7 Will more education work?

Economic marginalization and educational inequalities across birth cohorts 1955–1980

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Introduction

As societies change, each new generation faces altered social conditions. The new social environment will set the stage differently for the new birth cohorts than for the preceding ones. The educational expansion, with its proliferation of educational institutions and widening of educational opportunities, is one of the most prominent social transformations in the 20th century. It is a worldwide phenomenon, affecting practically all countries. Steadily rising educational levels are a conspicuous feature of modern welfare states, alongside other striking developments such as economic growth, the establishment of a range of social safety nets, and the advancement of women. Together, these institutional developments structure life-courses for those born towards the end of the 20th century in quite different ways than for those born in the mid-20th century.

The expansion of educational opportunities, and a markedly longer – on average – stay in educational institutions for each successive birth cohort, is rightly considered both a cause of and a sign of social progress. It is deeply implicated in the ongoing restructuration of the economy, as well as in improved material standards and better public health (World Bank, 2020). It has also been praised as a vehicle for social equality. Access to knowledge has been broadened in underprivileged social strata; education has become an important channel for upward social mobility (Breen, Luijkx, Muller, & Pollak, 2009); and gender equality is promoted by women's increased entrance into higher education.

Nonetheless, the association between rising educational levels and social equality is ambiguous. Scholars have pointed out that education is also a source of and creator of social stratification and inequality structures (Bourdieu & Passeron, 1990; Collins, 1979). Educational institutions are “sorting machines” (Domina, Penner, & Penner, 2017) which rank people in a hierarchy of educational categories. This has a profound impact on life chances, which vary markedly with educational attainment. Research has demonstrated that credentials from higher education enhance work careers (Breen, 2004), better earnings (Hansen, 2001), and social prestige (Klein, 2016). For those placed in the bottom layers of the educational hierarchy, life careers are typically very different – low education is commonly associated with social disadvantages such as low income (Eurostat,

2020), unemployment (Lahtinen, Sirnio, & Martikainen, 2020), and higher mortality (Mackenbach et al., 2003).

The relatively poor life chances of the low educated are a concern in all welfare states, not only because they threaten egalitarian ideals but also because worrying social issues, such as lack of employment, reliance on social benefits, and ill health, are associated with low education. Decades with educational expansion have brought forward an additional concern: Are educational inequalities not only persisting over time, but also even becoming *larger*? Rising educational levels mean that for each new birth cohort, a larger percentage will proceed to higher levels in the educational hierarchy, while those who attend little more than compulsory school will be fewer and fewer. Will this affect the *size* of the educational differences so that the disadvantages experienced by the shrinking category of low educated, relative to other educational levels, are becoming more and more severe?

This chapter addresses these issues. The focus is on *economic marginalization*, indicated by lack of paid work, reliance on social benefits, and weak labour market attachment.³ We ask whether such misfortunes have become scarcer as the educational levels in the younger generations have increased, and we assess whether economic marginalization has become more and more concentrated in the low-educated category.

Below, we first overview previous research about these topics, and we present four main approaches to explain the observed patterns. Thereafter follows our empirical contribution to this research field. We use Norwegian public register data, which provide us a more long-term view than commonly found in previous research. After an overview of the educational expansion in Norway since the Second World War, the prevalence of economic marginalization, when aged 35, is examined. Six successive birth cohorts born from the mid-1950s to around 1980 are analyzed, i.e., a period spanning from the early to a recent phase of the educational expansion. We comment on the relevance of the different explanations, before the chapter ends with a critical discussion on the typical welfare state response to economic marginalization: further educational expansion. We argue that this is, in itself, hardly an efficient tool for eradicating economic marginalization – rather, it may contribute to a worsened labour market attachment for the low educated.

Previous research

Background

For several decades, researchers have discussed the relationships between educational expansion and educational inequalities. Since all welfare states adhere, more or less, to the ideals of equality, signs of aggravated life situations for the low educated are a policy concern. One worry is that social safety nets, unemployment benefits, and other income protection types, such as disability pension and social assistance, may drain public budgets if the low educated are frequently in need of such support.

A basic empirical question is whether educational expansion *actually* coincides with a tendency that the low educated in recent birth cohorts face more difficulties in the labour market than the preceding cohorts. In order to answer this question, longitudinal data for several decades are required, since the educational expansion has been a protracted, nearly century-long, process. Such data are not abundant. Variable comparability is also an issue, since educational categories, for instance, change content over time. In addition, measuring differences has conceptual and technical challenges (Mackenbach & Kunst, 1997).

Nonetheless: Findings from economically advanced countries indicate, by and large, that the era of educational expansion has been accompanied by growing educational inequalities on several life arenas, not the least in work life. Thus, “Research indicates that the decreasing number of low-educated has been accompanied by a deterioration of their socio-economic position and a worsening of their life chances” (Gesthuizen, de Graaf, & Kraaykamp, 2005, p. 441). Other researchers have similar assessments: “It is now a widely acknowledged fact that the low-educated workers are facing important risks of labour market exclusion in modern economies” (Abrassart, 2013, p. 707), and it is “practically a universal feature ... that labor market outcomes of low-skilled people have deteriorated compared to those of high-skilled people” (Giesecke, Heisig, & Solga, 2015, p. 1).

The picture is not entirely uniform, however, as both stable educational differences across several decades and considerable between-country differences have been found. A Finnish study with 1988–2015 data did not find that unemployment risk had developed more negatively for low educated than for high educated (Lahtinen et al., 2020). The earning difference between those with and those without college education – the so-called college premium – was *reduced* in both Norway and United States during the 1970s. Later on, it increased in United States, but remained stable in Norway (Eika, 2010, pp. 21, 44). A study of 17 OECD countries found more economic marginalization among the low educated if they were a small percentage of the population, but also considerable between-country differences in occupational attainment among the low educated (Gesthuizen, Solga, & Kunster, 2011).

Explanatory approaches

Deteriorated labour market attachment over time among the low educated, relative to other educational levels, seems nevertheless the dominant tendency. But *why*? Four explanations have been highlighted: *displacement*, *family origin*, *negative selection*, and *discredit*.

An often-used argument is that the technologically advanced economies confronting recent birth cohorts will primarily need highly skilled, and therefore highly educated, workers. A direct implication may be that employment opportunities for today’s low educated will decrease. A counterargument is, however, that the number of low-educated workers seems to decrease *more* over time than the decrease in the number of low-skilled jobs (Åberg, 2003, p. 204). Therefore,

displacement has been suggested as a more appropriate explanation (Blackburn, Bloom, & Freeman, 1989; Solga, 2002; Åberg, 2003). This interpretation argues that educational expansion has resulted in an oversupply of well-educated individuals, relative to the number of jobs that require high education. In order to find work, the higher educated are therefore pushed towards the lower parts of the job hierarchy. When competing with low-educated applicants, the higher educated will often be preferred, and this may aggravate the labour market difficulties for the low educated.

Taking a different angle, the family origin and the negative selection explanations propose that wider educational inequalities are due to *compositional* changes in the category of low educated. The *family origin* interpretation contends that as an increasing proportion of each new birth cohort attains higher education, the shrinking minority that remains low educated will typically be recruited from socio-economically disadvantaged families: “Those who leave school without diplomas [will] increasingly originate from families with low levels of family resources” (Gesthuizen et al., 2005). Thus, the low educated of today, compared to previous birth cohorts, are more characterized by relatively unprivileged childhoods. This will obstruct school performance and hinder the acquirement of the social skills, sense of worth, and social networks, which help careers. Growing labour market difficulties for the low educated will be the result.

The *negative selection* hypothesis is related to the former explanation, but its primary focus is *personal traits* (Gesthuizen et al., 2011; Mackenbach, 2012; Solga, 2002). It assumes that in current welfare states, economic and social barriers against educational attainment are practically eliminated. Therefore, personal shortcomings become a main reason for ending up with low education. Those in recent birth cohorts who do not acquire better education will typically lack the required intelligence, motivation, energy, or mental health. The ample opportunities for education mean that those with favourable personal traits will almost without exceptions advance in the educational hierarchy, while the low educated will be “negatively selected” because of their unfavourable personal qualities. A premise for this explanation is that in earlier cohorts, when educational careers were scarce, both the low educated and other educational levels had a wide diversity in personal traits. As educational expansion proceeds, the educational hierarchy in more recent cohorts will mirror personal qualities, and educational inequalities in such traits will become more marked, thereby causing worse labour market opportunities for the low educated.

The *discredit* interpretation (Gesthuizen & Solga, 2014; Gesthuizen et al., 2011) has also links to the compositional change explanation, but it refers primarily to *stereotypes* that low education signifies a lack of abilities, skills, and trainability. Such stereotypes can develop and spread *irrespective* of verification by empirical evidence. If employers assume that such stereotypes apply to most low educated, employment difficulties will occur for all low educated – so-called statistical discrimination (Solga, 2002). The discredit explanation emphasizes in particular the *relative size* of the low-educated part of the

population. The fewer the low educated, the more will they appear in the public mind as a deviating minority, and this cultural labelling will impact negatively on their life chances.

Empirical analysis

Data and design

The following empirical study addresses these issues in Norway, a sparsely populated (about 5.3 million in 2015) but comparatively affluent country which exemplifies the Nordic (also known as social democratic) welfare regime (Esping-Andersen, 1990). Public register data obtained from the data portal <https://microdata.no/en/> are used. This portal provides access for authorized researchers to linked individual-level data for all registered residents, with information from a large number of public registers administered by Statistics Norway.

The data source has a number of advantages. The entire population can be analyzed, individuals' life-courses can be followed for years, and variables have high validity. Of particular importance for the present chapter is that life-courses for different generations, born in different epochs and confronted with different social conditions during their formative years, can be compared. However, data are restricted to information that public authorities have chosen to collect. Besides, analyses have to rely on the restricted assortment of statistical techniques *inside* the data portal, since raw data files cannot be transported out of the portal because of security reasons (NSD/SSB, 2020, pp. 106–113).

For the following analyses, *six cohorts*, termed the 1955 cohort, the 1960 cohort, and so on up to the 1980 cohort, were selected. Note that three birth years were pooled into each cohort in order to increase sample size: those born between 1954 and 1956 represent the 1955 cohort, those born between 1959 and 1961 are the 1960 cohort, etc. Data availability was the prime reason for the choice of birth cohorts. Demographic information stretches back for many decades, but information on economic marginalization was barely available before 1990 and – at the time of writing – was available only until 2015.

The main variables used in this study, i.e., educational level and indicators of economic marginalization, refer to age 35 for the 6 cohorts. Comparing the situation in the samples at exactly the same age facilitates the study of how different cohorts have experienced different (or similar) life-courses during young adulthood (note that since three birth years are included in each cohort, measurements are actually made at age 34, 35, or 36, which we term “age 35” for simplicity). At age 35, the life careers for the majority would commonly be more settled than the instability in employment and social relations more typical for those in their 20s (Vogt, Lorentzen, & Hansen, 2020). Cross-tabulations are used in the analyses. Since they include the entire population in the selected birth cohorts, we do not burden the tables with formal statistical testing of differences.

Educational expansion in Norway

At the end of the Second World War, less than one in six of the adult population in Norway had more than compulsory education. As low education appeared as a serious obstacle to economic growth and welfare progress, a series of educational reforms followed (Lindbekk, 2015). Examples are state grants and loans to students for higher education (since 1947); compulsory school extended from seven (five in some rural districts) to nine (1960s), and then to ten years (1990s); everyone entitled to attend upper secondary school (1994); and a large growth in institutions for higher education (e.g., three universities in 1950, ten in 2018).

As a consequence, average education levels rose. The six analyzed cohorts include those born in Norway, registered as residents, and alive at the end of 1990 for the 1955 cohort, end of 1995 for the 1960 cohort, and so on. Foreign-born individuals are excluded since their education would often be attained in countries with different educational systems. Norwegian-born descendants of immigrants are, however, included. They were just a tiny fraction in the earlier cohorts, increasing slightly to 1.4% in the 1980 cohort.¹

Practically every school and educational institution in Norway is obliged to submit person-identifiable information about pupils and students to the educational register administered by Statistics Norway. Thus, with few exceptions, high-quality educational information for every individual in the six cohorts was available. Many will have reached their final educational level already in their mid-20s or before that, but interrupted educational careers which are later continued occur frequently – not a few “early school leavers are in fact late finishers” (Vogt et al., 2020, p. 2). By measuring educational level at age 35, also education obtained unusually late is taken into account in this measurement.

For classifying the educational information, the Norwegian version of ISCED, i.e., the International Standard Classification of Education, was used (Barrabés & Løstli, 2015). Three educational levels were defined: *Low* (ISCED levels 0, 1, 2, and 3), *intermediate* (ISCED 4 and 5), and *higher* (ISCED 6, 7, and 8). *Low* education covers primary schools and compulsory schooling up to ten years for the youngest cohorts, and some will also have continued in upper secondary education for some time without completing it. *Intermediate* education will imply completed upper secondary school, in either academic or vocational tracks, but little formal education above that level. *Higher* education includes all completed education at colleges or universities. The many distinctions within the *higher* category (for instance two years in college versus a PhD degree) are not highlighted in this chapter, since our main concern is differences between the low educated and other educational levels.

Table 7.1 shows that the *size* of the cohorts varied considerably, from nearly 190 000 in the 1970 cohort (born in Norway, alive and residing in Norway at age 35, i.e., in 2005) to less than 150 000 in the latest, 1980 cohort (note that each birth cohort, as stated above, includes three birth years in order to increase sample size).²

In Table 7.1, the educational expansion is evident for both genders, but in particular for women. The proportion of low-educated men fell from 51% in the 1955

Table 7.1 Number and educational distributions (%) at age 35 in six cohorts

<i>Cohort</i>	<i>1955</i>	<i>1960</i>	<i>1965</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>
Men						
Low educated	51.1	41.1	31.9	25.5	20.2	19.4
Intermediate	24.1	34.6	41.0	41.7	42.4	42.9
Higher	24.8	24.3	27.1	32.8	37.4	37.8
N = 100.0%	90 143	89 453	95 670	96 243	82 689	75 317
Women						
Low educated	63.1	51.1	35.1	25.1	16.4	12.9
Intermediate	12.7	21.4	31.9	31.5	30.2	28.5
Higher	24.3	27.5	33.0	43.3	53.4	58.5
N = 100.0%	87 213	86 002	91 331	92 893	80 366	72 418

cohort to 19% in the 1980 cohort; corresponding figures for women were 63% and 13%. In the 1955 cohort, the proportion with higher education was similar for men and women. Among those born a quarter of a century later, the 1980 cohort, 59% of the women as against 38% of the men had some kind of higher education. Over time, women came to be more and more dominating in shorter higher education, i.e., ISCED level 6. In the latest 1980 cohort, the proportion that had attained university master level was also higher among women (15.3%) than among men (12.9%), but there was still a slight male advantage at the PhD level.

Economic marginalization at age 35

Four indicators are used to examine economic marginalization. *Marginal work income* was defined as having less than two Basic Amounts in work income during one's 35th year. This indicates that the individual either had no employment, or, if having paid work at all, had a very weak labour market attachment.³ The other three indicators are *disability pension* at the end of one's 35th year; receipt of at least some *social assistance* during the last two years; and finally receipt of *unemployment benefits* during the last two years.

Among men, Table 7.2 indicates relatively modest variations across the six cohorts as to the *average* prevalence of marginal work income (around 7%), having disability pension (around 3%), and being recipient of social assistance (also around 3%, perhaps slightly decreasing). Thus, in spite of the large changes in the educational composition, 35 years old men's *average* exposure to economic marginalization was, by and large, quite stable. Also, for women, the average percentage with disability pension and social assistance did not vary much, although a slight declining tendency can be spotted. As to marginal work income among women, however, the prevalence dropped – doubtlessly because the later cohorts had entered paid work to a higher degree than the earlier cohorts.

Receiving unemployment benefits fluctuated much more, with a peak for both gender in the 1960 cohort, followed by declining rates in the succeeding cohorts.

Table 7.2 Economic marginalization at age 35 in six cohorts; overall prevalence and educational differences (%)

<i>Cohort</i>	<i>1955</i>	<i>1960</i>	<i>1965</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>
Men						
<i>Marginal work income</i>						
Average % – entire cohort	7.2	6.8	6.2	7.2	6.8	6.8
Low educated	10.3	10.2	10.5	13.2	15.4	15.2
Intermediate education	5.1	5.0	4.6	5.7	5.5	5.4
Higher education	2.9	3.8	3.5	4.4	3.6	4.0
<i>Disability pension</i>						
Average % – entire cohort	2.8	2.5	3.0	2.8	2.8	4.0
Low educated	4.8	4.9	7.2	8.2	10.4	14.9
Intermediate education	1.0	1.0	1.3	1.3	1.3	2.2
Higher education	0.5	0.5	0.7	0.5	0.3	0.4
<i>Social assistance</i>						
Average – entire cohort	3.3	3.5	2.7	2.8	2.3	2.5
Low educated	5.4	6.7	6.6	7.8	7.8	9.0
Intermediate education	1.3	1.6	1.2	1.5	1.5	1.4
Higher education	0.6	0.7	0.4	0.5	0.4	0.3
<i>Unemployment</i>						
Average % – entire cohort	15.5	17.8	10.5	10.5	9.5	8.1
Low educated	20.7	23.9	15.5	15.0	15.6	13.4
Intermediate education	14.3	17.0	9.8	10.0	10.1	8.2
Higher education	5.9	8.4	5.9	7.5	5.5	5.2
Women						
<i>Marginal work income</i>						
Average % – entire cohort	16.8	18.3	15.7	14.8	11.5	10.5
Low educated	20.4	23.1	22.2	23.0	24.3	23.0
Intermediate education	16.0	18.3	15.6	16.3	13.3	13.3
Higher education	8.0	9.5	8.9	8.9	6.6	6.4
<i>Disability pension</i>						
Average % – entire cohort	4.0	3.2	4.0	3.3	2.7	4.5
Low educated	5.6	5.0	8.0	9.3	11.1	19.9
Intermediate education	1.7	1.8	2.4	2.0	2.0	5.1
Higher education	1.0	0.7	1.2	0.8	0.5	0.9
<i>Social assistance</i>						
Average % – entire cohort	2.7	2.9	2.1	2.2	1.7	1.7
Low educated	3.9	4.6	4.5	5.9	6.3	8.3
Intermediate education	1.0	1.7	1.2	1.8	1.8	1.8
Higher education	0.5	0.6	0.4	0.4	0.2	0.3
<i>Unemployment</i>						
Average % – entire cohort	13.6	16.0	10.2	11.0	7.6	7.7
Low educated	17.5	20.0	13.3	13.4	10.5	11.8
Intermediate education	12.5	17.1	11.1	12.6	9.6	9.9
Higher education	4.1	7.5	6.1	8.5	5.6	5.8

Macro-economic trends are clearly the underlying reason. In the early 1990s, an international economic downturn occurred, leading to increased unemployment, especially for the younger age categories. The 1960 cohort was aged 35 in the mid-1990s and therefore particularly susceptible to the relatively poor employment situation at that time.

Thus, although some interesting between-cohort differences in economic marginalization occurred, there was also much stability, in particular as regard disability pension and social assistance for both genders, and as to marginal work income for men.

But within these overall tendencies, Table 7.2 leaves no doubt that educational inequalities *widened*. Both for men and women, marginal work income, disability pension, and social assistance among the *low educated* increased across the six cohorts. For the other educational levels, fluctuations were much smaller. As a consequence, the contrast in economic marginalization between the low educated and the other educational levels had become much more marked in the later, more recent, cohorts, than in the earlier cohorts.

Figure 7.1 summarizes this widening of inequalities in economic marginalization by displaying the percentage in each educational category experiencing *at least one* of the four types of economic marginalization. Overall, the proportion among low-educated men who experienced any type of these forms of economic marginalization rose from 32% in the 1955 cohort to 40% in the 1980 cohort. For women, the corresponding percentages rose from 38% to 48%. The figure shows how the 1960 cohort, which was 35 years old in the mid-1990s, was hit by the economic downturn. Economic marginalization was relatively high for all educational levels at that time, due to the contribution from unemployment. From the 1965 cohort and onwards, economic marginalization increased for the low educated, but decreased somewhat among those with intermediate or higher education. In consequence, educational inequalities widened and the situation for the low educated, relative to other educational levels, deteriorated.

Comments on explanations

Accordingly, the Norwegian example displays developments spanning a quarter of a century which resemble tendencies in other economically advanced countries such as the Netherlands (Gesthuizen & Wolbers, 2010), Germany (Giesecke et al., 2015), and the United States (Blackburn et al., 1989). The low educated – a category which had declined in relative size in successive birth cohorts – were increasingly faced with economic marginalization. Their disadvantageous situation in work life, compared to other educational levels, has become more marked.

How did this happen? Certainly, by a complex of causes, linked to their placement in the changing economic structure, but also due to the circumstances provided by welfare state arrangements which also influence their situation, for instance, in terms of labour market policies and access to various types of income protection.

Above, four explanations were outlined. To assess these explanations in a satisfactory way is beyond the possibilities provided by available data. Some comments can nevertheless be offered, partly by exploiting the Norwegian data material used in this chapter and partly by referring to other research contributions.

Figure 7.1 Any type of economic marginalization (%) in three educational levels, men (upper panel) and women (lower panel), measured at age 35 for six cohorts.

Displacement

First, the *displacement* explanation assumes that educational expansion has led to a mismatch between the number higher educated and the number of jobs which require higher education. A surplus of better educated will push some of them downwards in the occupational hierarchy, and job competition will aggravate labour market difficulties for the low educated. Several analyses support this explanation (Abrassart, 2015; Blackburn et al., 1989; Gesthuizen & Solga, 2014;

Gesthuizen & Wolbers, 2010; Åberg, 2003). Also, since educational credentials may lose some of their distinction when higher education has become more widespread (Araki, 2020), it could be more common among high educated to seek work in low status occupations.

Our data do not allow for a direct testing, but an indirect test is to examine whether it has become more common, across the six cohorts, for better educated to have *work incomes* that are typical of low-educated workers. Such a development could signify that the better educated, to an increasing degree, enter the parts of the labour market which used to be more or less reserved for the low educated.

Among those who were active in the workforce (defined as earning at least two Basic Amounts in their 35th year), we focus on those who were in the *lowest quartile* of the work income distribution (estimated separately for each gender and each cohort). In these employed, but low paid, strata, we expect that the low educated will predominate. The question is, however: Has their predominance dwindled as educational expansion has proceeded and the better educated have become more numerous?

Table 7.3 confirms this expectation. Across the six cohorts, the better educated constituted a growing proportion in the poorly paid parts of the employed. Among men, for instance, intermediate or higher education constituted 34% among these relatively low-paid parts of the workforce in the 1955 cohort, increasing steeply to 75% in the 1980 cohort. A similar, but even more marked, change occurred for women.⁴

Family origin

Next, the *family origin* explanation, which argues that widening educational inequalities are due to a tendency over time to deteriorated social, economic, and cultural resources among the parents of the low educated, relative to the parents

Table 7.3 Educational distributions (%) among employed with low work income*

<i>Cohort</i>	<i>1955</i>	<i>1960</i>	<i>1965</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>
Men						
Low educated	66.0	51.8	42.8	34.4	26.0	25.0
Intermediate education	23.9	35.6	43.1	47.0	49.2	50.4
Higher education	10.2	12.6	14.1	18.6	24.9	24.6
N = 100.0%	16 777	16 613	19 244	18 982	16 508	15 073
Women						
Low educated	69.9	57.6	42.7	31.9	20.9	15.1
Intermediate education	12.7	22.2	34.5	40.2	42.9	44.3
Higher education	17.5	20.1	22.8	28.0	36.2	40.7
N = 100.0%	13 402	12 910	15 506	15 975	15 239	13 755

* Low work income among the employed = lowest quartile of work income among those earning at least 2 BA; income quartiles are estimated separately for each gender and each cohort.

Table 7.4 Distributions of parents' educational levels (%) among low-educated men and women

<i>Cohort</i>	<i>1955</i>	<i>1960</i>	<i>1965</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>
<i>Men in the six cohorts</i>						
<i>Parental educational level*</i>						
University level	0.9	0.9	1.2	1.5	2.4	3.0
College level	3.7	4.6	5.9	7.6	10.6	14.2
Upper secondary level	43.1	48.3	53.3	57.8	60.3	57.4
Compulsory level	52.4	46.2	39.5	33.1	26.5	25.3
N = 100%	45 873	36 703	30 485	24 557	16 686	14 615
<i>Women in the six cohorts</i>						
<i>Parental educational level</i>						
University level	0.8	0.8	1.0	1.4	2.0	2.7
College level	3.5	4.2	5.1	6.7	8.5	11.4
Upper secondary level	43.9	49.0	53.1	57.9	60.2	57.6
Compulsory level	51.8	45.9	40.7	34.0	29.3	28.3
N = 100%	54 733	43 870	32 045	23 327	13 195	9371

* University level = ISCED level 7 or 8 for either mother or father, or both. College level = ISCED level 6 for either mother or father, or both. Upper secondary level = ISCED 3, 4, or 5 for either mother or father, or both. Compulsory level = neither father nor mother had more than compulsory education (the tiny number with no information on parents' education included here).

of the better educated. Thus, one study, based on survey data on birth cohorts from the 1920s to the 1970s, suggests that the low educated "increasingly originate from families with unfavourable socio-economic, cultural and demographic resources" (Gesthuizen et al., 2005, p. 441).

Information on parental education, combined for both parents, when the samples of men and women in the six cohorts were aged 16, is available in our data. Table 7.4 shows the distribution of parental education for the low educated. The proportion of parents with only compulsory education among the low-educated offspring was strongly *reduced* across the six cohorts – down from 52% to 25% for men and from 52% to 28% for women. The proportion of parents with higher education (i.e., either college or university level) *increased* from a very low level in the 1955 cohort to around one in six in the 1980 cohort (17% among the low-educated men, 14% among the low-educated women).

In other words, the family origin explanation is hardly supported in these Norwegian data. The family background for the low educated, measured as the composition of parental education, has become *more diverse* over time. The proportion having low-educated parents declined markedly, while the proportion of

well-educated parents rose from trivial in the 1955 cohort to substantial in the 1980 cohort.

Negative selection

The *negative selection* explanation proposes that educational expansion results in a clustering of unfavourable *personal traits* in the shrinking strata of low educated. Increasing educational inequalities in such personal traits would in turn generate increasing educational inequalities in the labour market. Our data have no information about personal traits. Other information suggests, however, that this explanation has debateable value. Certainly, there exist educational differences in personal traits relevant for labour market success (e.g. Abrassart, 2015; Roth et al., 2015). However, the negative selection explanation requires not only that such inequalities exist, but in addition that they have *increased* during the educational expansion. As to this issue, those very few studies with relevant data we have located do *not* support the negative selection hypothesis. A Dutch study of birth cohorts from 1925 to 1970 did not find clear evidence that educational differences in “verbal ability” had increased from the earlier cohorts (when most of the cohorts attained only low education) to the later cohorts when higher educational attainment was more common (Gesthuizen & Kraaykamp, 2002, p. 202). Similarly, in the United States, educational differences in “verbal skills” *decreased* from the 1960s to the 1990s (Gesthuizen & Solga, 2014, p. 215). Studies on associations between parents’ education and offspring’s personal traits may also be relevant for assessing the negative selection explanation. A Finnish study (Jokela, Pekkarinen, Sarvimaki, Tervio, & Uusitalo, 2017) has showed that “economically valuable personality traits” among army conscripts varied with mothers’ education in an expected way. However, differences in personal traits between conscripts with mothers having low versus higher education did not increase but *declined* across the 1962–1976 birth cohorts, alongside a marked decline in the percentage of low-educated mothers.

Discredit

Finally, the *discredit* explanation (Gesthuizen & Solga, 2014; Gesthuizen et al., 2011; Solga, 2002) suggests that educational expansion nurtures the *stereotype* that low education signifies less skills, less trainability, and other unfavourable traits. The discredit explanation does not require that the stereotypes are valid. If widespread, they attach a negative label to the low educated, which will stigmatize and hamper life chances, regardless of the truthfulness of the stereotypes. Our data do not enable enquiry into this explanation. Its relevance may be considerable, however, as there are indications that many, especially in privileged social strata, assign little esteem to, but rather look down upon, the low educated (see, for example, Abrassart & Wolter, 2020; Sandel, 2020; Skarpenes & Saksliind, 2020).

Final remarks: Will rising educational levels work?

In sum, the transformation of the educational structure since the mid-20th century seems to have had relatively little impact on the overall prevalence of economic marginalization.⁵ Fluctuations in unemployment rates seem primarily connected to macro-economic trends, irrespective of how educational expansion has developed. In addition, a disturbing tendency is evident in a number of countries. Educational inequalities in economic marginalization have increased across succeeding birth cohorts since the Second World War, and the gap between the shrinking category of low educated and other educational levels has widened. How these developments can be explained is a complex issue. However, as argued above, displacement and discredit seem to be quite relevant mechanisms, while background family resources and the negative selection explanation are probably more doubtful.

For welfare states that pursue social equality, the developments described here are worrying. What policies could counter such developments? A dominant response is to strengthen educational institutions and raise educational levels. Policies enhancing education have of course a long tradition in welfare states; the educational expansion represents, in many ways, the welfare vision of a good society. Accordingly, adolescents are strongly encouraged (or pressurized) to seek more formal education. OECD, for instance, recommends that countries should be concerned about the proportion of late teenagers who are out of school instead of completing secondary education (OECD, 2017, p. 29).

Certainly, knowledge and skills are positive attributes, and there are good reasons for raising educational levels in the population. Whether policies aiming at increasing educational length for each new birth cohort will by themselves lead to reduced economic marginalization and less educational inequalities is highly dubious, however.

Such policies may embrace an illusory and exaggerated belief that more education will protect against economic marginalization. A simple illustration of this misunderstanding is seen in Table 7.2. This table covers a quarter of a century. The typical educational level for a 35-year-old individual was markedly higher if born in 1980 compared to those born in the 1950s. Nonetheless, the overall prevalence of economic marginalization has at most dropped slightly, although overall educational levels were significantly higher in the later cohorts. The total occurrence of marginal work income, disability pension, and social assistance shows few tendencies to decline – except for the prevalence of marginal work income among women, which dropped due to transitions from part-time to full-time work.

A related development is that over time, recruitment into economic marginalization has changed. When most people were low educated, the majority of the economically marginalized were low educated. When the educational distribution changes, also the educational *composition* of the economically marginalized changes. Table 7.5 shows distributions of educational levels among the recipients of disability pension, social assistance, and unemployment benefits, across the six

Table 7.5 Educational composition (%) of 35 years old recipients of disability pension, social assistance, and unemployment benefits, men and women pooled, six cohorts

Cohort	1955	1960	1965	1970	1975	1980
<i>Disability pension</i>						
Low educated	88.1	81.4	72.9	72.5	72.2	64.0
Intermediate	6.5	12.9	18.7	19.5	21.3	28.0
Higher education	5.4	5.6	8.3	8.2	6.9	7.9
N = 100.0%	5993	4920	6549	5744	4481	6300
<i>Social assistance</i>						
Low educated	88.0	80.4	77.1	69.7	65.2	66.9
Intermediate	7.7	14.4	17.9	23.8	28.3	26.1
Higher education	4.5	5.4	4.8	6.2	6.4	7.0
N = 100.0%	5280	5574	4488	4736	3290	3110
<i>Unemployed</i>						
Low educated	74.2	59.4	46.5	33.5	28.6	26.2
Intermediate	17.4	28.4	36.3	38.0	42.1	40.1
Higher education	8.4	12.2	17.2	28.5	29.4	33.6
N = 100.0%	25 804	29 606	19 396	20 333	13 959	11 708

cohorts (for simplicity, men and women are pooled, since gender-specific trends correspond fairly well with the overall trend). Table 7.5 demonstrates that over time, the low educated are a declining proportion of those affected by these types of economic marginalization, while those with more education constitute a growing proportion. In the 1955 cohort, 88% of those who had disability pension were low educated, falling to 64% in the 1980 cohort. In the 1955 cohort, those with *more* than low education constituted 12% of the social assistance recipients, rising to 33% in the 1980 cohort. Even clearer is this tendency for unemployment benefits. In the 1955 cohort, the low educated constituted 74% of those who received unemployment benefits; 25 years later, in the 1980 cohort, it was the intermediate and higher educated who constituted 74% of the recipients of unemployment benefits.

Thus, the idea that educational expansion in itself will eradicate, or at least reduce, economic marginalization, as well as closing the gap in economic marginalization between the lower educated and other educational levels, is difficult to substantiate.

In addition, other circumstances should be taken into account. One should not overlook that the majority of the low educated, even in recent birth cohorts when they were relatively few, attain, if not a brilliant, at least a fair position in work life (cf., Vogt et al., 2020). Figure 7.1 shows that in the 1980 Norwegian cohort, more than half of the low educated (about 60% of the men, 52% of the women) were *not*, at age 35, affected by any of the four types of economic marginalization. Although disadvantaged in many ways in comparison with those with more education, the greater part of these low-educated men and women were actually employed and

had work incomes above two Basic Amounts. The median work income among the employed, but low educated, men was about five Basic Amounts (not shown in table), which can be regarded as a decent work income. Thus, the majority of the low educated coped fairly satisfactorily with the labour market.

Besides, policies that do not consider this factual labour market participation may not only misrepresent the situation. It may also strengthen the *discredit* mechanism that is one source of economic marginalization among the low educated. Policies that stress that more formal education is the key to employment individualize the problem. Their claim is, implicitly, that the reason for labour market difficulties is the individuals' own shortcomings, his or her lack of higher education, and not the functioning of the labour market and employers' failure to provide jobs that fit the less educated. A one-sided focus on education may contribute to more stigmatization of the low educated and thereby aggravate their job opportunities.

The conclusion is not, of course, that a continuing educational expansion should be hindered. However, the hope that a further rise in educational levels, for each successive birth cohort, will, by itself, do away with, or at least reduce, economic marginalization is hardly warranted. Rather, the processes underlying labour market inequalities and economic marginalization are, although complex and multifaceted, primarily rooted in the overall functioning of the economic system. They will not disappear simply by policies that raise educational levels. With respect to economic marginalization, the challenge for welfare states is how to guide and control economic forces – a challenge which cannot be solved through educational policies.

Notes

- 1 The *actual* number of residents in the analyzed age categories in, say, 2015 was markedly higher than the 1980 sample size, due to large immigration in recent decades.
- 2 How the size of a birth cohort affects life chances is a recurrent topic in generation studies that will not be pursued here.
- 3 Work income is the yearly sum of wages, salaries, and net income from self-employment; also sickness and parental leave payments are included as work-related incomes. Dividends, rents, other forms of income from capital, pensions, and other types of social transfers are not work income. The magnitude of the Basic Amount is adjusted to developments in overall income levels and determined by government agencies each year for use in the social security system (NAV, 2020).
- 4 A further support for the displacement mechanisms is provided by an additional result, not shown in the table: within this lowest quartile in the work income distribution, median work incomes varied very modestly between all the three educational levels.
- 5 One may object that marginal work income represents *relative* economic marginalization, not *absolute* economic deprivation. This is true, but this objection is hardly relevant with respect to disability pension, social assistance, and unemployment.

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