EENEE *Ad-hoc* Question

Impact of Finnish budget cuts on access and quality of education

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Summary

Public expenditure on secondary and higher education in Finland is decreasing, with secondary vocational education facing especially severe cuts. Many of the budget cuts are quite recent and their full effects are not yet visible in published statistics. The funding model for higher education, and increasingly in vocational secondary education as well, awards funding for degrees earned, but only up to a certain level determined by the government. This has implications for the effects of budget cuts on the education system. Educational organisations have an incentive to award degrees up to the quota, which implies that access to education is determined more by these quotas and less by the level of funding. Budget cuts to education are thus more likely to decrease quality than impair access.

For more information on the Finnish education system, funding and policies, see chapter 6 of the recent report by the Finnish Economic Policy Council (Economic Policy Council, 2018).

Background: The basic structure of the Finnish education system

Preschool (*esikoulu*) is compulsory for 6-year-olds. Children enter comprehensive schooling (*peruskoulu*) in August of the year they turn 7. Comprehensive schooling lasts for nine years. Education is compulsory from preschool until the end of comprehensive education. Although comprehensive schooling is not compulsory – home schooling is allowed – almost everyone completes comprehensive education within comprehensive schools.

After comprehensive schooling, students enter into secondary school, which corresponds to upper secondary schooling in the ISCED classification. Secondary schooling is divided into a vocational track (*ammattikoulutus*) and a general track (*lukio*). A little over half of the students who continue studying immediately after comprehensive school follow a vocational education (55% in 2017).

After secondary school, students may enter into higher education (tertiary level). This level is again divided into universities (*yliopisto*) and universities of applied sciences/polytechnics (*ammattikorkeakoulu*), with the latter having a more vocational profile. Finnish universities award approximately 15,000 Masters degrees each year, which is approximately the same as the number of Bachelor degrees earned. Polytechnic institutes award 23,000 lower (2.5 or 3-year) degrees, and 2,500 higher (additional 2-year) degrees.

Municipalities are responsible for providing compulsory pre-schooling and comprehensive schooling, and the general government participates in their funding. This funding is based on the number of young people in certain age categories within the municipality. Additional funding is granted both automatically and in a discretionary manner due to certain other criteria, such as the number of young people with a native language other than Finnish or Swedish.

Governance of secondary and tertiary schooling takes place at the organiser, i.e. school, level. This means that municipalities are not directly involved, as the government grants licences and funds directly to the organisers. Licensed educators at the secondary level, however, are also funded by municipalities. General government funding for general-track secondary schools is based on the number of students enrolled. General government funding for vocational schools is similar but is gradually being transformed into a more output-based system. Municipalities complement general government funding according to their discretion. Tertiary education is funded by the general government with a strongly output-based formula. The general government also grants secondary and tertiary education some additional funds in a discretionary manner, for example to advance the digitalisation of learning.

Public expenditure on education

The broad picture on the development of public-education expenditure in Finland is reasonably clear. Expenditure on comprehensive schooling has grown steadily, although there are signs that this growth is slowing down or even stagnating. Expenditure on secondary education has been cut significantly since the peak of 2012, with an emphasis on cuts to vocational education. These budget cuts have been part of the current and previous government's expenditure-based consolidation packages.

As municipalities co-finance secondary education, changes in general government appropriations may not fully manifest themselves into changes in realised expenditure if municipalities increase their funding share in the face of the cuts. Such increased contribution by municipalities has been documented for cuts in 2011-2015 (Finnish Education Evaluation Centre, 2017), but it is not yet known how actual expenditure has developed during the current government's tenure.

Expenditure on tertiary education has decreased, although the cuts have been less severe than those to secondary education. It should also be noted that cohort sizes of 6-to-25-year-olds are decreasing, but taking these demographics into account does not alter these recent trends.

According to OECD statistics, public expenditure on tertiary education as a share of GDP is quite similar across the Nordic countries. Of course, the fact that Finland has a lower GDP per capita than the other countries in this group means that this spending is lower in absolute terms. Funding for tertiary education increased significantly in Sweden and Norway in 2010-2014, and slightly decreased in Finland and Denmark over the same period. Per-student spending in secondary education is slightly lower in Finland compared to Denmark and Sweden.

Quality of education

Measuring quality in education is very difficult, and can only be done using imperfect proxies.

As a first pass, one can look at inputs and relate them to the number of students. At the same time as funding to vocational education has decreased significantly, student intake has increased. Funding per student has thus decreased even more rapidly than aggregate funding. This arguably puts pressure on quality in vocational education. In general, the intake of secondary education and tertiary education students has not changed as significantly, although of course as aggregate funding has decreased, funding per student has decreased as well.

According to OECD's Education at a Glance statistics, Finnish teachers in secondary education are paid relatively well compared to their colleagues in other Nordic countries, which is indicative of quality. Teachers

are paid 1.09 times the average earnings of tertiary-educated workers in Finland, while corresponding figures are 1.06, 0.87 and 0.76 for Denmark, Sweden and Norway, respectively. The student/teaching staff ratio in tertiary education is slightly higher than in Norway or Sweden, but approximately the same as in Denmark.

Although there is some correlation between the quality of education and learning outcomes, other factors play a role as well. Learning outcomes are deteriorating in Finland, and this deterioration is happening both in absolute terms and relative to other Nordic countries. PISA scores have declined since 2006. Cognitive test scores of conscripts have declined since the end of 1990s. There is, however, no consensus on why this has happened and it should be noted that the decline began during a period in which educational funding was still increasing.

For future development, it is not only the level of funding but its structure that is relevant. Funding models of tertiary education are built strongly on output indicators, and the funding model for vocational secondary education is being gradually transformed in this direction. Educational indicators employed in these models emphasise quantity, not quality. Although improvements in the quality of education may reduce dropout rates and increase the speed at which degrees are completed, it is also possible that educational organisations respond to quantity-based indicators by simply setting the bar lower in terms of actual learning.

Funding is also based, but to a lesser extent, on graduate employment and student feedback. The university sector as a whole is allocated 2% of its total basic funding (€1,561 million in total for 2018) based on graduate employment. The corresponding share for student feedback is 3%. Funding for individual universities is tied to their relative performance. On the one hand, these indicators may give incentives to improve the quality of education. On the other hand, student satisfaction is often only weakly correlated with learning outcomes and educational organisations may strive to improve graduate employment by shifting intake into more employable degree programmes rather than investing in teaching.

Access to education

There are no tuition fees in secondary or tertiary education (although universities and polytechnics can set tuition fees for students coming from outside EU/EEA member states). Access to secondary and tertiary education is determined, among other things, by costs not related to tuition fees, student aid, regional availability and overall intake.

There have been no significant changes in the costs of education, although some worry about the high costs of learning material in secondary education. Financial aid for students in tertiary education was reformed in 2017. Most importantly, study grants were cut and the maximum government guarantees for student loans were increased. The reform effectively increased the lifecycle cost of education while also increasing consumption possibilities of students. It is certainly possible that this reform will change accessibility of higher education by socio-economic background, but even the sign of the effect is difficult to determine based on existing research.

With regard to regional availability, the share of 16-year-olds living within 10 to 30 kilometres from a secondary school did not change or decreased only slightly over the period 2011-2015, depending on the measurement. In higher education, regional accessibility has not changed. For a long time, governments have sought to strengthen university profiles to increase quality. Such a development would reduce the menu of degree programmes on offer in each university and marginally weaken regional accessibility, but thus far this development has been modest at best.

Overall access to secondary education is fairly good in Finland. Only a relatively small number of students completing comprehensive education do not immediately continue on to secondary education. The enrolment rate of 18-year-olds is approximately the same in Sweden and slightly higher than in Norway and Denmark, with little changes over the last decade.

Access to higher education is determined by the supply of degree programmes (intake), as there are by and large more applicants than there are available slots. Intake is determined by degree quotas set by the Ministry of Education. Educational organisations have an incentive to admit as many students as the quota allows (but no more, as they receive no funding for degrees awarded beyond the quota). Access to education at the tertiary level is therefore not determined by the overall level of funding, but by the degree quotas.

Intake into tertiary education has stagnated in Finland. The OECD reports first-time tertiary entry rates, which can be interpreted as the number of young adults enrolling in tertiary education at some point in their lives if current entry patterns continue in the future. For Finland this rate was 55% for 2015, with the corresponding figure being above 60% for Sweden, above 70% for Norway and above 80% for Norway. The first-time tertiary entry rate actually decreased in Finland in the 10 years since 2005, while Denmark experienced a significant expansion over the same period.

The stagnation in intake numbers hinders access to tertiary education in Finland. It should be noted that the aggregate intake at the tertiary level has implications for educational equality as well, as the marginal admitted student is typically from a lower background than the average admitted student. Changes in intake therefore have effects on access also on the basis on socio-economic background.

REFERENCES

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