



# Educational inequalities

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**Christine Farquharson**

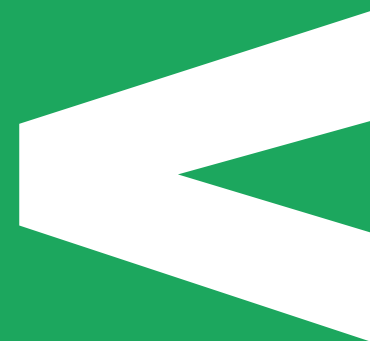
**Sandra McNally**

**Imran Tahir**

An IFS initiative funded  
by the Nuffield Foundation

 **IFS** Institute for  
Fiscal Studies

 **Nuffield  
Foundation**



**Inequality**

**The IFS Deaton Review**

**BTEC funding loss 'will deepen inequality', warns Rochdale MP**

## **Workplace gains elusive for highly educated UK minorities**

*A new study finds that despite high levels of education, UK-born children of immigrant parents face lower levels of employment compared to their white counterparts.*

Do GCSE results reveal growing inequality in education?

**Skip college? Not if you want to make more money**

## **Government education funding puts levelling-up into reverse, IFS claims**

**Maths A-Level can add up to £10k to an annual salary**

Black Caribbean girls in England 'twice as likely to be excluded from schools as white girls'

Covid could cost children £350bn in earnings due to lost learning, says IFS

## **Least selective universities 'performing best on social mobility'**

Although Russell Group university tops new IFS/Sutton Trust ranking based on 'mobility rate', other selective institutions languish towards bottom of list

**Children's language skills deteriorated during Covid lockdown so much that now they struggle to communicate**

# What do we mean by educational inequalities?



# Precision through prepositions

## Inequalities ‘by’ and ‘in’ education – and beyond



### “Educational inequalities” can mean many different things

- Inequalities **by** educational attainment – how do life outcomes differ by level of education?
- Inequalities **in** educational attainment – how is educational attainment distributed?

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## Inequalities in education

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## **This presentation**

A huge topic... in about 30 minutes



## **Inequalities by education**

1. Why should we worry about education inequalities?

## **Inequalities in education**

2. When do educational inequalities develop?

3. Who fares poorly, and well, in the education system?

4. How equal is the education system?



# Inequalities **by** education: Why should we worry about education inequalities?



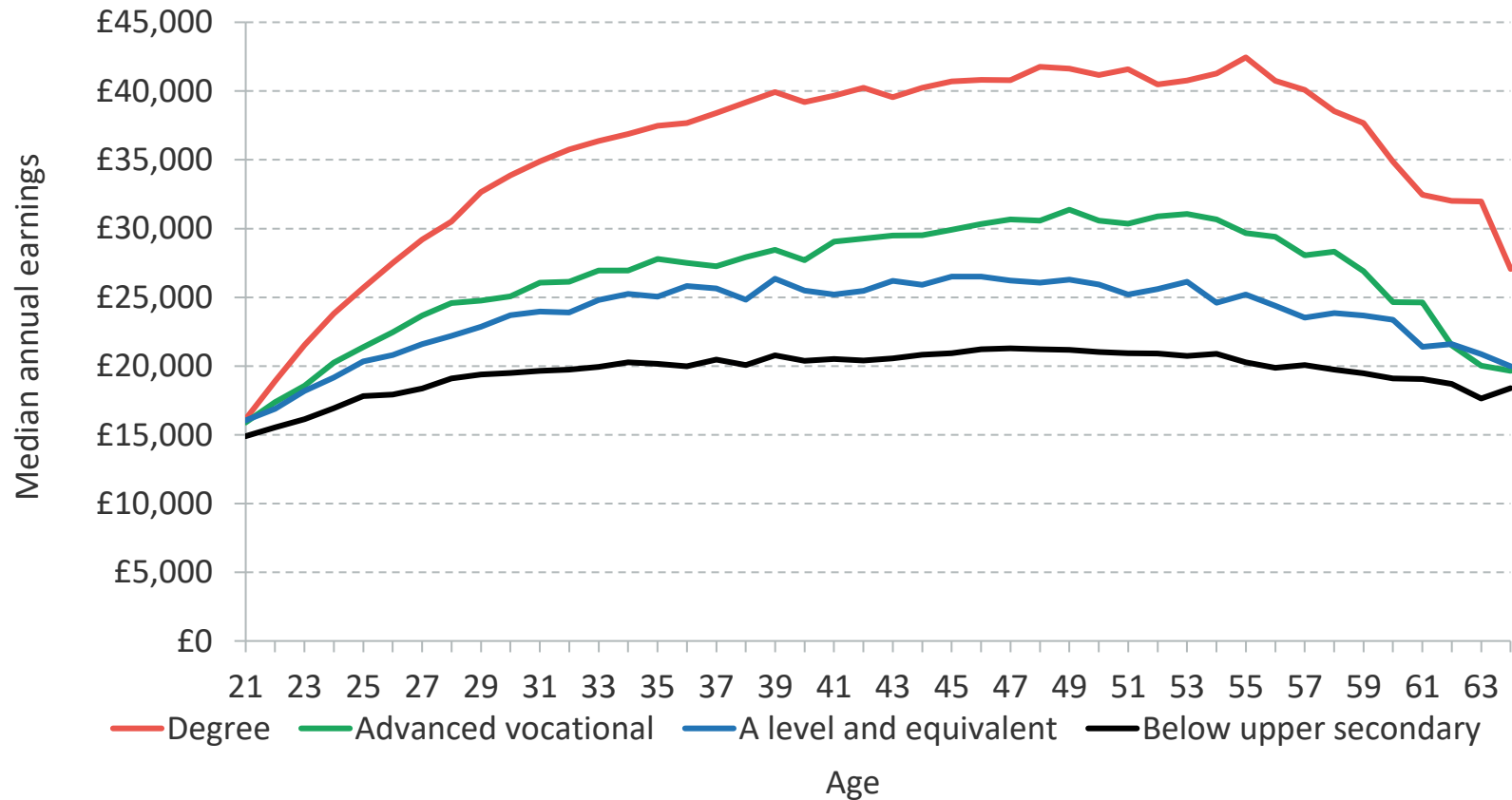
# Why should we worry about education inequalities?



People with higher levels of education tend to earn more

# Degree holders enjoy much higher earnings

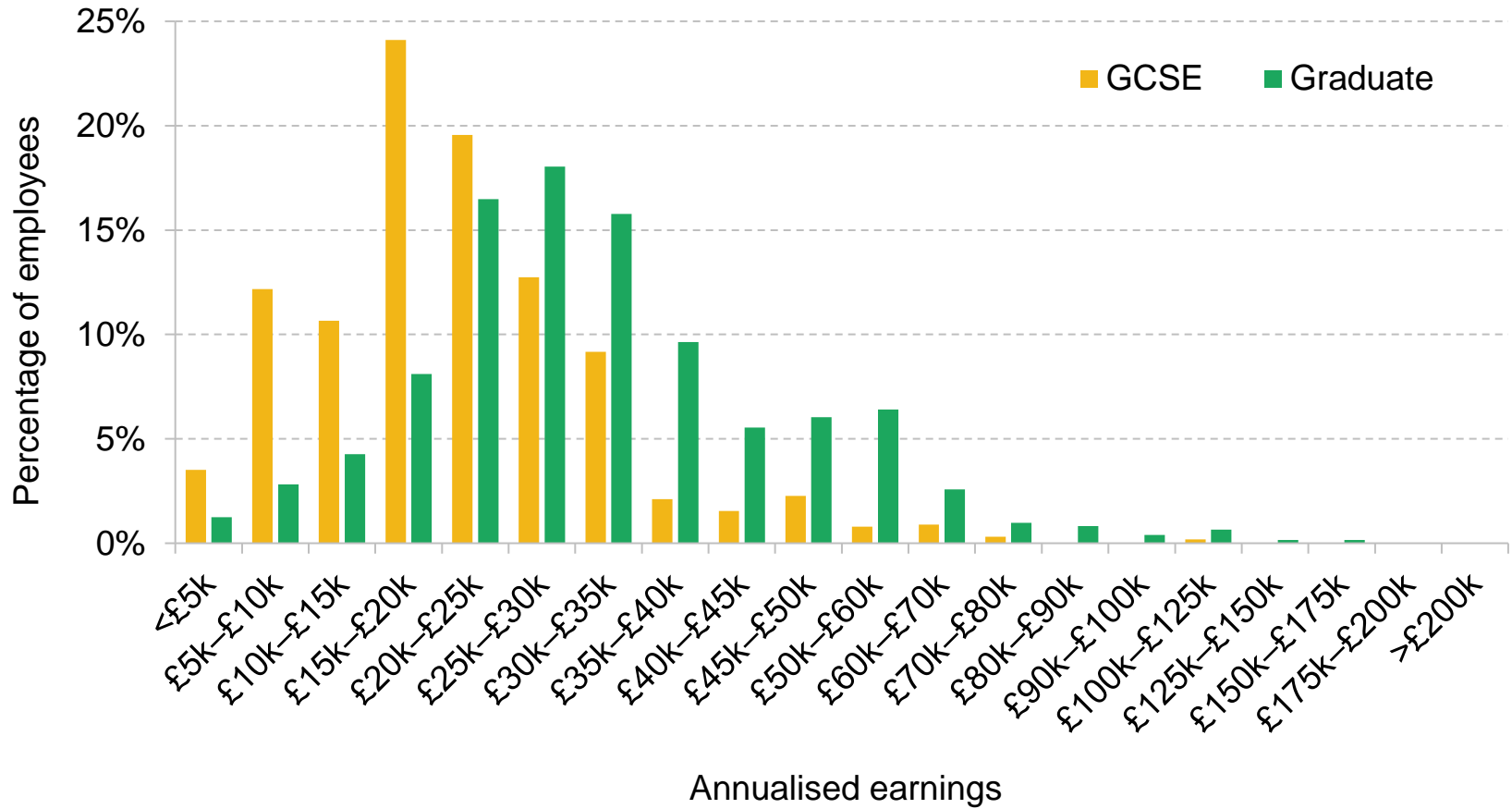
Median annualised earnings among employees, by age and qualification level



Source: Figures 14 and 15, Farquharson et al. (2022).

# Graduates already earn more at the start of their career...

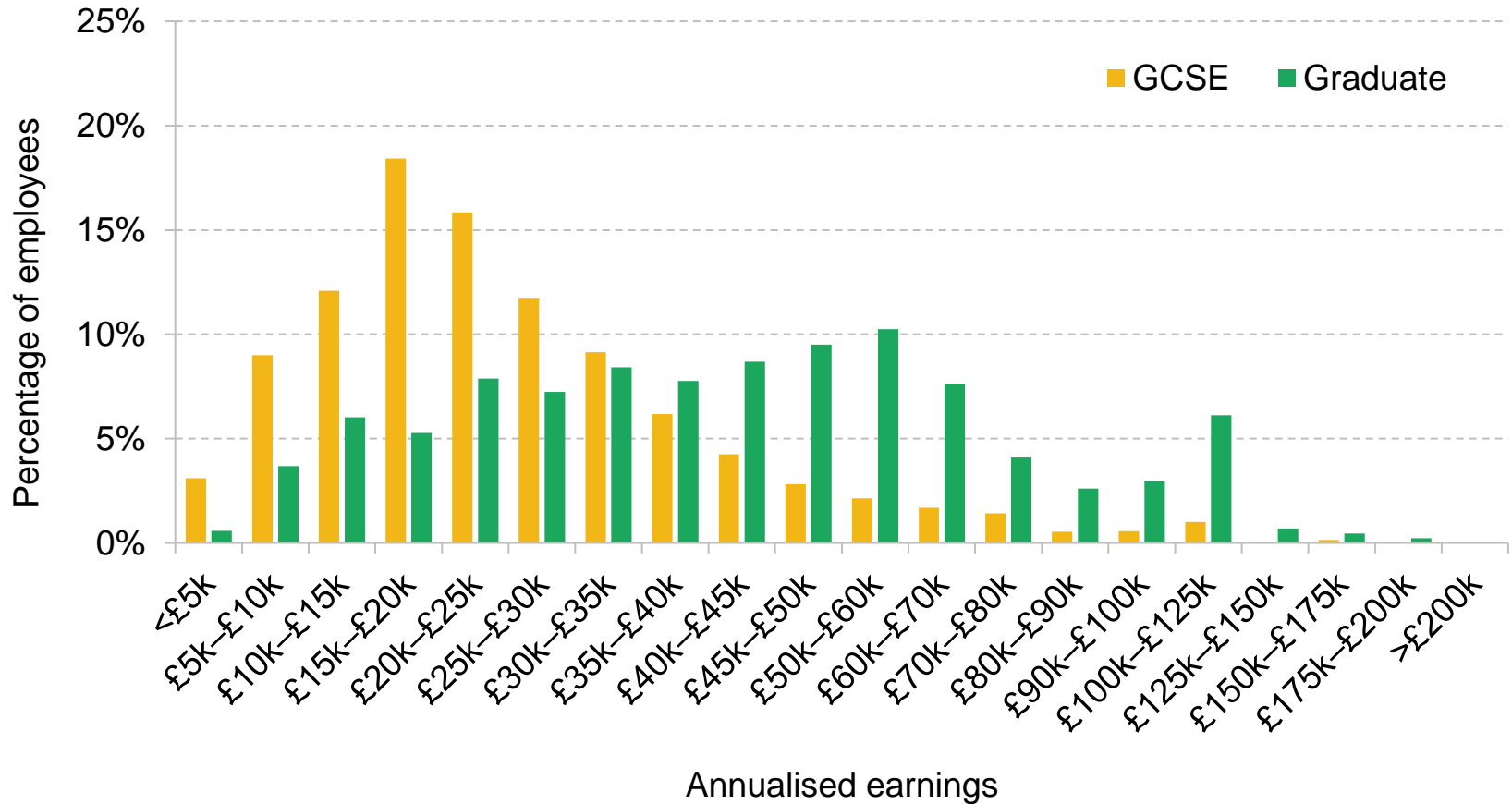
Distribution of annualised earnings among employees by qualifications, ages 25 to 30



Source: Figure 12, Farquharson et al. (2022).

# ... But the real differences are in their earnings *growth*

Distribution of annualised earnings among employees by qualifications, ages 45 to 50



Source: Figure 13, Farquharson et al. (2022).

# Why should we worry about education inequalities?



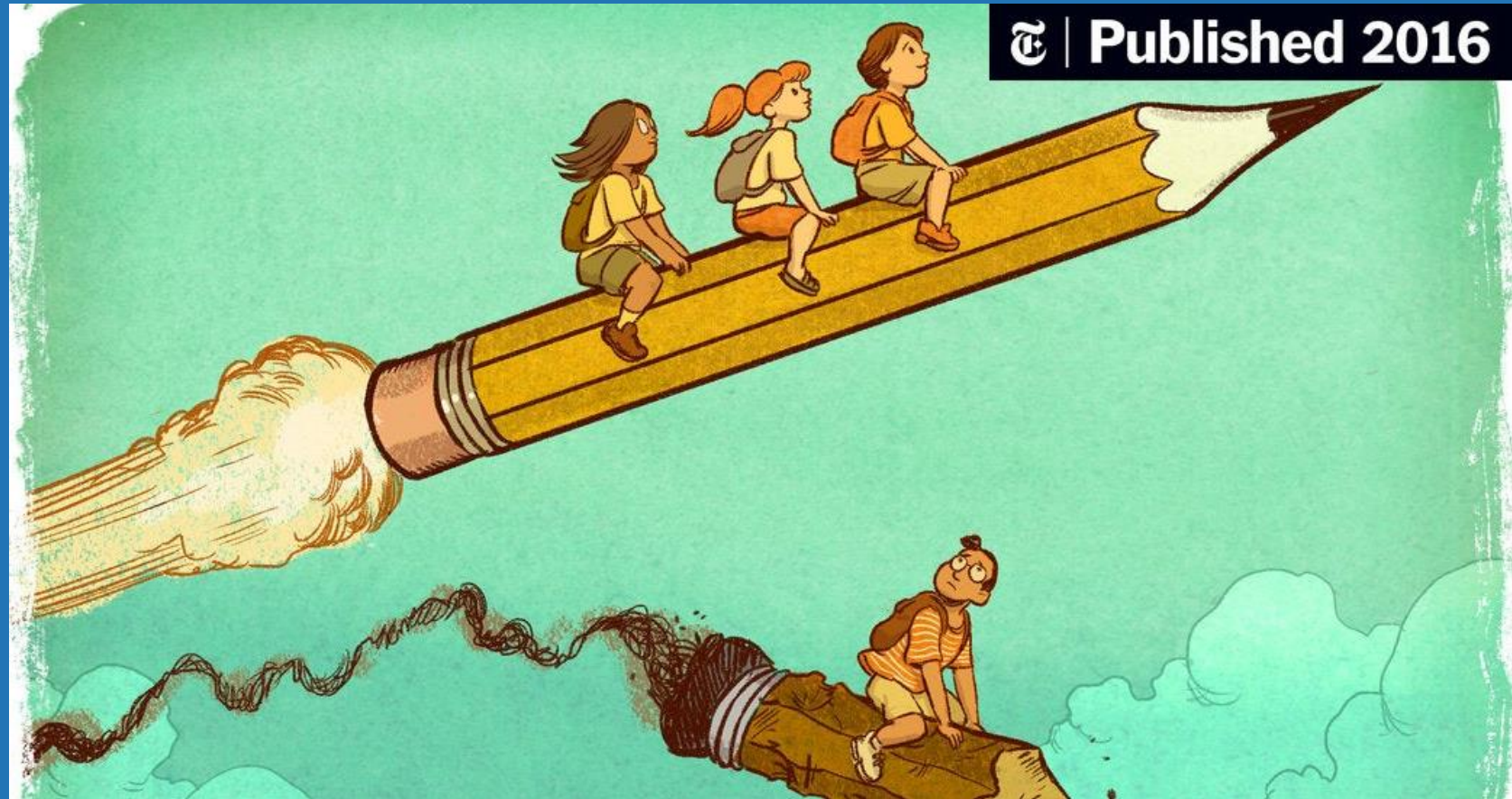
People with higher levels of education tend to earn more

People with higher levels of education also do better across a range of other outcomes

- Mental health
- Physical health
- Life satisfaction
- Civic participation
- Children's outcomes

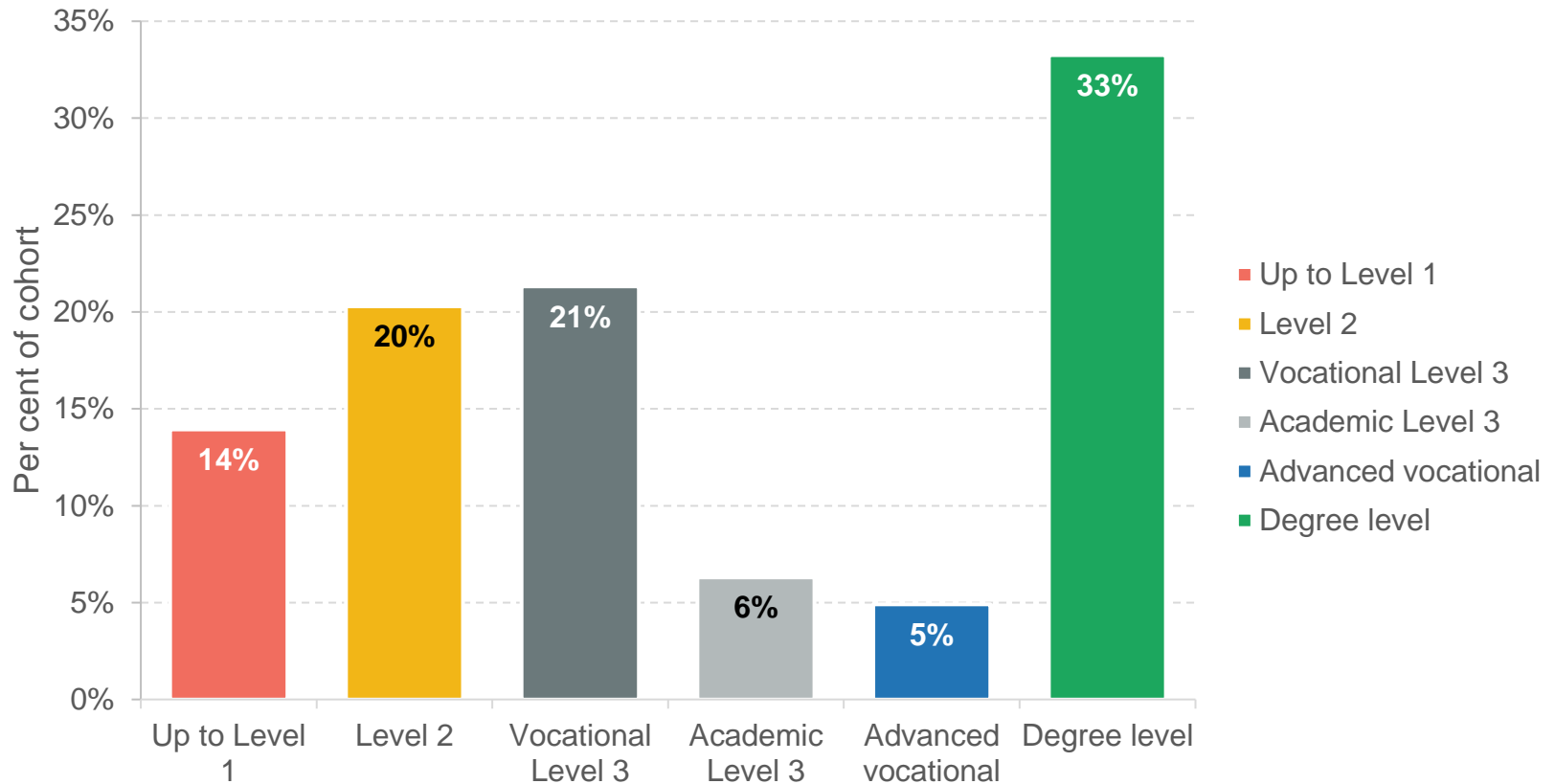
→ Education is at the root of many societal inequalities

# Inequalities **in** education: When do educational inequalities develop?



# There are significant differences in how much education young people get

## Highest qualification at age 26 (2016)

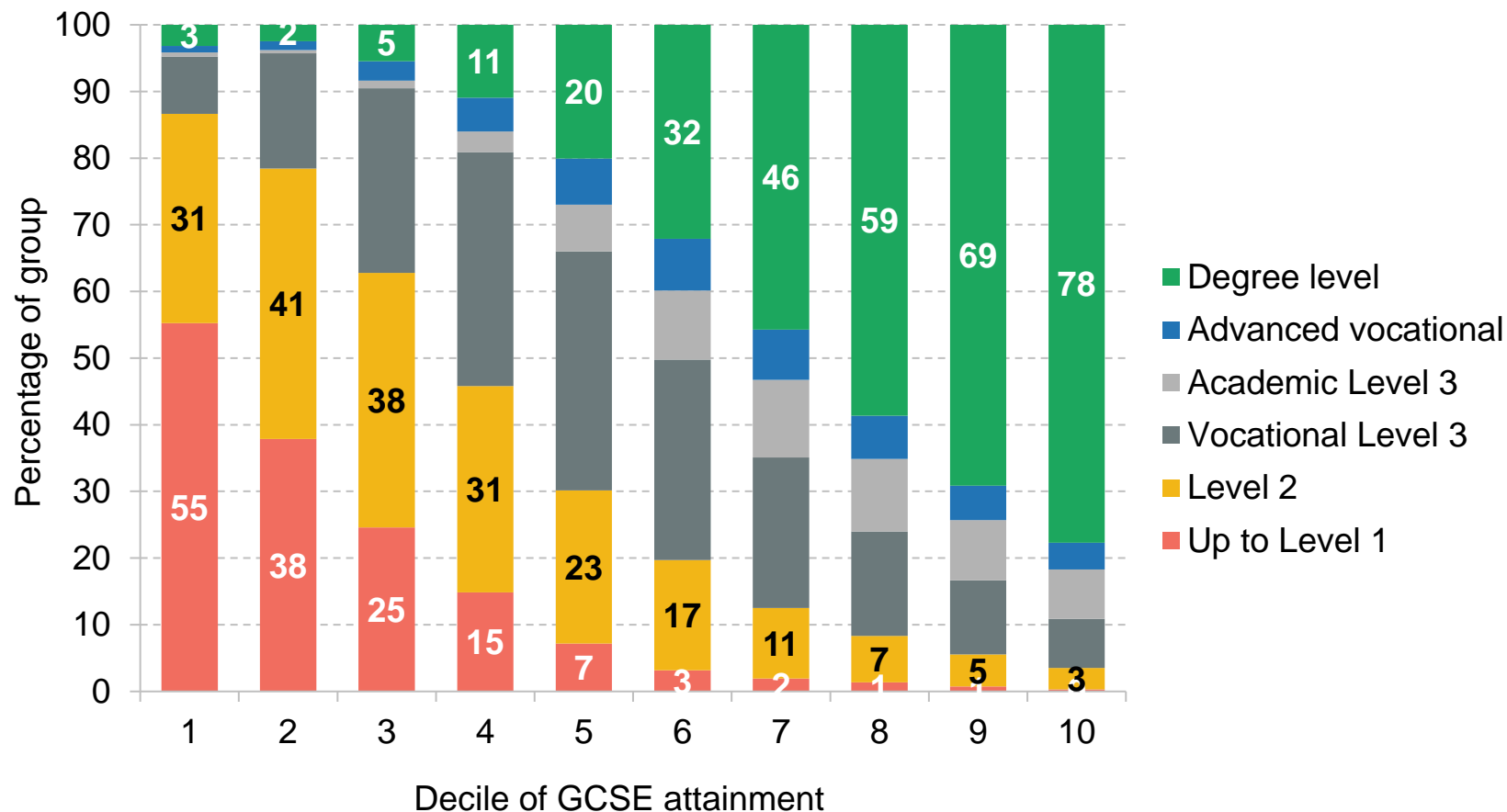


Source: Authors' calculations using Table A1.9 in Espinoza et al. (2020).



## But those differences trace back to age 16...

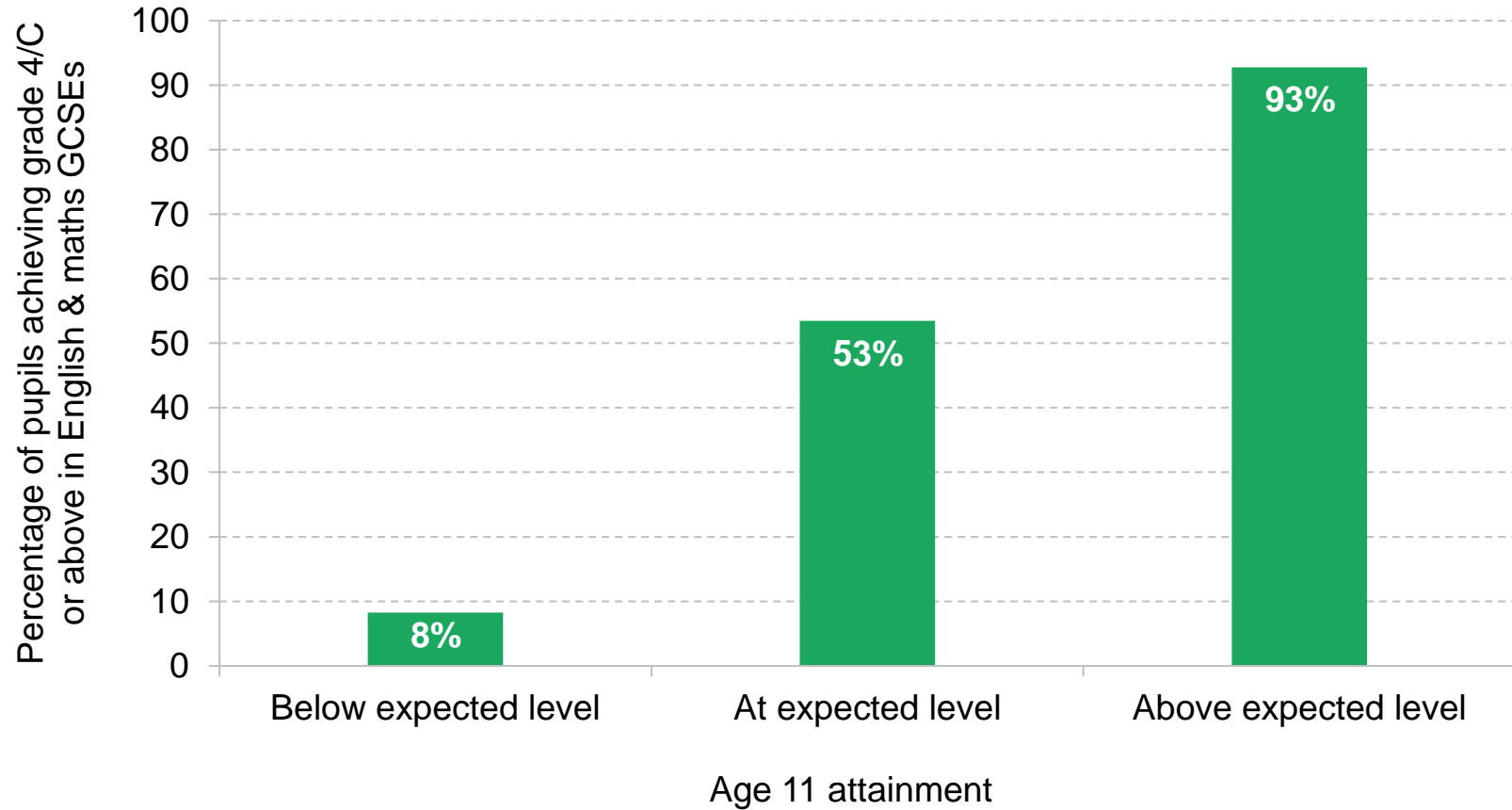
### Educational attainment at age 26, by GCSE attainment (2016)



Source: Figure 59, Farquharson et al. (2022).

... which traces back to age 11...

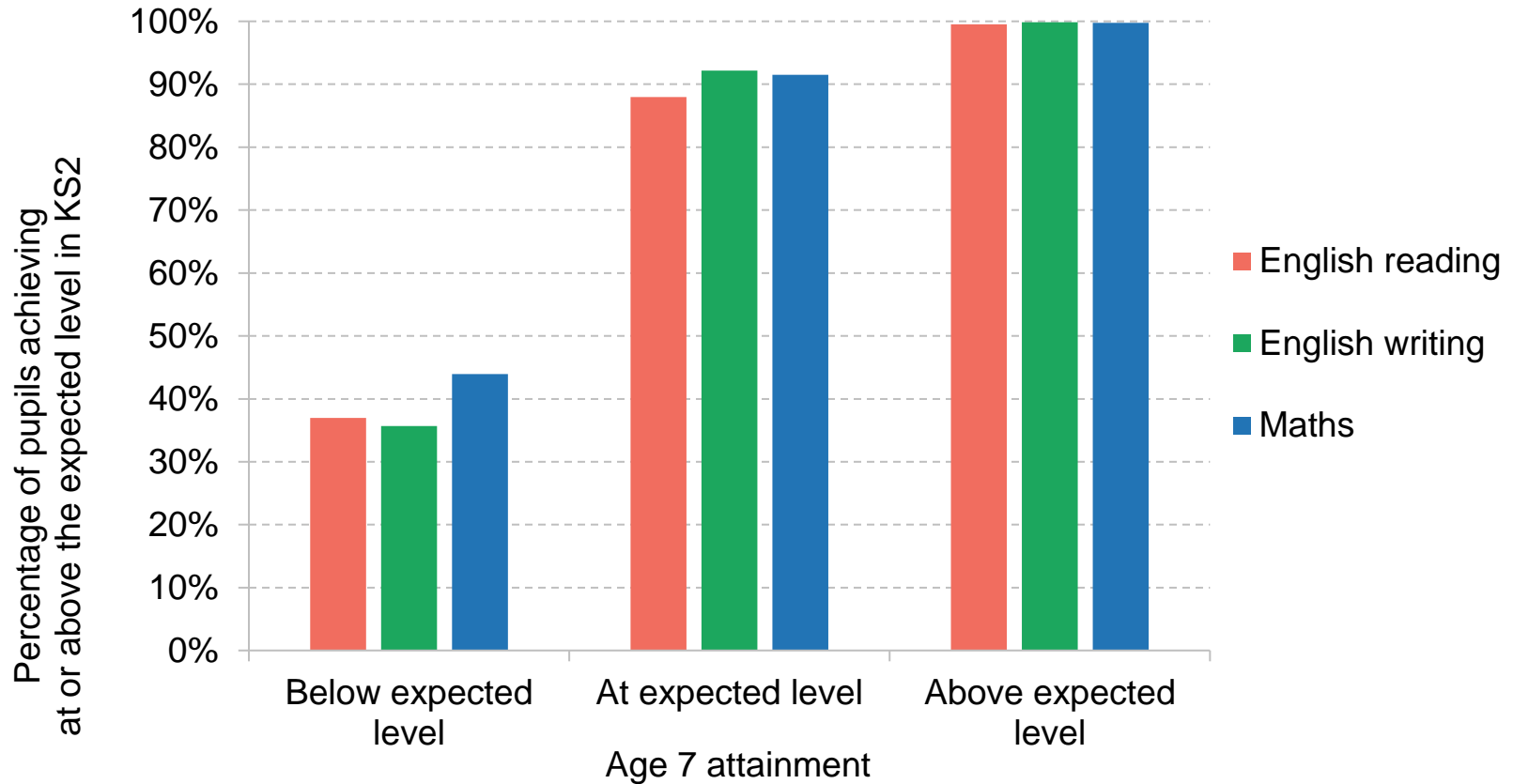
GCSE performance, by attainment at the end of primary school (2019)



Source: Figure 50, Farquharson et al. (2022).

... which traces back to age 7...

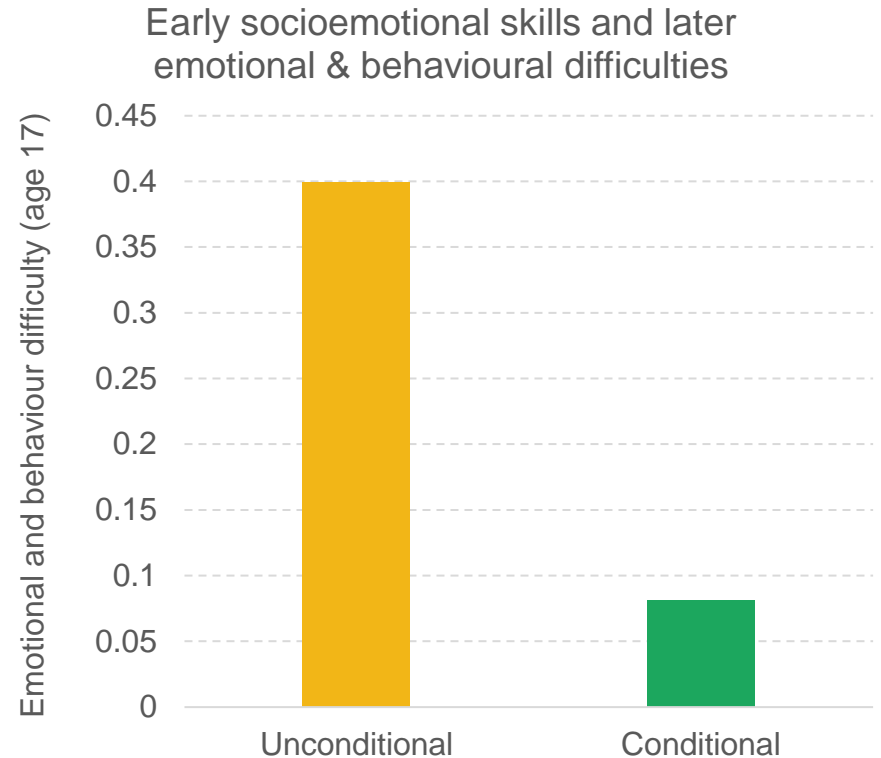
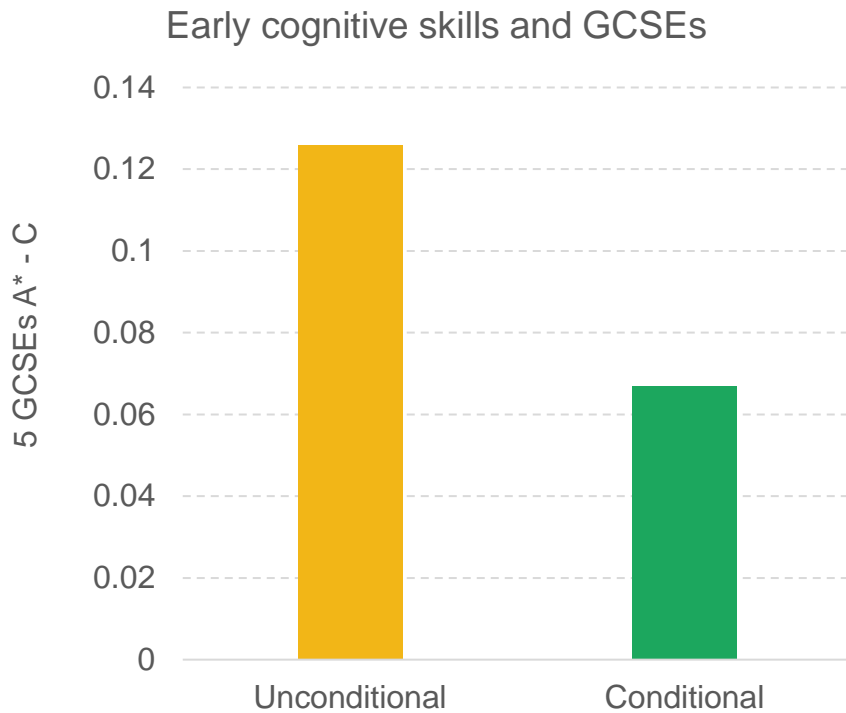
Attainment at the end of primary school, by level of attainment at age 7 (2019)



Source: Figure 49, Farquharson et al. (2022).

# ... which traces back to the pre-school years

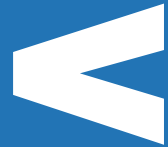
## Associations between early development (age 3) and later outcomes



Source: Table 2, [Cattan et al. \(2022\)](#).

Note: Conditional estimates control for characteristics of the child, family, environment and skills measures in adolescence

# Inequalities **in** education: Who fares poorly, and well, in the education system?



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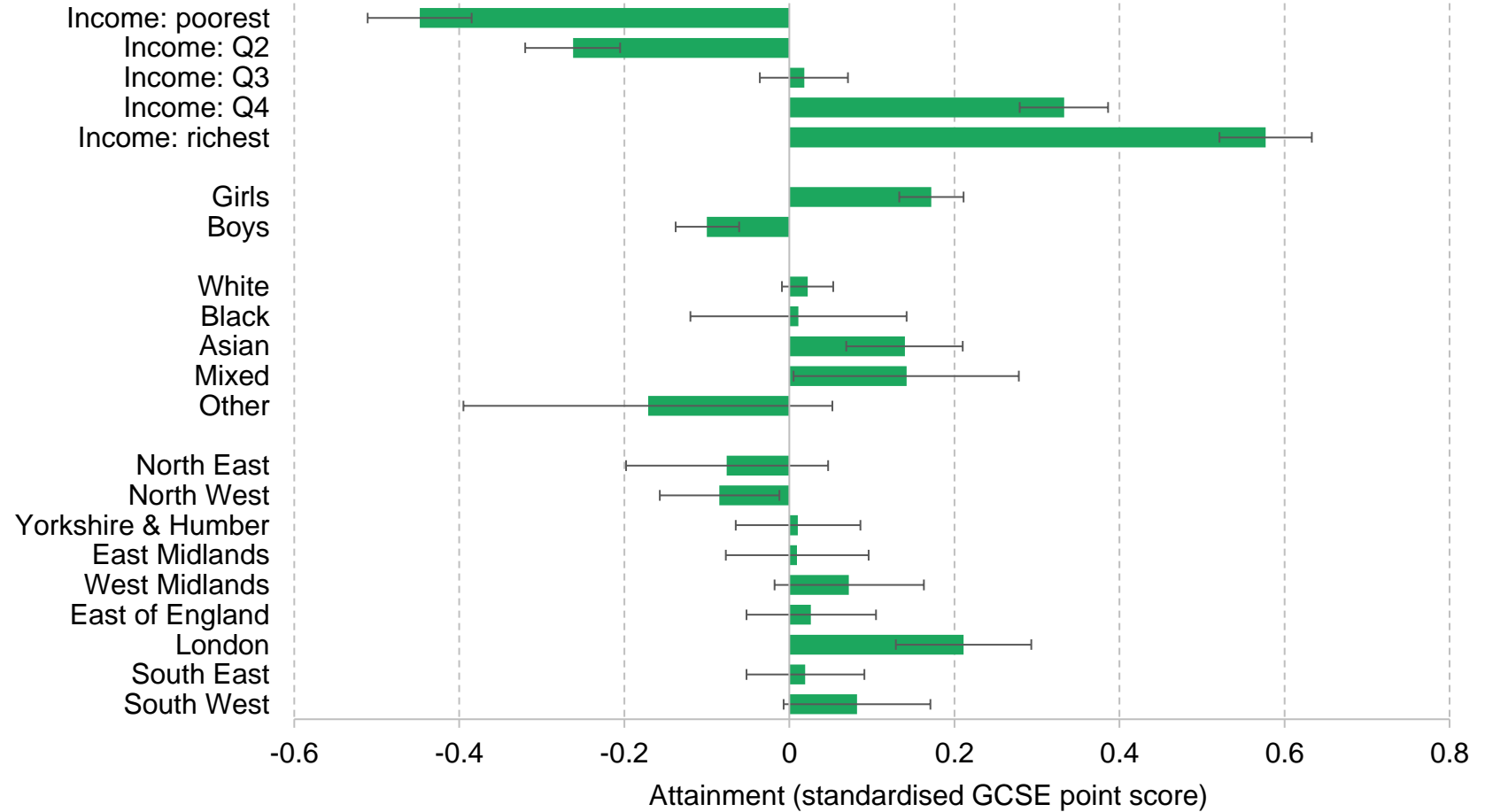


# (How) are existing inequalities reflected in education?

## Educational attainment at GCSEs, MCS cohort



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Source: Figure 24, Farquharson et al. (2022).

**What inequalities does the existing education system produce?**

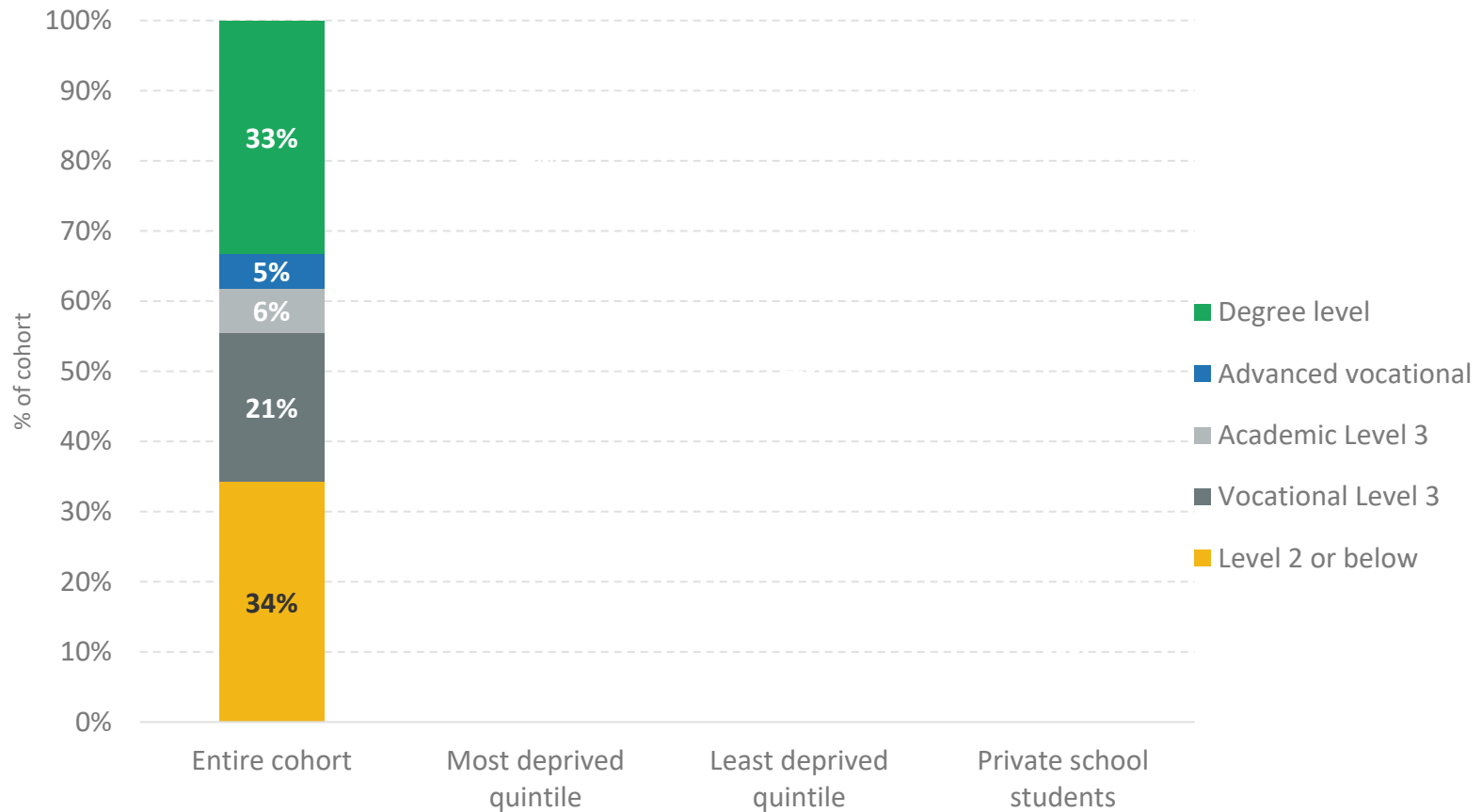
**(How) are existing inequalities reflected in educational outcomes?**

**Enormous socio-economic gaps in educational attainment**



# There are sharp inequalities by socioeconomic status

## Highest qualification at age 26 (2016)

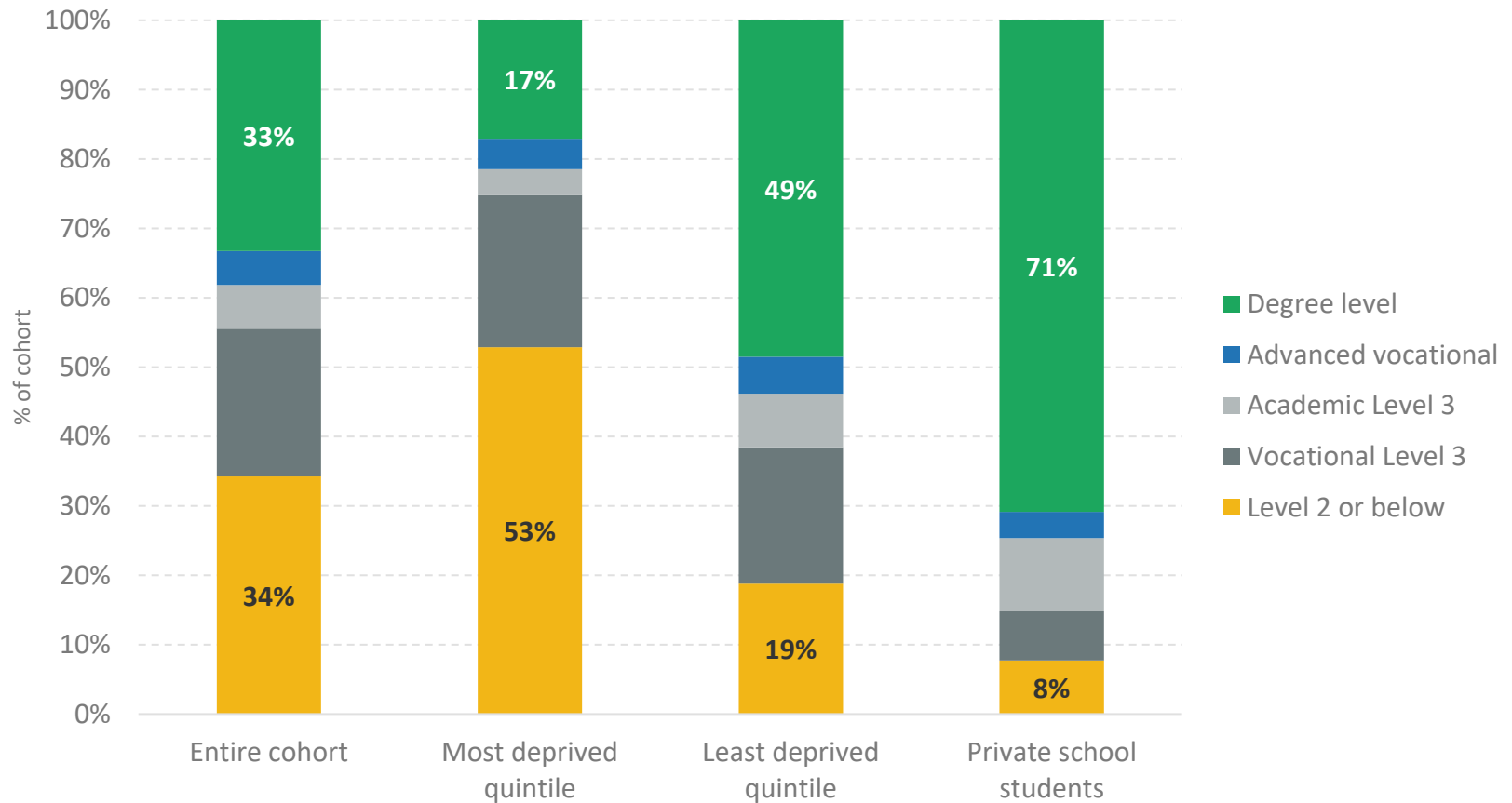


Source: Figure 33, Farquharson et al. (2022).



# There are sharp inequalities by socioeconomic status

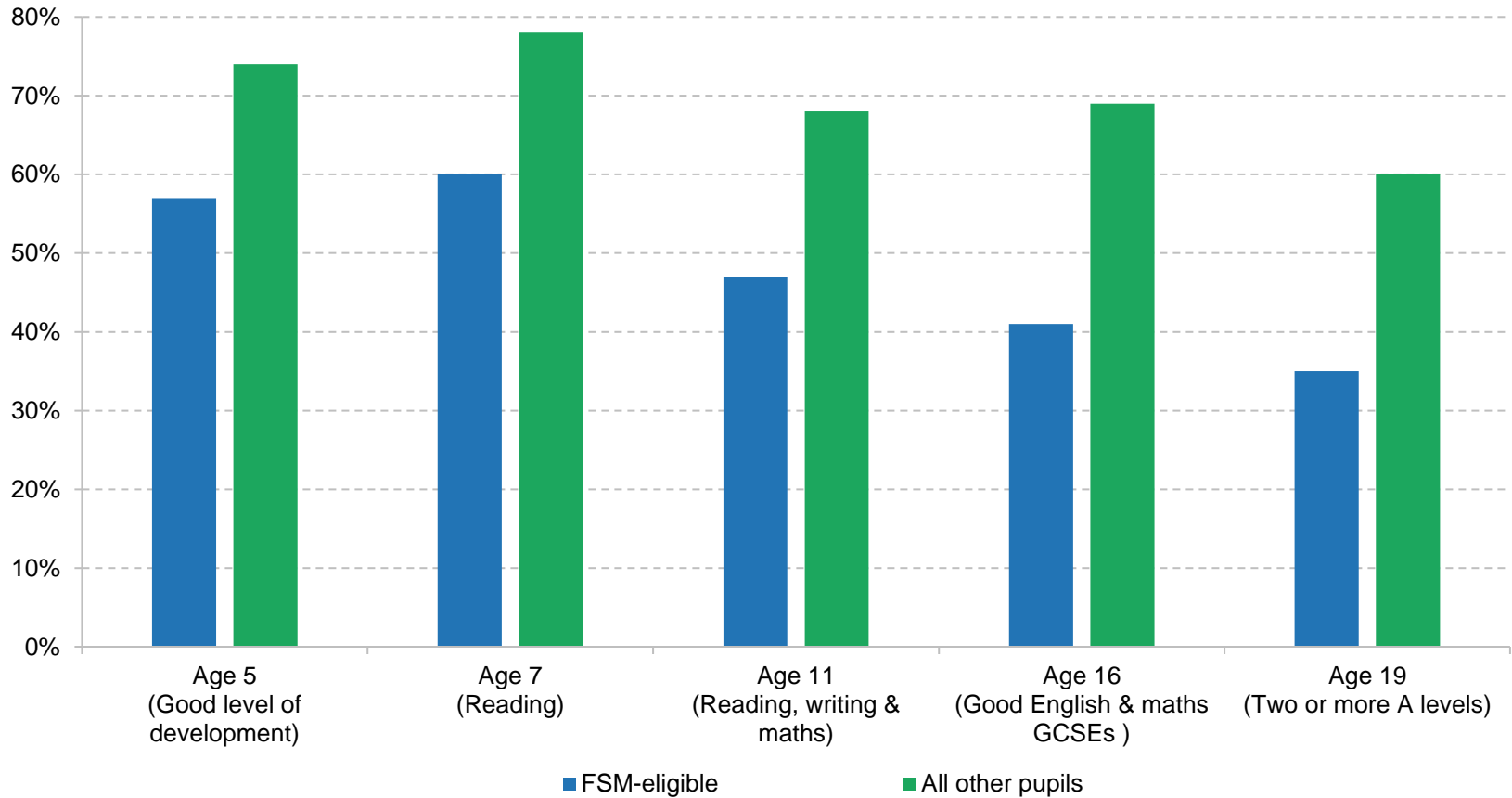
The distribution of educational attainment among 26-year-olds in England by socioeconomic status, 2016



Source: Figure 33, Farquharson et al. (2022).

# And these inequalities have their roots earlier in life

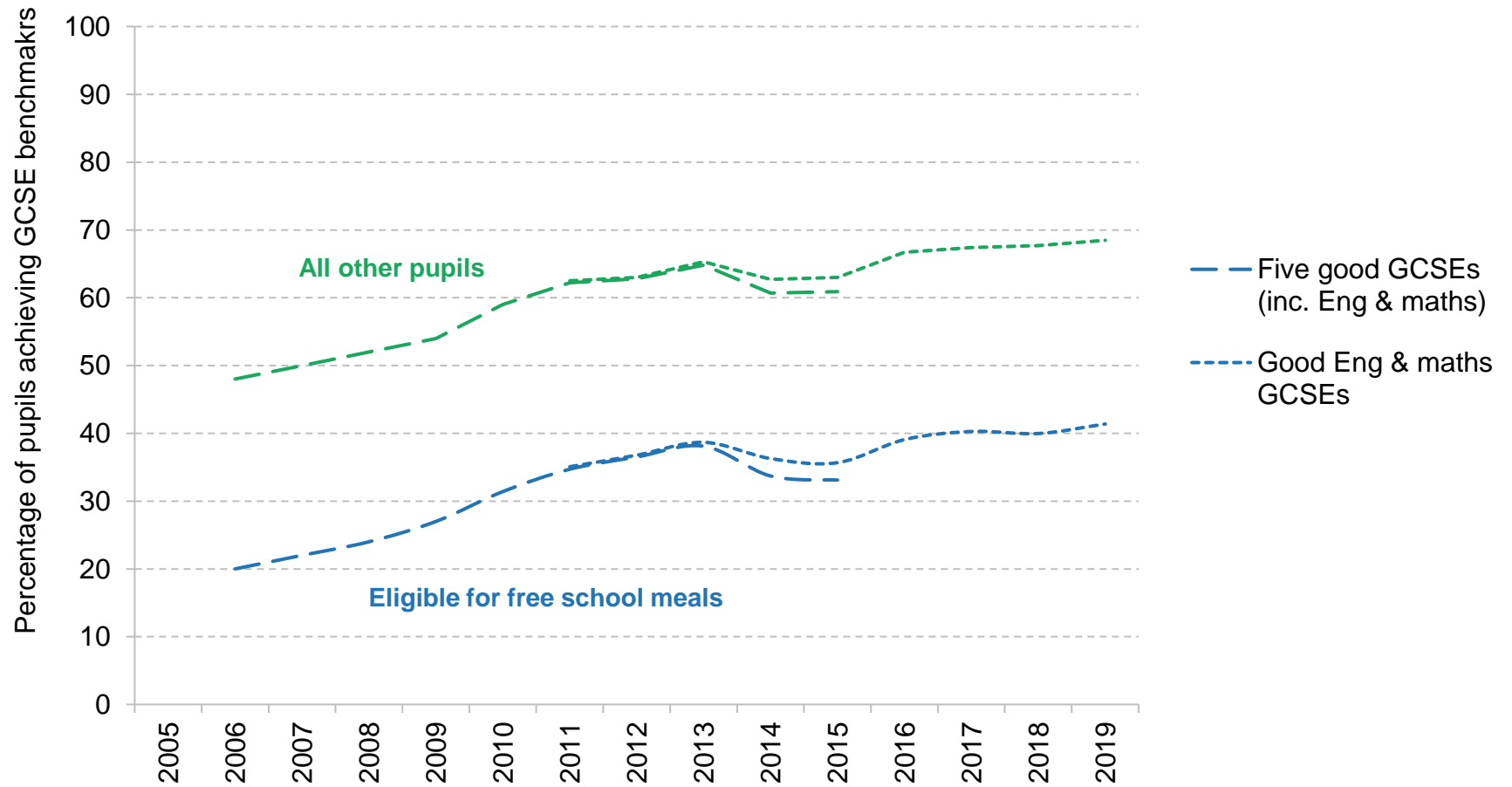
Attainment gaps between students eligible and not eligible for free school meals, 2019



Source: Figure 27, Farquharson et al. (2022).

# Disadvantage gaps are very stubborn

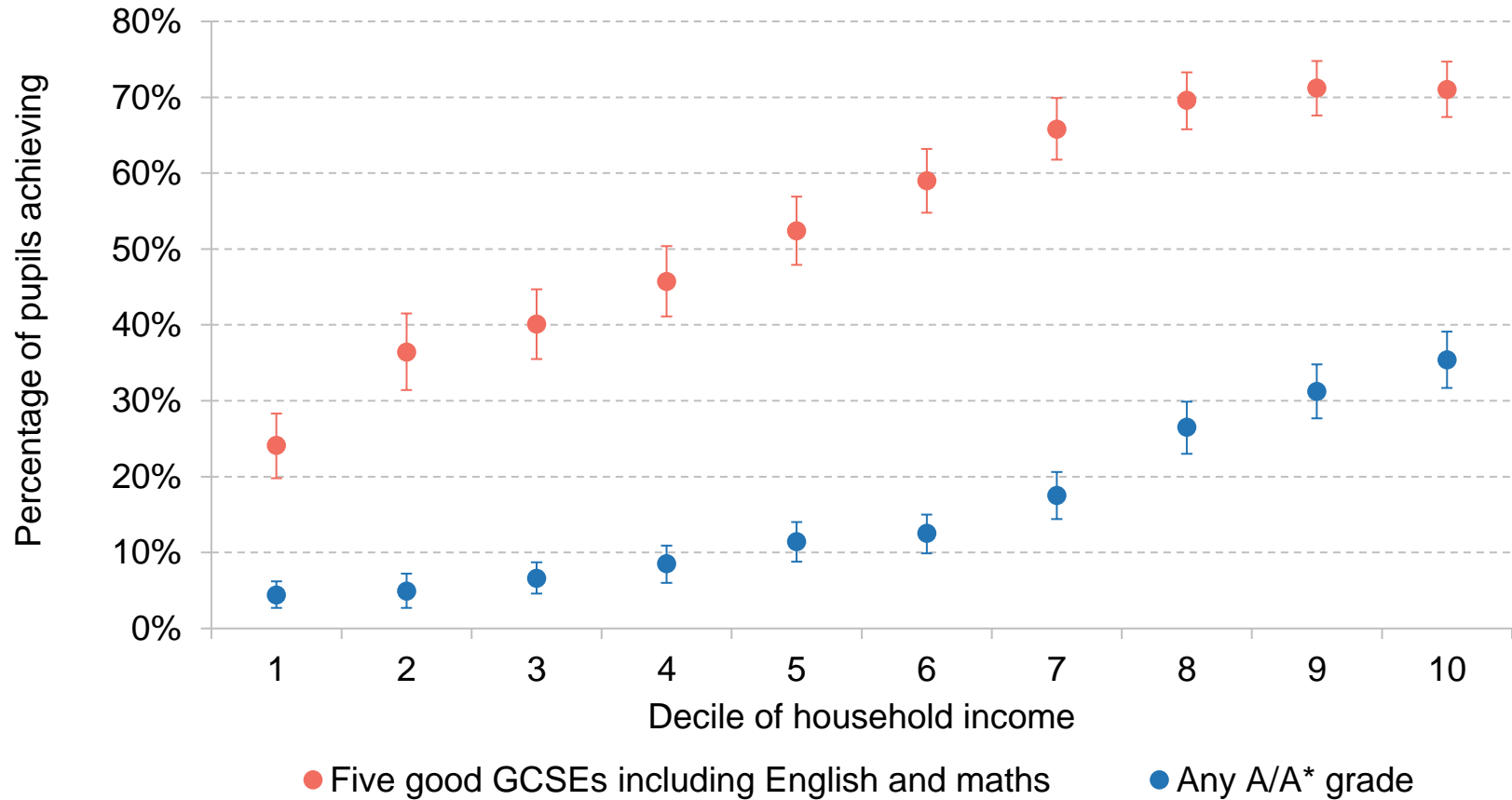
## GCSE performance by eligibility for free school meals



Source: Figure 28, Farquharson et al. (2022).

# And the gaps are not just about the poorest vs. the rest

GCSE attainment by decile of equivalised household income at age 14 (MCS cohort)



Source: Figure 29, Farquharson et al. (2022).

**What inequalities does the existing education system produce?**

**(How) are existing inequalities reflected in educational outcomes?**



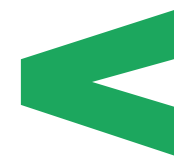
**Enormous socio-economic gaps in educational attainment**

- Young people from disadvantaged families are far less likely to be successful in their GCSEs and to study for higher-level qualifications

**Girls outperform boys at school – but miss out on the highest returns**

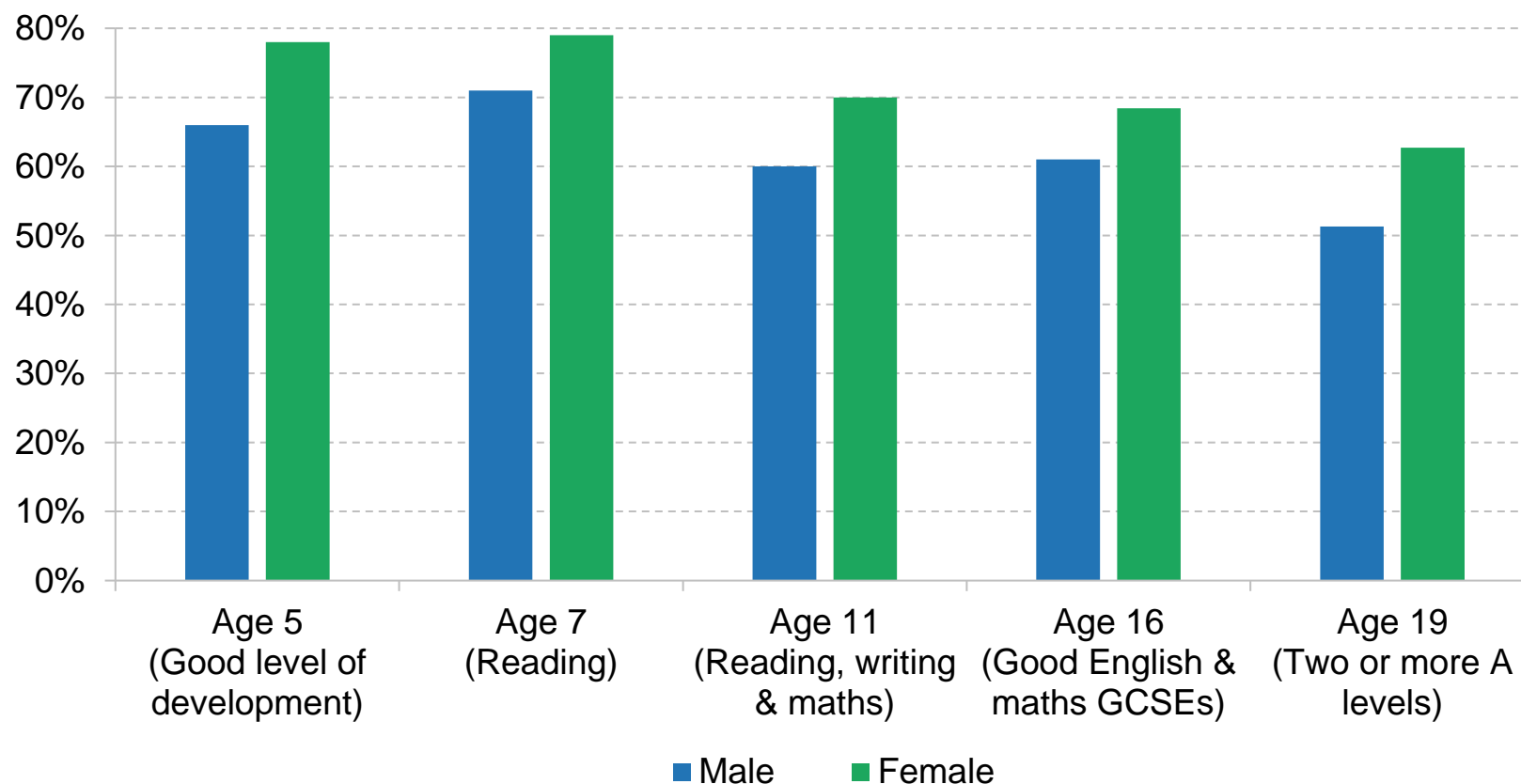
# Girls do better in education – but worse in the labour market

Attainment gaps between boys and girls, 2019



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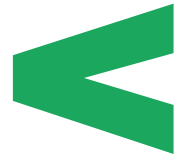
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Source: Figure 34, Farquharson et al. (2022).

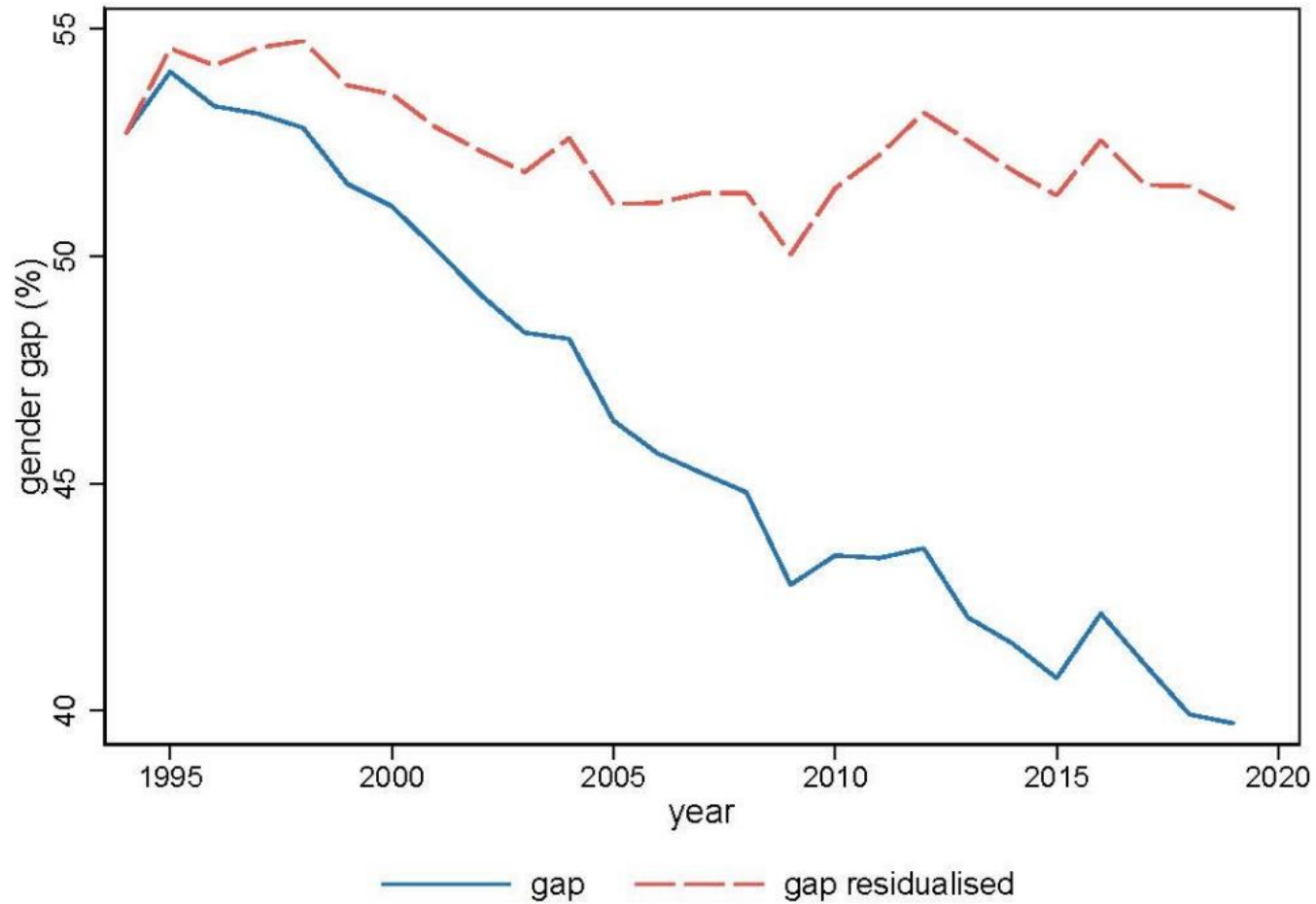
# Girls do better in education – but worse in the labour market

## Gender gap in pre-tax earnings: With and without controlling for education



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Source: Figure 6, [Andrew et al. \(2021\)](#).

## What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



### Enormous socio-economic gaps in educational attainment

- Young people from disadvantaged families are far less likely to be successful in their GCSEs and to study for higher-level qualifications

### Girls outperform boys at school – but miss out on the highest returns

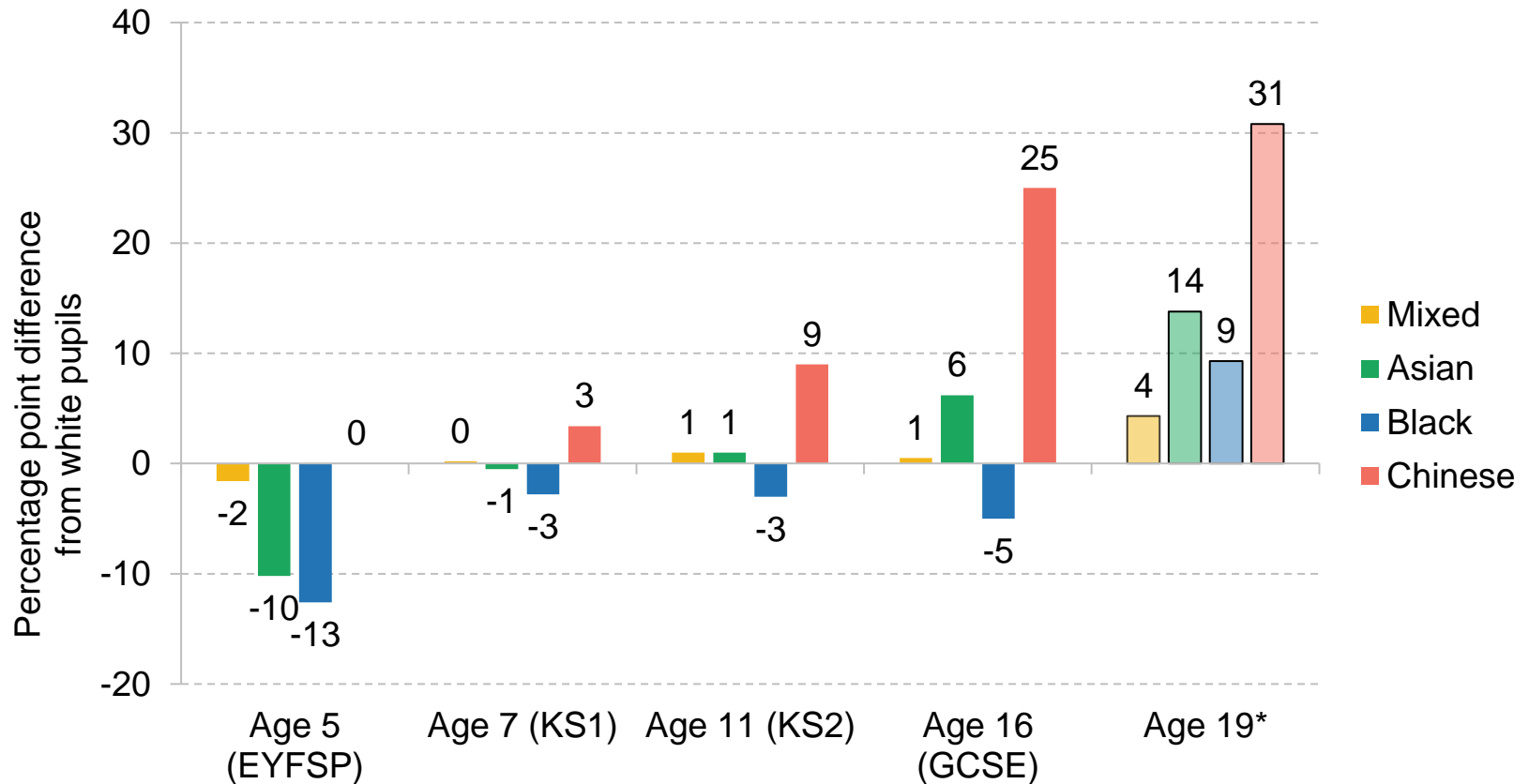
- Since the 1980s, girls have done better at school and more women now have degrees – but large earnings penalties still persist

**Young people from non-white backgrounds start out behind, but make faster progress through the schooling system and beyond**



# Children from ethnic minorities start out behind, but make fast progress

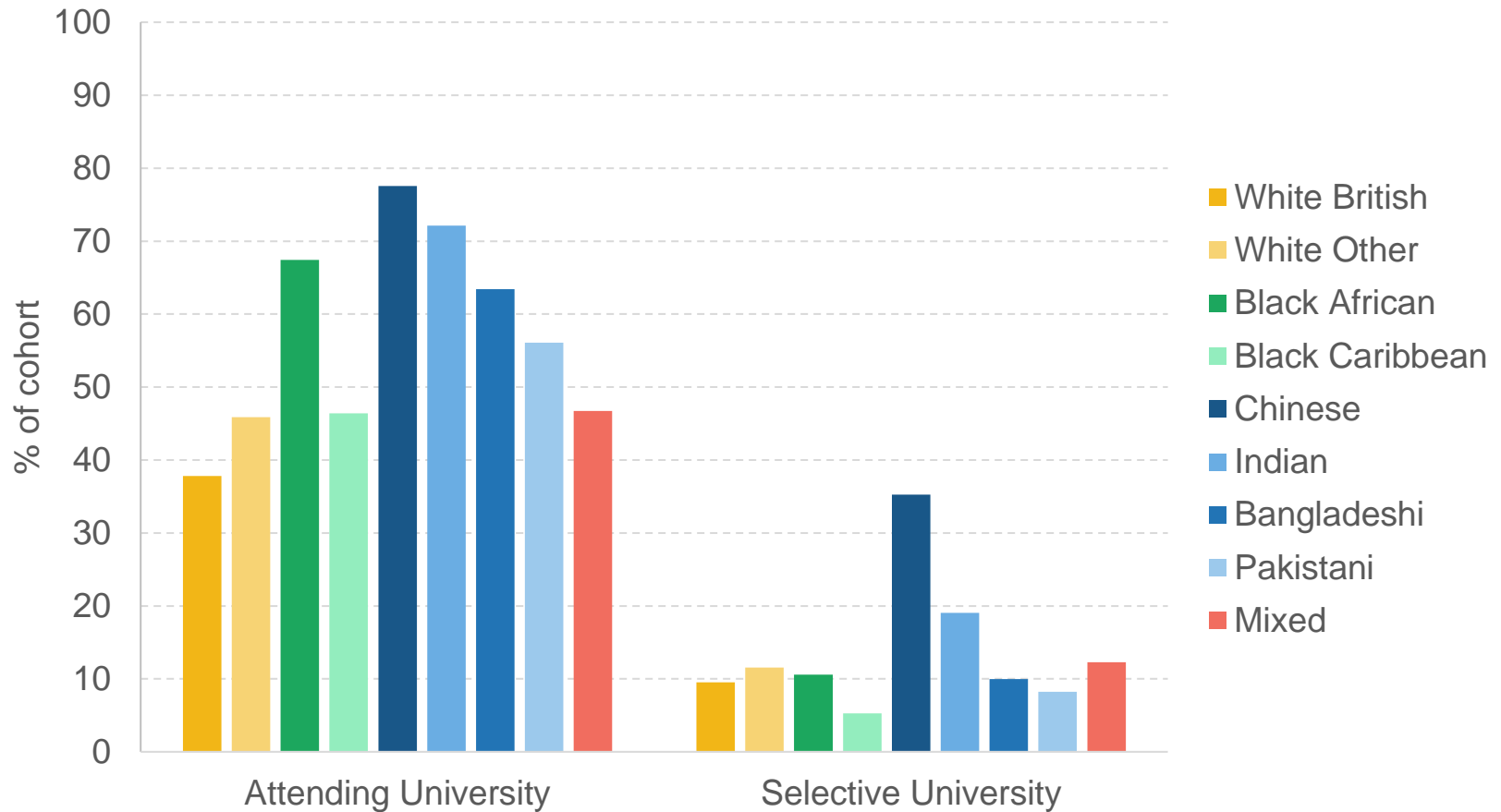
Attainment gaps between ethnic minority pupils and white pupils, 2019 GCSE cohort\*



Source: Figure 37, Farquharson et al. (2022). Note that age 19 results are from a different cohort (the 2016 GCSE cohort).

# Every ethnic minority group is more likely to progress to university than White British pupils

Progression to higher education at age 19 by ethnicity, 2018-19



Source: Adapted from Figure 39, Farquharson et al. (2022).

## What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



### Enormous socio-economic gaps in educational attainment

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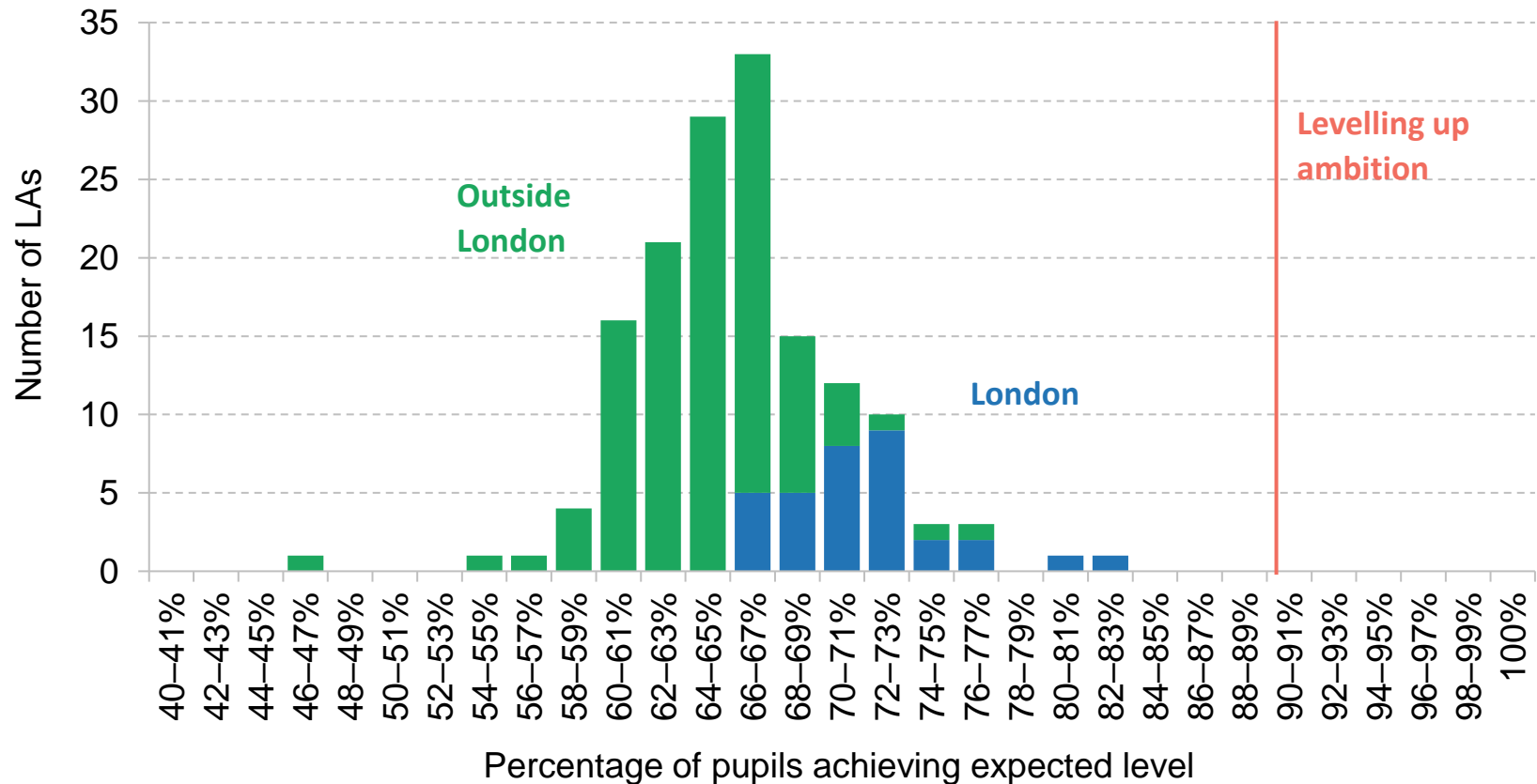
- Since the 1980s, girls have done better at school and more women now have degrees – but large earnings penalties still persist

Young people from non-white backgrounds start out behind, but make faster progress through the schooling system and beyond

**Attainment in London is higher than elsewhere – though most of this is explained by income**

# And pupils in London fare better than elsewhere

Distribution of local authorities based on the share of primary school leavers meeting the expected level in reading, writing and maths, 2019



Source: Figure 41, Farquharson et al. (2022).

## What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



### Enormous socio-economic gaps in educational attainment

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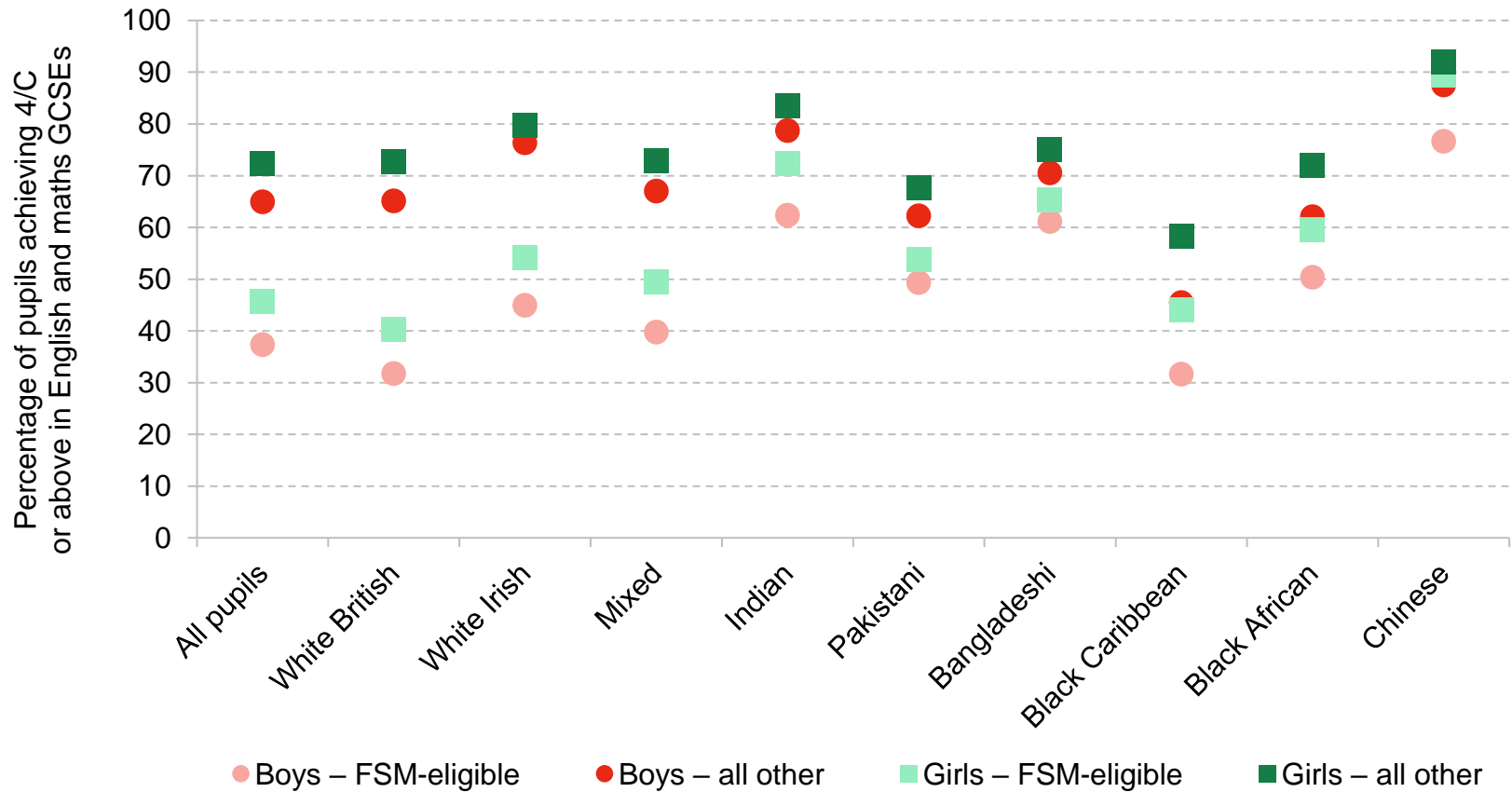
Young people from non-white backgrounds start out behind, but make faster progress through the schooling system and beyond

Attainment in London is higher than elsewhere – though most of this is explained by income

**And these inequalities also intersect**

# Intersections between inequalities matter a lot

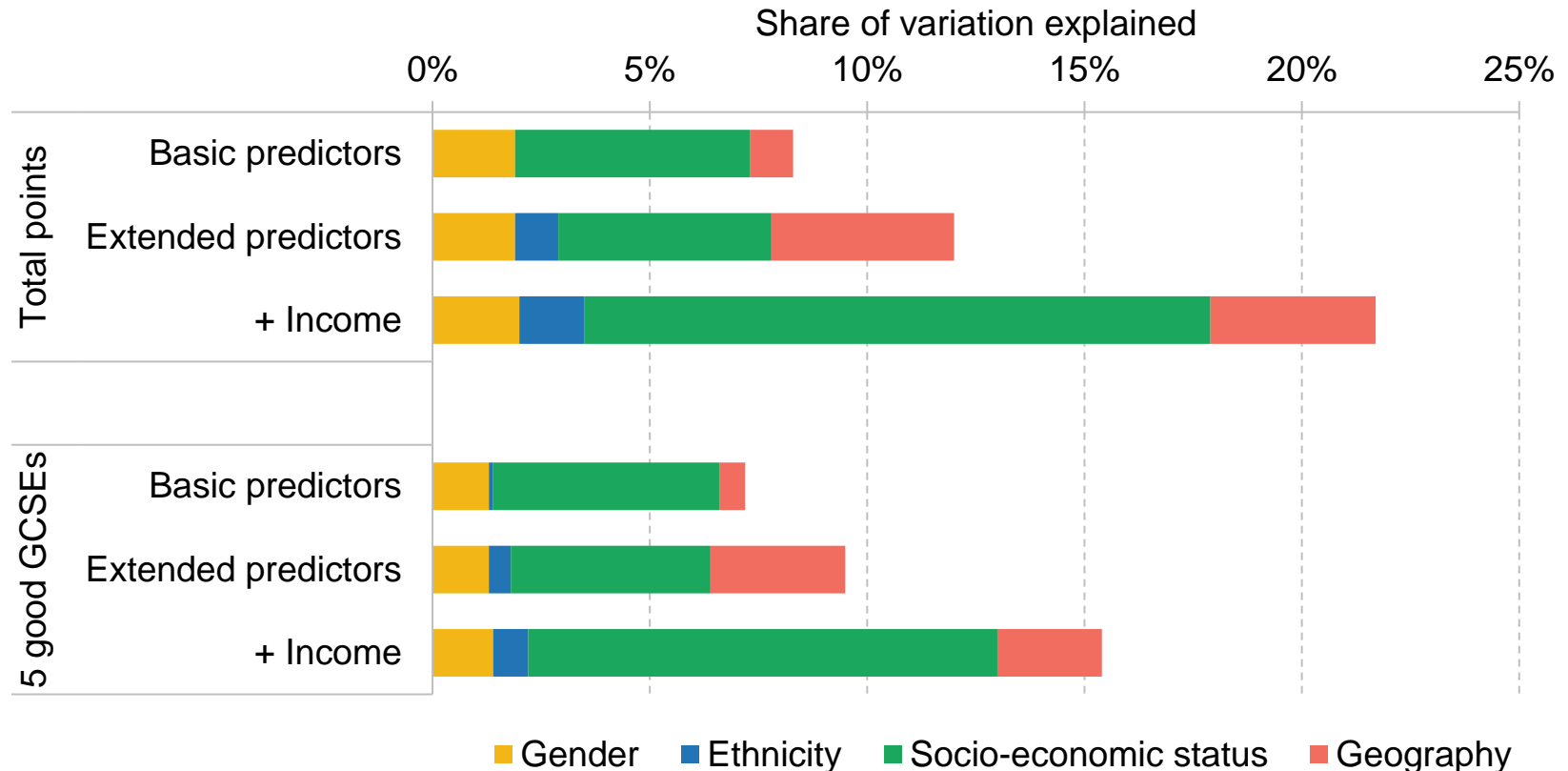
## GCSE performance by eligibility for free school meals, gender and ethnicity (2019)



Source: Figure 45, Farquharson et al. (2022).

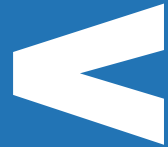
# Income is a big predictor of attainment – but not the only one

## Contribution of different demographic factors to inequalities in educational attainment (MCS cohort)



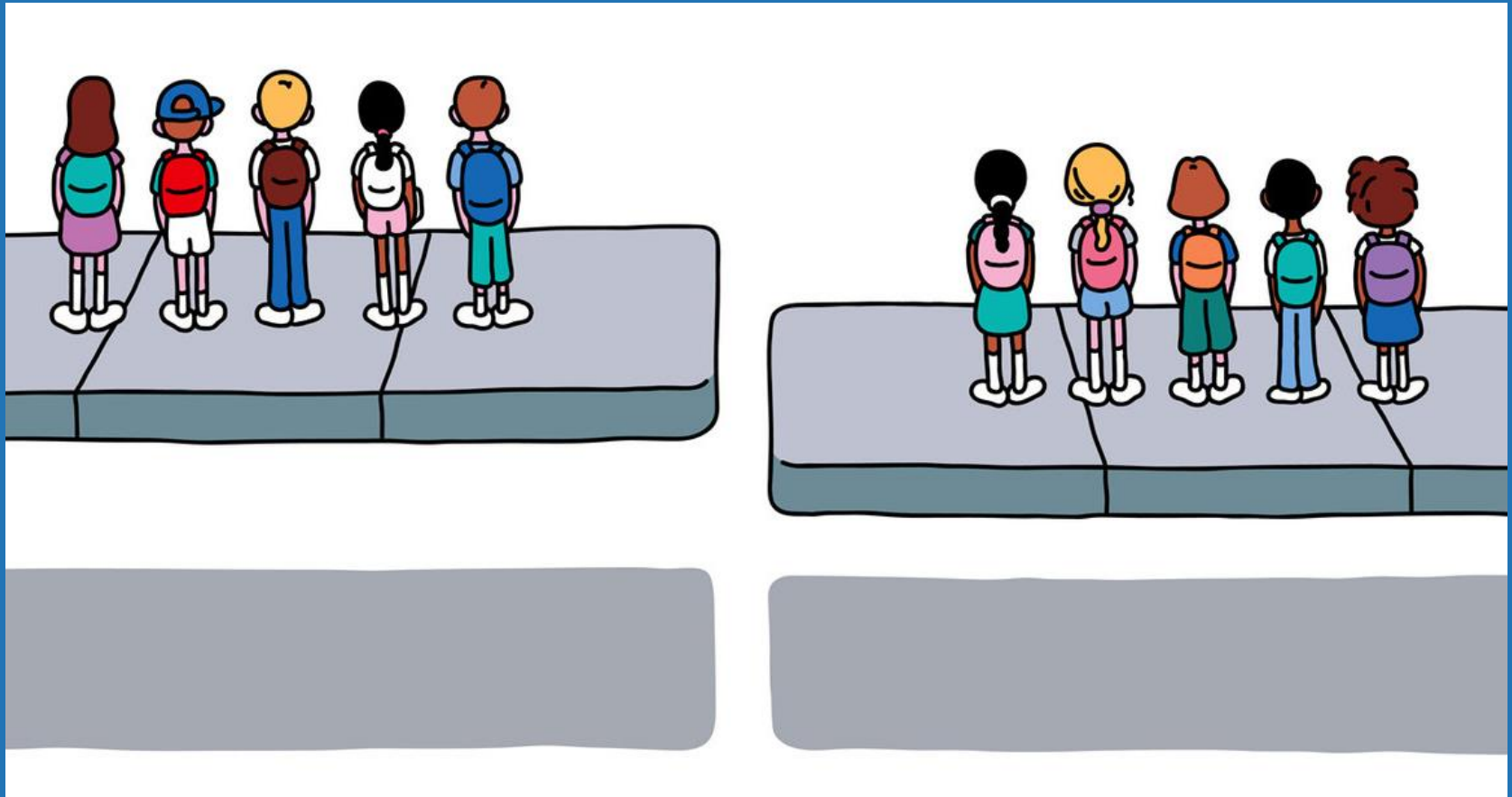
Source: Figure 48, Farquharson et al. (2022).

# Inequalities in education: How equal is the education system?



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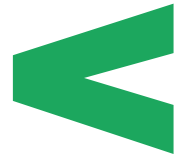
**What are the issues with the existing education system?**



**Big gaps in the resources available to different schools**

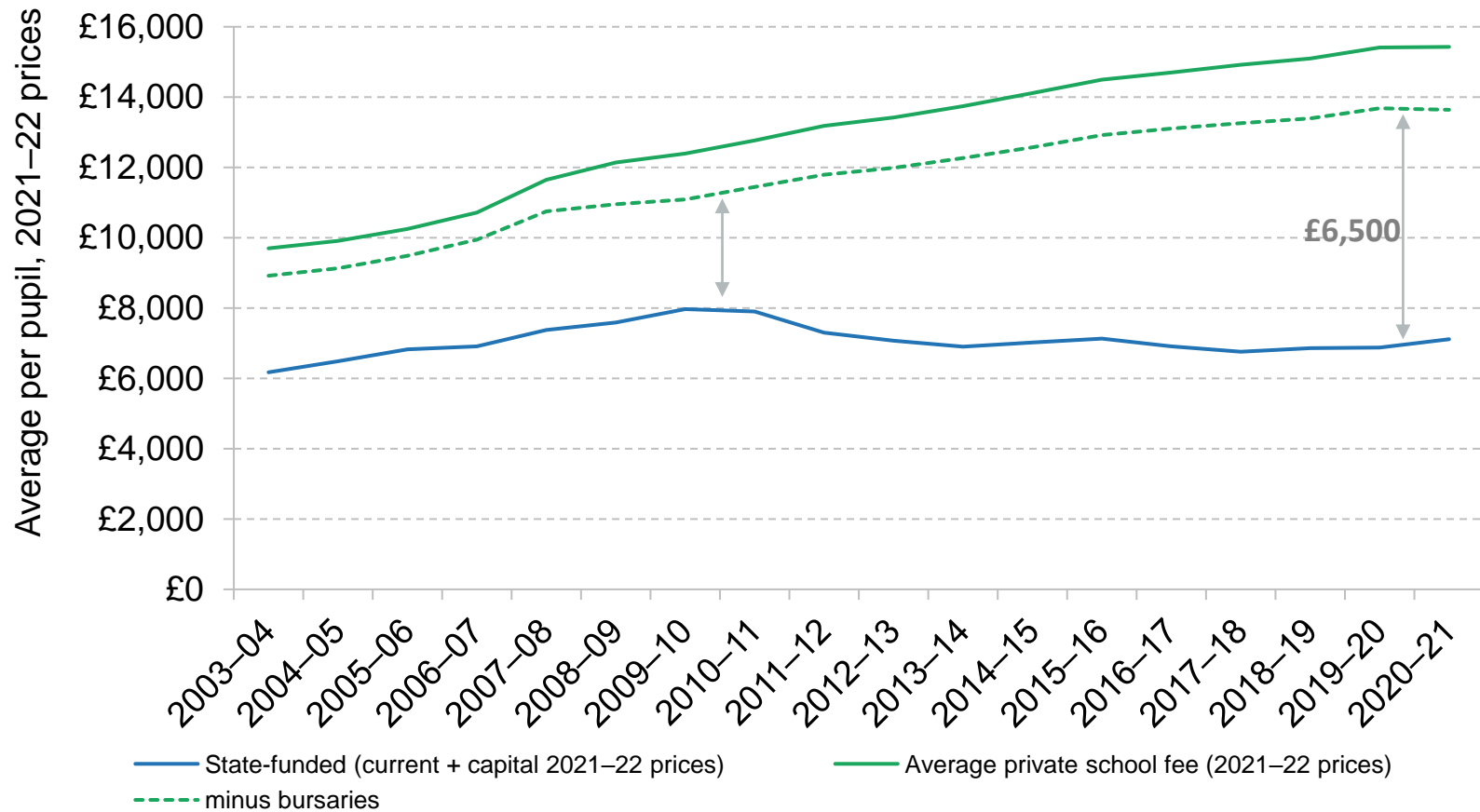
# The resource gap between private and state schools more than doubled between 2010 and 2020

## State school spending per pupil and average private school fees over time (2021–22 prices)



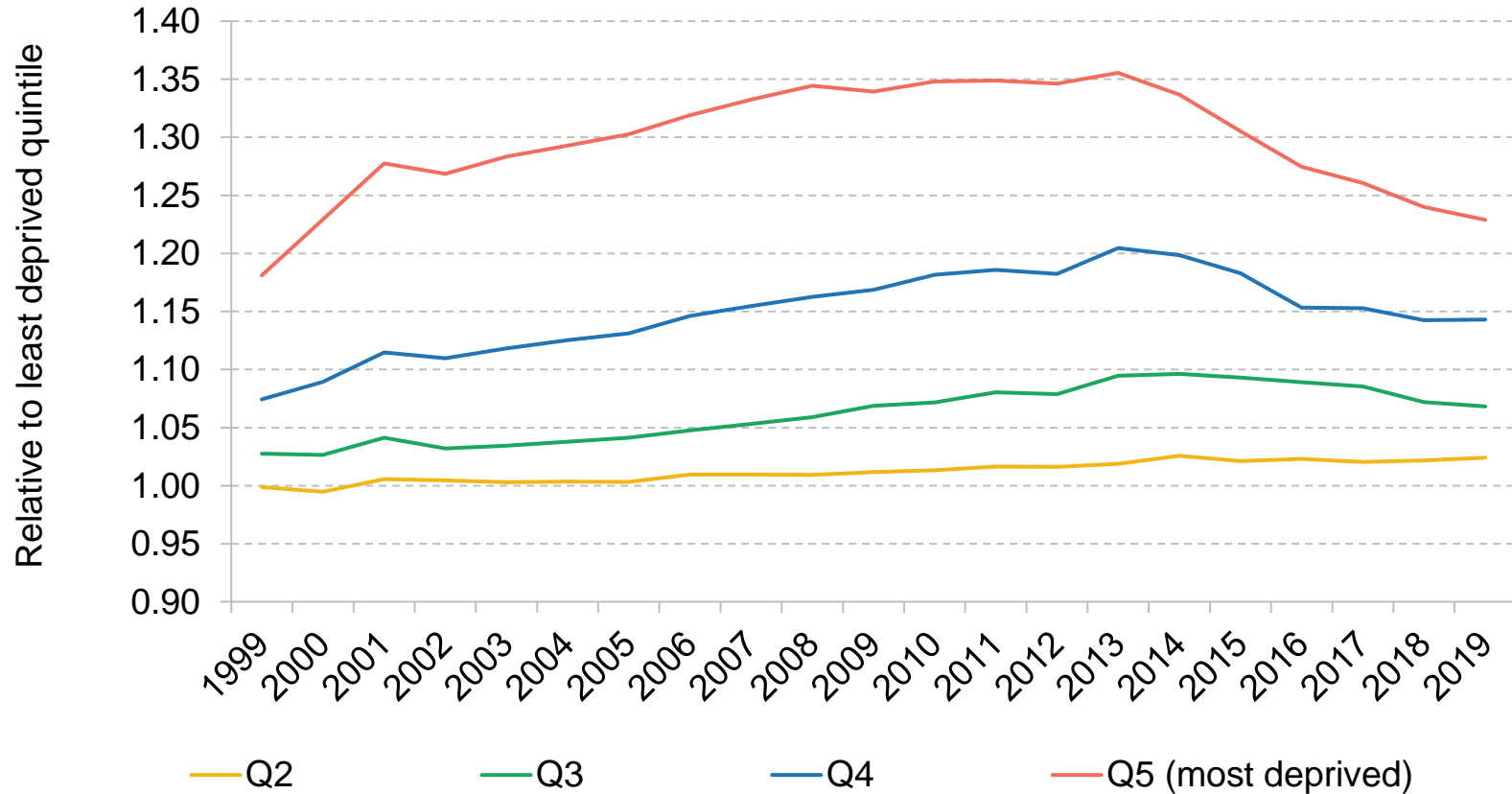
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# School funding has become less progressive

Spending per primary school pupil by quintile of eligibility for free school meals, relative to least deprived quintile



Source: Panel A, Figure 51, Farquharson et al. (2022).

# What are the issues with the existing education system?



## Big gaps in the resources available to different schools

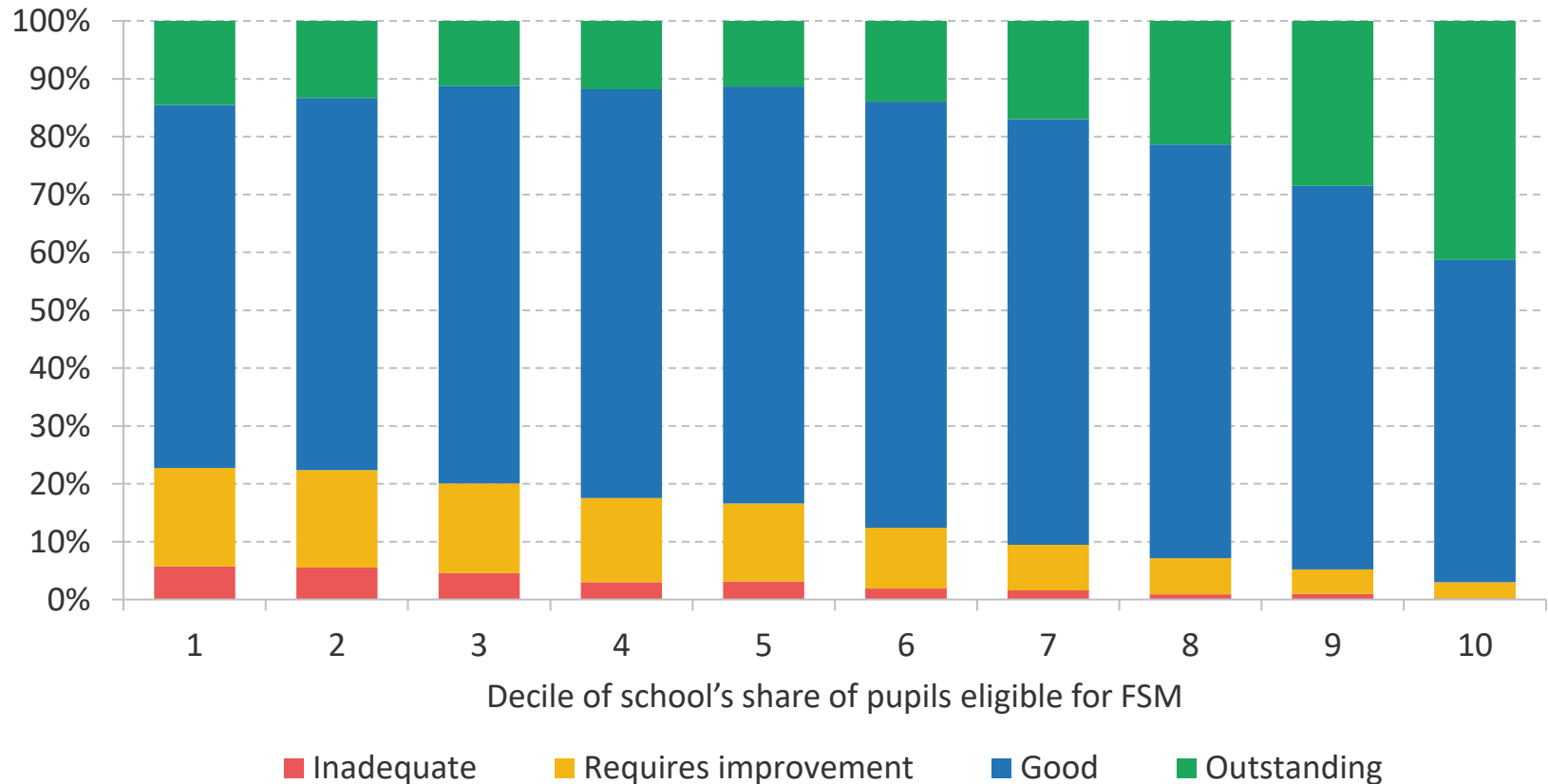
- Private schools spend substantially more on students, and state school funding has become less progressive over time

## Disadvantaged schools are less likely to have high-quality teaching

- Teachers are less likely to hold a degree in their subject area, and teaching is less likely to be judged Good or Outstanding by the schools regulator

# And poorer schools tend to have worse teaching

Ofsted ratings for quality of teaching, learning and assessment in state-funded schools in England (latest to August 2019)



Source: Figure 53, Farquharson et al. (2022).

## What are the issues with the existing education system?



There are large differences in the resources available to different schools

- Private schools spend substantially more on students, and state school funding has become less progressive over time

**Disadvantaged schools are less likely to have high-quality teachers**

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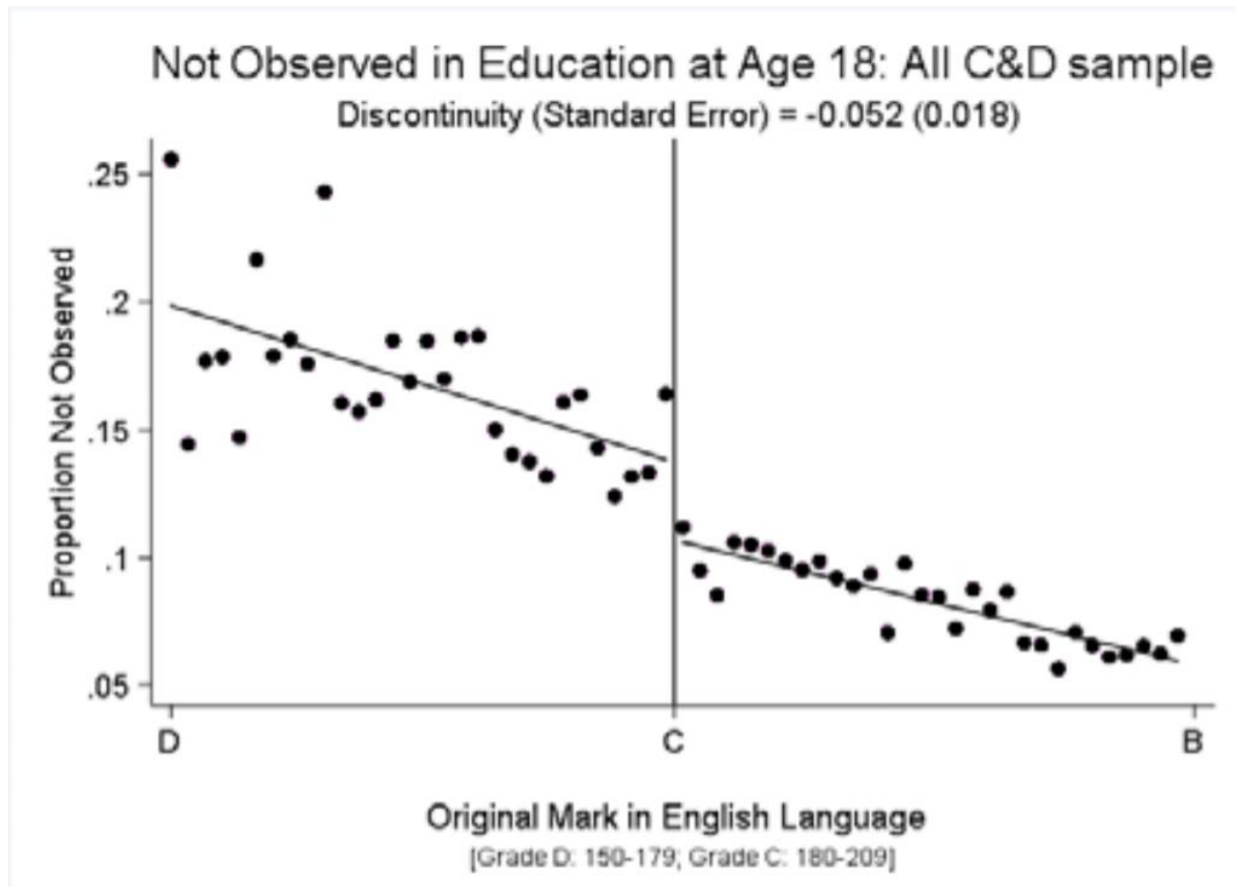
**High-stakes system coupled with few second chances**

# The English system is not kind to those who just miss out

Outcomes at age 18 for those who just miss out on a 'C' grade at GCSE



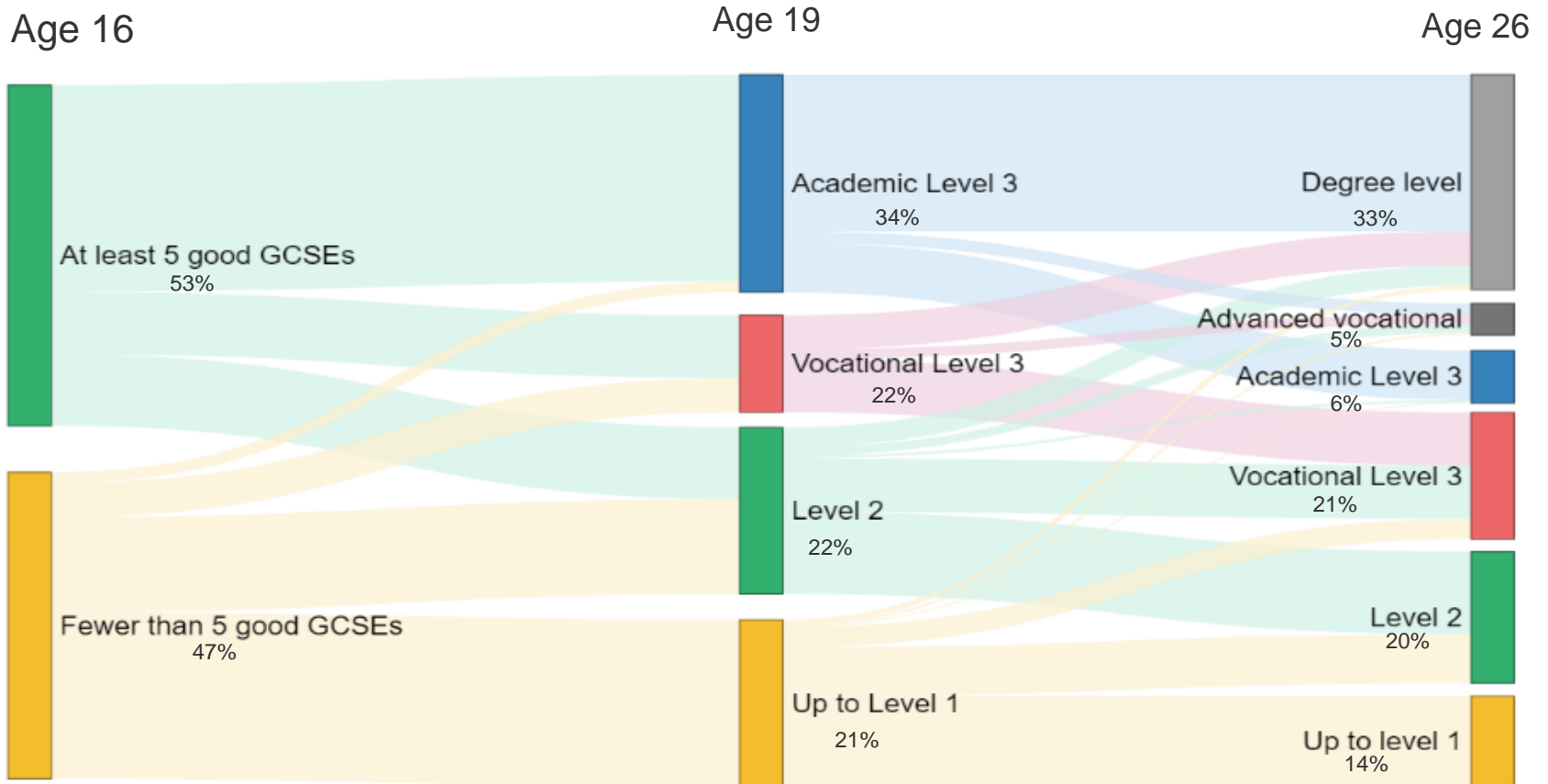
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Source: Figure 6, [Machin, McNally and Ruiz-Valenzuela \(2018\)](#).

# Meaning that some young people get stuck

The evolution of educational attainment for the 2006 GCSE cohort

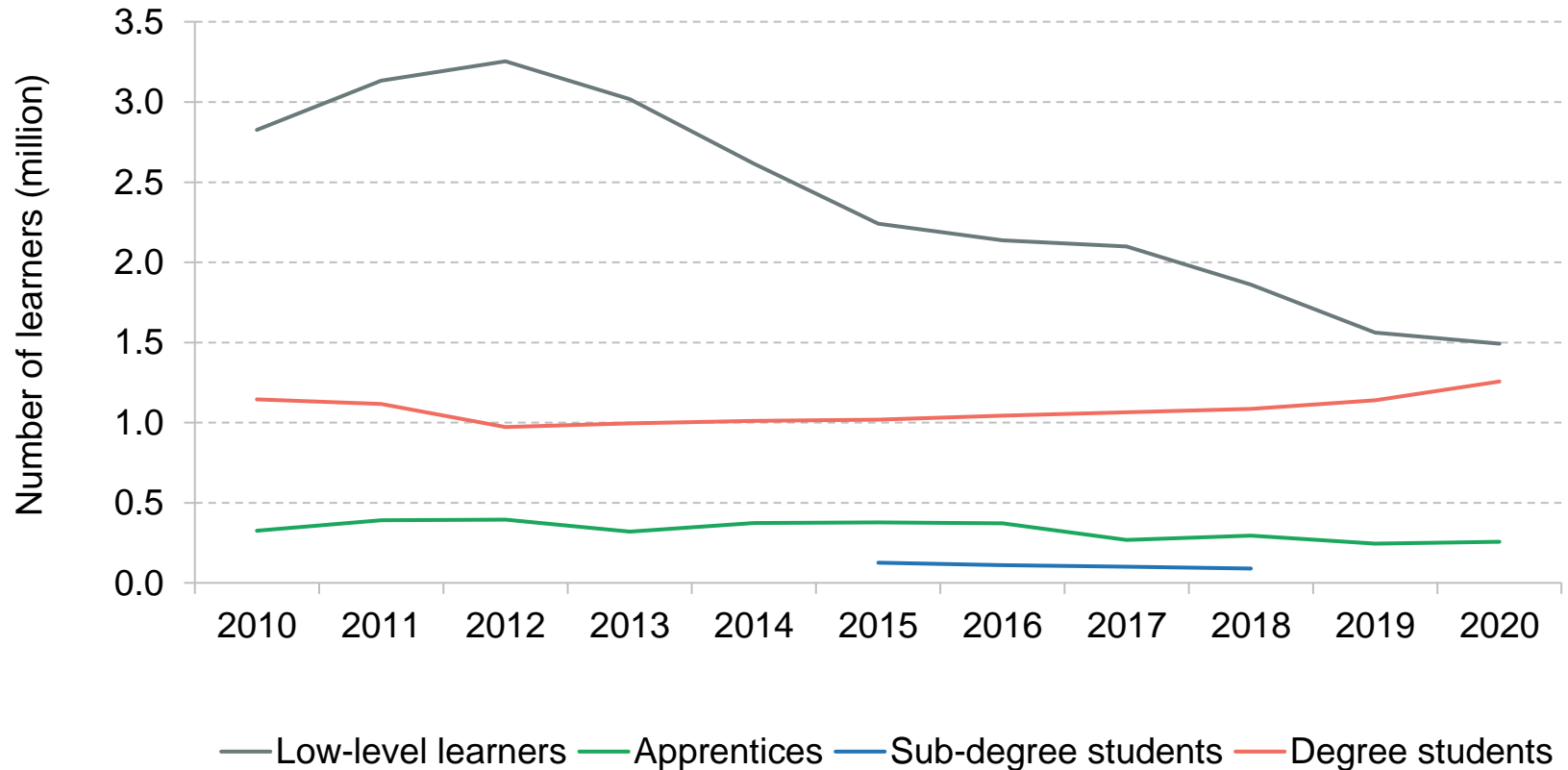


Source: Figure 54, Farquharson et al. (2022).



# There are few 'second chances' for those who don't do well, both in the adult education system...

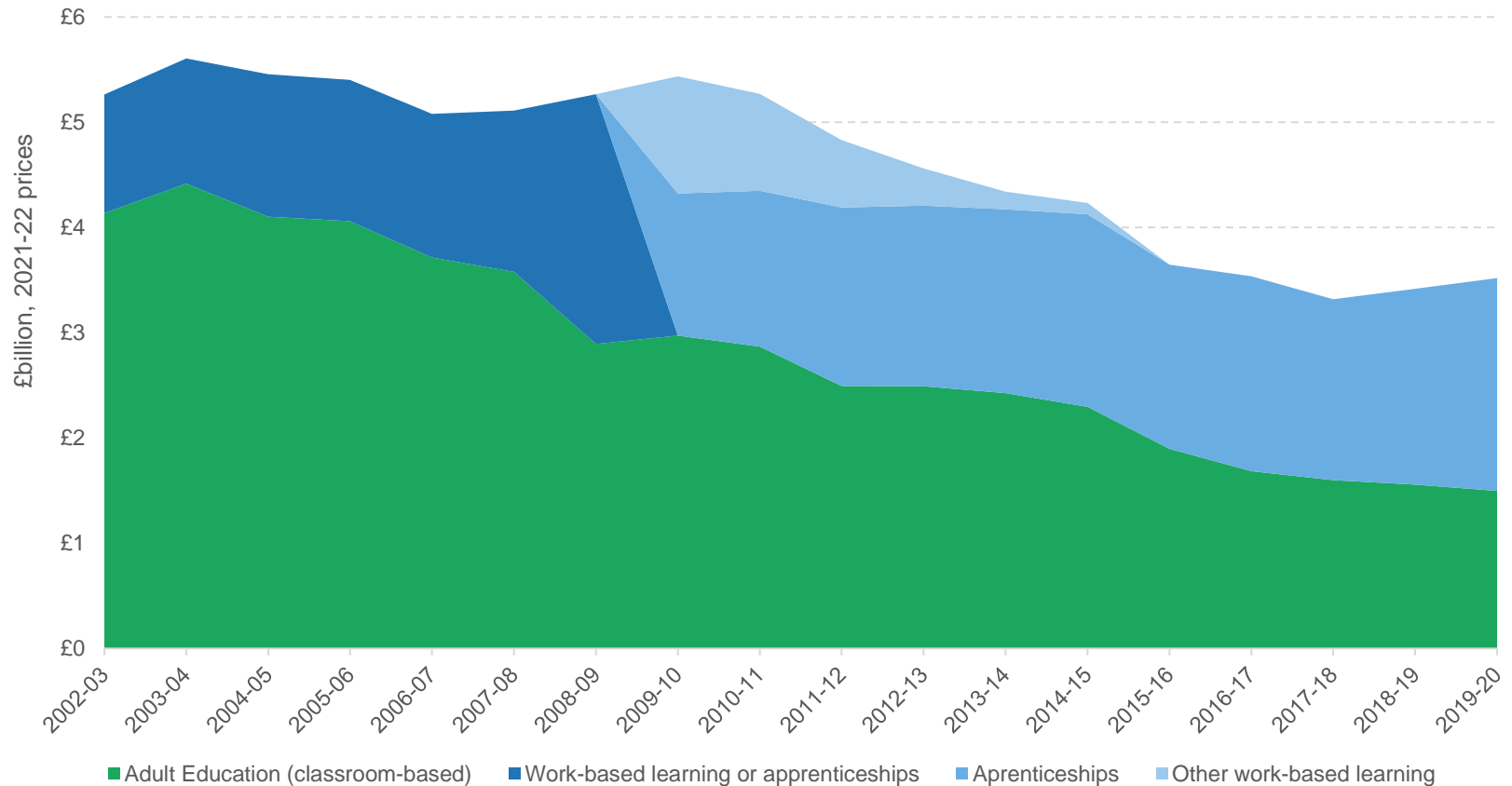
## Total number of adult learners in England



Source: Figure 55, Farquharson et al. (2022).

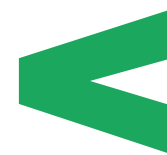
# There are few 'second chances' for those who don't do well, both in the adult education system...

## Total spending on adult education and skills, 2021-22 prices



Source: Figure 4.2 in Britton et al (2020).

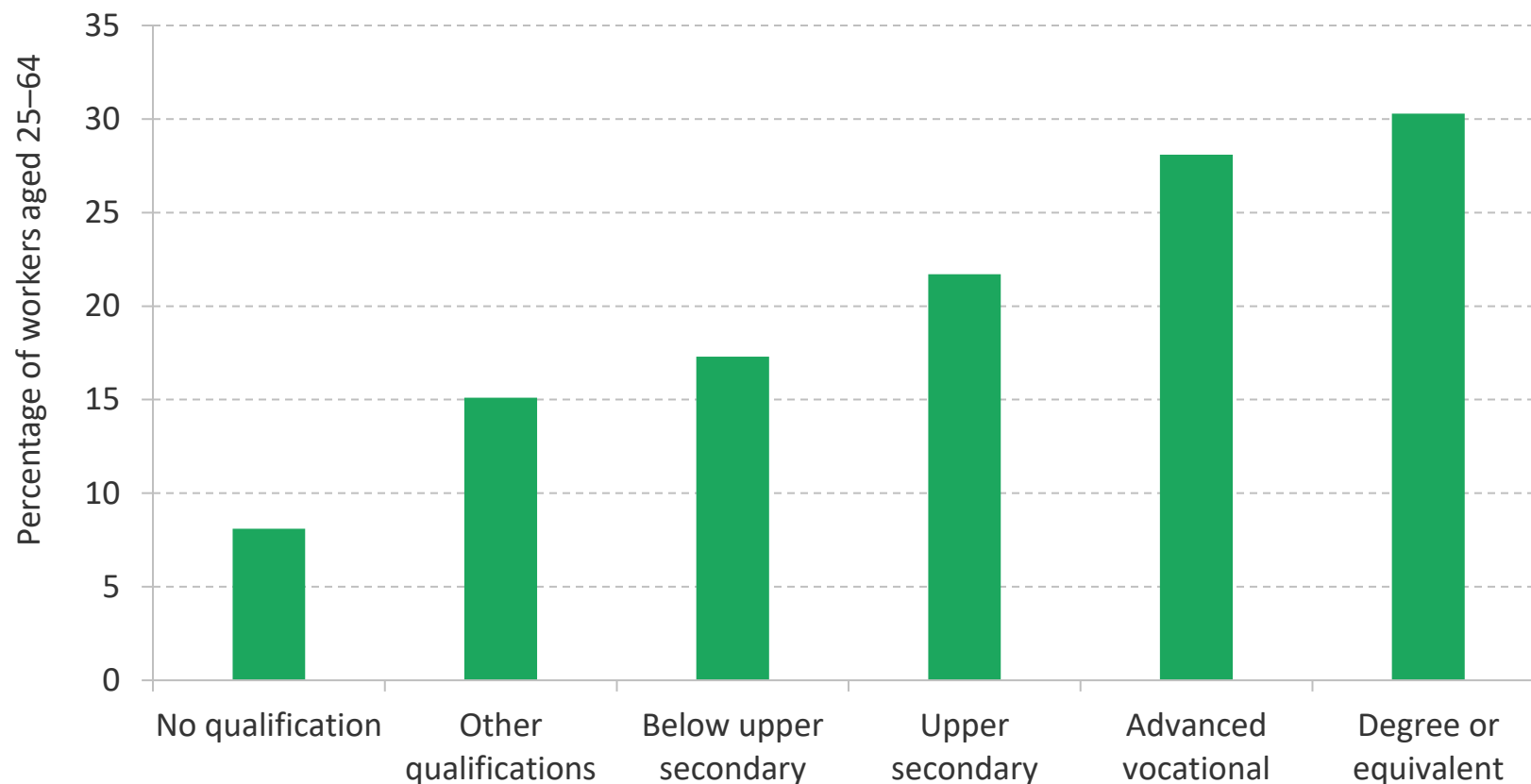
## ... and at work



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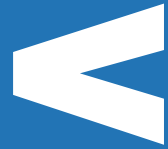
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Share of workers receiving employer-provided training in the last three months, by highest qualification level (2017)



Source: Figure 58, Farquharson et al. (2022).

# Building a more equal education system



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## Define the problem

### Making progress on tackling educational inequalities means defining the problem(s) we're trying to solve

- Inequalities **in** education or **by** education?
- Educational inequalities themselves, or wider social issues?
- Focusing on skills and human capital, or qualifications?
- Reducing inequality *per se*, or boosting skills at the bottom?

## Consider the root causes

## Think about the education system as a whole

- Early interventions can be a powerful tool – but must be followed up
- Don't ignore 'softer' skills – they are essential to long-term success
- Resources are finite, so the allocation matters – and there are difficult trade-offs here

## And look outside the education system too

- Families differ in their knowledge and resources
- Today's income inequalities can become tomorrow's education inequalities
- Health, social services, economic insecurity, housing policy, tax and benefits system all play a role

**But don't lose hope**

**Young people in the UK today are more qualified than ever**

**We've made progress in boosting some disadvantaged groups, e.g. women and ethnic minorities**

- Though educational success for these groups is too often not rewarded as highly in the labour market

**We all have an interest in raising skills and developing second chances**

- Economic case – productivity, resilience to labour market changes
- Moral case – wildly different outcomes based on small differences at key moments