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Higher education funding and access

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Outline of lecture

- Reasons for state intervention in HE
- Overview of 2012 reform to HE funding
- Implications of 2012 reform to HE funding
  - For public finances
  - For graduates
  - For universities
  - For students
- Potential implications for access to HE
- On-going policy changes and policy options

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Reasons for state intervention in HE

Why might the market alone lead to inefficient outcomes?

1. Externalities
2. Risk and uncertainty
3. Credit market failure
4. Information problems

1. Externalities

- Education may create benefits to society over and above those that accrue to the individual
  - Total return to education = private return + social return
  - College premiums in wages are substantial (on average 17% for men and 37% for women Blundell et al 2000)
  - Social returns much more difficult to quantify
  - Higher employment and earnings -> more tax revenues and less spending on benefits;
  - Improve productivity and wage of other workers (imperfect substitution and human capital spill-over, Moretti 2004)

- Do individuals incorporate *social* return to education in weighing up costs and benefits?

2. Risk and uncertainty

- Risk of failing the degree, or not getting a upper-second class
- Uncertain returns to a degree:
  - positive earnings returns on average but high variance,
  - Know to vary substantially by degree class and subject (Bratti et al 2008)
  - Non-financial private returns difficult to evaluate, e.g. more interesting/rewarding jobs
- Forgo opportunities with positive average returns
- Risk-averse student may be reluctant to borrow

3. Credit market failure

- HE requires cash for fees and living expenses
- With perfect credit markets, students borrow now and repay from future income

- But credit markets are *not* perfect:

1. Lack of collateral to secure debt against
2. Asymmetric information: borrower has more information than lender
   - Lender exposed to adverse selection / moral hazard
   - Higher interest rates or credit rationing
   - Inefficiently small amount of borrowing and investment

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4. Information problems

- To make rational decisions, individuals must be informed about
  - Nature of product (e.g. university quality, HE experience)
  - Prices (e.g. fees, living costs, foregone earnings, debt repayments)
  - Future benefits (e.g. earnings)

- Expectations affect not only whether a 18-year-old goes to university, but also the aspirations of younger teenagers

- All of these arguments can justify state interventions and subsidies on **efficiency** grounds
- Externalities → government subsidies to encourage participation; but how much and to whom?
- Other market failures → student loans, insurance, information campaign
- There also exist **equity** arguments for government intervention
    - Improve social mobility through widening participation. E.g. Should the government subsidize some students more than the others? Should admission policies favour those from certain socio-economic background?

Overview of the 2012 reform

The student finance regime over time

	Pre-2006		
Fees	£1,200 (in 2005/06)		
Fees	Up-front		
Fees	Same fee across all institutions/courses		
Fees	Exemptions if on low income		
Grants	No grants (before 2004/05)		
Maintenance loans	Up to £4,200 (in 2005/06)		
Repayment	9% of earnings above £10,000		
Repayment			

The student finance regime over time

	Pre-2006	2006 reforms (top-up fees)	
Fees	£1,200 (in 2005/06)	£3,375 (in 2011/12)	
	Up-front	Deferred (via fee loan)	
	Same fee across all institutions/courses	Variable up to £3,225	
	Exemptions if on low income	No exemptions	
Grants	No grants (before 2004/05)	Up to £2,906 in grants, plus bursaries	
Maintenance loans	Up to £4,200 (in 2005/06)	Up to £6,928 (in 2011/12)	
Repayment	9% of earnings above £10,000	9% of earnings above £15,000	
		25-year debt write-off	

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The student finance regime over time

	Pre-2006	2006 reforms (top-up fees)	2012 reforms
Fees	£1,200 (in 2005/06)	£3,375 (in 2011/12)	Maximum of £9,000
	Up-front	Deferred (via fee loan)	Deferred (via fee loan)
	Same fee across all institutions/courses	Variable up to £3,225	Variable between £6,000 and £9,000
	Exemptions if on low income	No exemptions	Fee waivers for poorest students
Grants	No grants (before 2004/05)	Up to £2,906 in grants, plus bursaries	Up to £3,250 in grants, plus bursaries and fee waivers
Maintenance loans	Up to £4,200 (in 2005/06)	Up to £6,928 (in 2011/12)	Up to £7,675
Repayment	9% of earnings above £10,000	9% of earnings above £15,000	9% of earnings above £21,000 (in 2016)
		25-year debt write-off	30-year debt write-off

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Implications of 2012 reforms to HE funding

Sources and destinations of funding

	(1) Old system	(2) New system	(3) Change (£)	(4) Change (%)
Source of funding per graduate				
Taxpayers	£20,690	£19,270	-£1,420	-6.9%
HEFCE funding				
National Scholarship Programme spending				
Maintenance grants				
£ loan subsidy				
% loan subsidy (RAB)				
Graduates	£16,990	£25,830	£8,850	52.1%
Fee loan repayment				
Maintenance loan repayment				
Destination of funding per graduate				
Universities				
Students				

Sources and destinations of funding

	(1) Old system	(2) New system	(3) Change (£)	(4) Change (%)
Source of funding per graduate				
Taxpayers	£20,690	£19,270	-£1,420	-6.9%
HEFCE funding	£10,990	£1,520	-£9,460	-86.1%
National Scholarship Programme spending	£0	£130	£130	
Maintenance grants	£4,020	£4,520	£510	12.7%
£ loan subsidy	£5,690	£13,100	£7,410	130.2%
% loan subsidy (RAB)	25%	33%	8 ppts	
Graduates	£16,990	£25,830	£8,850	52.1%
Fee loan repayment	£7,530	£15,960	£8,420	111.8%
Maintenance loan repayment	£9,450	£9,880	£430	4.6%
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Universities				
HEFCE funding				
National Scholarship Programme spending				
Fees				
Less Fee waivers				
Net fees				
Bursaries and scholarships				
Students				
Maintenance grants				
Maintenance loans				
Bursaries and scholarships				

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Destination of funding per graduate				
Universities	£20,160	£25,520	£5,370	26.6%
HEFCE funding	£10,990	£1,520	-£9,460	-86.1%
National Scholarship Programme spending	£0	£130	£130	
Fees	£10,420	£25,760	£15,340	147.2%
Less Fee waivers	£0	–£600	–£600	
Net fees	£10,420	£25,160	£14,740	141.5%
Bursaries and scholarships	–£1,250	–£1,290	–£40	3.2%
Students				
Maintenance grants				
Maintenance loans				
Bursaries and scholarships				

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Bursaries and scholarships	–£1,250	–£1,290	–£40	3.2%
Students	£17,520	£19,580	£2,060	11.8%
Maintenance grants	£4,020	£4,520	£510	12.7%
Maintenance loans	£12,250	£13,770	£1,520	12.4%
Bursaries and scholarships	£1,250	£1,290	£40	3.2%

Sources of funding, sensible to earnings growth

	1.5%	2% per year real earnings growth	2.5%
Taxpayers	**-£560**	**-£1,410**	**-£1,960**
HEFCE funding	-£9,460	-£9,460	-£9,460
National Scholarship Programme spending	£130	£130	£130
Maintenance grants	£510	£510	£510
£ loan subsidy	£8,260	£7,410	£6,860
% loan subsidy (RAB)	9%	8%	8%
Graduates	**£8,000**	**£8,850**	**£9,400**
Fee loan repayment	£7,580	£8,420	£8,990
Maintenance loan repayment	£420	£430	£410

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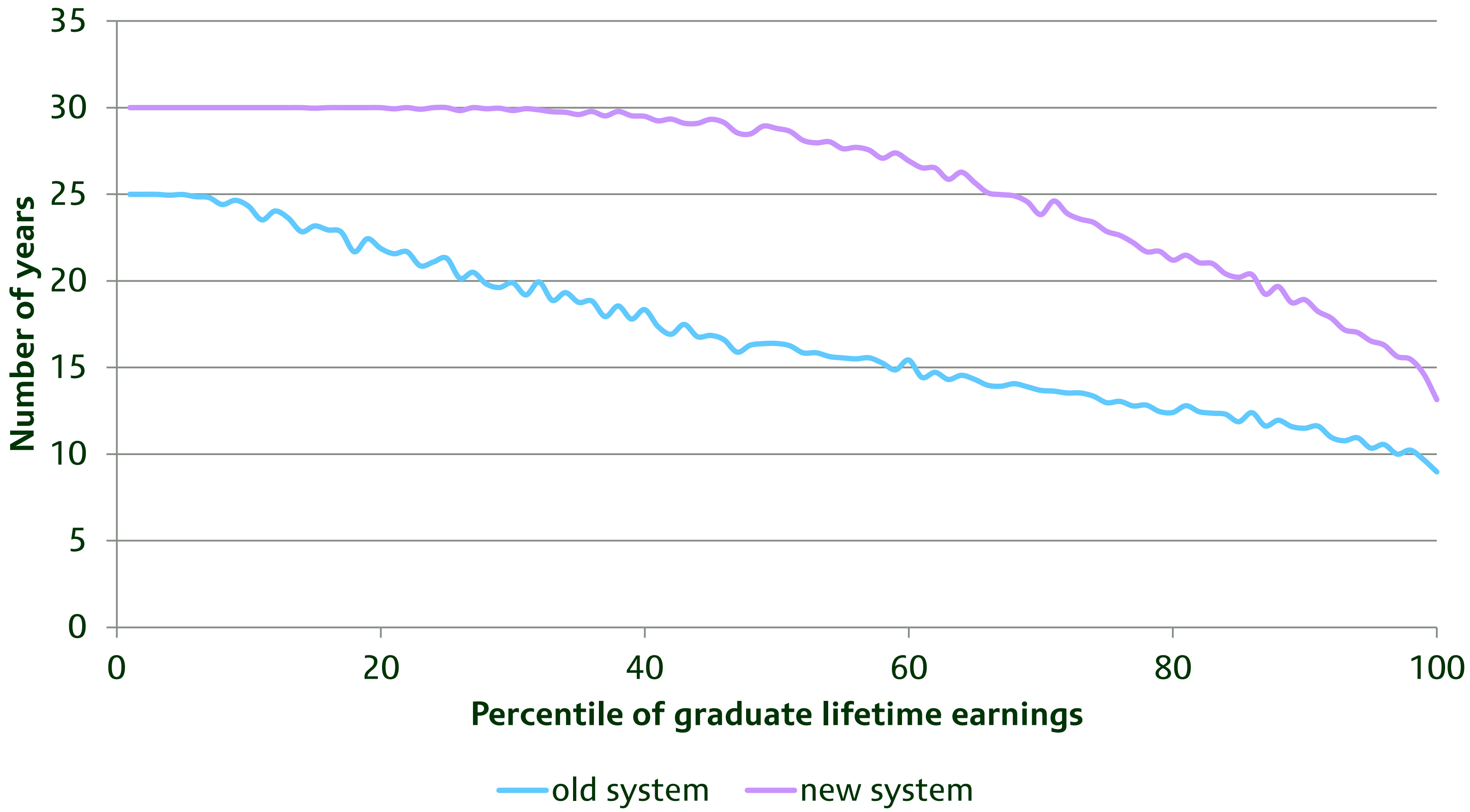
Implications for graduates: Years to repay



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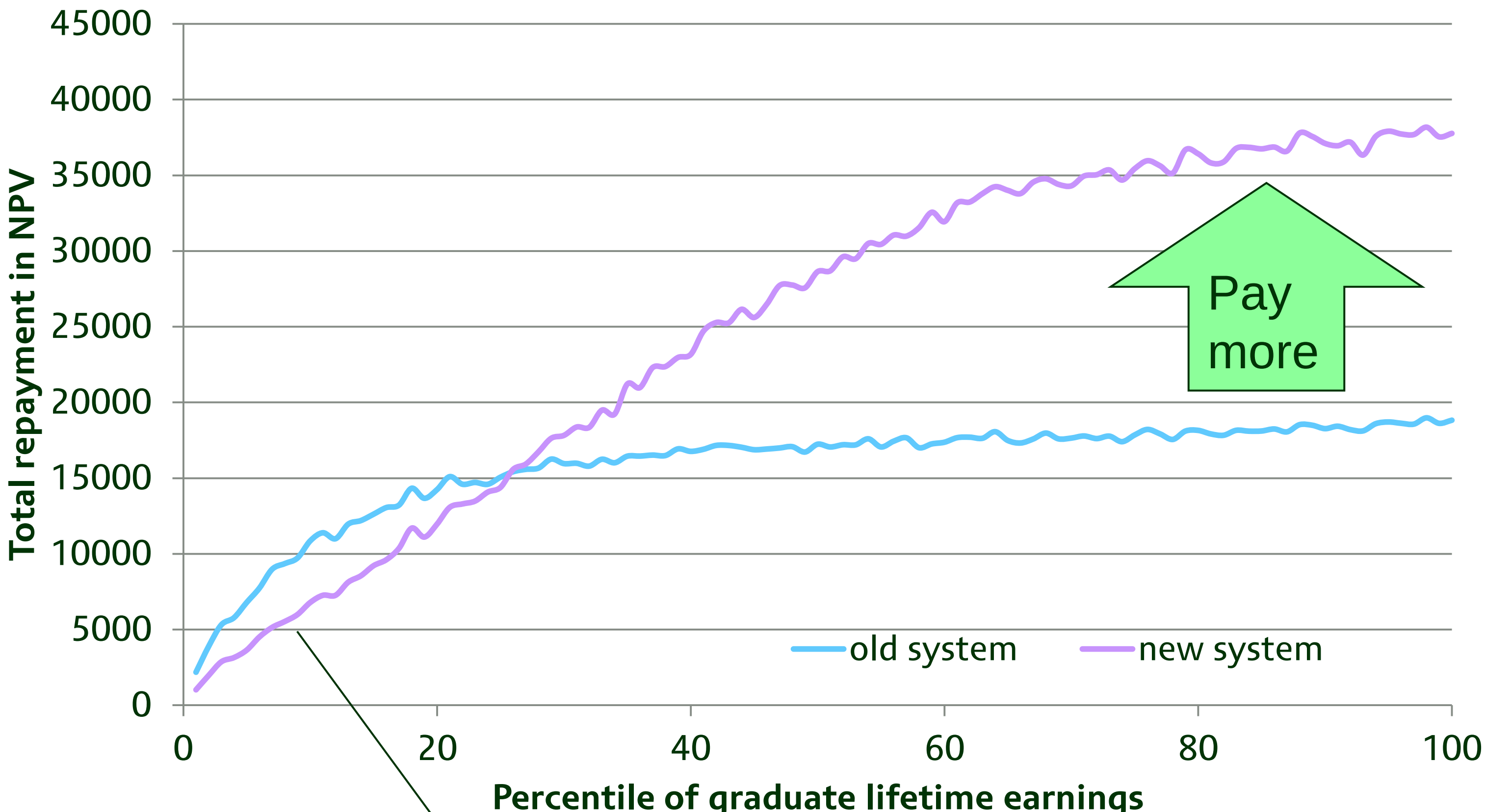
Implications for graduates:

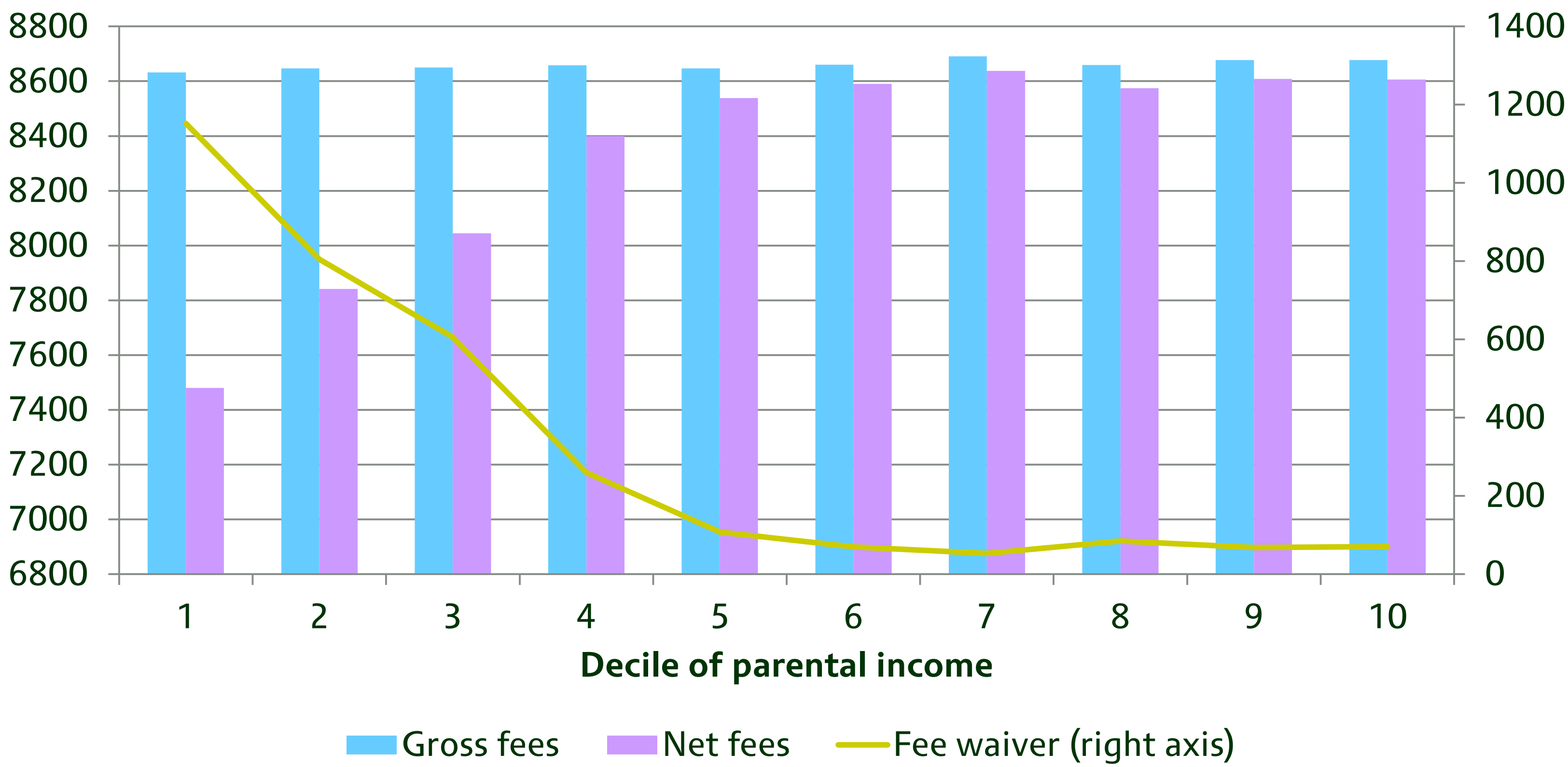


Insurance against uncertain private returns to HE

Implications for graduates

- On average graduates are worse off
  - But repayment schedule highly progressive
  - Poorest ¼ of graduates will be better off
- Low-earning graduates pay an effective graduate tax
  - Higher fees simply increase the amount of debt written off for low-earning graduates

Implications for students while at university - Gross and net fees



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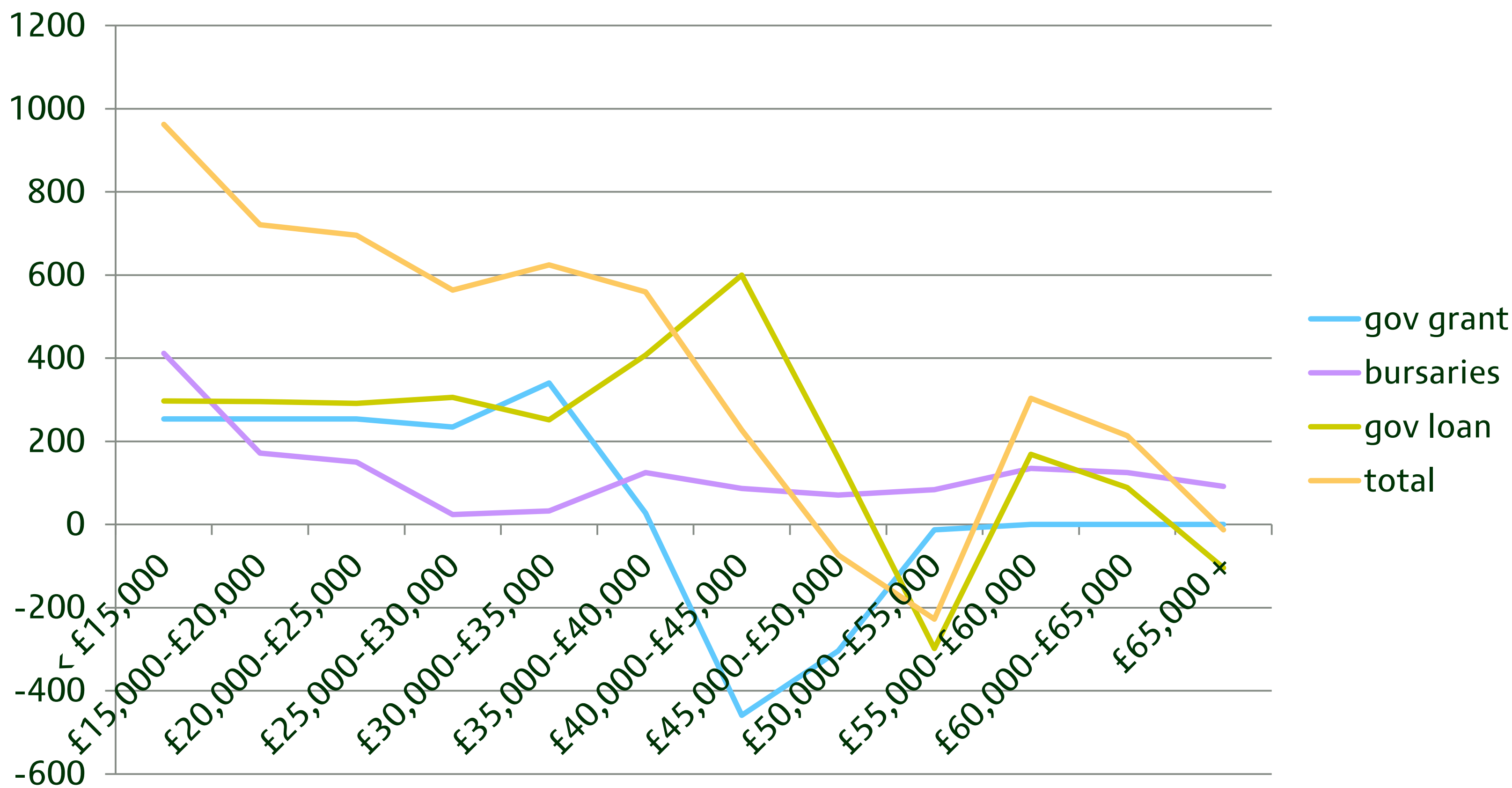
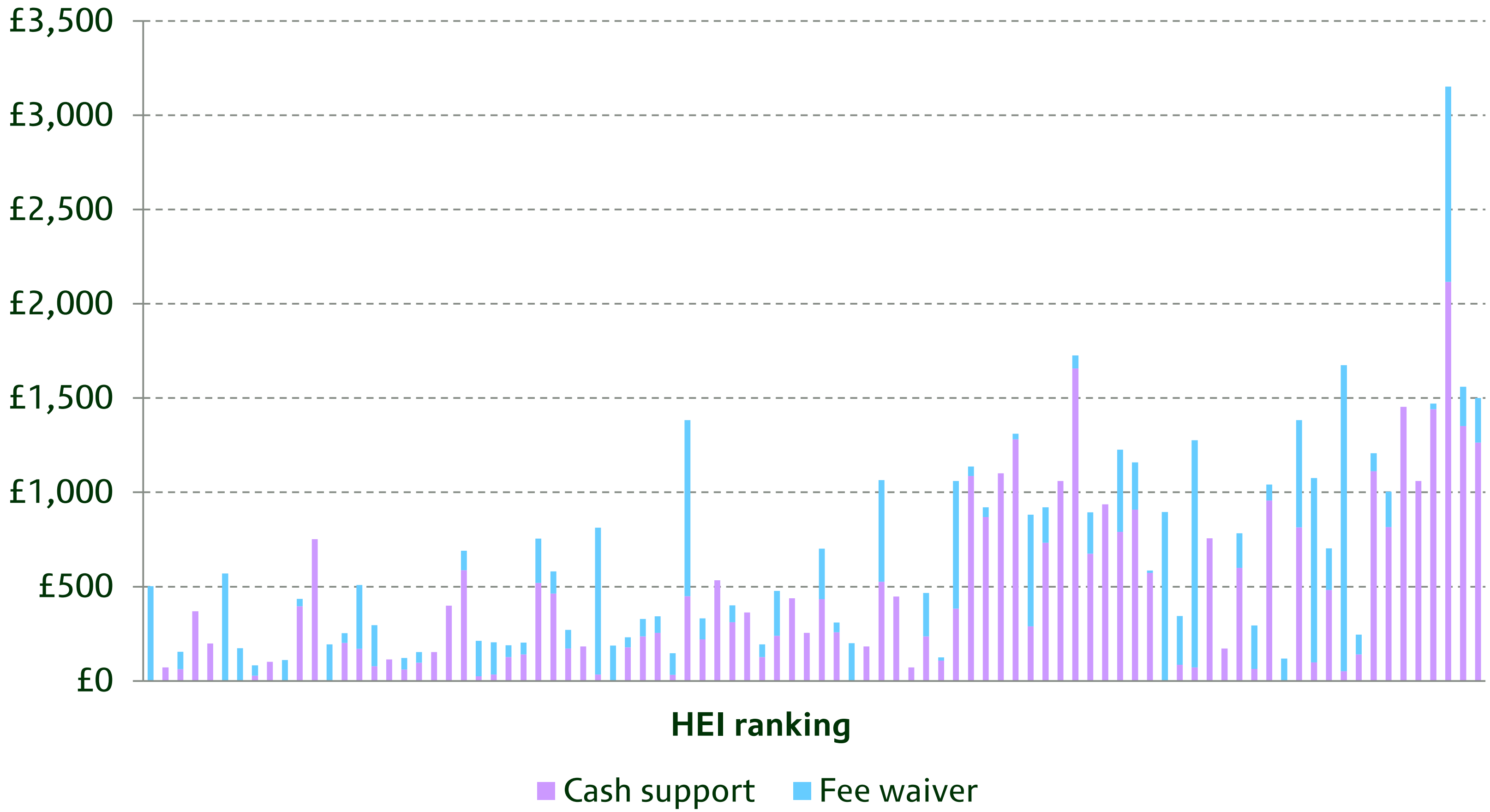
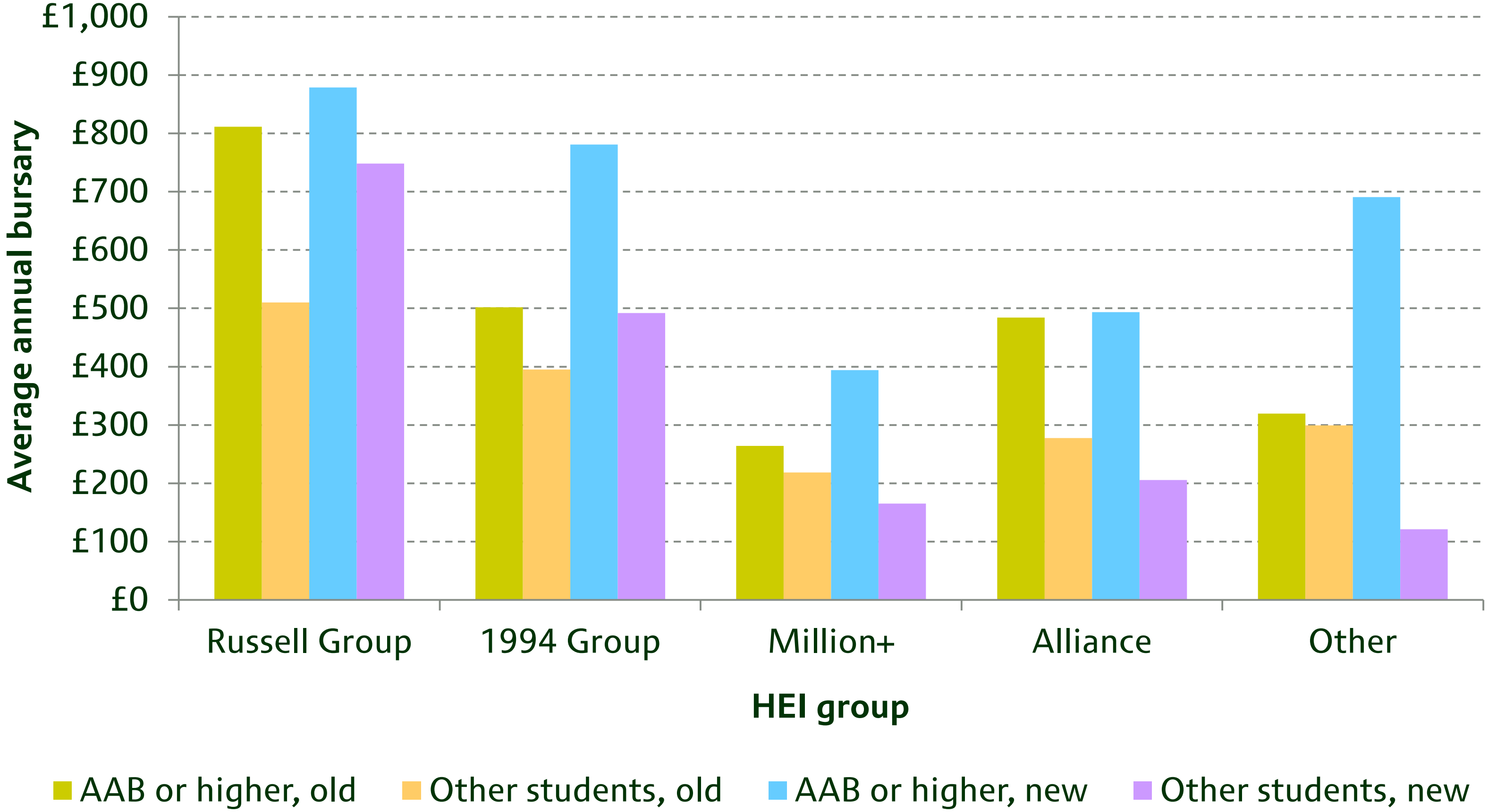
Implications for students while at university - how the reform changes upfront cash support



Implications for students while at university
- Huge variation across universities



Cash support for AAB students vs others, old system vs new system



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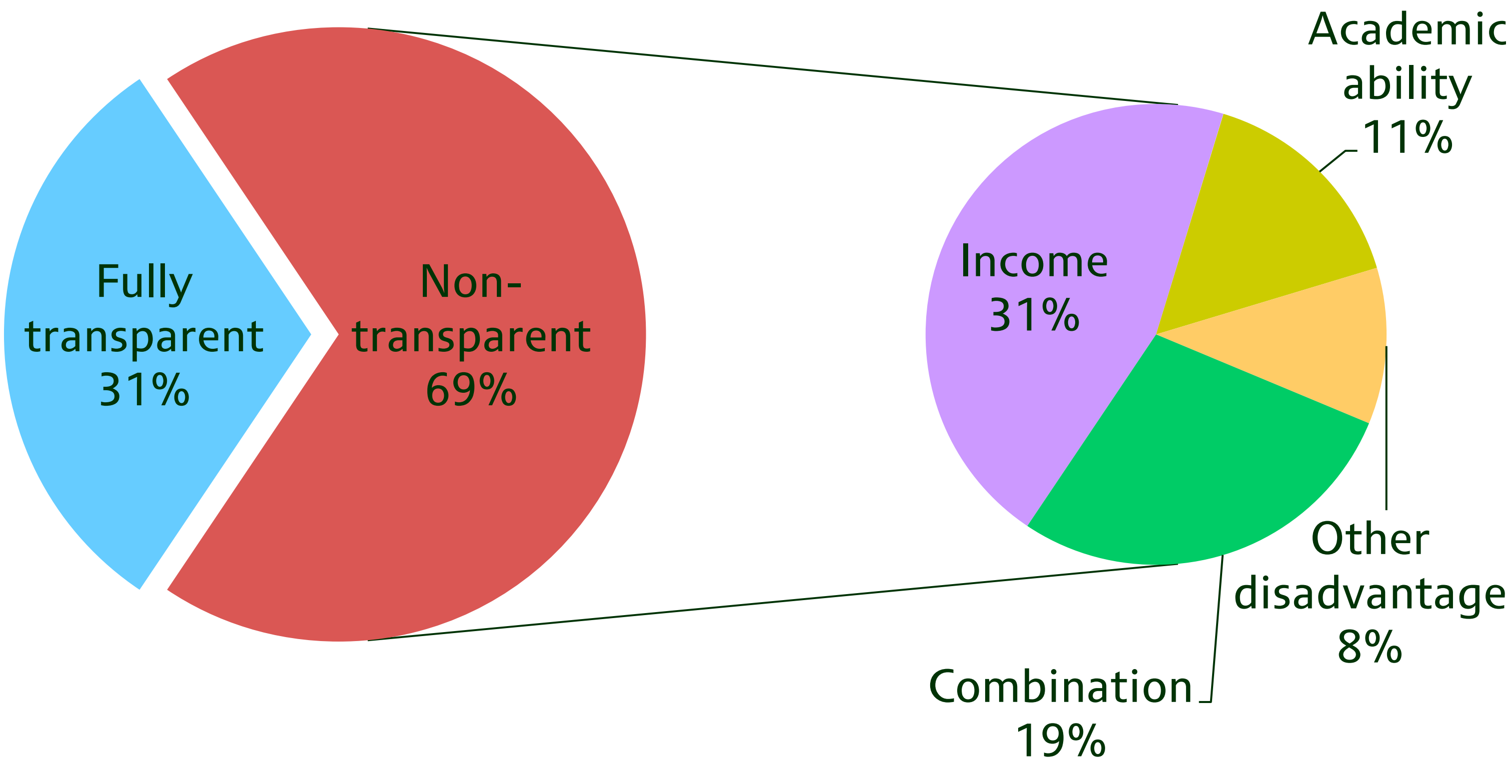
And uncertainty faced by individual students



Implications for students

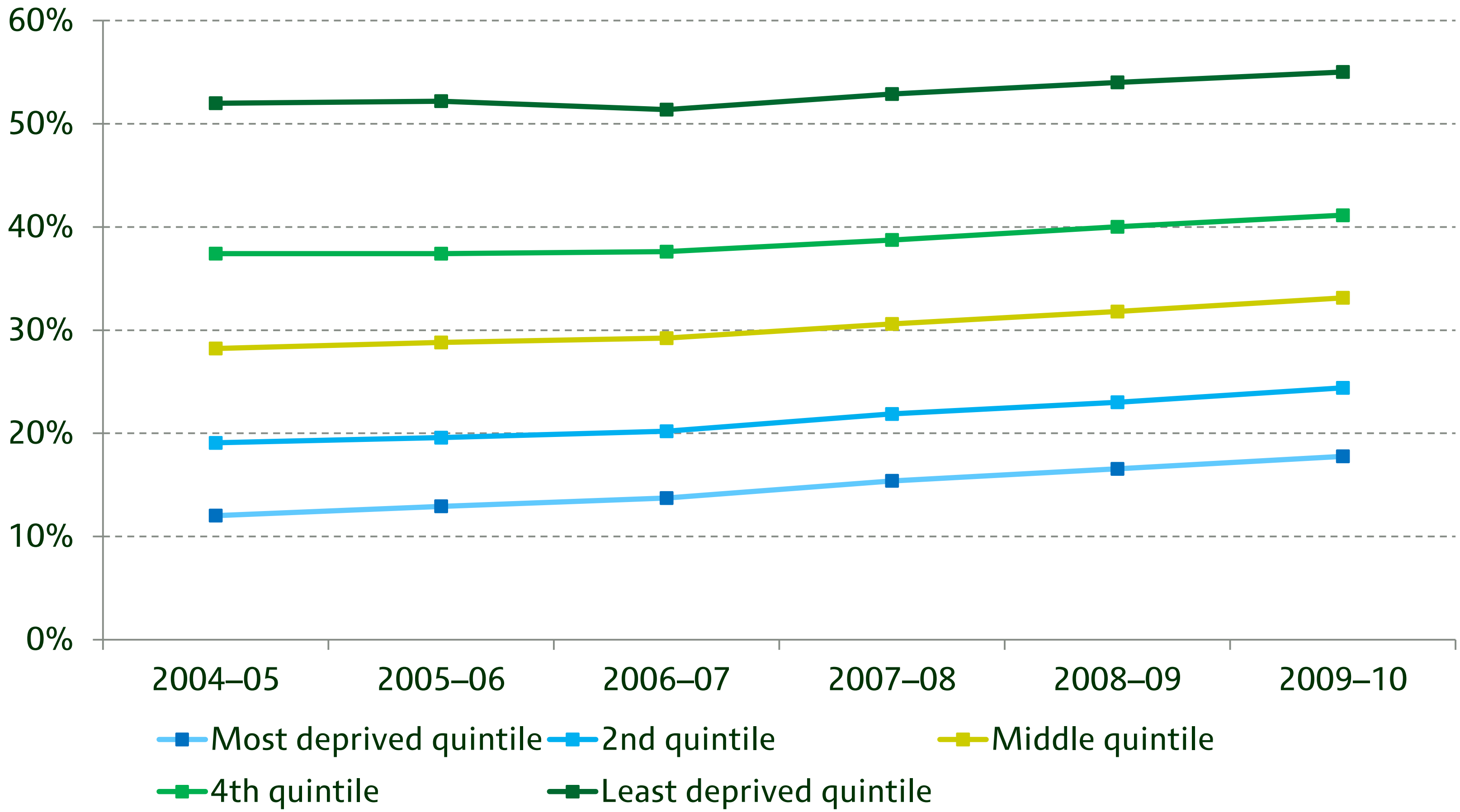
- On average students will gain more upfront cash support
- Those with lower family incomes will gain more
- There are also fee waivers available, especially for low-income students
- Every university is offering its own financial support package, and many students will not know how much support they can get

Potential implications for access to HE

Access to HE (1)

- Major concern that higher fees will discourage entry from poorer pupils
  - Yet one aim of reforms was to widen access
  - Poorest graduates will actually be better off financially
  - Poorest students will get more upfront support
- Well known that students from low-income backgrounds under-represented in university
  - Even more so in top universities
- How likely are changes to student finance to encourage/discourage entry?

Poorer students are overall less likely to go university than richer students…



Source: C. Crawford, November 2012, Socio-economic gaps in HE participation: how have they changed over time?, IFS Briefing Notes , BN133

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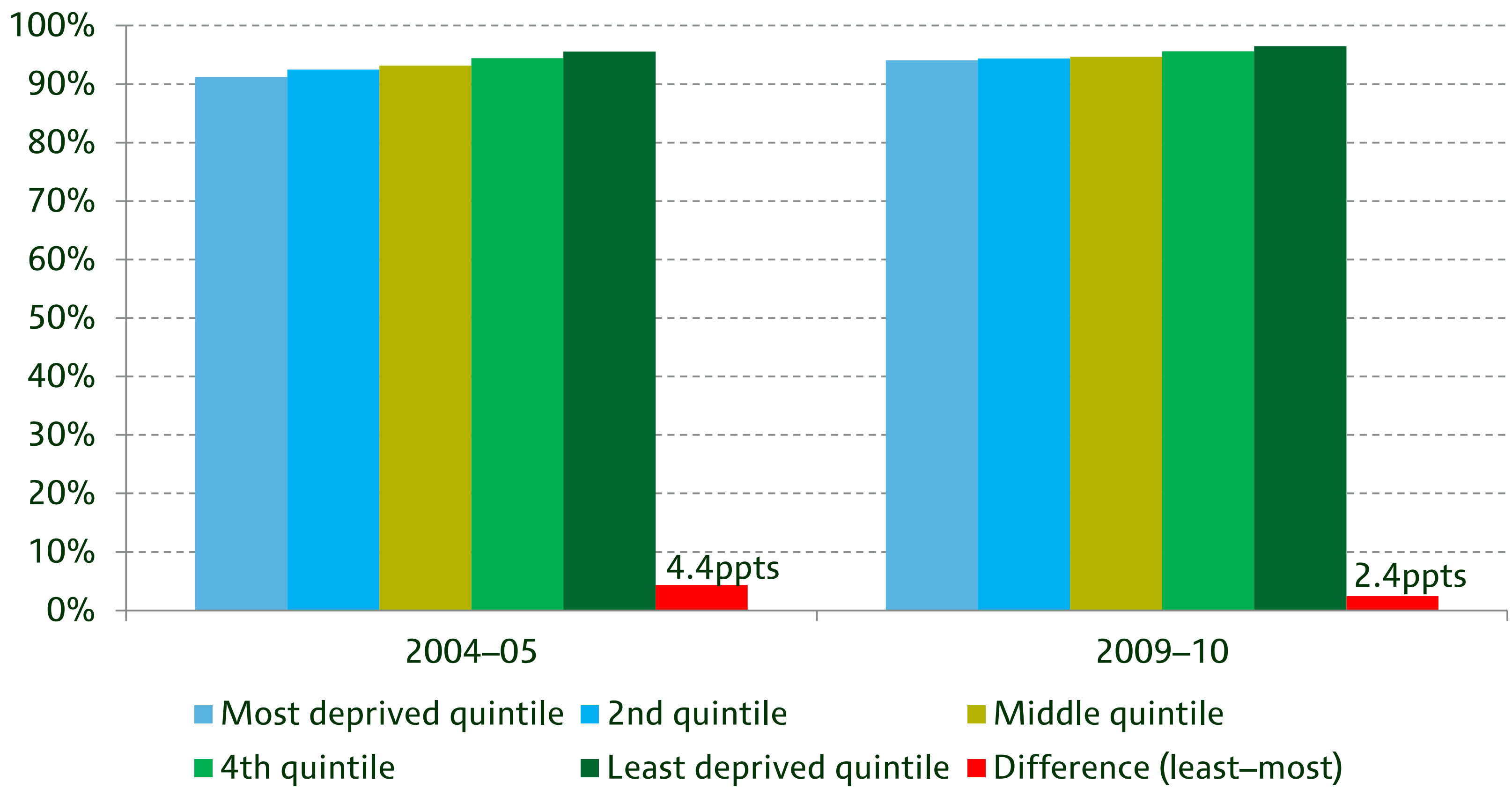
But the gap is small if look at the top 20% achievers at Key Stage 5



Source: C. Crawford, November 2012, Socio-economic gaps in HE participation: how have they changed over time?, IFS Briefing Notes , BN133

Access to HE (2)

- Most important determinant of HE attendance is having good A-Level grades
  - Conditional on this, relationship between income and HE participation is weak

- Best way to widen access is to improve A-Level grades of disadvantaged pupils
  - Limited scope for HE finance here
  - Targeting of financial resources should be earlier in life

- Now let's see the latest statistics on HE participation

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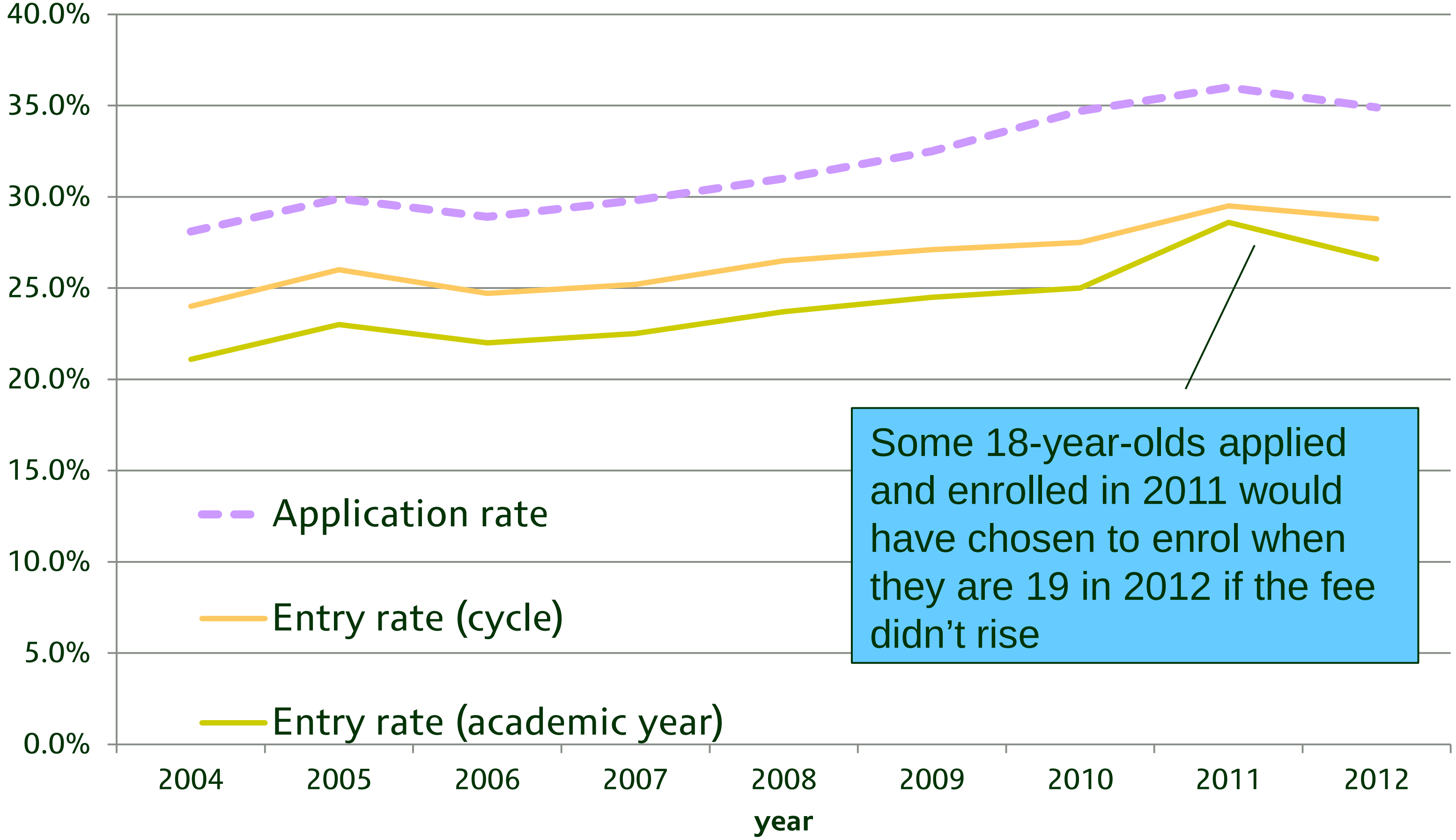
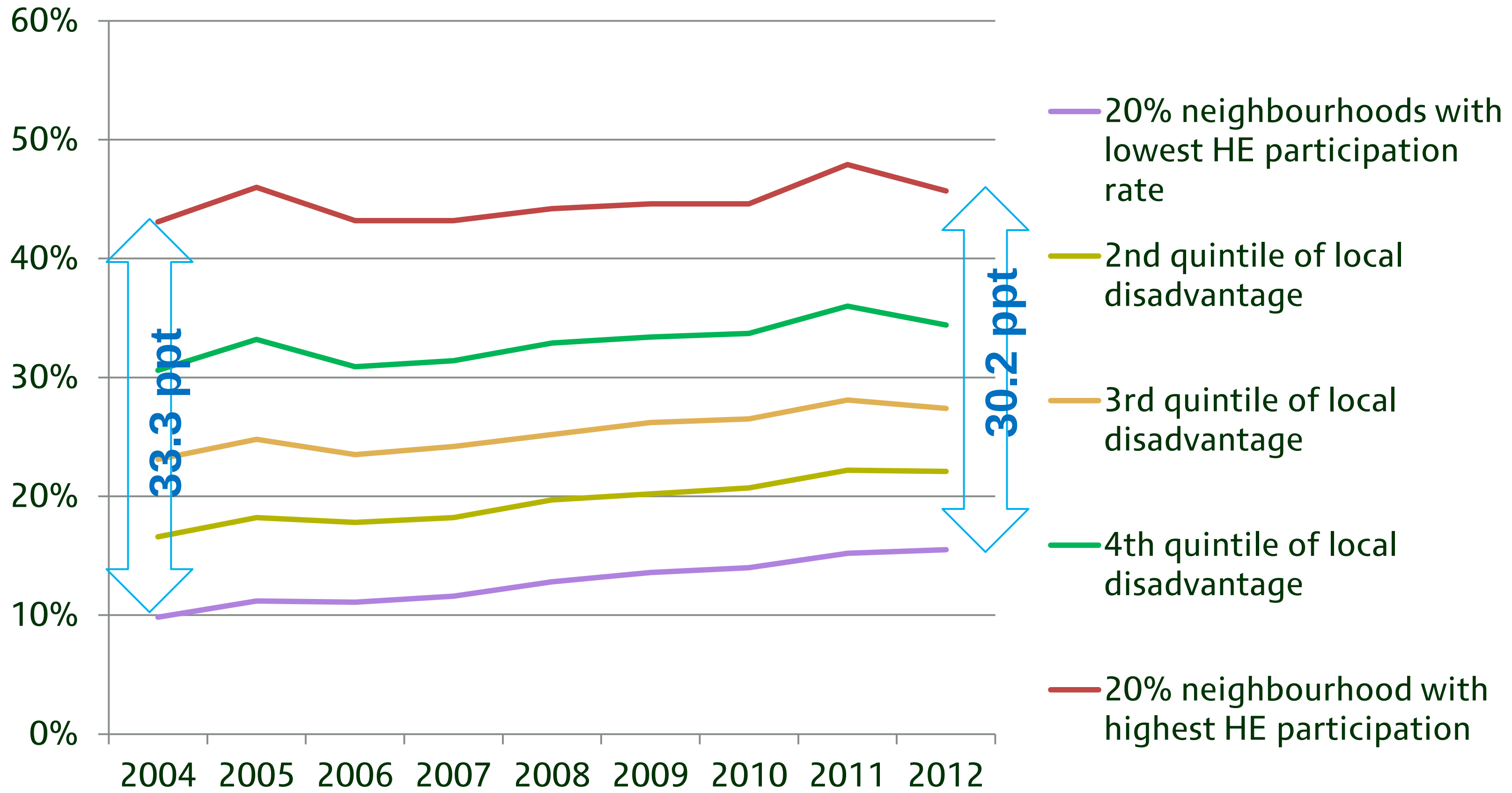
English 18-year-olds, application and entry rates



Source: UCAS end of cycle report 2012

English 18-year-old entry rate (cycle) by historical HE participation rates in the neighbourhood



Source: UCAS end of cycle report 2012

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Access to HE (3)

- Previous fee rises have not reduced participation
  - (Dearden, Fitzsimons and Wyness 2011) show increases in fees would discourage participation but increases in loans and grants would offset this
  - In fact, the participation gap between rich and poor narrowed slightly since 2006-07, as the increase in support favoured the poor

- Will 2012 reforms harm participation?
  - Total student number is constrained, so really we are asking whether the reforms would increase the rich-poor gap in participation
  - Acceptance figures show a convergence in 2012 relative to 2011 as well as a long-term convergence
  - The causal impact of the 2012 reform is still unclear: it increased student support as well as fees ; but the system of support is more complex now

Summary

- Government and Universities are the major ‘winners’ of funding reforms; but the government faces more risk
- Graduates are major ‘losers’ on average
  - But lowest earnings graduates are actually better off
- Well-informed applicants are unlikely to be deterred by fees increase
  - Given the higher upfront support, substantial wage returns and the insurance against low earnings
  - Observed participation in 2012 is close to the pre-2011 trend
  - HE participation among disadvantaged young people have risen faster than those from affluent backgrounds
  - Barriers to entry for poor students occur much earlier in life

Latest policies and issues for thought

- NSP will be abolished for undergraduates and become a scheme for postgraduates since 2015
  - How can NSP be reformed to reduce deadweight loss?
- 'High grades policy' for student number controls since 2012
  - supposed to encourage expansion of institutions with good student demand, but also motivates universities to compete for ABB students by financial support, which is arguably inefficient
- The number of part-time UG students has fallen by 40% since 2010-11
  - Possibly due to fee increase, but fee loans became available to some part-time students in 2012 for the first time
- How much cross-subsidisation do we want across institutions and across subjects
  - In particular, some students will repay more than the actual cost of their course

Questions?

References

- R. Blundell, L. Dearden, A. Goodman and H. Reed. 2000 The returns to higher education in Britain: evidence from a British Cohort, The Economic Journal, Feb. 2000 VOL. 110 NO.461
- M. Bratti, R. Naylor and J. Smith 2008 Heterogeneities in the returns to degrees: evidence from the British cohort study 1970
- H. Chowdry, L. Dearden, A. Goodman and W. Jin, June 2012, The distributional impact of the 2012-13 higher education funding reforms in England, Fiscal Studies, Vol. 33, No. 2, June 2012, Vol. 33, No. 2, pp. 211-235, Blackwell Publishing, Journal Articles
- H. Chowdry, L. Dearden, W. Jin and B. Lloyd, November 2012, Fees and student support under the new higher education funding regime: what are different universities doing?, IFS Briefing Notes , BN134
- C. Crawford, November 2012, Socio-economic gaps in HE participation: how have they changed over time?, IFS Briefing Notes , BN133

- L. Dearden, E. Fitzsimons and G. Wyness, September 2011, The impact of tuition fees and support on university participation in the UK, IFS Working Papers , W11/17
- E. Moretti 2004 Estimating the social return to higher education: evidence from longitudinal and repeated cross-sectional data, Journal of econometrics, Volume 121, Issues 1–2, July–August 2004, Pages 175–212
- UCAS, UCAS End of Cycle Report 2012