Gender differences in secondary education choices: Does the age at which you decide matter?[*]

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Abstract

This paper studies the relationship of the timing of the choice between the vocational and general (academic) secondary education and gender differences in educational attainment. We argue that in a system that streams students into vocational and general tracks relatively late (age 16), girls are more likely to choose the general track than boys because of gender differences in the timing of puberty. We exploit the Finnish comprehensive school reform of the 1970's to analyze this hypothesis. This reform postponed the streaming of students from the age of 11 to 16 and was adopted gradually by provinces so that we can observe members of the same cohorts in both systems. We find that the postponement of the streaming age had positive effects on the girls' probability of finishing general secondary school and on the completed years of schooling of girls.

1 Introduction

One of the most striking trends in the educational attainment since the early 1970's has been the relative improvement of the position of women in the industrialised countries. Today, both in the United States and in the European Union, well over 50% of the students in the academic higher education (universities or colleges) are women. These trends are particularly interesting in the light of the increasing returns to education that have been well documented in the literature.[1] Given that the demand for skilled labour has increased considerably in the past decades, one would expect the female dominance in the higher education to have significant effects on the relative economic position of women.

Yet, this gradual increase in the female educational attainment has received surprisingly little attention in the literature. The few papers that directly address the issue have used US data and have stressed the importance of gender differences in the returns to education and in the wage dispersion of college graduates. But these explanations fail to account for interesting cross-country differences in the relative educational attainment of women. In the European Union for example, the percentage of women in the higher education is particularly high in the Nordic countries whereas it is substantially lower in some of the continental countries. Indeed, in Germany men are still in majority among the students in the higher education.

In this paper, we examine the effect of the structure of the educational system on gender differences in educational attainment. Most educational systems in the developed countries stream pupils into general or vocational tracks in the secondary school.

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[1]See, for example Katz and Autor (1999) and Acemoglu (2002).

Typically, only the general secondary school enables the pupils to continue into higher education in the future. The age at which this streaming is done varies across countries and may or may not coincide with the end of full-time compulsory education. Here, we argue that in systems where this streaming is done relatively late, typically around the age of 14 to 16, girls are more likely to choose the general secondary education than boys because of gender differences in the timing of puberty.

Whereas boys and girls are more or less at the same stage of cognitive and psychological development before the age of 11, after this their developments momentarily diverge. Girls enter puberty on average two years earlier than boys and by the age of 14 most girls are at the end of puberty. Boys, on the other hand, and especially the late-maturers among them, are going through drastic physical and psychological changes at that age and these changes have been documented to have adverse effects on course grades and educational aspirations. Hence, in educational systems where the choice between general and vocational educational tracks is done at around the age of 14 to 16, boys and girls are forced to make educational investment decisions at a time when the information that they receive on their academic abilities and their aspirations can be very different.

Our strategy is to use the comprehensive school reform that was conducted in Finland during 1972-1977 as a natural experiment to test this argument. This reform transformed the Finnish educational system into what is called a single-structure educational system. Whereas in the old system the students were split into general and vocational tracks at the age of 11, in the new system this decision was postponed to the age of 16. This reform was conducted gradually by provinces so that we observe individuals of the cohorts 1961-1965 in both systems at the same time. Using this within cohort variation in the age at which the choice between the general and vocational tracks is made, we examine whether the girls are relatively more likely to choose the general track in the system where the choice is made at 16.

Most of the literature on gender differences in educational attainment has focused on the developing countries. Building on the work by Becker (1991), the authors have studied the parents' investment on their children's education in countries where the households typically invest less on their daughters' education than that of their sons.[2] On the other hand, we are aware of only two papers that directly examine the gender gap in educational attainment in the industrialised countries. Charles and Luoh (2003) document the within cohort gender differences in the educational attainment in the United States and attempt to explain these differences with the differences in the wage dispersion of college graduates. Jacob (2002), on the other hand, has data on the cognitive and non-cognitive skills of American high-school pupils and is able to show that the gender differences in non-cognitive skills can account for the most of the gender differences in college attendance.

The differences in educational systems across regions and countries have been used for variety of purposes in the literature. The transitions that have been studied most widely are the dropping out decisions at the end of full-time compulsory education and the transition from secondary to tertiary education. In a particularly influential paper, Angrist and Krueger (1991) exploited the heterogeneity in the school leaving age across different states in the US, to estimate the causal effect of education on earnings. More recently, Oreopoulos (2003) has used similar variation across countries to study the long-term consequences of dropping out decisions and Pischke and von Wachter (2004) have replicated the Angrist and Krueger study with German data finding surprisingly different results. More interestingly, from our point of view, Meghir and Palme (2004) and Aakvik et al (2003) use Swedish and Norwegian educational reforms, that are very similar to the Finnish reform studied here, to study the heterogeneity of the returns to education.

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[2]Most notably, a special issue of the Journal of Human Resources looks at this issue. See, Harris and Willis (1994) on Taiwan, Deolalikar (1994) on Indonesia, and Vijverberg (1994) on Côte d'Ivoire.

However, we are aware of only one paper that explicitly studies the consequences of the streaming of pupils into different educational tracks. Dustmann (2004) uses German data and argues that in a system, such as the German one, where the streaming is done at a very early age, the social mobility through education is very low.

In the current draft of the paper, we use data from the Finnish Adult Education Survey to study gender differences in the educational attainment among respondent born during 1961-965. In this survey, a random sample of the Finnish adult population was interviewed about their educational attainment in 2000. As a part of the survey, the respondents were asked whether they were educated in pre- or post-reform schools. We find that the comprehensive school reform increased the female probability of finishing the genral secondary school while for boys it's effect was negative. There is also some evidence that the effect on the completed years of schooling for girls was positive. However, these data do not allow us to rule out that these effects reflect regional differences in educational attainment. Because of these data deficiencies, we are in the process of drawing a sample of 1960-1966 cohorts from the Finnish Longitudinal Census Data Files to be used in the future drafts of the paper.[3] These data allow us to analyse the educational attainment as a sequential process where dropping out is possible and to control for regional fixed effects as well as the parental background. Furthermore, with longitudinal census data the economic consequences of the comprehensive school reform can be studied in more detail.

Structure of the paper is as follows. In the following section, we discuss cross-country differences in educational systems and the gender gap in educational attainment. We then move on to discuss the theoretical arguments for the existence of the gender gap before we present the natural experiment and the data that we use in our empirical analysis in the fifth section. The sixth section concludes.

2   Educational systems in the industrialised countries

The most widely studied educational system in the economics literature is the US one. In the American system, the upper secondary education, that is high school, is virtually compulsory. The pupils are not streamed into different educational tracks before they leave secondary education. In fact, the first genuine choice that the American pupil makes on his or her education is whether to drop out of high school or not at the age of 16. Thus, all the pupils who follow through the secondary education are, in principle, eligible for academic higher education in the United States.

But the American system is an exception among the industrialised countries. In Europe, most of the educational systems stream pupils into general and vocational tracks before the end of upper secondary school.[4] Only the pupils that have chosen the general track are eligible to continue to higher academic education at the tertiary level.

The age at which this streaming is done varies across countries. Broadly speaking, the European educational systems can be divided into two groups. In the first group, that we call "early streamers", the streaming is done either at the start of or during the lower secondary school. This means that the pupils choose between tracks at the age of 10 to 13 and this decision is taken before the end of full-time compulsory education. The countries with this kind of system are Austria, Germany, Belgium, Netherlands, and France.

In the second group, that we call "late streamers", the streaming is postponed until the start of upper secondary education at the age of 16. In these systems, pupils attend

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[3]The Statistics Finland has promised to have these data ready by the end of January 2005.

[4]In principle, this is the case in all the countries of the European Union but in practice the vocational track is not as widely available as the general track in Portugal, Greece, Spain, Italy, and Ireland.

the same schools during the whole lower secondary education and the choice between the educational tracks coincides with the end of compulsory full-time education. The countries in this group are Denmark, United Kingdom, Sweden, and Finland.

Table 1 reports the streaming ages and summary statistics on the gender differences in education in these countries. One can distinguish gender differences at three levels. First of all, there are differences in the number of students who stay in the educational system in the upper secondary education, be it vocational or academic. Proportion of women in this population is reported in the second column. Second, there are gender differences in the number of students that choose the general education track that enables them to continue to tertiary education. These are reported in the third column. Finally, the number of students that end up attending tertiary education institutions may differ by gender and these differences are reported in the fourth column.

Among the pupils who continue in the upper secondary education, women tend to be in majority in the late streaming countries whereas in the early streaming countries, with the exception of Belgium, women are in a slight minority. The relationship between the streaming age and the gender differences in the take up of general upper secondary education is slightly less clear. There are countries in the early streamers group, such as Germany and France, where the proportion of women is quite high. However, in the late streaming countries, with the notable exception of the United Kingdom, the proportion of women is higher. This is especially true in countries where the vocational track is a widely used option, such as the Nordic countries. Finally, the proportion of women in tertiary education is clearly higher in countries that stream students into different tracks relatively late.

These differences between early- and late-streaming countries suggest that educational systems may have different effects on men and women. Naturally, cross-country differences in the educational attainment shouldn't be interpreted as evidence on the different effects of streaming age on the educational investment decisions of boys and girls. It is very likely that there are a multitude of factors that vary across countries and also have an effect on the gender differences in educational attainment. This is why in the analysis below, we focus on a single country, Finland, and exploit an educational reform that postponed the selection between the general and vocational tracks by five years for a part of the population as a natural experiment.

3 Theoretical motivation

Standard models of the demand for education view education as an investment. When deciding between different levels of education the students weigh forgone earnings and direct costs of education (both monetary and psychic) against the future gains from completed education. What is common to these models is that educational investments are usually treated as an one-off decisions where there is no uncertainty about whether the individual will finish the program of schooling or not. Moreover, education is treated as homogeneous so that differences across fields of education are not addressed.

But in practice education consists of a series of sequential choices concerning the amount and the type of education. At various stages, the individuals is faced with the decision of whether to drop out of education or whether to choose a particular educational track. In the developed countries, these choices typically are made during the secondary schooling and at the transition from secondary to tertiary education

Altonji (1993) has presented a model that treats education as sequential choice and that allows for uncertainty about whether one is able to finish the chosen education programme or not. The model was originally designed to analyze the choice of whether to attend college and the choice of college major, but it suits our context as well. Basically,

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the model views individuals as choosing between dropping out (working) or attending school at two levels, that in our case would be general and vocational, and describes how new information about ones preferences and academic performance influences the decision of whether to continue to upper secondary education and which track to follow.

In the context of Altonji's model, the factors that can give rise to gender differences in the choice of track in late streaming systems are gender differences in the academic performance and in one's beliefs about the ability to finish the general educational track. If boys' school performance is, on average, lower at the age of 14 to 16 and they believe that this reflects their true academic ability, it would not be surprising to see boys as less likely to choose the general educational track.

The gender differences in the timing of adolescence may give rise to such gender differences in academic performance and educational aspirations. In fact, there is a substantial body of literature in the education and psychology literature that document the diverging development of boys and girls around the age of 12 to 16.[5] First of all, it is well known that girls enter puberty on average 1.5 to 2 years earlier than boys: the average starting age of puberty for girls in the developed countries is 12 or 13 whereas for boys it is 14. Second, several studies have found that school achievement, in terms of grades, falls over the adolescent years whereas on the other hand cognitive development and cognitive abilities increase. In particular, studies such as Duke et al (1982) and Dubas et al (1991) have found that late-maturing boys between the ages of 13 and 17 rank lower than their peers on IQ, standardised achievement tests, and educational expectations and aspirations.

These gender differences in pubertal timing have lead some authors, such as Waber (1977), to suggest that early pubertal timing can lead to persistent sex differences in cognition, but these claims have not been supported by subsequent work. However, pubertal timing does not have to cause persistent gender differences in order to have lasting effects on the educational attainment in late streaming educational systems. All that matters is that at the time when the decision between general and vocational track is made, girls and boys differ in their achievement and aspirations. We interpret the psychological literature as suggesting that they do. We thus expect to see larger gender differences in educational attainment in the favour of women in the late streaming systems than in the early streaming systems

4 Data and results

Finnish comprehensive school reform of the 1970's provides an excellent natural experiment setting where one can observe individuals of the same cohort choosing between vocational and general educational tracks at the age of 16 and 11. In this section, we briefly describe the basic features of the comprehensive school reform. We then present the data that we use to study the gender differences in educational attainment and the results.

4.1 Finnish comprehensive school reform of 1972-1977

The Finnish pre-reform and post-reform educational systems are depicted in table 2. Finland followed the rest of the Nordic countries in the 1970's and implemented a thorough reform of its secondary education system. The Swedish and Norwegian reforms are described in detail in Meghir and Palme (2004) and Aakvik et al (2003) respectively. These reforms were influenced by the expansion of secondary schooling in the United States. The aim of the reforms was to extend the years of compulsory schooling to same levels as in other industrialised countries and to widen the access to general secondary education.

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[5]For a survey of the literature, see Petersen (1988) and Leffert and Petersen (1995).

The Finnish pre-reform educational system dated back to 1921. Compulsory education in this system was provided by six year long folk school. Pupils entered the folk school at the age of 7 and in the fourth grade, at the age of 11, they could apply to the lower general secondary school which provided eligibility for upper general secondary school and subsequently to academic tertiary education. The access to the general secondary education was based on the pupil's school achievement. The pupils who chose not to apply remained in folk school for two more years after which the compulsory education was finished. After this, the folk school students could still continue at civic school, which offered a two- or three-year education. After civic school, it was possible to move up to vocational school.

The school system was reformed in the 1970s: the previous folk school, civic school and lower secondary school were replaced by a nine-year comprehensive school offering general basic education. Now, all the pupils followed the same curriculum in the same establishments and the streaming into general and vocational tracks was postponed until the age of 16. At the same time, upper secondary school was separated from secondary school to form a distinct form of institution.

The reform was not adopted simultaneously in all the Finnish provinces. There was a considerable amount of resistance to the reform and as a compromise it was agreed to carry out the transition into the comprehensive school gradually by provinces. This gradual adoption of the new system was supposed to allow for the examination of the effects before the full transition to the new system. The transition took place between 1972 and 1977 so that in each municipality that adopted the reform, the pupils from the first to the fifth grade in the folk school were immediately affected by the reform. This means that the first cohort to be affected by the reform was the cohort born in 1961 who were at the fifth grade in 1972. The last cohort with both pre-reform and post-reform pupils was the 1965 cohort who were in their sixth grade in 1977 and were thus not affected by the reform in the last municipalities to adopt the reform. The adoption of the reform was dictated by the geographical location of the municipality so that the first regions to be affected by the reform were situated in the north of the country. The last municipalities to enter the new system were the capital Helsinki and its surroundings.

4.2   Data

The aim of this paper is to use a sample from the Finnish Longitudinal Census Data Files (FLCD) to compare the education decisions of men and women who were affected by the comprehensive school reform and who were not. FLCD are a data source provided by the Statistics Finland which in principle contains data on all the individuals who had legal residence in Finland at some point in census years 1970, 1975, 1980, 1985, 1990, 1995 and 2000. This covers approximately 6.3 million individuals. The data contain information on the economic activity, education, income and dwelling conditions of these individuals. Moreover, the household identifiers in the data can be used to link family members to each other. We are in process of drawing a 10% sample of the 1961-1965 cohorts from the FLCD for our purpose. The fact that the data contain the municipality codes of the place of residence allows us to determine whether the individual was affected by the comprehensive school reform or not.

However, at the time of writing of this draft the FLCD data were not yet available. Instead, we had to rely on a much more limited survey of the Finnish adult population that was conducted in 2000. The Adult Education Survey 2000 (AES) interviewed a representative sample of the Finnish adult population to obtain information on the educational attainment and participation in further education programmes. As a part of this survey, the individuals were also asked whether they were educated in the pre- or
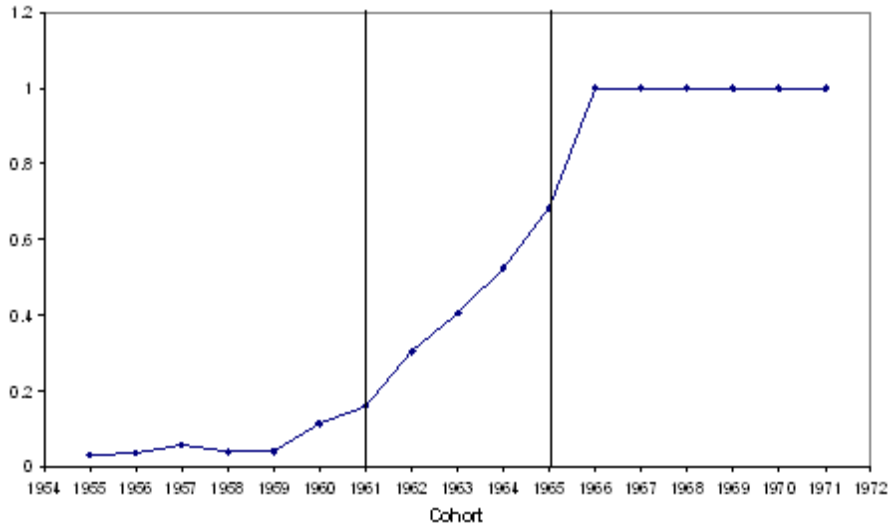
Figure 1: The reported participation in the post-reform comprehensive schools in 1955-1971 cohorts in the Adult Education Survey.

post-reform education system. This survey contains responses by 4 605 persons of whom 408 were born between 1961 and 1965.

In order to asses the validity of the responses to the comprehensive school reform responses, it is helpful to check whether the responses by cohorts reflect the adoption of the reform. The figure 1 plots the percentage of respondents in the 1955-1971 cohorts who reported participating in the post-reform comprehensive schools. The responses reflect fairly well the actual adoption of the reform. In the 1961 cohort about 16% of the respondents were affected by the reform whereas in the 1965 cohort this figure was 68%. Moreover, the individuals born in 1966 all report attending a post-reform school. In our view, these responses suggest that the responses to the comprehensive school reform question correctly reflect the adoption of the reform, and that these data can be used to asses the effects of the reform.[6]

4.3   Results

Before we move on to report the results, it is important to bear in mind the caveats involved with AES data. First of all, the sample size of the relevant cohorts, 408, is very small. We have only 169 individuals in the post-reform treatment group, out of which 79 are women. This means that the effects are very imprecisely estimated. Even more importantly, AES lacks some significant information. The place of residence at the time when individual attended school is not known, so we can't control for any regional effects. Furthermore, there is no information on the parental background of the individuals. Neither is there any information on test scores or grades.

With the exception of the last problem, all of these issues can be addressed with the FLCD. The 10% sample of 1961-1965 cohorts leads to sample size of over 50 000

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[6]The only puzzling thing in figure 1 is the high percentage of persons born in 1960 who report attending a post-secondary school, 11%. Apart from mis-reporting, the only explanation for this response is late entry into the education system which may well have occured to the idividuals who were born very late in 1960.

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individuals. The region where the individual attended school as well as the education and the income level of the parents is also observed. Hence, the results presented at the present draft of the paper should only be interpreted as a first attempt to look at the differences in the educational attainment across the treatment and control groups.

The overall educational attainment of the individuals affected by the reform is somewhat lower than that of the individuals who attended the pre-reform educational system. While among the pupils that attended the pre-reform school 44% of the pupils finished the general secondary school which enabled them to continue to tertiary academic education, for the post-reform pupils this number was only 33%. Similarly, the average years of completed education was higher in the control group than in the treatment group, 13.44 years against 13.17 years, although this difference was not statistically significant.

However, without controlling for regional effects it is impossible to say whether these differences actually reflect negative effects of the reform. As was explained earlier, the reform was first adopted in the north of the country, which traditionally has had lower average educational attainment than rest of the country. Therefore it is likely that these regions are over-represented in the treatment group. In fact, if we compare the 1960 and 1966 cohorts which were fully unaffected and affected by the reform respectively, we do not find any significant differences in the educational attainment of the groups. Controlling for regional effects would solve this problem but this is not possible with the AES data.

Nevertheless, the aim of this paper is not to evaluate the overall effects of the reform, but to find out whether these effects are different for men and women. The figure 2 plots the proportions of individuals that finished general secondary school by gender and cohort groups. For the purposes of this figure, the cohort groups were defined by five year intervals. Hence, the first cohort group in figure 2 that was affected by the comprehensive school reform was the 1965 cohort groups where there are individuals born between 1961-1965. This is precisely the group where there are both pre- and post-reform individuals. The figure 2 clearly indicates that the gender difference in the proportion of individuals that finish general secondary school increased at the time when the reform was implemented and the streaming age consequently postponed to the age of 16.

In table 3, we report the percentages of men and women in the pre- and post-reform groups that finished upper general secondary school. Now the negative effects of the reform is evident for men: male pupils in the pre-reform system are twice as likely to finish upper general secondary school than in the post-reform schools. However, for women there is no clear difference between two groups.

Probit model of the probability of finishing upper secondary school confirms what table 3 indicated. The introduction of cohort dummies does not change the results. The marginal effects of the model are reported in table 4. The interaction of the female and reform dummies is positive and significant. These results imply that whereas for boys the postponement of the streaming to 16 had a clear negative effect on the probability of finishing upper secondary school, for girls this negative effect was absent. Thus, the new system seems to have improved the relative position of women.

While the impact of the reform on the probability of finishing upper secondary school would be the immediate effect of the reform, the purpose of the reform was also to increase the average level of education in the population. In table 5, we report the average number of years of completed schooling for men and women in the treatment and control groups. Again, the attainment of boys in the post-reform system is lower than in the pre-reform, whereas for girls it appears that the number of completed years of schooling is somewhat higher in the post-reform system.

In table 6, we report results from a regression of completed years of schooling on the
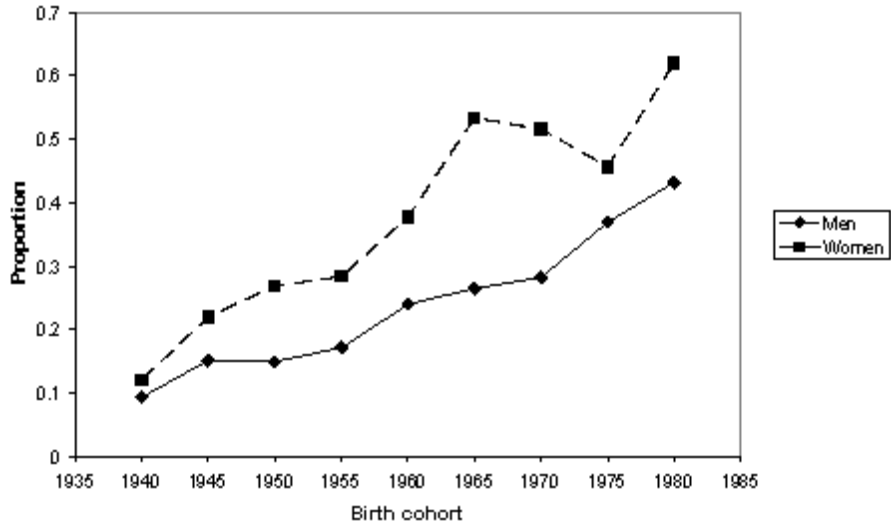
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Figure 2: Proportion of men and women finishing general secondary school by cohort groups.

reform and female dummies and their interaction as well as a full set of cohort dummies. The pattern of the results is similar as in the probit model of finishing general secondary school. However, the effect of the reform on women, although positive, is not statistically significant. It may be that the sample size in the AES data is simply not large enough to identify the effect of the reform on women or that we fail to control for some important covariates such as regional effect or family background.

We interpret these results as indicating that the postponement of streaming into vocational and general educational tracks from the age of 11 to 16 had different effects on men and women. Even though we are using a very small data set, the gender differences are visible in the effect of this postponement on both the probability of finishing general secondary education and in the years of completed schooling. While we can't rule out that these differences reflect unobservable regional differences, these results encourage to pursue this question with more high quality data such as the longitudinal census data.

5 Conclusions

Gender differences in educational attainment have received little attention in the economics literature despite the increasing returns to education in recent decades. Here, we examine the hypothesis according to which the female dominance in higher education can be, at least partly, explained by the age at which students are streamed into general and vocational educational tracks. We argue that the educational systems that stream students late, that is around the age of 16, tend to favour girls because of gender differences in the timing of puberty. Girls are momentarily ahead of boys in both biological and psychological development at the ages of 14 to 16 and this may be reflected in long term educational outcomes, if important decisions are taken at that age.

Finnish comprehensive school reform of the 1970's can be used to analyse this hypothesis. This reform postponed the streaming age from 11 to 16 and was adopted gradually

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by provinces so that we can observe members of the same cohort in different systems. We use Finnish education survey data to study the effects of the reform on the educational attainment of men and women in the cohorts that contain individuals from both pre- and post-reform educational systems. We find that the reform had a positive effect on the female probability of finishing general secondary education and also a weak positive effect women's years of completed schooling. For men, these effects were negative.

While these results come from an analysis that rely on very small sample sizes, we think that the results do warrant further research. We are currently in the process of drawing a random sample of the cohorts affected by the reform from the Finnish Longitudinal Census Data Files. These data do not only provide larger sample sizes but also make it possible to analyse the educational attainment as a series of sequential choices under uncertainty. Moreover, with the census data we can control for the unobservable regional effects, that may explain some of the results reported above, and for the effects of parental background as well as study the long-term economic consequences of the change in the streaming age.

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Table 1 Streaming age and the proportion of women in upper secondary and tertiary education in European countries 1999/2000.

	(1) Streaming age	(2) Proportion of women in upper secondary education	(3) Proportion of women in upper general secondary education	(4) Proportion of women in tertiary education
		Early streamers		
Austria	10	.468	.548	.510
Germany	10	.474	.551	.481
Belgium	12	.510	.539	.523
Netherlands	12	.482	.531	.500
France	13	.492	.560	.542
		Late streamers		
Denmark	16	.508	.565	.571
Finland	16	.525	.577	.537
Sweden	16	.575	.579	.582
UK	16	.538	.498	.539

Note: Streaming age refers to the age at which pupils are streamed into vocational and general secondary education. Proportion of women in upper secondary education is the share of women in the educational track that enables the student to participate in the academic tertiary education. Proportion of women in tertiary education is the share of women in the population of students in the tertiary education institutions. Greece, Spain, Portugal, Italy and Ireland are dropped because vocational education is not widely available in those countries. Source: Eurostat.

Table 2 Finnish educational systems

The pre-reform system

									Age									
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Folk school	General secondary school		Universities
	Civic school	Vocational schools	

The post-reform system

									Age									
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Comprehensive school	General secondary school	Universities
	Vocational school	Higher vocational education

Table 3 Differences in the percentage of individuals who finish upper general secondary school across reform status and gender

	Male	Female	Difference
Pre-reform education system	.34	.54	.21
	(.04)	(.05)	(.06)
Post-reform education system	.17	.52	.35
	(.04)	(.05)	(.07)
Difference	-.17	-.02	.12
	(.06)	(.07)	(.09)

Note: Cells report the proportion of individuals who finished the upper general secondary education with a diploma. Standard errors are in parentheses.

Table 4 Probit model of the probability of finishing the upper general secondary school. Marginal effects.

Variable	
Reform	-.217**
	(.072)
Female	.202**
	(.062)
Reform x Female	.197*
	(.105)
Cohort 1962	.021
	(.076)
Cohort 1963	-.067
	(.077)
Cohort 1964	.030
	(.087
Cohort 1965	.045
	(.082)
N	408
Pseudo-R^2	.076

Note: The dependent variable is the probability of finishing upper general secondary school with a diploma. Reform refers to a dummy that takes value one if the individual attended a post-reform school. Female x reform is an interaction of the reform and female dummies.

Table 5 Differences in the years of completed education across reform status and gender

	Male	Female	Difference
Pre-reform education system	12.97	13.96	1.00
	(.27)	(.28)	(.39)
Post-reform education system	12.41	14.04	1.63
	(.30)	(.34)	(.45)
Difference	-.56	.07	.63
	(.41)	(.44)	(.41)

Note: Cells report the average number of years of completed schooling. Standard errors are in parentheses.

Table 6 Years of education regression

Variable	
Reform	-.631
	(.432)
Female	.993**
	(.390)
Reform x Female	.673
	(.600)
Cohort 1962	.044
	(.454)
Cohort 1963	-.426
	(.479)
Cohort 1964	.069
	(.513)
Cohort 1965	.200
	(.489)
Constant	13.01**
	(.371)
N	408
R^2	.036

Note: The dependent variable is the years of completed education. Reform refers to a dummy that takes value one if the individual attended a post-reform school. Female x reform is an interaction of the reform and female dummies.