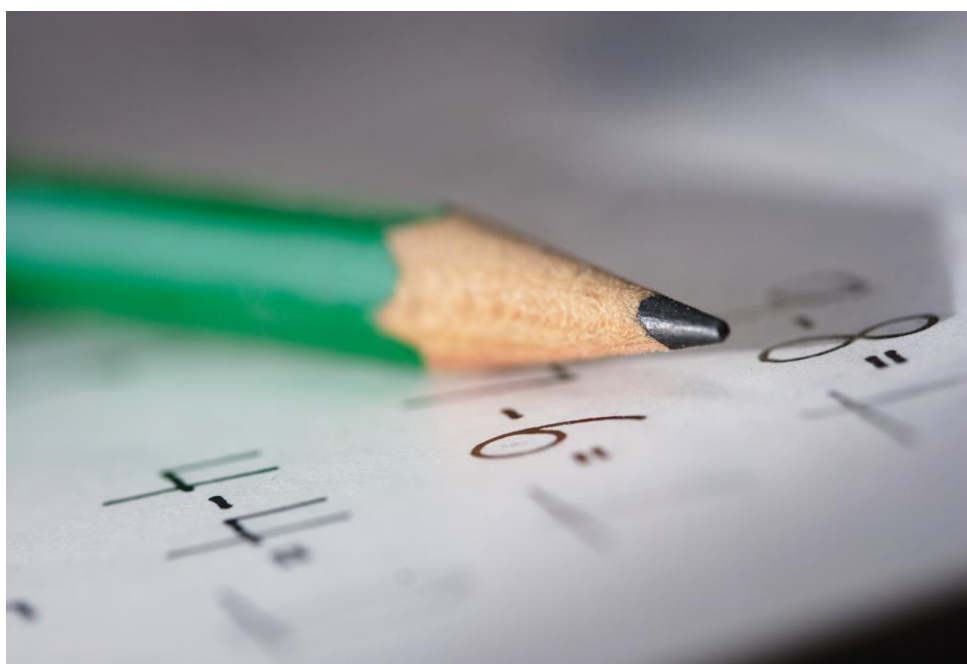




# Economic Analysis Norway

## Report no. 32-2016



# THE COSTS OF INADEQUATELY EDUCATING ASYLUM SEEKERS AND REFUGEES

## SUMMARY

Economic Analysis Norway (Samfunnsøkonomisk analyse AS) has calculated the socio-economic costs of children and young people who come to Norway as asylum seekers or refugees receiving inadequate primary and secondary education.

On average, quantified factors amount to about NOK 3.8 million in 2015 prices per child. In addition, there are non-monetised effects on the individual's quality of life, on crime rates and democracy.

Moreover, the analysis looks at conditions in schools that can improve the pupils' chances of going on to achieve success in education, the labour market and society in general. The analysis also sets out proposals for measures that schools can implement to facilitate the future success of pupils.

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# 1. Introduction

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Economic Analysis Norway (Samfunnsøkonomisk analyse) has on behalf of the Norwegian Ministry of Education and Research calculated the socio-economic costs of providing inadequate primary and secondary education for children and young people who come to Norway as asylum seekers and refugees.

As part of the project, Fafo (subcontractor) has examined which factors in education can be viewed as pivotal for the reference group of children and young people going on to achieve success in their continued education and later career. Fafos contribution is not included in this English version of the report.

## 1.1 Background and areas of analysis

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Figures from the Norwegian Directorate of Immigration (UDI) show that 31 145 people applied for asylum in Norway in 2015,<sup>1</sup> which is almost triple that of the previous year.<sup>2</sup> The group of asylum seekers included 10 254 minors, which is defined as persons under the age of 18.<sup>3</sup> Of these, 4 957 were accompanied minors, i.e. with a parent or someone with parental responsibility, while 5 297 were unaccompanied minors. About 20 per cent of the unaccompanied minors were below the age of 15.

The increasing number of children and young people seeking asylum in Norway is a major challenge for the education authorities and school system in terms of ensuring that they are given an adequate education.

If this group of children and young people are not offered an adequate education this could hinder their chances of continuing their education, participating in the labour market and contributing to society in general. Being left on the fringes in this way represents a challenge both for the individual concerned and for society as a whole. For example, a failure to secure employment leads to a lack of income and the associated psychological and social challenges that this often brings. Public sector intervention will then be required on many different levels.

Based on the problem described here, this analysis examines two elements:

- A. What are the estimated socio-economic costs of refugee minors receiving inadequate primary and secondary education?

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<sup>1</sup> Figures taken from: <https://www.udi.no/statistikk-og-analyse/>

<sup>2</sup> Figures taken from: <https://www.udi.no/statistikk-og-analyse/arsrapporter/eldre-arsrapporter/tall-og-fakta-2014/hvor-mange-sokte-om-beskyttelse/>

<sup>3</sup> Figures taken from: <https://www.udi.no/statistikk-og-analyse/statistikk/asylsoknader-enslige-mindrearige-asyloskere-etter-statsborgerskap-og-maned-20141/>

- B. Which key aspects of the education can be viewed as playing a central role in whether refugee minors do well or not at school, and in their continued education and the labour market? This part of the analysis is not discussed in this English version of the report.

## 1.2 Definition of terms

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### Children and young people who come to Norway as asylum seekers and refugees

The analysis examines what the report will henceforth refer to as “refugee minors”. However, the group will be broken down for analysis where appropriate.

The term “refugee minor” refers to children and young people with the following status:

- Children and young people who come to Norway as asylum seekers.
  - Accompanied asylum seekers (children and young people under the age of 18 who come to Norway with a parent or someone with parental responsibility).
  - Unaccompanied minor asylum seekers (children and young people under the age of 18 who come to Norway with no parent or anyone with parental responsibility).
- Children and young people who come to Norway as resettlement refugees (quota refugees).

### Inadequate education

A core element of this analysis entails estimating the socio-economic costs of children and young people who come to Norway as asylum seekers or refugees receiving an inadequate education (at primary and secondary level). In the report, inadequate education is defined as follows:

Primary and secondary education is considered inadequate if it does not give asylum seekers and refugee minors the same competence-related opportunities as Norwegian children and young people to participate in continued education, employment and society in general.

Giving children and young people what we refer to in this report as adequate primary and secondary education requires enrolment in primary school and admission to upper secondary school in accordance with their statutory rights, and the children and young people receiving the education they are entitled to and need, by virtue of their particular backgrounds. The deficiencies in education are thus linked to the asylum and refugee children’s weaker chances of achieving the same competence as that of Norwegian children.

### Settlement and residence

Asylum seekers and refugees’ rights to settlement and residence are relevant to understanding children and young people’s entitlement and obligation to attain an education.

### *Asylum seekers*

People applying for asylum in Norway shall be offered a place to stay. The UDI has primary responsibility for providing this offer. However, the Norwegian Directorate for Children, Youth and Family Affairs (Bufetat) has responsibility for unaccompanied asylum seekers under the age of 15, and these are placed in dedicated care centres.<sup>4</sup>

The group of asylum seekers that falls under UDI's area of responsibility, including unaccompanied asylum seekers between the ages of 15 and 18, is normally given priority for places at reception/transit centres. Unaccompanied minors between the ages of 15 and 18 are placed in separate transit centres, where they remain until they have completed an asylum interview. They are then moved to an ordinary reception centre where they stay while their asylum case is being processed. Temporary overnight accommodation was established to take the overflow from ordinary reception centres, but this arrangement is no longer used since only long-term reception centres are to be established in the future.

The length of an asylum seeker's stay at a transit centre depends on how long they have to wait for an asylum interview, and this varies according to what country they are from. UDI's website states that, as per 22 February 2016, the waiting time for an asylum interview for asylum seekers from Syria is around nine months, and in some cases longer.<sup>5</sup>

After the asylum interview, they will need to stay in an ordinary reception centre until the processing of their case is complete, and this waiting time will vary. For Syrians, the estimated processing time is up to nine months. For unaccompanied minors, the estimated processing time is somewhat shorter.<sup>6</sup> Most unaccompanied asylum seekers under the age of 18 are granted either a temporary or permanent residence permit.<sup>7</sup> The length of stay in the reception centre can be extended if, for example, an application is rejected and the decision is appealed.<sup>8</sup>

After an application for residence is granted, Bufetat is responsible for settling unaccompanied minors under the age of 15, while the Directorate of Integration and Diversity (IMDi) is responsible

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<sup>4</sup> Taken from: <https://www.udi.no/asylmottak/onsker-a-drive-mottak/ulike-typer-asylmottak/> and [http://www.bufdir.no/Barnevern/Tiltak\\_i\\_barnevernet/Omsorgssentre\\_for\\_enslige\\_mindrearige\\_asylsokere/Om\\_enslige\\_mindrearige\\_asylsokere/](http://www.bufdir.no/Barnevern/Tiltak_i_barnevernet/Omsorgssentre_for_enslige_mindrearige_asylsokere/Om_enslige_mindrearige_asylsokere/)

<sup>5</sup> Taken from: <https://www.udi.no/viktige-meldinger/informasjon-til-syrere-og-statslose-fra-syria-som-har-sokt-beskyttelse-asyll/#link-6329>

<sup>6</sup> Taken from: <https://www.udi.no/viktige-meldinger/informasjon-til-barn-under-18-ar-som-har-sokt-om-beskyttelse/>

<sup>7</sup> Nine in ten unaccompanied minor asylum seekers whose case was processed between January and November 2015 were granted residence.

[http://www.bufdir.no/Statistikk\\_og\\_analyse/Oppvekst/Barn\\_som\\_soker\\_asyll/Enslige\\_mindrearige\\_asylsokere\\_EMA/#heading5174](http://www.bufdir.no/Statistikk_og_analyse/Oppvekst/Barn_som_soker_asyll/Enslige_mindrearige_asylsokere_EMA/#heading5174)

<sup>8</sup> Taken from: <https://www.udi.no/ord-og-begreper/saksbehandlingstider/#link-2321>

for unaccompanied minors aged between 15 and 18 years. Otherwise, it is the municipalities that are responsible.<sup>9</sup>

### *Resettlement refugees*

Most resettlement refugees (quota refugees) have already been defined by UNHCR<sup>10</sup> as people with a need for protection, and it is UNHCR that submits the applications for the resettlement refugees.<sup>11</sup> However, UDI decides who should come to Norway. The successful applicants have therefore already been granted leave to remain and assigned a municipality of residence before their arrival in Norway. It is only in exceptional cases that these refugees have to stay in refugee reception centres whilst waiting for a permanent place to live.

## 1.3 Method

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This section provides a brief account of the methods and sources used in the analysis.

### *Literature review*

In this project, a variety of literature has been reviewed that is relevant to the investigation of the theme of the study. The literature review mainly concentrates on Norwegian and other Nordic literature, plus a small selection of international literature. Excerpts from legislation and political documents such as reports to the Storting and studies have also been used.

The knowledge we have gained from the literature review has strengthened our understanding of the issues to be examined in the socio-economic analysis.

### *Socio-economic analysis*

A key part of this analysis is to calculate the socio-economic costs of refugee minors receiving an inadequate education. We have therefore, as far as possible, estimated the total costs to society, the individual and the public sector of the reference group receiving an inadequate education.

Where it is not possible to quantify costs, the so-called plus-minus method will be used to make a qualitative assessment of the effects of an inadequate education.

A more detailed description of the assumptions on which the socio-economic analysis is based, and of how the analysis is carried out, is given in section 3.1.

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<sup>9</sup>Taken from:

[http://www.bufdir.no/Barnevern/Tiltak\\_i\\_barnevernet/Omsorgssentre\\_for\\_enslige\\_mindrearige\\_asylsokere/Om\\_enslige\\_mindrearige\\_asylsokere/](http://www.bufdir.no/Barnevern/Tiltak_i_barnevernet/Omsorgssentre_for_enslige_mindrearige_asylsokere/Om_enslige_mindrearige_asylsokere/)

<sup>10</sup> United Nations High Commissioner for Refugees

<sup>11</sup> Taken from: <http://www.imdi.no/planlegging-og-bosetting/slik-bosettes-flyktninger/overforingsflyktninger/>

## 1.4 Organisation of the report

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The structure of the report is as follows:

- Chapter 2: A description of various factors that have a bearing on whether refugee minors receive an inadequate education or not, as well as a description of the potential consequences of an inadequate education for the individual. The chapter forms a backdrop to the socio-economic analysis in chapter 3.
- Chapter 3: Estimated socio-economic costs of a refugee minor receiving an inadequate education.
- Chapter 4: Conclusions and recommendations



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## 2. Refugee minors in primary and secondary education in Norway

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As explained in section 1.2, we define adequate primary and secondary education as education that gives refugee minors the same opportunities to attain competences as Norwegian children and young people. In this chapter we will also look at how the intention of the statutory rights and obligations is to put refugee minors on a par with other children in terms of education.

We will first describe various aspects of the primary and secondary education that have a bearing on whether children and young people arriving in Norway as asylum seekers or refugees receive an inadequate education or not, and will highlight other factors that have an impact on whether this group has the same basis as Norwegian children and young people. Moreover, we will describe the consequences of inadequate education on participation in continued education, the labour market and society in general.

The chapter forms a backdrop to the socio-economic costs of an inadequate education, which are reviewed in chapter 3.

### 2.1 Aspects of primary and secondary education that have a bearing on whether adequate education is provided

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#### 2.1.1 The right to primary and secondary education

Children, young people and adults have statutory rights and obligations in connection with primary and secondary education. In relation to primary and lower secondary education, participation is both a right and an obligation. Children at primary and lower secondary schools in Norway normally start school in the year of their sixth birthday, and leave in the year they turn 16. Some adults aged 16 to 18 are also entitled to schooling at this level. The right to an upper secondary education can be broken down into young people with a right to education and adults with a right to education. The young people's right normally applies from the time they finish lower secondary school up to the age of 21. The adults' right applies from the year they turn 25. This is described in more detail in textbox A.

**Textbox A – Primary and secondary education for children and young people**

All children of primary and lower secondary school age who are likely to stay in Norway for at least three months have a statutory right to attend primary and lower secondary school (1st to 10th grade). Once they have been in Norway for three months, they then have an obligation to attend. Children normally start school in the year of their sixth birthday, and leave lower secondary school in the year they turn 16. Young people between 16 and 18 with a need for education at primary and lower secondary level are entitled to receive this, provided they do not have an entitlement to an upper secondary education. This right normally covers the subjects that the individual needs to attain a certificate of lower secondary education for adults.

Young people who have completed lower secondary school, or the equivalent, have a right, upon application, to a full-time upper secondary education. The standard length of this education is three years, but this can be extended if the curriculum so dictates. The right to a primary and lower secondary education for adults or upper secondary education for young people is only applicable to people who reside legally in Norway. Residence is considered to be legal in this context if leave to remain has been granted, or if the young person is in Norway pending a ruling on the application for a residence permit. Notwithstanding, the latter group only has a right to an upper secondary education if they are under the age of 18 and it is likely that they will stay in Norway for more than three months. Those who are in Norway pending a decision on their residence application and who turn 18 during the school year, have the right to complete the commenced school year. Where an application is rejected, the right remains applicable until the date of the final decision. Upper secondary education for adults applies to those who are legal residents, but does not include those residing in Norway legally who are awaiting a ruling on an application for a residence permit.

The county authority shall have a follow-up service for young people who have a right to education, and who are not in education or employment. The service must be available until the year of the person's 21<sup>st</sup> birthday.

Source: Extract from the Act relating to Primary and Secondary Education and Training (the Education Act) sections 2-1, 3-1, 3-6, 4A-1 and 4A-3, and the Act relating to independent schools (the Independent Schools Act) sections 3-1 and 3 -2.

Until now it has been common practice for asylum seeker children to be enrolled in the Norwegian education system relatively quickly after relocating from the temporary transit centres to ordinary reception and care centres.<sup>12</sup>

We are aware, however, that the increase in the number of children and young people applying for asylum in Norway has led to longer waiting times for enrolment into primary and lower secondary schools in line with statutory rights. This has been highlighted in a number of media reports. An article in the newspaper *VG* in November 2015 reported that at least 2 372 asylum children living in Norwegian reception centres do not attend school.<sup>13</sup> Another example is a newspaper article in *Bergens Tidene* from February 2016, which reports that 680 asylum children

<sup>12</sup> Valenta, M. (2015)/Lidèn, H. et.al. (2011) / Sletten, M. Aa. and A. I. Engebrigtsen (2011)

<sup>13</sup> See newspaper article: <http://www.vg.no/nyheter/innenriks/flyktningkrisen-i-europa/over-2000-asylbarn-faar-ikke-skolegang/a/23567778/>

with a right to primary and lower secondary schooling have not been offered a place.<sup>14</sup> The figures are taken from a survey the UDI has sent to all municipalities in Norway. UDI believes, however, that the real figures are higher.<sup>15</sup>

The strain on the asylum reception system may well be the reason why many refugee minors are not being entered into primary and lower secondary schools. School enrolment has traditionally taken place when the children are moved to an ordinary reception centre following a short stay in a temporary transit centre. However, as the ordinary reception centres have been full and the number of places is only being increased slowly, there is now a longer wait to transfer to an ordinary reception centre. This presents a dilemma in terms of the degree to which it will be sensible to integrate the children into the community when most of them will be moved before too long.<sup>16</sup> The aforementioned case in *Bergens tidene* also shows that another reason for asylum children not attending school is the municipalities' lack of awareness of the children's right to education pursuant to the Education Act.

There is little information or documentation in relation to how well refugee minors' right to upper secondary education is safeguarded. However, admission to upper secondary school differs somewhat from enrolment in primary and lower secondary school.<sup>17</sup> First, we know that many of those who come to Norway aged 16–18 do not have a lower secondary education or the equivalent, or have no documentation of such education. As such, they do not qualify for admission to upper secondary school, and instead many take primary and lower secondary education for adults (ref. textbox A). Second, many of the young people who start upper secondary school do not have sufficient language skills and/or subject qualifications to undertake the education. Finally, we should mention that young people whose residence application is rejected lose the right to an upper secondary education. One challenge in this context is that the period between receiving the rejection and leaving the country can span several years, as highlighted in a newspaper article in *Dagsavisen* on 1 March 2016.<sup>18</sup>

### 2.1.2 The right to extra language instruction

The challenges entailed in giving asylum children an adequate education are more complex than simply complying with their right to primary and secondary education. As described in textbox B, refugee minors have a right to adapted Norwegian language instruction, and where appropriate, mother tongue instruction and/or bilingual subject teaching “*until they are sufficiently proficient*

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<sup>14</sup> See newspaper article: <http://www.bt.no/nyheter/lokalt/Mange-asylbarn-har-ikke-fatt-undervisningen-de-har-krav-pa-3543630.html>

<sup>15</sup> A total of 170 municipalities have asylum children of primary and lower secondary school age. Only 114 responded to the survey. In these municipalities there are around 800 children who were not accounted for in the survey.

<sup>16</sup> Deloitte (2014)

<sup>17</sup> Rambøll (2016)/Rambøll (2013 b)/Sletten, M. Aa. and A. I. Engebrigtsen (2011)

<sup>18</sup> <http://www.dagsavisen.no/nyemeninger/ikke-til-stede-1.691523>

*in Norwegian to follow the normal instruction of the school*".<sup>19</sup> The education can be said to be inadequate where such language instruction is not given.

**Textbox B – Adapted language instruction in primary and secondary education\***

Pupils in primary and secondary education with a mother tongue other than Norwegian or Sami are entitled to adapted Norwegian language instruction until they are sufficiently proficient in Norwegian to follow the normal instruction of the school. If necessary, such pupils are also entitled to mother tongue instruction, bilingual subject teaching, or both. In cases where a school does not have qualified teaching staff for mother tongue instruction or bilingual subject teaching, the school owner shall as far as possible facilitate other instruction that is adapted to the students' aptitudes. For pupils who have recently arrived, the municipality may organise special educational facilities in separate groups, classes or schools. If all of the education is to take place in such a group, class or school, this must be stipulated in the decision to provide adapted language instruction. Education in a specially organised facility may last for up to two years. A decision can only be made for one year at a time.

Source: Extract from the Act relating to Primary and Secondary Education and Training (the Education Act) sections 2-8 and 3-12, and the Act relating to independent schools (the Independent Schools Act) sections 3-1 and 3-5.

Giving children adequate Norwegian language instruction is seen as an important instrument for facilitating other learning, and research shows that minority pupils' poor language skills are one of the main reasons why this group of pupils has lower school grades than other groups.<sup>20</sup> Language is also important for integration into different social arenas, including continued education and employment. Moreover, providing mother tongue instruction can have a large bearing on a person's situation when they return to their homeland, where it is not uncommon for children to have problems integrating at school due to poor skills in their mother tongue.

Studies show that the local and county authorities are struggling to provide language instruction that enables pupils to follow the mainstream lessons and to acquire knowledge in line with the curricula.<sup>21</sup> Several reports further stress that inadequate mother tongue instruction and bilingual subject teaching are a universal challenge in schools.<sup>22</sup>

The inadequate language teaching is due to several factors.<sup>23</sup> First, there is uncertainty as to how to interpret "sufficiently proficient in Norwegian" as stipulated in the Education Act, leading to differing practices in terms of who receives instruction and when the pupils are transferred to

<sup>19</sup> The Education Act sections 2-8 and 3-12

<sup>20</sup> Valenta, M. (2008)

<sup>21</sup> Sletten, M. Aa. and A. I. Engebrigtsen (2011)

<sup>22</sup> Bachmann, K. et.al. (2015)/Sletten, M. Aa. and A. I. Engebrigtsen (2011)/NOU 2010: 7

<sup>23</sup> Bachmann, K. et.al. (2015)/Valenta, M. (2008)

mainstream lessons.<sup>24</sup> Second, there are no national standards for how the teaching of new pupils should be organised, but we also know that good routines have been established in order to give new arrivals adapted language instruction.<sup>25</sup> A third point is that there are challenges in relation to recording pupils' mother tongue proficiency levels in a way that enables them to receive the mother tongue instruction they need. Another factor is that the language teaching is dependent on access to teaching resources with the relevant language skills. Smaller municipalities in particular have a poorer range of classes in mother tongue and adapted Norwegian language instruction due to their limited access to resources.<sup>26</sup> Finally, it may be the case that resources for language instruction are not prioritised for pupils who are likely to be moved within a relatively short time.

It should also be mentioned here that pupils who do not have or cannot achieve a satisfactory learning outcome from the ordinary education offering also have a statutory right to special education.<sup>27</sup> The goal is for these pupils to achieve a proper learning outcome that is comparable with other pupils and in accordance with educational objectives that are realistic for the individual pupil. Pupils receiving special education should have the same number of lessons in total as the other pupils. A study conducted by Rambøll (2013 b) shows that there is no clear picture to suggest that asylum children have a greater need for special education than other groups.<sup>28</sup>

### 2.1.3 The right to socio-educational counselling and a good school environment

Pursuant to the Education Act and its associated regulations, schools are responsible for their own psychosocial environment, and for providing assistance to pupils with social difficulties. This is discussed in more detail in textbox C.

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<sup>24</sup> Rambøll (2016)

<sup>25</sup> Rambøll (2016)

<sup>26</sup> Bachmann, K. et.al. (2015)/Sletten, M. Aa. and A. I. Engebriksen (2011)/NOU 2010: 7

<sup>27</sup> Ref. the Education Act section 5-1 and the Independent Schools Act section 3-6.

<sup>28</sup> Rambøll (2013)

**Textbox C*****The psychosocial environment at school***

The school shall make active and systematic efforts to promote a good psychosocial environment for pupils. This also means that the school has a responsibility to intervene if it becomes aware that a pupil is being subjected to offensive language or acts such as bullying, discrimination, violence or racism.

Source: Act relating to Primary and Secondary Education and Training (the Education Act) section 9a-3

***Socio-educational counselling***

All pupils are entitled to the necessary counselling on social issues. The goal is for individual pupils to feel comfortable with the education and to help the pupil with personal, social and emotional problems that may affect their learning and their social relationships at school.

Source: Extract from the Regulations on Primary and Secondary Education and Training section 22-2 and the Act relating to Independent Schools (the Independent Schools Act) section 3-6

Many of the refugee minors who come to Norway have psychological and social challenges.<sup>29</sup>

Several studies show that children living in asylum centres do not feel included at school and are not comfortable with attending separate classes.<sup>30</sup> They also feel poor and have poorer living conditions than other children and young people in Norway. Behavioural problems and separation anxiety are also common.

Asylum seekers and refugees are also highly likely to develop mental health problems.<sup>31</sup> This is because many of them have been involved in wars and violence, and/or have lost their parents or other close family, and unaccompanied minors are more likely to have problems than those who arrive with family.<sup>32</sup>

#### 2.1.4 Other factors that affect an individual's learning outcome and life cycle

How well a pupil does in primary and secondary education impacts significantly on how successful they are in the job market and in other social arenas. How well they fare at school and later in life is also related to factors beyond their scholarly achievements,<sup>33</sup> and these factors are taken into account in the calculation of the socio-economic costs of an inadequate education.

<sup>29</sup> Sletten, M. Aa. and A. I. Engebrigtsen (2011)

<sup>30</sup> Valenta, M. (2008)

<sup>31</sup> Lauritzen and Sivertsen (2012)

<sup>32</sup> Jensen, T. K. et.al. (2015)

<sup>33</sup> Rambøll (2016)/Grøgaard, J. B. et.al. (2008)

The variable that best explains an individual's degree of success as they continue their education and progress to employment, is the marks from 10th grade.<sup>34</sup> The marks they achieve are, however, closely linked to socio-economic background variables.<sup>35</sup> The disparity in scholastic attainments largely disappears when we control for social background. Socio-economic factors are nonetheless relevant in this context, since the proportion of parents with a low level of education and income is greater among children and young people who have come to Norway as asylum seekers or refugees than among pupils of Norwegian origin.

Country background also has a bearing on how the refugee minors fare in Norwegian primary and secondary education.<sup>36</sup> First, the parents' level of education and socio-economic background has a correlation with their country of origin.<sup>37</sup> In the same way, the level of education that children and young people have when they come to Norway will also be related to where they come from. There is reason to assume that those with previous schooling are better equipped to cope in Norwegian schools than those without previous schooling. It is often difficult to document earlier education and training for people who arrive as asylum seekers and refugees, and one such example is the recent Syrian migrants to Norway.<sup>38</sup> There is still much to suggest that the level of education in Syria was relatively high before the outbreak of war in 2011, which implies that this group may be better equipped to cope in various social arenas in Norway than the many other groups of asylum seekers and refugees.

Gender is a factor in how well an individual does at school, with girls performing better than boys on average.<sup>39</sup> Far more males than females apply for residence in Norway, also among unaccompanied asylum seeker minors.<sup>40</sup>

Unaccompanied minors generally perform poorer in school than accompanied children, partly due to language factors. Most unaccompanied asylum seeker minors who come to Norway are over the age of 15, and on average are older than children who come with their parents. The older a child is upon arrival in Norway the more difficult it is for them to learn Norwegian, and the longer they have been in Norway and the more Norwegian they know, the greater their chances of integrating well into society.

Another explanation for unaccompanied minors' poorer school performance may be the lack of contact with parents; something that impacts all children and young people, regardless of the

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<sup>34</sup> Markusen, E. (2014)/Støren et.al. (2007)/Markusen, E. (2006)

<sup>35</sup> Bakken, A. (2009)/Hegna, K. (2013)/Markussen, E. (2014)

<sup>36</sup> Støren, L. A. and H. Helland (2009)

<sup>37</sup> <https://www.ssb.no/utdanning/artikler-og-publikasjoner/store-forskjeller-i-innvandrerens-utdanningsnivaa>

<sup>38</sup> NOKUT (2015)/Søholt, S. et.al. (2015)/<https://www.ssb.no/utdanning/artikler-og-publikasjoner/store-forskjeller-i-innvandrerens-utdanningsnivaa>

<sup>39</sup> Markussen, E. (2014)/Hovdhaugen, E. et.al. (2014)

<sup>40</sup> <https://www.udi.no/statistikk-og-analyse/statistikk/asylsoknader-etter-statsborgerskap-aldersgruppe-og-kjonn/> and UDI (2015)

pupil group.<sup>41</sup> A study examining asylum seeker minors' participation in the Swedish labour market, however, shows that unaccompanied minors do not necessarily have the poorest performance in all contexts. The study shows that unaccompanied minors, and particularly girls, are more likely to get a job than accompanied children.<sup>42</sup> The study presents four explanations. First, it observes that the unaccompanied minors are a select group of particularly independent individuals. Second, a foster family can be more proactive in encouraging integration than biological parents. Third, accompanied children can miss out on education and employment when family responsibilities take their place, and finally, unaccompanied minors tend to be under greater financial pressure as they have no one to support them financially.

Finally, it should be noted that several studies show that pupils' motivation has a bearing on their performance at school, and many minority pupils appear to be particularly motivated to learn.<sup>43</sup> The motivation of this pupil group is partly due to the fact that the parents also have a strong desire for their children to do well in school, and we often see greater upward social mobility in minority children, who break down social barriers through education to a greater degree than majority children. The strong motivation among minority pupils reduces the relative impact of socio-economic variables.

The variables that we have discussed here affect participation in education and employment later in life. Another factor that may have great significance for the group's attachment to the labour market is discrimination. This refers to the discrimination of children and young people who come to Norway as asylum seekers and refugees because of their skin colour, country of origin, language, religion, etc. – even when they have adequate primary and secondary education and training, and irrespective of their language skills.<sup>44</sup> Discrimination may not necessarily result in unemployment, but may mean that the discriminated group end up in jobs they are overqualified for.<sup>45</sup>

## 2.2 Inadequate primary and secondary education can have major consequences for the individual and society

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The education authorities and education sector in general have a huge social responsibility to ensure that children and young people receive the primary and secondary education they are entitled to. The responsibility is great in the sense that training and education are about so much more than the actual knowledge imparted in the classroom.

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<sup>41</sup> Markussen, E. (2014)

<sup>42</sup> Celikaksoy, A. and E. Wadensjö (2015)

<sup>43</sup> Rambøll (2016)/Støren, L. A. et.al. (2007)

<sup>44</sup> Midtbøen, A. and J. Rogstad (2014)/Støren, L. A. et.al. (2007)/Støren, L. A. (2004)

<sup>45</sup> Villund, O. (2014)

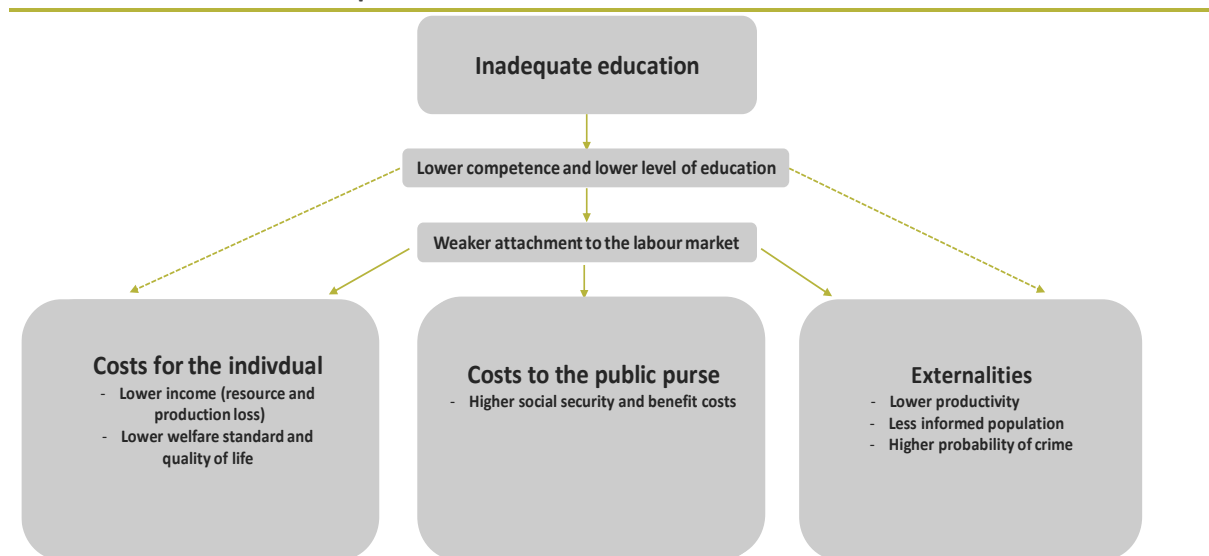


Attaining a good education is a key requirement for integration into society in many different arenas, such as continued education, employment and society in general.<sup>46</sup> The positive effects of being able to participate in these areas are many, and correspondingly, non-participation has numerous negative effects.

The potential consequences of inadequate primary and secondary education are illustrated in figure 2-1. The main mechanism of the model is that an inadequate education affects an individual's level of competence in a way that makes participation in continued education and employment less likely. Furthermore, non-participation in the labour market may result in costs for the individual, costs to the public purse and what we might call externalities.

We will provide further details of the consequences of inadequate education in section 3.2, where we also calculate the socio-economic costs of an inadequate education.

**Figure 2-1**  
**Main mechanisms of inadequate education**



Source: Economic Analysis Norway

<sup>46</sup> Report to the Storting no. 16 (2015-2016)/NOU 2016: 3/Markussen, E. (2014)/Frøseth, M. W. and N. Vibe (2014)

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## 3. Socio-economic analysis

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In Section 2.2, we discussed the various consequences of refugee minors in Norway receiving an inadequate education. In this chapter we calculate the socio-economic costs of these consequences. Where it is not possible to quantify costs, they are discussed qualitatively using the plus-minus method.<sup>47</sup>

Section 3.1 starts with a description of the procedure and methods used in the calculations. Section 3.2 then assesses each cost component. The various components are then added up to calculate the average total cost of giving a refugee minor an inadequate education. This cost is then compared with the average cost of giving refugee minors an adequate education. Finally, a sensitivity analysis is conducted that shows the calculations' sensitivity to changes in the assumptions applied for unknown quantities. In section 3.3, we conclude with a sample calculation of the total costs of asylum seekers who came to Norway in 2015 being given an inadequate education.

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### 3.1 Procedure and method

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A socio-economic analysis is a well-established methodology for evaluating the effect of public investment projects, but is also suitable for analysing the costs of various phenomena in society. The method is a systematic procedure for identifying and comparing all relevant effects of social change.

A socio-economic analysis entails a comparison of the combined effects of a specific social change – at the individual level, for the government and for third parties. This is a comprehensive exercise and it will be necessary to make certain simplifications in order to quantify the various consequences for society. We use estimated prices to quantify the various consequences, and it is generally an objective to put a monetary value on as many of the effects as possible. In cases where it is difficult to quantify the effects, we will use the plus-minus method to assess their magnitude. See textbox D on the next page for a more detailed discussion of monetised and non-monetised effects.

In order to provide a basis for the analysis we need to identify the potential consequences of inadequate education to society. As we have explained in section 2.2 and figure 2-1, inadequate education affects society through a variety of channels and in various ways. It affects an individual's income, health and quality of life – both directly and through a reduced probability of participation in continued education, employment and society in general. Meanwhile, there are negative externalities linked to inadequate education per se, and to non-participation in the

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<sup>47</sup> DFØ (2014) recommends the plus-minus method in order to assess the effects qualitatively. See textbox D for further details.

labour market. In addition, inadequate participation in the labour market leads to costs to the public purse in the form of social security and benefit payments as well as lower tax revenues.

**Textbox D – Monetised and non-monetised effects**

The main principle for valuing the effects is to set the cost impact as equal to the value of these resources in their best alternative application. Estimated prices are used to quantify the effects. In line with the Norwegian Government Agency for Financial Management's (DFØ) guide for socio-economic analyses (2014) and the Ministry of Finance's circular R-109/14: Principles and requirements for the preparation of a socio-economic analysis etc., we have made the following assumptions about the discount rate, analysis period and fiscal costs:

- An analysis period corresponding to the number of working years, i.e. from 15-74 years.
- Discount rate of 4 per cent in the analysis period.
- Fiscal costs at 20 per cent.

In a socio-economic analysis a distinction is made between public budgets and social economics. Social security and other benefit payments are not social economic costs, but transfers of resources from the taxpayers to those who are not in work. The financing of these transfers through taxes and duties, however, entails a fiscal cost. The cost arises from the wedge that taxes and duties put between the prices faced by consumers and producers. The cost therefore contributes to a shift in resource use, giving a loss of efficiency. It is this loss of production that is the socio-economic cost associated with social security payments and benefits.

Furthermore, we have assumed a real price adjustment factor of 1.4 per cent, equivalent to the expected growth in real disposable income (Report to the Storting no. 12 (2012-2013), p. 44).

The measures may also have effects that cannot be valued in money (non-monetised effects). This could relate to changes in quality, safety, privacy, working environment etc. These will, however, be identified and discussed in a way that provides a good basis for assessing how they will affect the socio-economic profitability. This can be done by qualitatively assessing the value of the non-monetised effects through the so-called plus-minus method. Three important notions in this method are significance, scope and consequence. First, the significance of the area affected by the measure for groups of society and for society as a whole is assessed. Thereafter, an assessment is made of the extent to which the various measures affect this area compared with the zero alternative (scope). Based on the assessments of significance and scope, an impact matrix is drawn up where the consequences of the measure are derived relative to the zero option. The table below shows an impact matrix for non-monetised effects.

**Impact matrix for non-monetised effects**

Scope \ Significance	Significance		
	Minor	Moderate	Major
Mostly positive	+ / ++	++ / +++	+++ / ++++
Moderately positive	0 / +	++	++ / +++
Slightly positive	0	0 / +	+ / ++
None	o	o	o
Slightly negative	o	o / -	- / - -
Moderately negative	o / -	- -	- - / - - -
Mostly negative	- / - -	- - / - - -	- - - / - - - -

### 3.1.1 Four generalised life cycles

The calculation of the socio-economic costs of an inadequate education must be viewed in the context of how inadequate education is defined. We have defined the education as inadequate if it does not give asylum seeker and refugee minors the same competence-related opportunities as Norwegian children and young people after completing their primary and secondary education, ref. section 2.1.

There will be many different outcomes in terms of participation in continued education and labour market attachment after completing secondary school. Different outcomes entail different socio-economic costs. For the purposes of analysis, it is therefore appropriate to distinguish between the occupational careers of those who receive adequate education and those who do not.

First, a distinction must be made between the refugee minors who receive an inadequate education and those who receive an adequate education, and these groups can be further divided into two (illustrated in figures 3-2 and 3-5). The group receiving an adequate education can be broken down into those whose eventual working life is on a par with Norwegians, and those whose working life is not on a par with Norwegians due to discrimination and such like. The latter group will either be overqualified for the job they end up in, or will have a greater propensity for non-participation in the labour market than Norwegians. Furthermore, the group receiving inadequate education are divided into those who are working – despite their inadequate education, and those who do not participate in the labour market. Thus, the refugee minors can end up in one of the following four categories after completing secondary school:

- A. Adequate education and appropriate employment for the level of education attained
- B. Adequate education, but overqualified for their job
- C. Inadequate education, but appropriate employment for the level of competence attained
- D. Inadequate education and not in employment

Throughout a life cycle, many people will switch between different categories. However, we want to look at the average socio-economic costs of an individual falling into one of the four categories. The average can be considered “types of individuals” whose pathway throughout life fits into only one category. We have therefore calculated the socio-economic costs associated with the life cycle of different types of individuals, where outcomes show whether the children have attained an adequate education and have adapted to the labour market and society. Such an analysis is a simplification of the reality for actual individuals, but nevertheless a valuable method for elucidating the average socio-economic costs associated with different outcomes of inadequate education.

### Group A: Adequate education and appropriate employment and labour market attachment for the level of education attained

Individuals in this group complete their primary and secondary education on a par with pupils with a Norwegian background, and will take continued education and participate in the labour market on a par with the average population of Norwegians. Individuals in this group achieved the same level of education as the average population of Norwegians. After completing their education, the individuals in this group who participate in the labour market find a job that is appropriate for their level of education, and with a wage and productivity level on a par with the average population of Norwegians. Moreover, these individuals have the same probability of ending up unemployed as those with a Norwegian background, either as a result of illness, an accident or by choice.

### Group B: Adequate education, but overqualified for their job

Individuals in this group also complete their primary and secondary education, and eventually attain the same level of education as the average population of Norwegians. These people have good qualifications, but unlike group A, individuals in group B are either more likely to be in a job they are overqualified for than the average person of Norwegian origin, or they are less likely to participate in the labour market than the average Norwegian. In other words, notwithstanding the same reasons that make some people with a Norwegian background overqualified for their job, individuals in this group experience discrimination in the labour market. Furthermore, as described in 2.1.4, the “baggage” that these individuals brought with them from their homeland increased the likelihood of ending up unemployed, despite having an adequate education.

### Group C: Inadequate education, but appropriate employment for the level of competence attained

Individuals in this group have received an inadequate education. This may be due to inadequate adaptation and facilitation, such as little or no mother tongue instruction and/or bilingual subject teaching. The inadequate education results in this group achieving a lower competence level than the average Norwegian. The individuals in this group are, nonetheless, qualified to work, but if they find work they end up in an industry or occupation with lower productivity and income than average. The individuals in this group differ therefore from those in Group B in that their education is inadequate and their income level is lower due to the fact that they work in industries and occupations with lower productivity. However, their jobs are appropriate for their competence level.

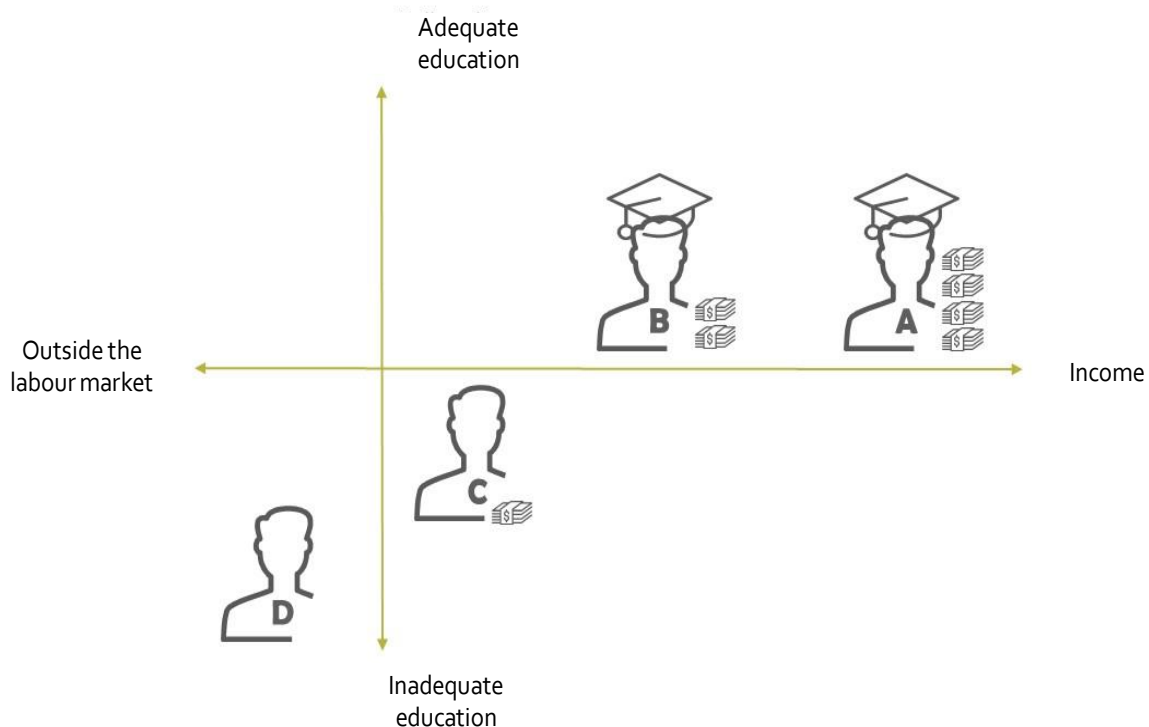
### Group D: Inadequate education and not in employment

This group has received an inadequate education that has hindered them from continuing their education and taking part in the labour market. This can be due to many of the same reasons as for the individuals in group C, such as lack of adaptation and facilitation, e.g. little or no mother tongue instruction, adapted Norwegian language instruction and/or bilingual subject teaching. This group ends up outside the labour market and remains inactive throughout their life. Income

mainly consists of transfers of social security and benefit payments. Group D thus differs from Group C in that the degree of inadequate education is more serious, and that the individuals in this group fall outside the labour market and end up as recipients of social security and benefit payments.

The characteristics of the four groups are summarised in Figure 3-1, where the groups' outcomes are placed in an income and education axis.

**Figure 3-1**  
**Outcomes for the four groups**



Source: Economic Analysis Norway

### 3.1.2 Breakdown of different life cycles

We have now defined four generalised outcomes for the refugee minors who come to Norway. The socio-economic costs of refugee minors receiving an inadequate education will be based on the life cycles of the types of individuals in categories C and D. These individuals are measured against a zero alternative, which describes what the individuals in C and D could have achieved if they had received an adequate education. The zero option is an average outcome for the types of individuals that receive an adequate education, i.e. a combination of the outcomes in groups A and B. The zero option is further described in section 3.2.1.

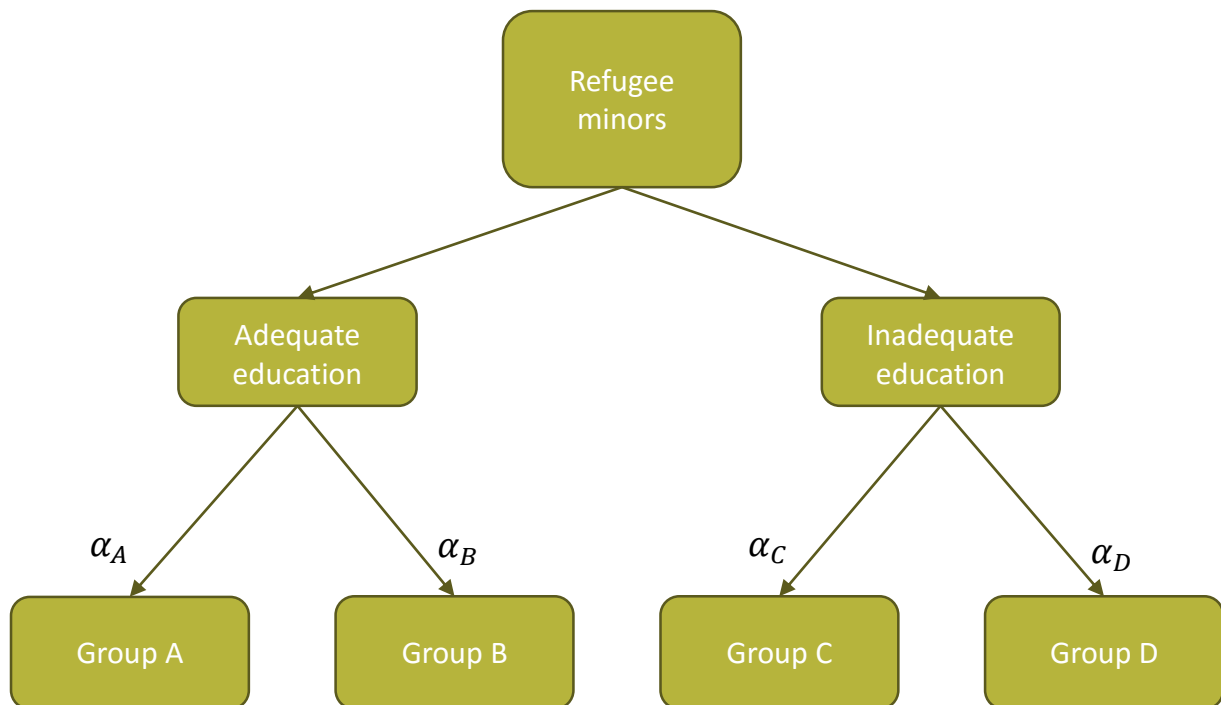
Before we can calculate the socio-economic costs of refugee minors receiving an inadequate education we need to break down the different outcomes. More precisely, we need to identify

the *conditional* probabilities of the different outcomes in the labour market, given the education attained:

- Given that a refugee minor receives an *adequate education*, what is the probability that the individual ends up in group A ( $\alpha_A$ ) and what is the probability that the individual ends up in group B ( $\alpha_B$ )?
- Given that a refugee minor receives an *inadequate education*, what is the probability that the individual ends up in group C ( $\alpha_C$ ) and what is the probability that the individual ends up in group D ( $\alpha_D$ )?

This entails quantifying the conditional probabilities  $\alpha_A$ ,  $\alpha_B$ ,  $\alpha_C$  and  $\alpha_D$  as presented in figure 3-2. Quantifying these proportions is complicated, and with a limited data base we are forced to make a number of discretionary assumptions.

**Figure 3-2**  
Breakdown of refugee minors into different outcomes



Source: Economic Analysis Norway

#### Adequate education and outcome in the labour market

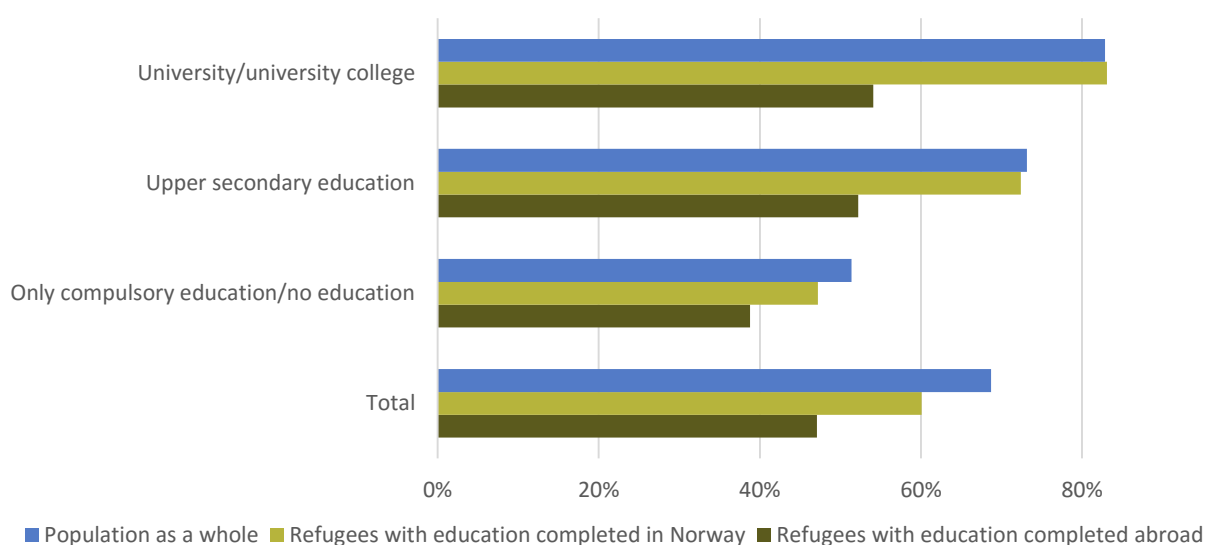
Given that a refugee minor receives an adequate education, what is the probability that this person will participate in the labour market on equal terms with those with a Norwegian background?



In order to determine labour force participation for a given education, we use an overview from Statistics Norway that charts refugees in the labour market.<sup>48</sup> Figure 3-3 shows the statistical breakdown of employment among refugees and the population as a whole by highest level of completed education. The figure also distinguishes between education that refugees have taken abroad and in Norway. We see that the employment rate among refugees is lower than for the population as a whole for all levels of education when the education is taken abroad. However, if we look at the education taken in Norway, the disparities in education level between refugees and the population as a whole are smaller, and in fact, the employment rate is marginally higher among refugees who have completed their higher education in Norway. For upper secondary education, the employment rate for refugees is barely one percentage point lower than for the population as a whole. For those who are registered with only a compulsory education or no education, the employment rate disparities are greater.

**Figure 3-3**

**Proportion in employment by highest level of education completed. Education completed in Norway and abroad. Refugees and the population as a whole. As of 4th quarter 2012.**



Source: Olsen (2014)

As discussed in section 2.1, previous studies show that immigrants with good qualifications experience discrimination in the labour market. Midtbøen and Rogstad (2012) conducted a field experiment in which 1 800 pairs of fictitious job applications were sent in response to actual vacancy announcements, with the only difference being the applicant's name. The results show that the likelihood of being called for an interview is reduced by about 25 per cent for applicants with foreign-sounding names. This barrier for job seekers from minority groups can result in a lower labour force participation rate and the overqualification of these individuals in the labour market.

<sup>48</sup> Olsen (2014)

Villund (2014) analyses the degree of overqualification among immigrants with a higher education. While 11 per cent of the population of Norwegian origin work in a job where they are overqualified, the corresponding figure for people from countries in group 3<sup>49</sup> is 43 per cent. It is important to emphasise that there are several factors in addition to discrimination that can lead to more immigrants being overqualified than those with a Norwegian background. For example, the transfer value of certain foreign degrees, such as law, will be small. This is also evident from figure 3-3, where the disparities in labour force participation between refugees and the population as a whole disappeared after controlling for whether the education is taken in Norway or not. However, this can be controlled for by only looking at immigrants who were under 16 when they arrived in Norway, as these have not had the opportunity to take a higher education abroad. This group is also more representative of the refugee minors. The proportion of overqualified people among those with a higher education from country group 3 falls to 20 per cent when we only look at this group.

In Villund's analysis, overqualification is defined as higher education (one year or more) in occupations that do not require higher education. Individuals whose highest level of completed education is upper secondary can also be overqualified in the labour market. This particularly applies to pupils who take vocational courses and end up in occupations that do not require a trade certificate. We have assumed that the probability of overqualification is the same for these individuals.

*Thus, we assume the following: Given that a refugee minor receives an adequate education, the probability of the individual ending up in a job for which he or she is overqualified, i.e. group B, is **20 per cent**. The conditional probability of ending up in group A is therefore **80 per cent**.*

#### Inadequate education and outcome in the labour market

Given that a refugee minor receives an inadequate education, what is the probability of this person being active in the labour market?

Wiggen (2014) has analysed the level of activity of those who came to Norway as unaccompanied refugee minors in the period 1996-2011, and who are now in the age group 18-29.<sup>50</sup> These are also compared with other refugee minors, i.e. those who have come to Norway with their parents, or who already had a parent in Norway. Figure 3-4 presents some of the results from this study. The figure shows the activity status for those who came to Norway unaccompanied as well as minors who were accompanied by a parent, broken down according to whether they have been resident in Norway for 0-3, 4-7 or over 7 years respectively. If we consider unaccompanied minors with a minimum residence period of seven years, we see that the proportion that on the reference date was unemployed, in receipt of social security or benefit payments, or had an unknown activity

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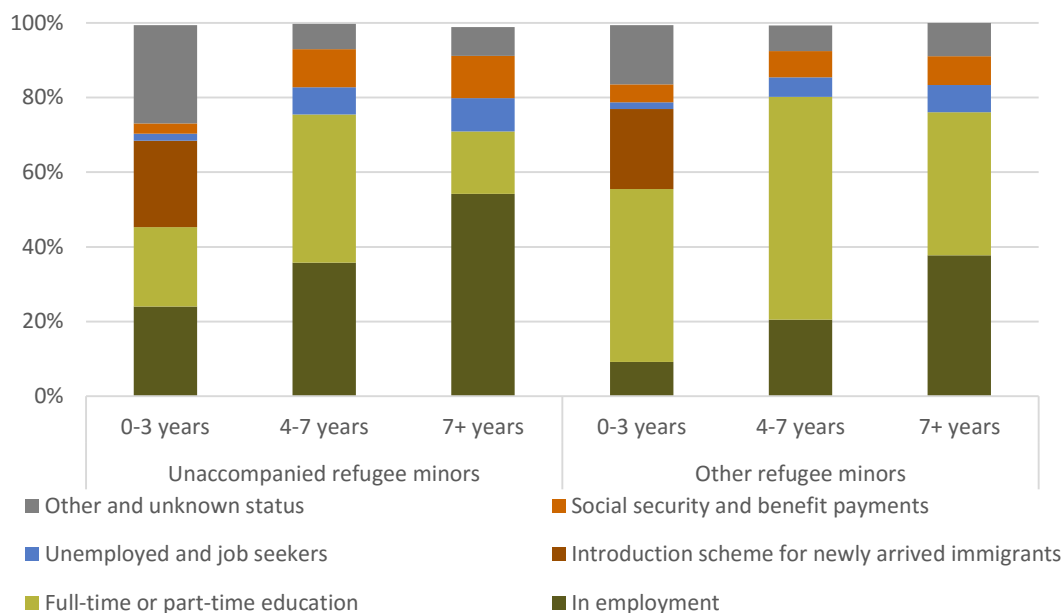
<sup>49</sup> Country group 3 is made up of countries in Africa, Asia, Europe excluding the EU, Latin America and Oceania excluding Australia and New Zealand.

<sup>50</sup> "Unaccompanied refugee minors" are defined in Wiggen (2014) as unaccompanied asylum seeker minors who have applied for asylum, been granted a residence permit and subsequently settled in Norway on this basis.

status amounts to 28 per cent. For other refugee minors with the same period of residence, the corresponding share is 24 per cent. It is, however, difficult to apply these figures directly, as they do not control for the individuals' level of education.

**Figure 3-4**

**Activity status for refugee minors, by length of residence in Norway. 18-29 years as of 1 January 2012**



Source: Wiggen (2014)

We know, however, more about the labour market status of refugees in general. Figure 3-3 shows that the proportion of refugees who were employed, given that they have no education or only a compulsory education – i.e. primary and lower secondary – is 47 or 39 per cent, depending on whether any compulsory schooling was taken in Norway or abroad. As discussed earlier, the challenge of selecting this group as a reference point is that it includes all refugees, not just minors. By using the employment rate among those who have taken any compulsory schooling in Norway as a basis, however, we will obtain a clearer picture of those who arrived as minors. We also therefore choose to use the employment rate among those who have taken an upper secondary education in Norway, as this will apply to the refugee minors.

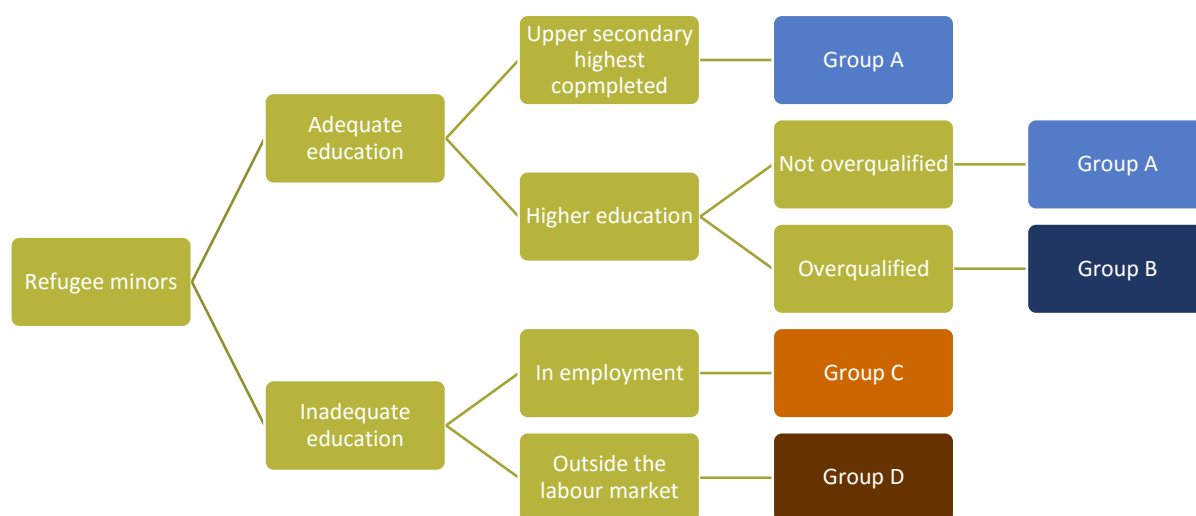
We assume here that the probability of finding employment is 50 per cent for a refugee minor with an inadequate education at primary and lower secondary level. However, this is not consistent with the probability of ending up in group C, given an adequate education, as we need to control for the fact that individuals in group C can also fall outside the labour market.

*Thus, we assume that the probability of a refugee minor ending up in group C is **70 per cent**, given that he or she receives an inadequate education at primary and lower secondary level. The conditional probability of ending up in group D is thus **30 per cent**.*

It must be noted that the group of refugees whose highest level of completed education is upper secondary can include individuals who have received an inadequate education, given that our definition of inadequate education at primary and lower secondary level is closely related to actual competence. There is nothing in our definition that precludes refugees who completed upper secondary school from having poorer competence-related abilities than those with a Norwegian background. If we consider that some of this group have an inadequate education according to our definition, this can pull up the employment rate for those with an inadequate education. However, it can also be envisaged that those with an inadequate education among those with a formally completed upper secondary education are pushing the average employment rate for this group down.

As a summary and guide for the reader, we have summarised the ideas described in this chapter using the “tree” in figure 3-5. Among the refugee minors, we assume that there will be groups that receive adequate and inadequate education respectively. Given the education attained, the children are broken down into the expected outcomes in the labour market. The outcomes in the labour market are then linked to the four generalised outcomes.

**Figure 3-5**  
Summary of breakdown of different outcomes



Source: Economic Analysis Norway

## 3.2 Calculations and results

The four groups described in section 3.1.1 will generate different socio-economic outcomes. They are different in terms of educational adequacy and labour market attachment. As described in section 2.2, this will impact negatively on the quality of life enjoyed by the individuals concerned and on the productivity of society in general, it will give rise to higher social security and benefit payments and lead to potential third-party impact (externalities) for instance through criminality.

We can summarise the socio-economic costs associated with inadequate education in the following bullet points:

- Loss of resources and production associated with non-participation in the labour market
- Reduced rates of welfare and income for those who fail to gain employment, including a lower quality of life
- Fiscal costs associated with social security and benefit payments
- Negative consequences to society (externalities), including:
  - Lower rate of productivity
  - Poorer understanding of democracy
  - Higher rate of criminality
- Teaching costs in primary and secondary education

Each of these factors will be discussed in detail in this chapter. However, we will first describe the zero option in section 3.2.1, and then go on to summarise and consider the total socio-economic cost of inadequate education in section 3.2.7.

### 3.2.1 The zero option

In order to calculate the socio-economic cost of different life cycles for refugee minors, we need to describe a zero option. The zero option reflects the pathway of refugee minors who receive an adequate education (like groups A and B).

We are unable to base our case on group A alone because we need to take account of the fact that refugee minors are less likely to find work than the average person of Norwegian origin, for reasons other than inadequate education, e.g. discrimination, or the individuals' personal baggage from their home country, ref. section 3.1.2 above. These factors are accounted for in group B.

The zero option thus represents an average life cycle for an individual (refugee minor) who has received an adequate education, i.e. an average of life cycle types A and B. We then go on to calculate the socio-economic costs associated with the types of individuals we find in groups C and D compared to the zero option. We can therefore say that we calculate the cost of the difference between the achievements of individuals in groups C and D due to inadequate education, and their potential achievements had they received an adequate education.

Later on in this chapter we will explain the assumptions on which the zero option is based. This option is particularly relevant for calculating the loss of resources and production, and the effects on social security and benefit payments. Groups A and B differ from one another when it comes to the probability of employment and the expected achievable level of pay. For group A we have outlined a life cycle that involves employment with a level of pay and productivity similar to the average population of Norwegian origin. Furthermore, these individuals have the same probability of unemployment as people of Norwegian origin following, for example, ill health or an accident. For group B we have outlined a life cycle that gives individuals, despite having received an

adequate education, a lower probability of employment and a lower level of pay than individuals of Norwegian origin. This group therefore takes account of the individuals' personal baggage from their home country, which in combination with discrimination increases the probability of non-participation in the labour market.

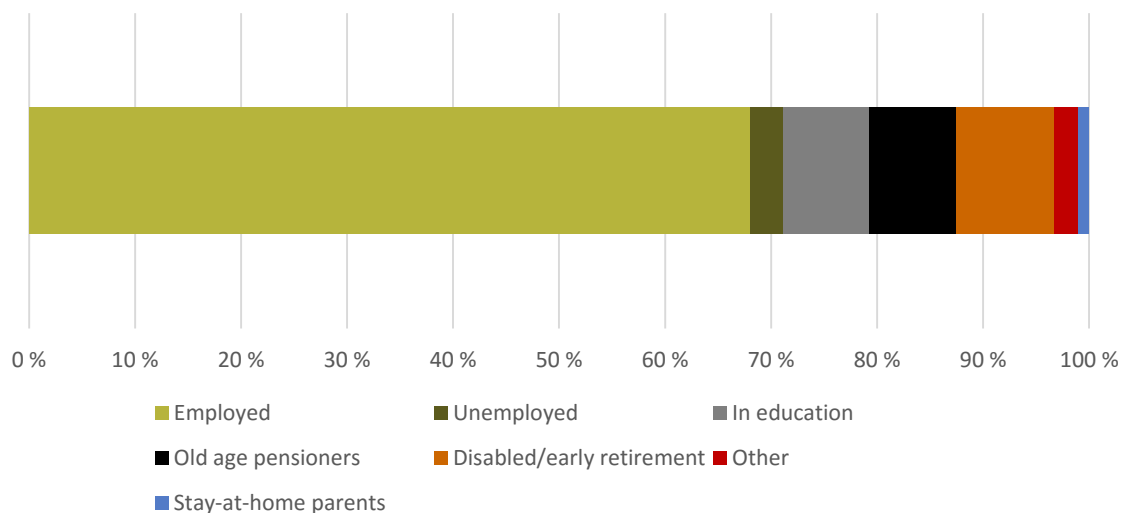
Before we go on to look at what proportion of these groups are in employment or in receipt of social security or benefit payments, we will consider how Norway's average population measures up against these parameters.

### The population's 15-74 age group

In 2015, the population's 15-74 age group comprised 3.869 million people. Most of these individuals were in work, in education or in receipt of retirement pension. In 2015, the proportion that was part of the labour force was just over 71 per cent, of which 68 per cent were in employment, three per cent were unemployed, eight per cent were in education and approximately eight per cent were in receipt of retirement pension. In total, these individuals made up just over 87 per cent of the population between the ages of 15 and 74, while just over nine per cent were in receipt of various social security or benefit payments, and approximately three per cent were stay-at-home parents or otherwise assigned to the "Other" category. Figure 3-6 shows how the population is distributed among the various groups.

**Figure 3-6**

#### Labour market attachment among the population's 15-74 age group. 2015



Source: LFS (Statistics Norway)

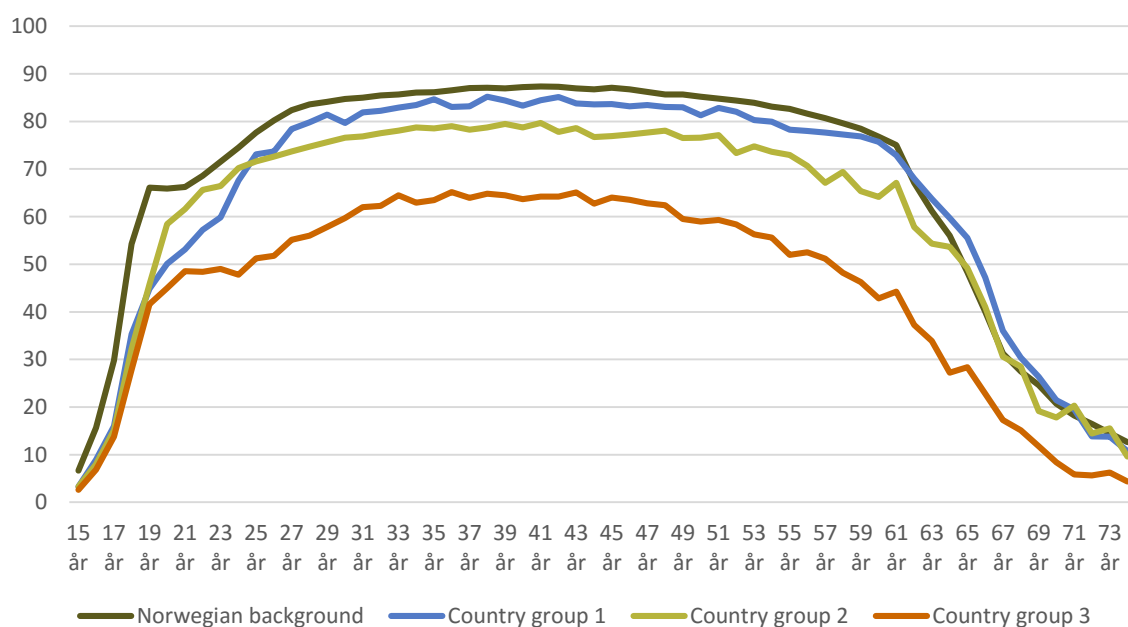
### Employment

Figure 3-7 shows one-year employment rates in the 15-74 age group by country group. It is evident that employment is highest among people of Norwegian origin, followed by country group 1 and country group 2. Among immigrants from Western Europe and North America, who have largely come to Norway to work, employment is almost at the same level as those of Norwegian origin. We find the lowest rate of employment in country group 3, which is made up of people resident

in Norway who come from countries in Africa, Asia, Europe excluding the EU, Latin America and Oceania excluding Australia and New Zealand. Many of these came as refugees, or for the purpose of family reunification, or for other humanitarian reasons, and thus carry personal baggage, which makes it more challenging to achieve a stable employment situation. As discussed in section 3.1.2, it is probable that the disparities in employment rates can be due to poor language skills, inadequate education and discrimination.

**Figure 3-7**

**One-year employment rates in the population by country group in 2014. As a percentage of the population.**



Source: Norwegian Ministry of Finance and Statistics Norway

Note: People of Norwegian origin refers to people with at least one Norwegian-born parent. Country group 1 includes Western countries (Western Europe, North America, Australia and New Zealand). Country group 2 includes EU countries in Central and Eastern Europe. Country group 3 includes countries in Asia, Africa etc.

As in accordance with our description of the four types of life cycles, we assume a rate of employment for group A that is equal to that of the population with a Norwegian origin. We also assume that this group receives an average level of pay relative to the Norwegian economy, and that the average employment cost is NOK 542 000.<sup>51</sup>

For group B we assume, on a discretionary basis, an employment rate that is five percentage points lower than for group A, and average annual employment costs of NOK 453 000, i.e. 17 per cent lower than the employment costs for group A.<sup>52</sup> The reason is our assumption that individuals will

<sup>51</sup> This reflects weighted average employment costs for the Norwegian economy in 2015. Obtained from Statistics Norway's National Accounts for 2015.

<sup>52</sup> This is based on employment costs per job-holder in low-income sectors (construction; health and care services; business services; postal and carrier services; retail and motor vehicle repair; culture, entertainment

be discriminated against, and that they will experience exclusion from the labour market due to their personal baggage, for instance because they struggle with mental and physical afflictions. The fact that their rate of pay is lower also reduces their incentive to remain in work.

By using rates of employment in our calculations we factor in the disparate nature of the members of each group. By doing so, we are able to take account of the fact that individuals in society are excluded from the labour market for shorter or longer periods of time for reasons other than inadequate education. This includes health-related factors such as disability allowance, employment incentives, sick pay and maternity/paternity leave, or other factors such as unemployment, or choosing not to participate in the labour market (stay-at-home parents). Our method also takes account of the fact that people generally work less in the early and late stages of their life, due to education or pension payments.

### Recipients of various social security and benefit payments

In 2015, approximately 20.5 per cent of the Norwegian population between the ages of 15 and 74 were either unemployed or on benefit, ref. figure 3-6. However, we do not know the distribution between different population groups or countries of origin.

Based on the disparity between the zero option's rate of employment and the average employment rate for the entire Norwegian population<sup>53</sup>, we assume for the zero option that 20.2 per cent of the population between 15 and 74 years of age receive various forms of social security and benefit payments.

Furthermore, as a basis for our calculation of the costs of various social security and benefit programmes, we have assumed an average annual payment of NOK 220 000 per zero option recipient.<sup>54</sup> This is based on the average social security transfer per recipient and converted to full-year equivalents for monthly benefit payments.

The zero option is based on our various assumptions about rates of employment, the share of the population in receipt of various allowances and benefits, employment costs and social security costs for groups A and B. The zero option is weighted by using the conditional probability of ending up in group A (80 per cent) and group B (20 per cent) respectively, as described in section 3.1.2. The zero option will hereafter be used for comparison when we calculate the socio-economic cost associated with the types of individuals in groups C and D, the costs for these groups being

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and other services; international shipping; accommodation and catering; and fishing, hunting and aquaculture) in 2015.

<sup>53</sup> In 2015, the average rate of employment in the population's 15-74 age group was 68.4 per cent, while the zero option is based on a rate of employment of 68.7 per cent. For comparison, the rate of employment for people of Norwegian origin was approximately 69.7 per cent.

<sup>54</sup> This is based on average transfers per recipient of disability benefit, work assessment allowance and social assistance. The figures have been calculated based on statistics obtained from the Norwegian Labour and Welfare Administration and Statistics Norway with details of transfers and the number of recipients of various allowances and benefits. We have based our calculations on the following rates of payment (adjusted to full-year equivalents for monthly benefits: disability benefit (NOK 240 041), work assessment allowance (NOK 225 623) and social assistance (NOK 106 403). Prices have been adjusted to the 2015 level using CPI.



calculated as the difference compared to the zero option. In the sections below we will look in further detail into the cost elements of the socio-economic analysis that we briefly described at the start of section 3.2 by way of an introduction, and as illustrated by figure 2-1.

### 3.2.2 Loss of resources and production

Inadequate education and a consequential weak labour market attachment will impact on the individuals' earning potential. Furthermore, the loss of earnings potential represents a loss of production and reduced productivity for society. In our analysis this is represented by a loss of value creation to society in that the people concerned are unemployed (group D) or that their jobs are less productive than they would have been had they received an adequate education (group C). Consequently, inadequate education leads to a socio-economic loss in that society's total production is lower than it otherwise would have been.

A vast array of international and Norwegian research literature attempts to calculate the effects of education on income. Different methods give different results, and the return on education appears to vary between countries. According to a report by the Centre for Economic Research at NTNU<sup>55</sup>, the return on 12 months' education in Norway is an average of 4-5 per cent.<sup>56</sup> However, the marginal return on education will vary with the length of education. In a study conducted by Hægeland et. al. (1999) the authors found relatively large variations in the marginal return depending on the length of education. However, they also found that the marginal wage premium per year of education peaks at 10-13 years of education and 16-18 years of education, while the marginal return is lower for people with 14 and 15 years of education. The latter group would be in the second or third year of higher education following upper secondary school. Other studies have come up with similar findings, e.g. Raaum and Aabø (2000).

Bhuller et. al (2011) conclude however that earlier Norwegian studies have over-estimated the impact of education on income. While earlier studies have looked at the effect of education on annual pay or income accrued over a few years, Bhuller et. al. (2011) examined the effect on lifetime pay. According to the report, one year's additional education gives a return of 2.5 per cent on lifetime pay.

The study carried out by the Centre for Economic Research at NTNU<sup>57</sup> calculates the socio-economic cost of dropping out of upper secondary education. The report concludes that the marginal return on completing upper secondary school is considerably greater than the average return on one year's additional education. Completing upper secondary school gives individuals a higher level of education, and also qualifies them to take up higher education. The report refers to an income gap of 12 per cent between people who complete their upper secondary education and those who drop out. The report also refers to Aakvik et. al. (2009) who found that the income

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<sup>55</sup> Falck et. al. (2009)

<sup>56</sup> The report refers to Hægeland et.al. (1999), Barth (2005) and Aakvik et. al. (2009).

<sup>57</sup> Falck et. al. (2009)

effect of a completed upper secondary education will be higher than for any other type of education, for which the income effect will be between 10 and 15 per cent.

The studies we have examined look at the return on education with respect to income for the entire population, and consequently do not distinguish between the country backgrounds of individuals. Hardoy and Schøne (2008) found that the return on one year's additional education is three times as high for native Norwegians as for non-Western immigrants educated in their native country. However, the study finds large disparities in the return on education depending on whether they received their education in their native country or in Norway. The latter group is of special relevance to our analysis. Among other things, they found that for non-Western immigrants who received their highest education in Norway, the rate of overqualification is similar to that found in the native Norwegian population<sup>58</sup>. When it comes to the return on education with respect to income, the authors calculate the effect to be 6.8 per cent per year of additional education for Norwegian natives. For non-Western immigrants who received their highest education in Norway, the calculated return is 5.5 per cent<sup>59</sup>, compared to just 2.5 per cent for non-Western immigrants educated in their native country. The findings of other studies point in the same direction.<sup>60</sup>

Most of the studies that examine the return on education with respect to income are looking at the levels of education beyond upper secondary school. There is however reason to believe that the impact is even greater if we look at the return on an adequate primary and lower secondary education. An inadequate primary and lower secondary education will potentially stop the individual from completing their upper secondary education and thus exclude them from higher education. On the other hand, the studies above suggest that the return on education is somewhat lower for non-Western immigrants compared to native Norwegians, even if they have received their education in Norway.

When calculating the productivity loss caused by inadequate education, we looked at the two life cycles in groups C and D, ref. section 3.1.1. Group C includes refugee minors who, despite inadequate education, are qualified to work, but in an industry or occupation where productivity and pay are lower than the average for the economy. For this group we assume an income gap of 15 per cent compared to the zero option. This is an uncertain assumption, which is why we will conduct a sensitivity analysis. For our high estimate we assumed a 20 per cent income gap and for our low estimate we assumed a 10 per cent income gap. Group D includes the group of refugee

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<sup>58</sup> This varies however with the level of education. There is a higher rate of overqualification among non-Western graduate immigrants than among native Norwegians. On the other hand, Hardoy and Schøne (2008) found that for non-Western immigrants who had attended either upper or lower secondary school in Norway, the overqualification rate is somewhat lower than in the native population.

<sup>59</sup> The authors point out that some of this return is a reflection on the benefit of growing up in Norway, as this group includes adopted children. They have tested this by removing people from typical adoption countries from this group, but the results remained the same.

<sup>60</sup> See also Raaum (1999) *Inntektseffekter av utdanning i Norge – en litteraturoversikt*.

minors who end up outside the labour market and thus go through their entire life cycle without earning an income.

When we calculate the production loss caused by [inadequate] education, our starting point is a life cycle perspective for the 15-74 age group. We assume that the value created by employment equals the employer's gross employment costs and a real pay increase of 1.3 per cent.<sup>61</sup> Furthermore, we utilise rates of employment in order to take account of the disparities between the individuals in each of the groups, ref. section 3.2.1. For group C we assume the same rates of employment as for the zero option.

Summary of socio-economic costs compared to the zero option (weighted average of groups A and B). In NOK 1 000.

**Table 3-1**

**Assumptions and calculations of production loss compared to the zero option (weighted average of groups A and B). Present value per individual in NOK at 2015 prices**

	Group C	Group D
<b>Production loss</b>	15% of zero option pay	100% zero option pay
<b>Production loss, NOK 1 000</b>	1 460	9 731

Source: Economic Analysis Norway

The calculations show that the socio-economic cost of a single person ending up outside the labour market is very high. We have calculated this at just over NOK 9.7 million at 2015 prices over the life cycle. This is a considerable cost to society. There are also considerable socio-economic costs associated with individuals who end up in group C and who receive inadequate education. We have calculated this cost to be close to NOK 1.5 million at 2015 prices.

### 3.2.3 The individual's loss of welfare

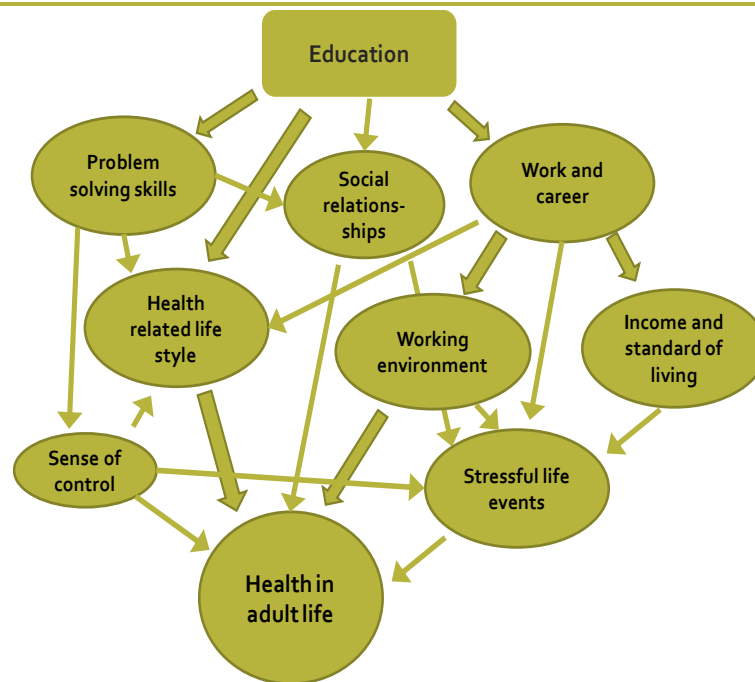
Education is important to the individual's welfare, and inadequate primary and secondary education can have a negative impact on the quality of life. Correspondingly, better education can have a number of positive effects on the individual's welfare and quality of life.

An individual's welfare and quality of life can depend on many things. Many studies suggest that highly educated people enjoy better health and a longer life than people with a low level of education. The ways in which education affects health and length of life are linked to numerous factors.<sup>62</sup> Elstad (2008) summarises the findings of various research on how education influences health, as illustrated in figure 3-8 below.

<sup>61</sup> This is in keeping with DFØ (2014) and the Perspective Report to the Storting issued by the Ministry of Finance (2013).

<sup>62</sup> Elstad (2008)/Lleras-Muney (2005)/Grossmann (2005)/Currie, J. and E. Moretti (2004)

**Figure 3-8**  
**A summary of the ways that education influences health**



Source: Elstad (2008), p. 60

Other studies examine the impact of education on health by looking at how education increases the chances of labour force participation. In this context, the importance of labour force participation can be summarised by referring to the following quote (Henriksen 2010, p. 347): *“Not only is employment valuable in itself, it also gives a higher income, greater control of one’s finances, more Norwegian friends, reduces the feeling of loneliness and improves your mental health.”* Henriksen goes on to point out that employment also provides an arena for learning Norwegian, which in turn influences the individual’s level of integration and participation in various social arenas.

However, it can be difficult to form a clear picture of the correlation between education on the one hand and welfare and quality of life on the other, and it may well be that the causality works both ways.<sup>63</sup> For example, we see that immigrants with a job have more Norwegian friends and a better command of the Norwegian language than those without a job. It may however also be the case that those who have Norwegian friends or a good command of the Norwegian language find it easier to get a job.

Given that an individual’s quality of life and welfare are influenced by a number of factors, and given that the causalities are less than clear, it is difficult to put a value to the socio-economic cost of a lower quality of life for those who receive inadequate education. We will therefore be discussing this from a qualitative point of view by employing the plus-minus method.

<sup>63</sup> Henriksen (2010)

In our socio-economic analysis, we consider inadequate education to have a **major** impact on the quality of life of the individuals concerned. However, groups C and D will be affected in different ways by inadequate education, compared to the zero option. For group C, which has an attachment to the labour market, we consider inadequate education to carry a **medium cost** to the individual, because employment in itself has a positive effect on their quality of life – while labour market participation is closely associated with gainful employment. For group D however, we consider inadequate education to carry a **high cost** to the individual, as inadequate education has led to exclusion from the labour market.

### 3.2.4 Social security and benefit payments

Inadequate education makes for a weak attachment to the labour market. This has a socio-economic cost beyond society's loss of production. Social security and benefit payments represent an increased cost to the public purse. As discussed in section 3.1, such social security costs other government benefits are not in themselves socio-economic costs, but transfers of money from the tax payer to non-participants in the labour market. However, taxes involve a loss of efficiency in the economy, so-called fiscal costs. This is a socio-economic cost linked to social security and benefit payments.

Numerous different benefit programmes form part of Norwegian society's financial safety net. Primarily, the National Insurance scheme is intended to provide a safeguard against the loss of income, through unemployment benefit, sick pay, work assessment allowance and disability benefit. In addition, local authorities must provide social assistance to ensure that everyone has sufficient funds to survive.

There is consensus in the literature that the level of education affects the probability of ending up on benefit. Fevang and Røed (2006) identify what groups in society are at greatest risk of receiving disability benefit. In their descriptive analysis the authors find considerable variation among different groups with respect to their risk of disability, and poorly educated people are more likely to receive disability benefit than people with a high level of education. For people with no education beyond the compulsory level, the probability of becoming disabled is 25 per cent, compared to seven per cent for graduates.<sup>64</sup>

Bratsberg and Røed (2011) examine the degree to which changes in the population's age and education makeup can explain the strong rise in disability benefits and other health-related social security payments since the early 1990s. By controlling for a number of characteristics among the individuals the authors found that completing upper secondary school is highly significant with respect to disability, but that education beyond upper secondary school has little or no impact.

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<sup>64</sup> The authors point out that this is not interpreted as a causal effect.

A study conducted by Statistics Norway<sup>65</sup> shows that performance levels at an early educational stage also has a considerable impact on how people fare later in life. The study shows that among the 15-year-olds who left lower secondary school with an average mark of 3 or lower, 20 per cent were in receipt of a social security benefit at the age of 24. By comparison, only 4 per cent of pupils who left lower secondary school with a mark of 4 or 5 were in receipt of benefit payments. Many of these disparities may be down to socio-economic background factors, such as the parents' level of education, but research also shows that education affects the probability of receiving disability benefit when we control for individual characteristics.

Oreopoulos and Salvanes (2009) examined how the length of education affects various outcome variables later in life. Among other things, they found that spending one year in education reduces the probability of becoming disabled by one percentage point, while the probability of receiving social assistance is reduced by 0.3 percentage points.

Falck et. al. (2009) linked the effect of dropping out of upper secondary education with the probability of receiving various benefit payments. They concluded that the effect of dropping out appears to differ depending on the benefit scheme, and they assume in their principal scenario that the probability of ending up in receipt of disability benefit increases by 3.8 per cent when dropping out of upper secondary education. With respect to work assessment allowance and social assistance, they assume an increase in probability of 3.5 per cent and 2 per cent respectively. However, the authors point out that they have not calculated the causal effects and that the probability of ending up on benefit is not only affected by dropping out of upper secondary education; there may also be other reasons. For example, they point out that poor health is the principal reason for claiming disability benefit.

The outcomes for the four groups A-D, ref. section 3.1.1, differ with respect to the degree of labour market attachment. In order to calculate the socio-economic costs of inadequate education, we compare the outcomes for groups C and D with the zero option (weighted average of groups A and B). Group C includes refugee minors who, despite inadequate education, are qualified to work. This group has the same probability of receiving various social security and benefit payments as the zero option. However, their average benefit payments will be lower. We assume that these are 15 per cent lower than in the zero option, as a consequence of this group's lower income. Group D includes refugee minors who do not participate in the labour market and who are therefore in receipt of various social security payments throughout their life. For this group, our assumption is that individuals receive benefit payments with an annual value of NOK 166 000<sup>66</sup>.

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<sup>65</sup> Presentation by Scheel (2014) at the NHO Conference (Confederation of Norwegian Enterprise).

<sup>66</sup> This equals the average amount received per recipient of social welfare payments and work assessment allowance in NOK at 2015 prices.

Only the fiscal cost of social security payments is included in the socio-economic analysis. In keeping with the guidance for socio-economic analyses<sup>67</sup>, we assume fiscal costs at 20 per cent of the government's outlay.

**Table 3-2**

**Higher government transfers compared to the zero option (weighted average of A and B). Present value per individual in NOK at 2015 prices**

	Group C	Group D
Transfers, social security and benefit payments	-109	2742
- of which fiscal costs	-22	548

Source: Economic Analysis Norway

We have calculated net social security and benefit transfers for group D at just over NOK 2.7 million in the course of a life cycle compared to the zero option. It is however only the fiscal costs that are included in the socio-economic analysis, and these amount to NOK 548 000 over the life cycle of a group D individual. For group C we assume the same probability of ending up on benefit as for the zero option. This group thus receives somewhat lower social security and benefit payments over the life cycle compared to the zero option as a consequence of an average lower level of benefit payments.

### 3.2.5 Negative consequences to society (externalities)

The effects of education go beyond a contribution to the individual's value creation and the quality of life enjoyed by the people concerned. Among other things, education contributes to socialisation and general edification, which in turn impacts on numerous aspects of society. Hægeland (2003), who analyses the micro-economic and socio-economic return on education, differentiates between three types of externalities:

- Productivity: skilled workers increase the productivity of other workers
- Criminality: participation in the labour market can reduce the probability of engaging in activities with negative externalities
- Democracy: a better educated population can help ensure that public decisions are better informed

Below is a discussion of the various factors in further detail.

#### Productivity

Education may generate productivity gains beyond the individual's productivity. Education can stimulate research and development, or help ensure that new technology is implemented faster, thereby creating economic growth to society.<sup>68</sup> If such effects of education mean that others

<sup>67</sup> The Norwegian Government Agency for Financial Management (2014)

<sup>68</sup> Among them Hanushek et. al. (2015)/OECD (2010)/Barth (2005)/Hægeland and Møen (2000)

increase their productivity, the socio-economic return may be significantly higher than the micro-economic return.

The studies referred to in section 3.2.2 look at the micro-economic return on education. The socio-economic cost is probably greater. It is however difficult to quantify these effects, and macro studies are probably better suited than micro studies to estimating the socio-economic effects of education.<sup>69</sup> Macro studies attempt to estimate the overall effect of education investments on, for example, economic growth and welfare standards in various countries.<sup>70</sup> Deconstructing the micro-economic effects and the externalities is, however, a challenge. Furthermore, it is hard to interpret the direction of causalities, from education to economic growth or vice versa.

Falck et. al. (2009), in their high estimate, add a 50 per cent mark-up to the return on education. This is based on a micro study of Norwegian data,<sup>71</sup> which calculates the socio-economic return on one year's education at approximately eight per cent in Norway. This is based on a micro-economic return of approximately five per cent. The authors also calculate the effect of the average level of education in the company on the individual's pay at 1.5 per cent, and the effect of the average level of education in the county to 2.2 per cent. Barth (2005) interprets this effect to suggest that a higher level of education within a company increases learning, hastens the implementation of new technology or helps to improve organisation, which increases the company's productivity and therefore its wage-paying capacity.

Based on Barth (2005), we assume a productivity gain beyond the micro-economic level of 3 percentage points per additional year of education. If we assume that inadequate education in groups C and D equals three fewer years in education, this gives a productivity loss of NOK 131 000 over the period of analysis<sup>72</sup>.

### A well-functioning democracy

One of the most important prerequisites for securing a well-functioning democracy is an informed and politically active population, and a highly educated population will be able to ensure that *"better democratic decisions are made at system level, in decision-making bodies, and as they are implemented."* (Barth 2005).

The mechanism behind the impact of education on democracy is that a higher level of education can increase the individual's inclination to be politically active and to follow or take part in public debate and society's decision-making processes.<sup>73</sup> Furthermore, it is envisaged that the greater the proportion of a population with higher education, the more people will learn to think critically

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<sup>69</sup> Hægeland (2003)

<sup>70</sup> Hægeland and Møen (2000).

<sup>71</sup> Barth (2005).

<sup>72</sup> This is based on the disparities in employment costs for Group C and the zero option, multiplied by a 3 per cent return on education over three years.

<sup>73</sup> Barth (2005)/Milligan et. al. (2004).



and avoid becoming victims of abuse of power and exploitation. An educated population will also be able to help ensure that public decisions are made on better informed grounds. And the higher the level of education in the population, the more difficult it becomes for abuse of power, corruption and manipulation to take place, and the greater the input of critical thinking and distribution of power. At the same time, there is reason to believe that the effect of education at primary and secondary level is greater than at a higher level.<sup>74</sup>

Quantifying the effect of an individual's education on the smooth running of democracy at system level is, however, a challenge.<sup>75</sup> The costs can nevertheless be assessed using the plus-minus method.

The socio-economic analysis suggests that a good understanding of democracy in the population has a **major** impact on society. Given that individuals in both groups C and D have inadequate education, we consider that inadequate education is a **great cost** to the individual, compared to the zero option. To the extent that a disparity exists between groups C and D, the cost may be reduced to **moderate** for C, if labour force participation is considered to impact on the individual's understanding of democracy. It is also conceivable that labour force participation may impact on a well-functioning democracy at system level, if employees are unionised. Membership of a trade union allows individuals to further their own interests with respect to work-related conditions.

### Criminality

As we have already discussed elsewhere in this report, education impacts on people's chances of employment. Education may also influence the rate of criminality in that participation in the labour market can reduce the probability of becoming involved with criminality. For example, going to work fosters social control over behaviour that is harmful to society, and helps the individual make rational choices and build an identity.<sup>76</sup>

The connection between education and criminality is demonstrated by studies that show how the probability of committing an offence is higher for individuals who have failed to complete their upper secondary education. A study carried out by Statistics Norway shows that a great many career criminals have not completed their upper secondary education.<sup>77</sup> The proportion lacking this education increases considerably with the seriousness of the offence. Another study shows that prison inmates are poorly educated, and that their average level of education is immediately above lower secondary.<sup>78</sup> Other studies show that by taking part in education and work

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<sup>74</sup> Barth (2005)

<sup>75</sup> Barth (2005)

<sup>76</sup> Hægeland (2003)/Danielsen (1998)/Skardhamar and Telle (2009)

<sup>77</sup> Skardhamar (2005)

<sup>78</sup> Skardhamar and Telle (2009)/Akselsen et.al. (2007)

programmes while in prison, offenders have a significantly reduced probability of re-offending compared to other groups of inmates.<sup>79</sup>

Socio-economic status is a key background factor in a person's probability of participating in education, employment and criminality, and socio-economic differences may also explain why immigrants are over-represented among offenders.<sup>80</sup> A study conducted by Statistics Norway comparing immigrant and Norwegian offenders, shows that in 1998 a total of 25 offenders were registered per every 1 000 immigrant residents.<sup>81</sup> The corresponding figure among the general population was 16. This gap increases further if we confine the comparison to the male population: 28 registered offenders per every 1 000 Norwegian men and 42 per every 1 000 immigrant men. At the same time, the report points out that socio-economic status, as exemplified by low income, low level of education and a loose attachment to the labour market, is an important background factor in the recorded criminality of a population group.

Because there are numerous factors that can affect whether individuals have an education and a job, as well as the probability of offending, isolating the effects of education and employment on criminality is a challenging task. The causal direction between living conditions and criminality is unclear.<sup>82</sup> For example, Skardhamar et. al. (2011) point to the importance of circumstances in the offenders' childhood, where the parents' socio-economic status will influence various factors, such as a child's level of education. They also point to the significance of whether the offenders' parents were themselves criminals – and if so, what social stigmas the children were subjected to during their childhood.

Based on our analysis using the socio-economic plus-minus method, we consider criminality to have a **major** impact on society. However, inadequate education will impact differently on groups C and D compared to the zero option. For group C, which has an attachment to the labour market, we consider inadequate education to carry a **small cost** to the individual, as employment in itself has a preventive effect on criminality. For group D, we consider inadequate education to carry a **moderate cost** to the individual, because the individuals concerned do not participate in the labour market.

### 3.2.6 Teaching costs in primary and secondary education

In Norway, primary and secondary education is largely a government responsibility, and with responsibility comes cost. Pupils attending Norwegian primary and secondary schools are entitled to free tuition (sections 2-15 and 3-1 of the Norwegian Education Act), while approved

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<sup>79</sup> Sedgley et.al. (2008)

<sup>80</sup> Skardhamar et.al. (2011)

<sup>81</sup> Gundersen et.al. (2000)

<sup>82</sup> Falck et. al. (2009)/Skardhamar et. al. (2011)

independent schools receive a government subsidy and are authorised to request payment of tuition fees (sections 6-1 and 6-2 of the Norwegian Independent Schools Act).

According to figures from Statistics Norway, the cost of a child's primary and lower secondary education amounted to an average of NOK 105 600 in 2014.<sup>83</sup> This includes teaching costs at primary and lower secondary level, school administration costs and school transport.

What is the price, then, of giving a refugee minor an adequate education, as defined in section 2.1? We seek to examine the additional costs associated with ensuring that refugee minors attain the same level of competence as children of Norwegian origin. There are three factors that can be examined in this context. First, it is assumed that the refugee minors are enrolled in school as soon as possible, and in accordance with their statutory rights. There is also the assumption that the refugee minors, in addition to mainstream lessons, are offered sufficient adapted Norwegian language instruction, mother tongue instruction and bilingual subject teaching, to ensure that they are able to follow mainstream lessons and normal progression through the education system. Finally, there is a cost associated with giving pupils the socio-educational follow-up and good school environment they are entitled to.

However, there is not a sufficiently strong numeric basis to calculate the government costs associated with these factors. We will nevertheless be able to arrive at an estimate by making an assumption about the resource inputs required at primary and lower secondary level in order to provide adapted Norwegian language instruction, mother tongue instruction and bilingual subject teaching for every pupil who has received such tuition.

Based on statistics obtained from the system for registering information on primary and lower secondary schools (Grunnskolen informasjonssystem - GSI) for the school year of 2014/2015, we have calculated the resource input at just over 67 hours per pupil in receipt of adapted Norwegian language instruction, mother tongue instruction and bilingual subject teaching. This is based on the total number of teaching lessons given, in combination with the number of pupils who receive instruction, ref. table 3-3.

**Table 3-3**  
Resource input for adapted Norwegian language instruction, mother tongue instruction and bilingual subject teaching in public primary and lower secondary schools for the 2014/2015 school year

	Number of lessons per year	Number of pupils	Number of lessons per pupil
<b>Adapted Norwegian language instruction</b>	1 368 465	43 380	31.5
<b>Mother tongue instruction and bilingual subject teaching</b>	542 458	15 264	35.5
<b>Total</b>			67.1

<sup>83</sup> <https://www.ssb.no/education/statistikker/utgrs/aar/2015-12-11>

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Source: Grunnskolen informasjonssystem (GSI)

If we assume that the resource cost of a single lesson is NOK 1 085<sup>84</sup>, the annual cost per pupil will amount to just under NOK 73 000. This is the average annual additional cost per pupil who receives adapted Norwegian language instruction as well as mother tongue instruction and bilingual subject teaching at primary or lower secondary level. It tells us nothing about the point in the education cycle at which the cost will incur.

In order to calculate the cost per individual throughout their school career, we multiply this average figure by the number of years that each individual spends in primary and secondary education, i.e. from they arrive in Norway until they leave upper secondary school. Based on Wiggen (2014), we assume an average age of 13 on arrival.<sup>85</sup> On the assumption that the average age on completion of upper secondary school is 18, this gives an average of five years of additional tuition per pupil.

The additional teaching costs per individual can therefore be estimated at just under NOK 324 000, discounted to 2015 prices. On top of this, there are 20 per cent fiscal costs. This is an uncertain estimate, but it highlights the fact that the additional tuition given to refugee minors also carries a resource cost. The number of years that individuals receive adapted Norwegian language instruction and bilingual subject teaching will probably be lower. On the other hand, however, we are probably under-estimating the annual additional costs associated with giving refugee minors sufficient language training, as we know that only limited bilingual subject teaching and mother tongue instruction is provided (discussed in chapters 2 and 4). We have also no figures available to calculate costs associated with socio-educational counselling and the provision of a good school environment, which indicates that we are underestimating the cost of an adequate education. Our socio-economic analysis looks at the costs of inadequate education, and in this context teaching costs can be interpreted as a saving achieved by giving refugee minors an inadequate education.

Rambøll (2013) looks at the government subsidies payable to local authorities that run refugee reception centres. According to his report, a total of NOK 73 170 was payable per school year for every young asylum seeker and child of asylum seeker in state-run reception centres in 2011/12. However, the same report calculates the real cost per asylum seeker at approximately NOK 119 000 in 2011/12, i.e. 1.6 times higher than the subsidy. This figure is not immediately comparable to our calculations as we are looking at additional costs on top of mainstream lessons. Also, the

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<sup>84</sup> This is based on information obtained from the Norwegian Ministry of Education and Research about the cost per teaching lesson. This cost is based on the average teacher's salary, social costs and accounting for preparatory work.

<sup>85</sup> This is based on the average age of unaccompanied refugee minors (under 16) and that of other refugee minors (under 12) at the time of immigration, weighted by the number of people in the two groups. See table 5.1 in Wiggen (2014).

report points out that the need for additional resources, such as special education, will be greater for this group than for other pupils, which probably increases the real cost even further.

The cost of giving refugee minors an adequate education is uncertain, which is why we will conduct a sensitivity analysis to shed light on the uncertainties. The sensitivity analysis will therefore look at two different cost estimates, involving an adjustment of +/- 50 per cent to teaching costs.

### 3.2.7 Summary of socio-economic costs

We have calculated that the average socio-economic cost of inadequately educating a refugee minor amounts to NOK 3.8 million per individual at 2015 prices. This is based on a weighted average of the socio-economic cost associated with the types of individuals in groups C and D. The weighting is described in section 3.1.2. On top of this, there are non-monetised social effects that we have assessed using the plus-minus method. All of these factors suggest that the real cost is higher than NOK 3.8 million per individual were they to be inadequately educated.

**Table 3-4**  
**Summary of socio-economic costs compared to the zero option (weighted average of groups A and B).**  
**In NOK 1 000.**

Social effect	Impact	Group C	Group D	Weighted average*
Loss of production	Monetised effect	1 460	9 731	3 941
Social security and benefit payments	Monetised effect	-22	548	149
Quality of life	Major	+++	++++	+++
Externalities 1: Productivity	Monetised effect	131	131	131
Externalities 2: Democracy	Major	+++	++++	+++
Externalities 3: Criminality	Major	++	+++	++
Teaching costs at primary and secondary level	Monetised effect	-389	-389	-389
<b>Total monetised costs</b>		<b>1 180</b>	<b>10 022</b>	<b>3 833</b>

Source: Economic Analysis Norway

Note: Weighted average of outcomes in groups C and D, where the weights are based on the groups' conditional probabilities, ref. section 3.1.2.

### 3.2.8 Sensitivity analysis

The numeric value of the various effects is uncertain. In order to shed light on this uncertainty we are therefore conducting a sensitivity analysis in which we alter some of the key assumptions. The objective is to examine how sensitive or robust the analysis results are to assumption changes. We will split the sensitivity analysis into two parts. We will first look at how the results change if we make adjustments to the assumptions associated with the effect of education on levels of pay in group C, and the teaching costs in primary and secondary schools. We will then look at the various assumptions on which the probability of ending up in groups C and D is based.

### High and low estimates

Table 3-5 shows how the results change if we alter the assumptions associated with the effect of education on levels of pay for group C, as well as various assumptions made about teaching costs in primary and secondary education. The **high estimate** is based on an assumed wage differential of 20 per cent for group C (as opposed to 15 per cent in the main analysis), while we assume that teaching costs in primary and secondary schools are 50 per cent lower than in the main analysis. The **low estimate** is based on an assumed wage differential of 10 per cent for group C (15 per cent in the main analysis), while we assume that teaching costs in primary and secondary schools are 50 per cent higher than in the main analysis.

Based on these altered assumptions, we calculate average socio-economic costs at NOK 4.4 million per individual at 2015 prices in the **high estimate**, and NOK 3.25 million per individual at 2015 prices in the **low estimate**.

**Table 3-5**

Socio-economic costs as per the main analysis, high estimate and low estimate compared to the zero option (weighted average of groups A and B). In NOK 1 000.

Social effect	Impact	Main analysis	High estimate	Low estimate
Loss of production	Monetised effect	3 941	4 281	3 600
Social security and benefit payments	Monetised effect	149	144	154
Externalities 1: Productivity	Monetised effect	131	175	88
Teaching costs at primary and secondary level	Monetised effect	-389	-194	-583
<b>Total monetised costs</b>		<b>3 833</b>	<b>4 406</b>	<b>3 259</b>

Source: Economic Analysis Norway

Note: Weighted average of outcomes in groups C and D, where the weights are based on the conditional probabilities for the groups, ref. section 3.1.2.

### Life cycle distribution

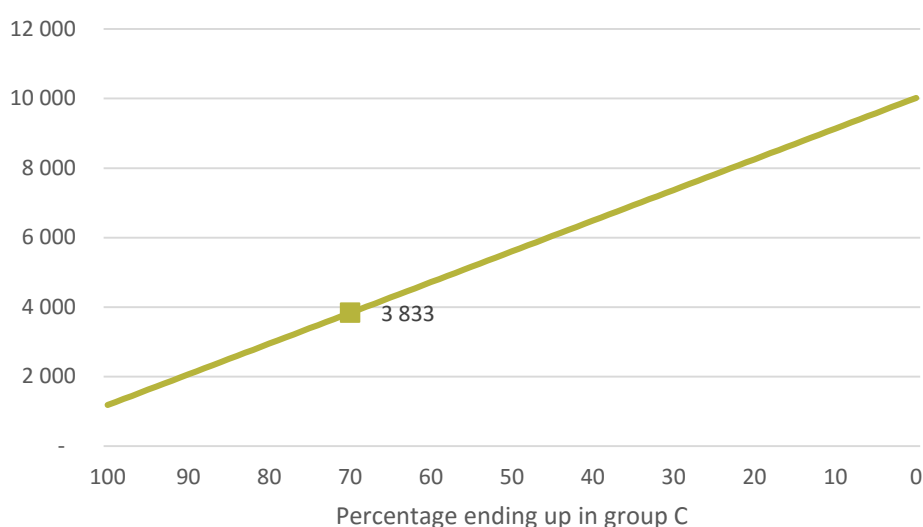
In section 3.1.2 we based our main analysis on an assumption that the probability of a refugee minor ending up in group C is 70 per cent, given that he or she receives inadequate education at primary and secondary level. Similarly, the conditional probability of ending up in group D was 30 per cent. This is also an uncertain assumption and the life cycle distribution impacts considerably on the average socio-economic cost per individual.

This is illustrated in figure 3-9, which shows different socio-economic outcomes if we change the percentages assigned to groups C and D respectively. The figure's horizontal axis shows the percentage of individuals who end up in group C. The result of the main analysis, i.e. 70 per cent in group C and 30 per cent in group D, is illustrated by the point that shows a socio-economic cost of NOK 3.8 million.

It is clear from the figure that the average cost per individual largely depends on what percentage ends up in employment (group C) or outside the labour market (group D). The extreme case, in which all individuals who receive inadequate education end up in group C, gives an average cost of just under NOK 1.2 million per individual. If all individuals who receive inadequate education end up in group D, this gives an average socio-economic cost per individual of just over NOK 10.0 million.

**Figure 3-9**

**Average socio-economic costs, given different sets of assumptions, of the percentage that ends up in groups C and D compared to the zero option (weighted average of groups A and B). In NOK 1 000.**



Source: Economic Analysis Norway

Note: The figure's horizontal axis illustrates the proportion of individuals who end up in group C. Consequently, the proportion that ends up in group D equals one minus the percentage in group C.

### 3.3 Sample calculation for the refugees who arrived in 2015

In section 3.2 we calculated the socio-economic cost of a refugee minor receiving inadequate education. Because many of the estimates used in this calculation were based on statistics compiled for refugees who arrived in 2015, it is an interesting exercise to calculate the total socio-economic cost of inadequately educating the refugees who arrived in 2015.

A total of 31 145 asylum seekers arrived in Norway in 2015.<sup>86</sup> It is important to keep in mind that not all refugees will be granted asylum. If we look at applications that were considered in 2015, the (weighted) average success rate was 53 per cent.<sup>87</sup> If we consider only decisions concerning

<sup>86</sup> Figures obtained from: <https://www.udi.no/statistikk-og-analyse/>

<sup>87</sup> Figures obtained from: <https://www.udi.no/statistikk-og-analyse/statistikk/asylvedtak-etter-statsborgerskap-og-utfall-2015/>

unaccompanied minors, the average success rate was 92 per cent. However, success rates vary between countries due to local humanitarian and political circumstances at different points in time.

Table 3.6

**Asylum seekers and resettlement refugees, 2015. Estimated approval of applications for asylum and permanent leave to remain.**

Category:	Number	Estimate - asylum granted	Estimate - permanent leave to remain
<i>Asylum seekers:</i>			
Adults	20 891	8 682	7 813
Unaccompanied minors	5 297	4 925	4 432
Other minors	4 957	2 060	1 854
<b>Total asylum seekers</b>	<b>31 145</b>	<b>15 666</b>	<b>14 100</b>
<i>Resettlement refugees:</i>			
Adults	1 598	1 598	1 598
Unaccompanied minors	405	405	405
Other minors	379	379	379
<b>Total resettlement</b>	<b>2 383</b>	<b>2 383</b>	<b>2 383</b>
<b>Total</b>	<b>33 528</b>	<b>18 049</b>	<b>16 483</b>

Source: Norwegian Directorate of Immigration

If we apply the 2015 success rates for various countries to our calculations, we arrive at an estimate which suggests that a total of 15 666 of the asylum seekers who arrived in Norway in 2015 will have their applications approved. Of these, 4 925 are unaccompanied minors and 2 060 are minors accompanied by their parents. However, not everyone who has their asylum application approved will also be granted permanent leave to remain. According to the Norwegian Directorate of Immigration, approximately 90 per cent of those who are granted asylum receive a three-year temporary residence permit. Most of these will go on to be granted permanent leave to remain, unless their temporary permit is of limited duration for a particular reason. The remaining 10 per cent will be granted a temporary residence permit which in the first instance is for less than three years. We have chosen to assume that 90 per cent of those who are granted asylum will also be granted permanent leave to remain. *This means that 4 432 of the unaccompanied minors who claimed asylum in Norway in 2015, and 1 854 of the minors accompanied by parents, will be granted permanent leave to remain.*

In addition to the asylum seekers, a total of 2 383 resettlement refugees arrived in 2015.<sup>88</sup> We assume that all of these will be granted indefinite leave to remain and that the percentage of adults, unaccompanied minors and other minors is the same as for the asylum seekers. *This means that 405 unaccompanied minors who arrived as resettlement refugees in 2015, and 379 minors*

<sup>88</sup> Figures obtained from: <https://www.udi.no/statistikk-og-analyse/statistikk/overforingsflyktninger-etter-statsborgerskap-innvilgelser-og-ankomster-2015/>



*accompanied by parents, will be granted indefinite leave to remain. This means that a total of **4 837** unaccompanied minors and **2 233** other minors who arrived in Norway as asylum seekers or resettlement refugees in 2015 will be granted permanent leave to remain. An estimated total of approximately **7 000** refugee minors will thus be granted leave to remain in Norway in 2015.*

In section 3.2.7 we calculated the average socio-economic cost of inadequate education to NOK 3 833 000 per refugee minor. The total socio-economic cost of inadequate education at primary and secondary level for all the refugee minors who arrived in Norway in 2015 will thus amount to 7 000 x 3 833 000 = NOK 26.8 billion.

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## 4. Conclusions and recommendations

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This report has calculated the socio-economic cost that will arise if children and young people who arrive in Norway as asylum seekers or refugees were to receive inadequate education at primary and secondary level.

As part of our analysis, we pointed to factors in primary and secondary education that has a considerable impact on whether refugee minors will fare well as they continue their education and proceed into employment. On this basis we have proposed a number of educational initiatives that may help the children and young people concerned to succeed as they progress in life.

### The socio-economic cost of inadequate education

The socio-economic calculations demonstrate that if refugee minors receive inadequate education the average cost to society would be NOK 3.8 million per child at 2015 prices. On top of this, there are numerous non-monetised effects. Were we to change the assumptions on which these calculations are based, our sensitivity analysis shows that the cost in a high estimate scenario would be NOK 4.4 million per individual at 2015 prices, while a low estimate would give costs of NOK 3.25 million per individual at 2015 prices.

From a socio-economic perspective, there is therefore good reason for the government to ensure that the children and young people concerned receive an adequate education, thus equipping them, in the same way as Norwegian children and young people, to take part in education, work and society in general.

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