



BANK OF FINLAND **BULLETIN**

BANK OF FINLAND ARTICLES ON THE ECONOMY

Table of Contents

Higher education a solid currency in Finland

3

Higher education a solid currency in Finland

11 JAN 2018 1:00 PM • BANK OF FINLAND BULLETIN 5/2017 • ECONOMIC OUTLOOK



Helvi Kinnunen
Senior Adviser



Petri Mäki-Fränki
Senior Economist

Well-educated people typically earn more than those with a lower level of education. This article discusses the financial benefits of education when, in addition to earnings level, we also take into account the better employment prospects of people with higher education. A higher education degree would still appear to be a profitable investment, especially for men.



The profitability of an education can be assessed on the basis of how much it affects people's earnings during their lifetime. Education typically increases productivity, and therefore also earnings level.^[1] We also know that the better their education, the more likely a person is to be employed.^[2]

The following looks at the connection between educational background and annual income by means of simple charts.^[3] Not only do people with a higher education

1. The connection between education and earnings is discussed by e.g. Asplund, R. and Maliranta, M. (2006) *Koulutuksen taloudelliset vaikutukset* ('Economic effects of education'), Sitra reports no. 60.

2. For the connection between education and labour market status, see the feature article 'The influence of age, gender and education on labour supply in Finland' elsewhere in this publication.

3. The research was based on household data in Statistics Finland's 'Survey on income and living conditions'.

(includes both graduate and post-graduate degrees) typically have higher earnings, but they also have better employment prospects. Because a comparison of annual incomes takes into account both of these benefits, it describes the benefits accruing to an individual from education better than a comparison focused solely on earnings level or earnings development.

In order to assess the actual personal return on education, we should remember that productivity also depends on a number of personal characteristics and background factors, not just education. To assess the profitability of education, we should also look at the costs of acquiring an education and the risks related to income development. Here, however, we will just cover on a general level the connection between education and income development.

The significance of education was evaluated by dividing households and persons into groups on the basis of their educational background and gender, and then comparing both average disposable income and wage and salary earnings. Comparison of wage and salary earnings was done separately for men and women in order to evaluate differences on the basis of education. The comparison of disposable income shows to what extent taxation and current transfers improve the financial standing of especially those with just a basic education.^[4]

Measured in terms of disposable income, acquiring a higher education degree^[5] would seem like a profitable choice in Finland, as the average income of people below the age of 35 at the turn of the millennium was one and a half times as high as those with no more than a basic education (Chart 1), and by 2015 this ratio had risen to almost 1.9. The benefit of a post-comprehensive qualification^[6] is, however, surprisingly low. At the turn of the millennium, the median income of people with a post-comprehensive qualification did not differ much from those with just a basic education, and even in 2015 the difference was a mere 10%.^[7]

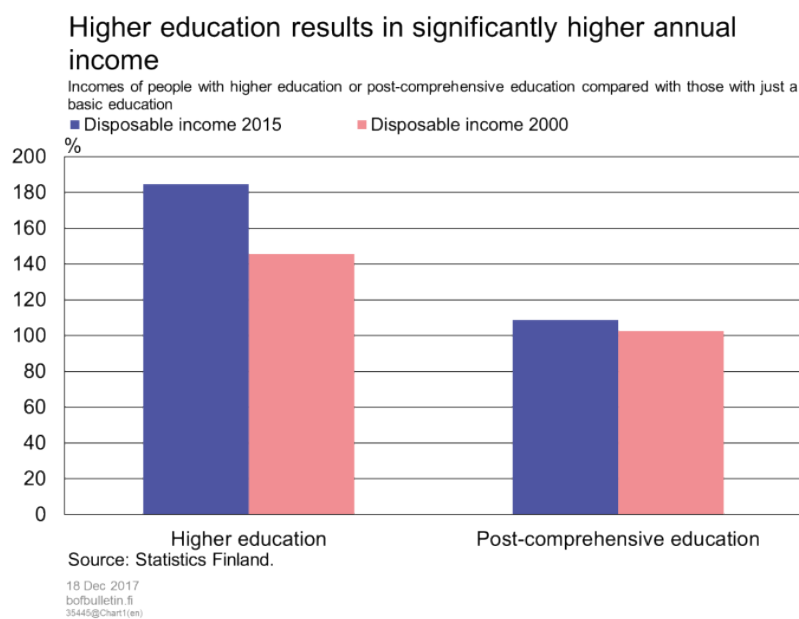
4. Under the current education system in place in Finland, this term covers primary and lower secondary education, also referred to as the comprehensive stage.

5. The term 'higher education qualification' covers, according to the educational classifications of Statistics Finland, bachelor's and higher degrees (including those achieved at a polytechnic) and the lowest level of higher education qualifications, e.g. technician, business college and nursing qualifications.

6. The term 'post-comprehensive qualification' refers to qualifications taken after from 1 to 3 years of study after completing the basic, or comprehensive level of school. The term covers e.g. high school (upper secondary) graduation, 1–3-year vocational qualifications and vocational first degrees.

7. This is similar to what Koerselma & Uusitalo (2014) proposed in their study on the significance of education for lifetime incomes, where they also took account of the risk attendant on education. According to their results even the risk-adjusted incomes of people with a higher education are considerably higher than the incomes of those with just post-comprehensive or only basic education. In contrast, the lifetime incomes of those with post-comprehensive education differed little from those with just a basic education. The same outcome was also found by Asplund & Maliranta (2006).

Chart 1.



Disposable income includes not only wage and salary earnings but also income transfers that typically improve the position of those with the lowest income and in the poorest employment situation. This partly explains the fact that the annual income differences are small between those with a post-comprehensive education or just a basic education. For the same reason, comparison of disposable income may actually undervalue the benefits of higher education.

Chart 2 compares the average (gross) wages and salaries of people with basic, post-comprehensive, or higher education by gender in 1990, 2002 and 2015. The annual income of the six groups thus formed is presented relative to the income of all people of working age. The annual income of each group in relation to the income of all employees has weakened during the review period. This observation is explained by a higher proportion of people with higher education compared with all employees, which has raised the comparison level, i.e. the average income of all employees.

On the basis of wage and salary comparison, the labour income of highly educated men relative to working age people with an average income has fallen more than in other groups. In 1990, men with a higher education degree earned an average of 3.5 times as much as employees on average, but in 2015 the ratio was only about 2.5. However, the difference in income with people who have a post-comprehensive education, and especially just basic education, remains substantial.

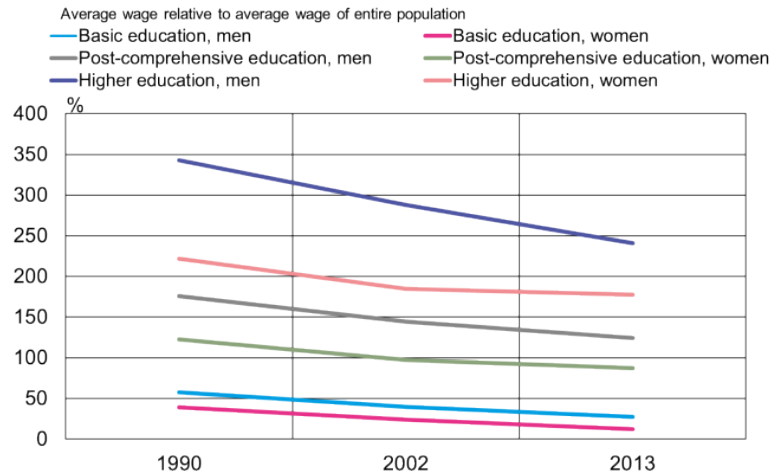
The benefits of higher education for women in terms of income development are much lower than those for men. The labour income of women with higher education has averaged around double the average income of all people of working age. The position of highly educated women in relation to highly educated men has nevertheless improved somewhat since 2000.

When comparing wages and salaries, obtaining a post-comprehensive qualification is also worthwhile, especially for men. The labour income of men who had completed a

post-comprehensive education in 2015 was 30% higher than the average pay of all people of working age. Yet the annual income of women with a post-comprehensive education fell slightly short of the average income of all people of working age, although it was nevertheless well above the income of those with just a basic education. The income of people with only a basic education is, regardless of gender, much less than half of the average income of all people of working age.^[8]

Chart 2.

Those with a higher education degree have much higher annual incomes than others



Source: Statistics Finland.

18 Dec 2017
bofbulletin.fi
35445@Chart2(en)

Sources

Asplund, R. and Maliranta, M. (2006) *Koulutuksen taloudelliset vaikutukset* ('Economic effects of education'), Sitra reports no. 60.

Koerselma, K. and Uusitalo, R. (2014) 'The Risk and Return of Human Capital. Investments', *Labor Economics*, vol. 30, 154–163.

Tags

[disposable income](#), [employment](#), [return on education](#)

8. A comparison of annual wages and salaries shows that those with only a basic education are in a much weaker position than the earnings structure statistics of Statistics Finland indicate. According to the earnings structure statistics, which measure monthly income and full-time employees, those with just a basic education earned 85% of the average income. This shows that people with a low level of education often have irregular work.

Authors



Helvi Kinnunen
Senior Adviser
firstname.lastname(at)bof.fi



Petri Mäki-Fränki
Senior Economist
firstname.lastname(at)bof.fi