

ASK: NUS ECONOMISTS

The rise and rise of women in higher education

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FOR THE STRAITS TIMES

WHY are women becoming increasingly better educated than men?

University graduation rates have increased rapidly in Singapore over two decades. The 2010 Population Census shows 47 per cent of the population aged between 25 and 34 graduated with a degree compared to 15 per cent for those between 45 and 54, more than a threefold increase.

Within two decades, the male advantage in higher education has eroded.

By 2010, women were more likely to be university graduates among 25- to 34-year-olds than men, where graduation rates were 48 per cent for women and 45 per cent for men.

It is by no means a phenomenon unique to Singapore, and can be found in virtually all developed nations, Asian economies such as Japan, Taiwan and Hong Kong, and even some developing countries (Brazil and Iran).

A study by Chicago economists Gary Becker, William Hubbard and Kevin Murphy found that among 30- to 34-year-olds, there are more women than men college graduates in more than half the nations studied. In countries with below-median gross domestic product, women college graduates outnumber men in one-quarter of the nations.

Why are women overtaking men in higher education? To understand why some individuals obtain more schooling than others, economists typically examine the benefits and costs of higher education.

Apart from monetary benefits such as the lifetime earnings gain, a university degree gives non-monetary benefits such as improved health, marriage prospects (educated individuals are likely to marry higher-quality spouses) and more productive investments in children.

The costs of attending university include direct tuition costs, forgone earnings as well as “psychic costs” which reflect the ease or difficulty of succeeding in higher education. Mr Becker and his

co-authors found that in the United States, the benefits of college education over time increased faster for women than for men in some dimensions such as lifetime earnings gain, marital prospects and health.

Despite the fact that women have seen a faster increase in the benefits to a college education relative to men, women have yet to catch up with men in enjoying the full benefits of such education. Women’s earnings and hours worked continue to be lower than that of men, suggesting that men continue to reap more benefits from higher education than women.

Similarly, while the health and marriage benefits of university education have increased for women, they remain lower than that for men.

What matters in the decision to obtain a college education is the “net return” – defined as the difference between the benefits and costs of acquiring a college degree. Individuals with a higher “net return” are more likely to graduate from college.

This apparent “puzzle” that

women have overtaken men in higher education even as they face lower overall benefits of a college degree can be resolved if we consider the costs of college completion for men and women.

Although education costs such as tuition and forgone earnings are likely to be similar for men and women in developed countries like the US, research suggests there are significant gender differences in the “psychic costs” of college completion. There is ample evidence suggesting that women have higher levels of non-cognitive abilities than men – as reflected in their higher grades in school.

Harvard economists Claudia Goldin, Lawrence Katz and Ilyana Kuziemko demonstrate that much of the diminishing initial male advantage in US college completion can be attributed to three factors – women’s improvement in achievement test scores, number of maths and science courses taken, and high school class rank.

Boys tend to have a higher incidence of school disciplinary and behavioural problems and tend to spend fewer hours doing home-

work. Even if the overall benefits of higher education are slightly higher for men (for reasons discussed above), the higher costs of acquiring more schooling among boys due to their lower non-cognitive skills would tend to reduce the “net return” of higher education for boys relative to girls.

In the past, women spent far fewer years in school because higher education conferred few benefits due to labour market discrimination, societal norms and the division of labour in households.

As these barriers lifted, the benefits to schooling have increased for women and are now nearly equal with men’s, sparking the worldwide educational boom for women.

That women have now overtaken men in university completion in many countries around the world simply implies that their “net return” from higher education exceeds that of men. This is not because women are more likely to benefit from higher education, but because women find it easier (or less costly) to graduate from university.

While the source of boys’ lower non-cognitive abilities remains an area of active research, the gender reversal in the education gap has important implications.

The closure of the gender gap in education is likely to narrow other forms of gender inequity in the labour market. At the same time, while education has been touted as a rising tide that will lift all boats, these patterns raise concerns that without some timely help, some boys may miss the boat.

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