup>

**Figure 1: Median Annual Earnings by ATAR**

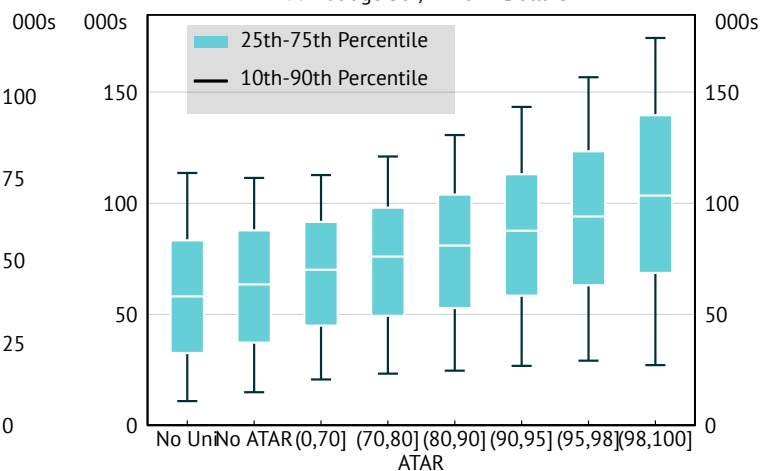
In 2022 dollars, workers born in Australia between 1988-1997



Sources: ABS; e61

**Figure 2: Distribution of Annual Earnings by ATAR**

Workers born in Australia between 1988 and 1991 at age 30\*, in 2022 Dollars



Sources: ABS; e61

The trade-offs for going to university versus entering employment early are also apparent. Earnings are initially higher for individuals who don't enrol in university. However, **after age 25, the earnings of people without a university degree remain well below those of people with a university degree.**

1 In general, domestic students who want to attend university need to obtain an ATAR score. Yet, about one-quarter of students enter university with no ATAR. These are students who enter university after obtaining a Vocational Education and Training (VET) qualification and students who ask for *Recognition of Prior Learning* (RPL), namely mature age-students who already have obtained formal and informal education and prior relevant experience.

2 The differences in incomes between people of different ATARs are conservative estimates. Because we only see ATARs for people who enrol in university, we cannot compare the incomes of people with different ATARs regardless of whether or not they went to university. People with higher ATAR scores are more likely to enrol in university<sup>3</sup> and people with university qualifications, on average, earn higher incomes. Because of this, Figure 1 likely displays an upper estimate of the median incomes for people who graduate high school with low ATARs.

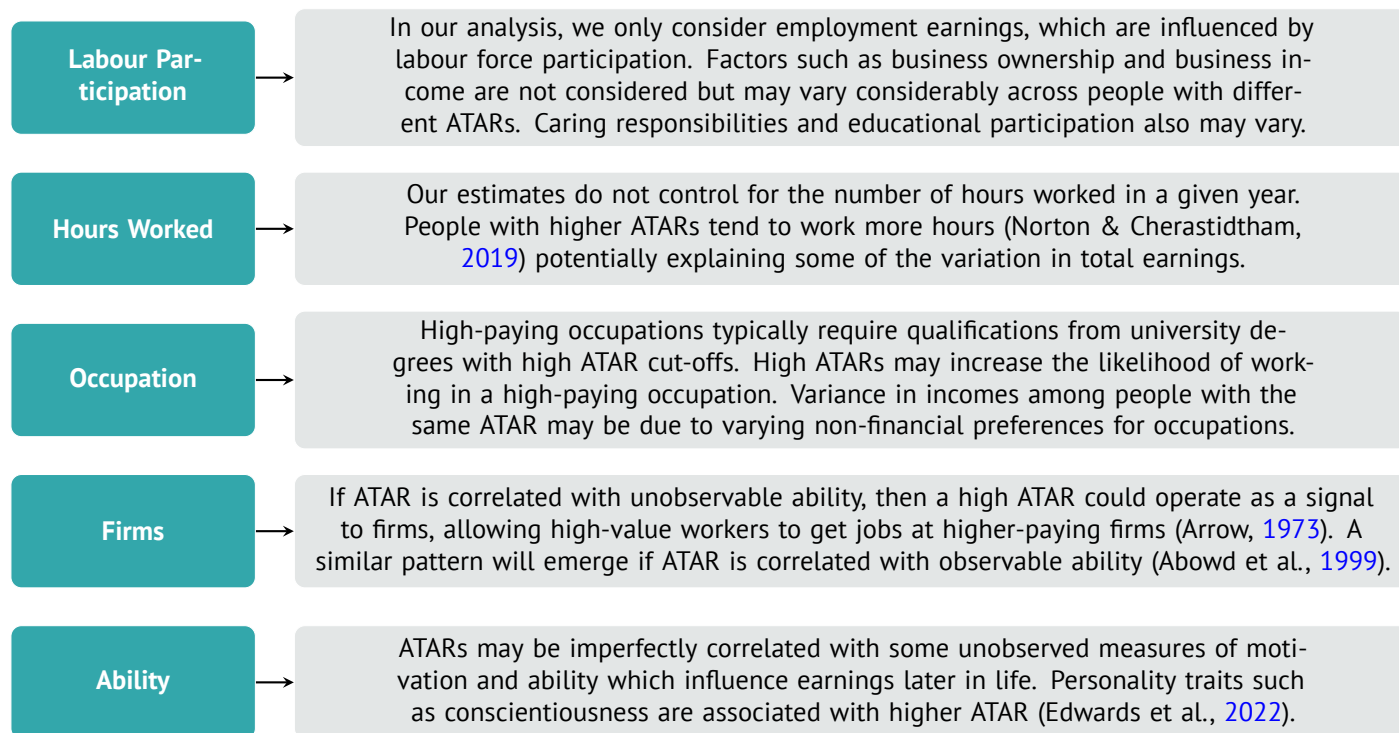
Is a high ATAR a guarantee of a high income? Not exactly. Median earnings increase with ATARs. However, people with similar ATARs can earn very different amounts (Figure 2). Consider 30-year-old workers without university degrees: one in ten earn more than \$115,000, one in four earn more than \$80,000, and half earn less than \$60,000 per year.

The variation in earnings is even bigger for 30-year-old workers who are university graduates, and have an ATAR above 95:

- one in ten earns less than \$30,000 per year
- one in ten earns more than \$156,000 per year.<sup>4</sup>

Overall, there is a large variation in incomes **between** groups of people with different ATARs, just as there is a large variation in incomes **within** groups of people with **similar** ATARs. Further research by e61 will aim to examine the mechanisms behind these findings:

**Figure 3: Key Mechanisms**



## References

- Abowd, J. M., Kramarz, F., & Margolis, D. N. (1999). High wage workers and high wage firms. *Econometrica*, 67(2), 251–333. <https://doi.org/10.1111/1468-0262.00020>
- ABS DataLab. (2023). Multi-Agency Data Integration Project (MADIP), 2005 - 2021, MADIP Modular Product.
- Arrow, K. J. (1973). Higher education as a filter. *Journal of Public Economics*, 2(3), 193–216. [https://doi.org/https://doi.org/10.1016/0047-2727\(73\)90013-3](https://doi.org/https://doi.org/10.1016/0047-2727(73)90013-3)
- Edwards, R., Gibson, R., Harmon, C., & Schurer, S. (2022). First-in-their-family students at university: Can non-cognitive skills compensate for social origin? *Economics of Education Review*, 91, 102318. <https://doi.org/https://doi.org/10.1016/j.econedurev.2022.102318>
- Norton, A., & Cherastidtham, I. (2019). Risks and rewards: When is vocational education a good alternative to ... <https://www.grattan.edu.au/wp-content/uploads/2019/08/919-Risks-and-rewards.pdf>

<sup>4</sup> We do not observe hours worked and the hourly wage. Therefore, low earnings could be the result of low wages and or low number of hours.