



University  
of Glasgow | Business  
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Cherry Blossom  
Financial Literacy Institute  
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# Financial Literacy among Scottish Students

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Scottish  
Economic  
Society



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## Some starting points

- **OECD (2013):** integrating financial education into the school curriculum – as early as possible – in a flexible manner – methods and criteria to evaluate progress and impact – top-down and bottom-down approaches, e.g. from government to teachers, parents and communities
- **Hanushek and Woessmann (2008, JEL):** There is strong evidence that the cognitive skills of the population – rather than mere school attainment – are powerfully related to individual earnings, to the distribution of income, and to economic growth
  - New empirical results show the importance of both minimal and high level skills, the complementarity of skills and the quality of economic institutions, and the robustness of the relationship between skills and growth

# Numeracy skills in the UK and Scotland

## ➤ Low levels of numeracy among adults in the UK

- Skills for Life 2011; PIAAC 2014; National Numeracy YouGov Survey 2014
- “Low numeracy” : those below Level 2 on the UK adult qualifications scale
- 2011, Skills for Life survey: Across the UK, around **4 in 5 adults** have a low level of numeracy
- Numeracy skills declined in the 8 years from 2003, whereas literacy improved
- 17 million adults in England are working at a level roughly equivalent to that expected of children at primary school
- Around 30% of the people who rated their skills as “very good” performed poorly
- **The maths they are taught at school does not necessarily overlap with the maths that can best help them later in life**
- 16% of the population are unable to identify the available balance on a bank statement while 1 in 10 cannot identify the better deal
- Staggeringly, just over half of those surveyed did not make a budget

# Youth numeracy in the UK and Scotland

## ➤ **Low youth performance on PISA 2012 scores**

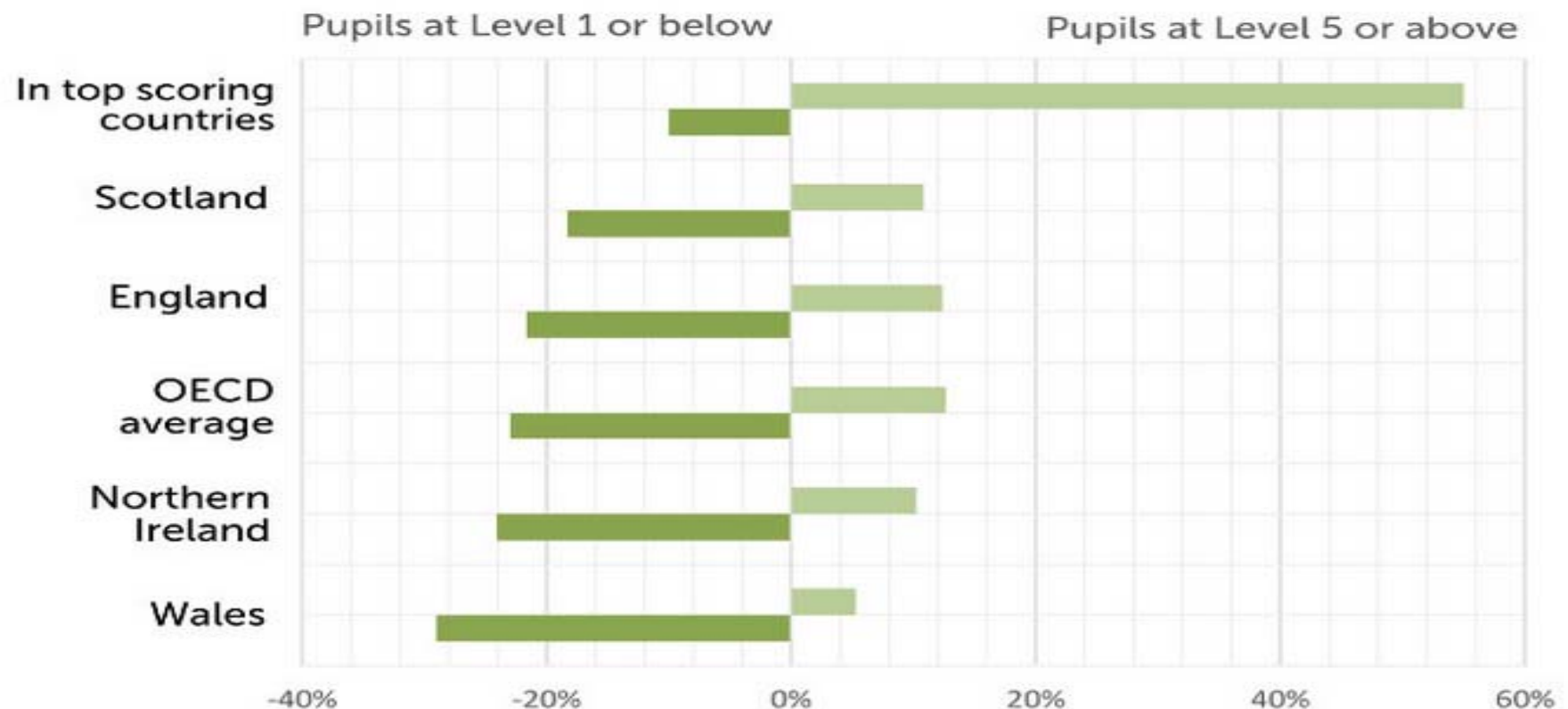
- UK children, like the adults, were performing at an average level
- Compared with top scoring countries, the UK had more than 2 times more children performing poorly and a very low percentage of top scorers

## ➤ **Some outcomes: Employment; high wages; health; deprivation**

- In OECD reports and the UK basic skills reports, the correlation between poor numeracy and poor health is clear in the data
- 2008, KPMG's report on the cost of poor numeracy estimated the wage premium is on average 10%
- Recent data by the OECD has shown that there is a direct relationship between wage distribution and numeracy skills
- Across a number of reports it is also evident that there are significantly higher rates of low numeracy amongst the unemployed
- Bynner (3) analysed the social and economic circumstances of the participants in the UK Cohort study and discovered that, in a number of ways, low numeracy is an especially strong predictor for long-term deprivation

# Motivation: UK and Scotland – Numeracy

## A Long Tail of Under-Achievement



Source: OECD (2013) – PISA



# What we do

- **We examine financial literacy among 11-18 year-olds in Scotland**
  - Using a novel representative school survey of 2,016 students across 55 schools and 103 classes
- **We examine the role of student, class and school characteristics, based on insights from the labour/education economics literature**

# Insights from education/labour/health economics

## ➤ School characteristics & educational attainment

- **Hanushek (1986, JEL):** Teacher skills matter more than anything else for educational attainment
- **Angrist and Lavy (1990, QJE):** Maimonides' rule and reducing class size induces a significant and substantial increase in test scores for fourth and fifth graders, although not for third graders
- **Dustmann et al. (2003, EJ):** Positive effect of class size on staying at school at 16 and later wages
- **Knoth-Humlum and Smith (2014, IZA dp):** Small effect of school size on later-in-life labour market outcomes in Denmark, driven mostly by boys, urban area residents, and children of families with low educational attainment
- **Krueger (2003, EJ):** Variable class-size reduction effects, dependent on study weighting
- **Rivkin et al. (2005, E'trica):** **Teacher quality has powerful effects on reading and mathematics achievement, although little of the variation is explained by education or experience. Teacher quality matters more than class –size reduction**

## ➤ Deprivation and educational attainment

- **Zimmermann (2003, ReStat):** Small, but significant peer effects are almost always linked more strongly with verbal SAT scores than with math SAT scores
- **Leventhal and Brooks-Gunn (2000, PsychB):** Neighborhood characteristics and child outcomes and suggests the importance of high socioeconomic status (SES) for achievement and low SES and residential instability for behavioural/emotional outcomes



# Education and health outcomes

- **Cutler and Lleras-Muney (2006, NBER):** Persistent effects of education on health outcomes, across gender, race. Stronger patterns at young age. Income and occupational differences explain only part of the education effect. Suggestion that increasing levels of education lead to different thinking and decision-making patterns
- **Education and smoking**
  - **Grimard and Parent (2007, JHE):** A quasi experiment inferring causation on smoking
  - **De Walque (2007, JHE):** Education does affect smoking decisions: educated individuals are less likely to smoke, and among those who initiated smoking, they are more likely to have stopped
  - **Aizer and Stroud (2010, NBER):** strong positive effect of education and peer effects on smoking reduction upon motherhood
  - **Alexander et al. (2001, AH):** School environments are important contexts for understanding peer group influences on adolescent cigarette smoking
  - De Walque (2010, JHR); Eide & Showalter (2011, EEdR); Gilman et al. (2007, IJEpidem); Kenkel et al. (2006, NBER):

## Time preferences and other factors:

- Fersterer & Winter-Ebmer (2003, EEdR); Kenkel et al. (2006, NBER); Tenn et al. (2010, JHE)
- **De Cicca et al. (2002, JHR):** Weak or nonexistent tax effects in models of the onset of smoking between grades 8-12. Students who eventually drop out of school are already more likely to smoke in the 8<sup>th</sup> grade

# The data

- **Young People in Scotland Survey 2014**
  - By: Ipsos MORI Scotland
  - 55 schools – 103 classes
  - Representative survey data collection – Weights
  - Demographic–socioeconomic data
  - Attitudes
  - +++ Financial literacy
  
- **Basic feature: Enabled matching with school, district, zip-code characteristics**

# The data: SIMD

- **SIMD2012: The Scottish Index of Multiple Deprivation**
  - The Scottish Government's official tool for identifying places in Scotland suffering from deprivation
  - It incorporates several different aspects of deprivation, combining them into a single index
  - It divides Scotland into 6,505 small areas, called datazones, each containing around 350 households
  - The Index provides a relative ranking for each datazone, from 1 (most deprived) to 6,505 (least deprived)
  - By identifying small areas where there are concentrations of multiple deprivation, the SIMD can be used to target policies and resources at the places with greatest need
  - Seven SIMD domains are identified – and data from these domains are combined to produce the index
  - Multiple deprivation is defined as the range of problems that arise due to lack of resources or opportunities, covering health, safety, education, employment, housing and access to services and financial aspects

## Data advantages

- Class, school, and local authority (administrative region) FE
- Multiple deprivation indicators, detailed down to the ZIP-code, both at the school and the residence level
- A first assessment of FL among students anywhere in the UK, using standard FL-questions
- Ages 11 – 17/18

# Data limitations

- Student performance? ... Not allowed ☹
- Teacher quality / financial experience
  - Would be amazing
  - Next time???
- Family background? ... Not allowed ☹
- FL – Risk question ? ... Not allowed ☹
- Restrictions on using full survey, due to government confidentiality clauses, conflicts of interest with other parties/academics

# Financial literacy measurement

## Q1: Numeracy

Suppose you had £100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- (1) ☐ More than £102
- (2) ☐ Exactly £102
- (3) ☐ Less than £102
- (4) ☐ Don't know

# Financial literacy measurement

## Q2: Inflation

Imagine again that you have £100 in a bank account. The interest rate for this account is 1% per year and inflation is 2% per year. After 1 year, how much would you be able to buy with the money?

- (1) ☐ More than today
- (2) ☐ Exactly the same
- (3) ☐ Less than today
- (4) ☐ Don't know



# Financial literacy measurement

## Q3: Inflation/Money Illusion

Suppose that by this time next year, the money that you earn or get from your parents has doubled and the prices of all the things you like to buy have also doubled. By this time next year, how much will you be able to buy assuming you buy the same things?

- (1) ☐ More than today
- (2) ☐ Exactly the same
- (3) ☐ Less than today
- (4) ☐ Don't know

# Financial literacy measurement

## Q4: Sales discounts

Let's assume that you saw a TV-set of the same model on sale in two different shops. In both shops the price is £1,000. One shop offers a discount of £150, while the other one offers a 10% discount. Which discount is the best bargain?

- (1) ☐ A discount of £125
- (2) ☐ A 10 % discount
- (3) ☐ The prices are the same in both stores
- (4) ☐ Don't know

# Financial literacy measurement

## Q5: Compound Interest

Suppose you had £100 in a bank account and the interest rate of the account was 20% per year. You do not spend any of the money. After five years, how much would you have?

- (1) ☐ More than £200
- (2) ☐ Exactly £200
- (3) ☐ Less than £200
- (4) ☐ Don't know

# Financial literacy measurement

## Q6: Time Value of Money

A friend is given a £10,000 gift from their grandparents. His younger sister will be given the same amount in 3 years. Who will be richer?

- (1) ☐ My friend
- (2) ☐ His younger sister
- (3) ☐ They will be equally rich
- (4) ☐ Don't know

# Summary statistics

- **Low levels of financial literacy**
  - Average 2.2 correct responses out of 6
  - Expectedly lots of DK – average 2.1 out of 6
- **Significant gender differences**
  - Overall and across all 6 questions
  - Males more likely to be both right... (and wrong...?)
  - Females more likely to reply DK
  - Persistent across different years of schooling
- **Age profile: Major rises in FL at ages 13 and 16**
- **Year of schooling: Major rises at S2 and S5**
- **Ethnicity: UK and Scottish more FL, compared to other ethnicities**

# Financial literacy responses

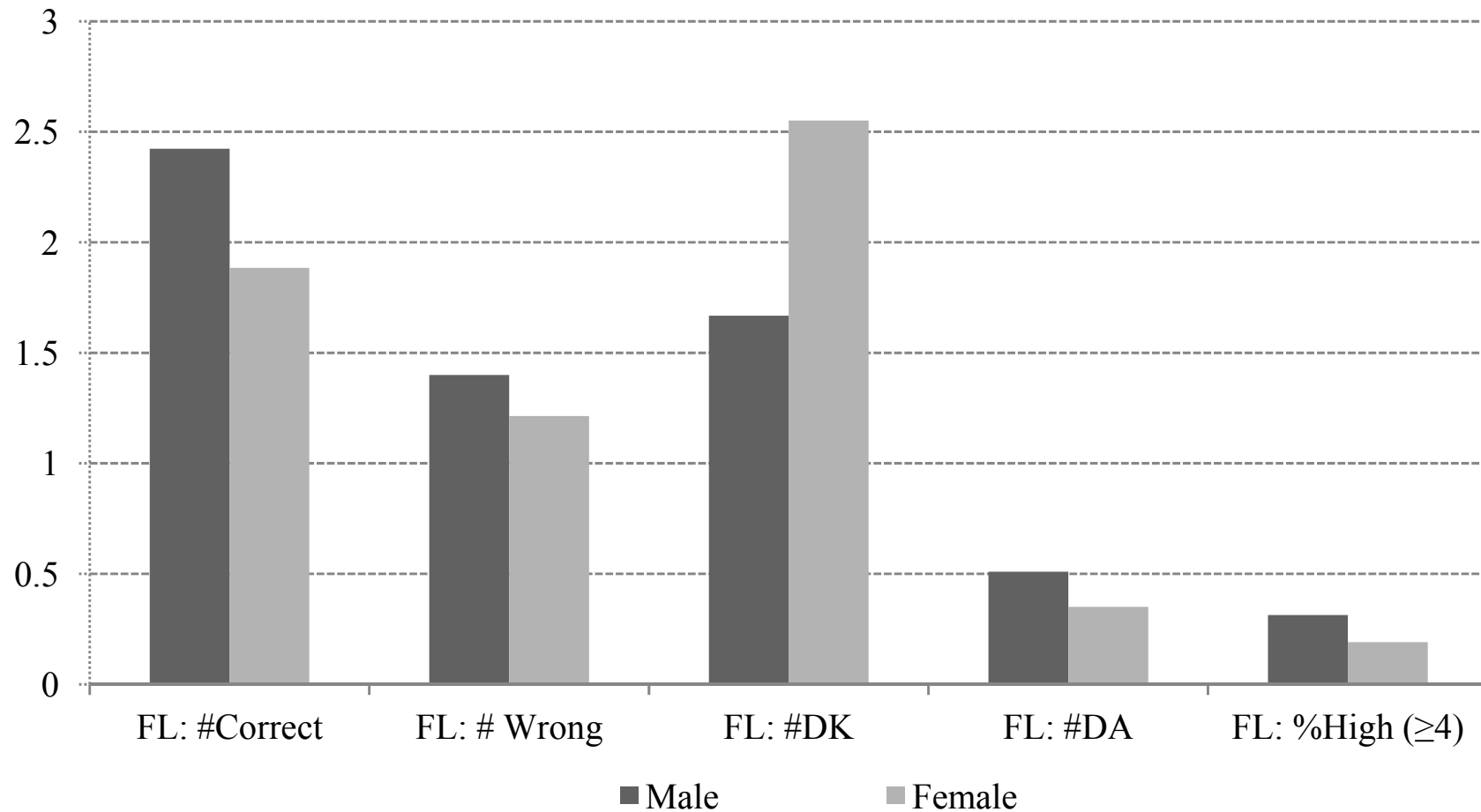
**Table 1**  
Financial-literacy response statistics

	<b>#Correct</b>	<b>#Wrong</b>	<b>#DK</b>	<b>#DA</b>	<b>FL: High (≥4)</b>
Average	2.152	1.306	2.114	0.429	25.16%
Numeracy	52.65%	12.03%	29.66%	5.66%	-
Money illusion	19.97%	20.45%	52.85%	6.73%	-
Inflation	40.16%	18.25%	34.84%	6.75%	-
Discounts	56.73%	9.83%	26.12%	7.31%	-
Compounding	28.38%	26.06%	37.46%	8.10%	-
Inheritance	17.26%	43.97%	30.42%	8.35%	-

Notes: Weighted summary statistics at the Scottish population level, based on 2,016 observations.

# Financial literacy by gender

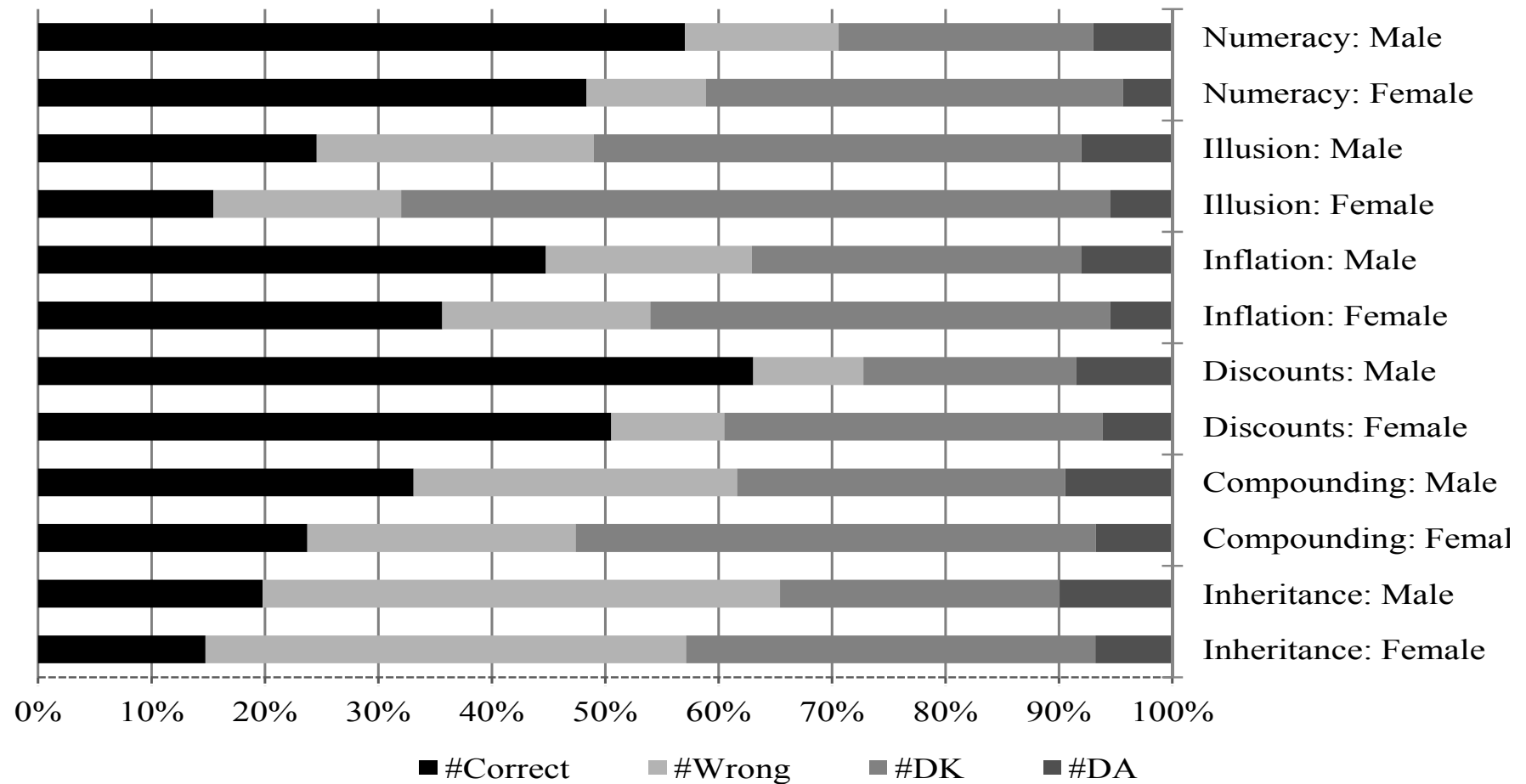
Panel A: Financial literacy by gender





# Financial literacy by gender

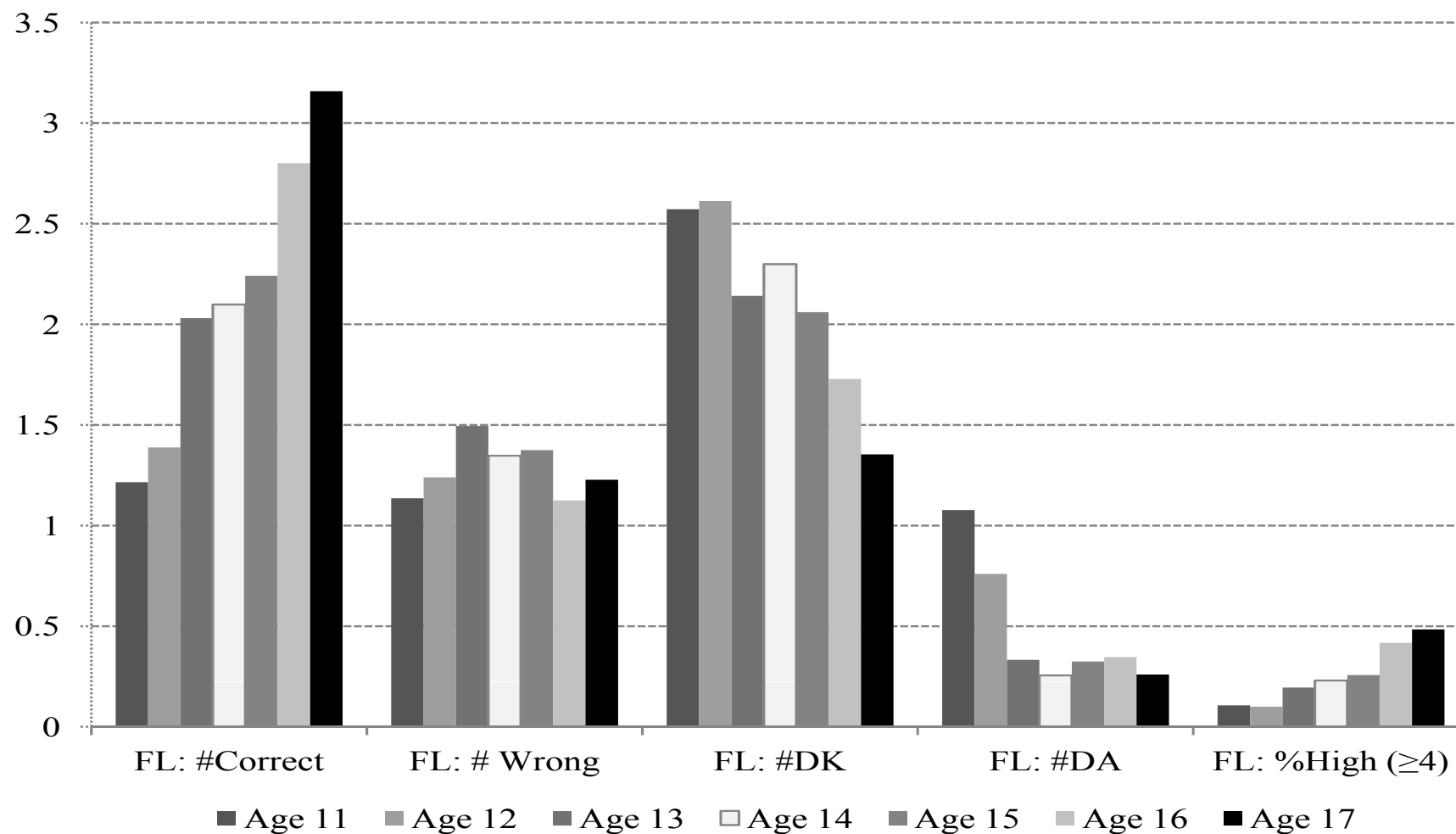
Panel B: Financial-literacy components by gender



Notes:

Weighted summary statistics at the Scottish population level.

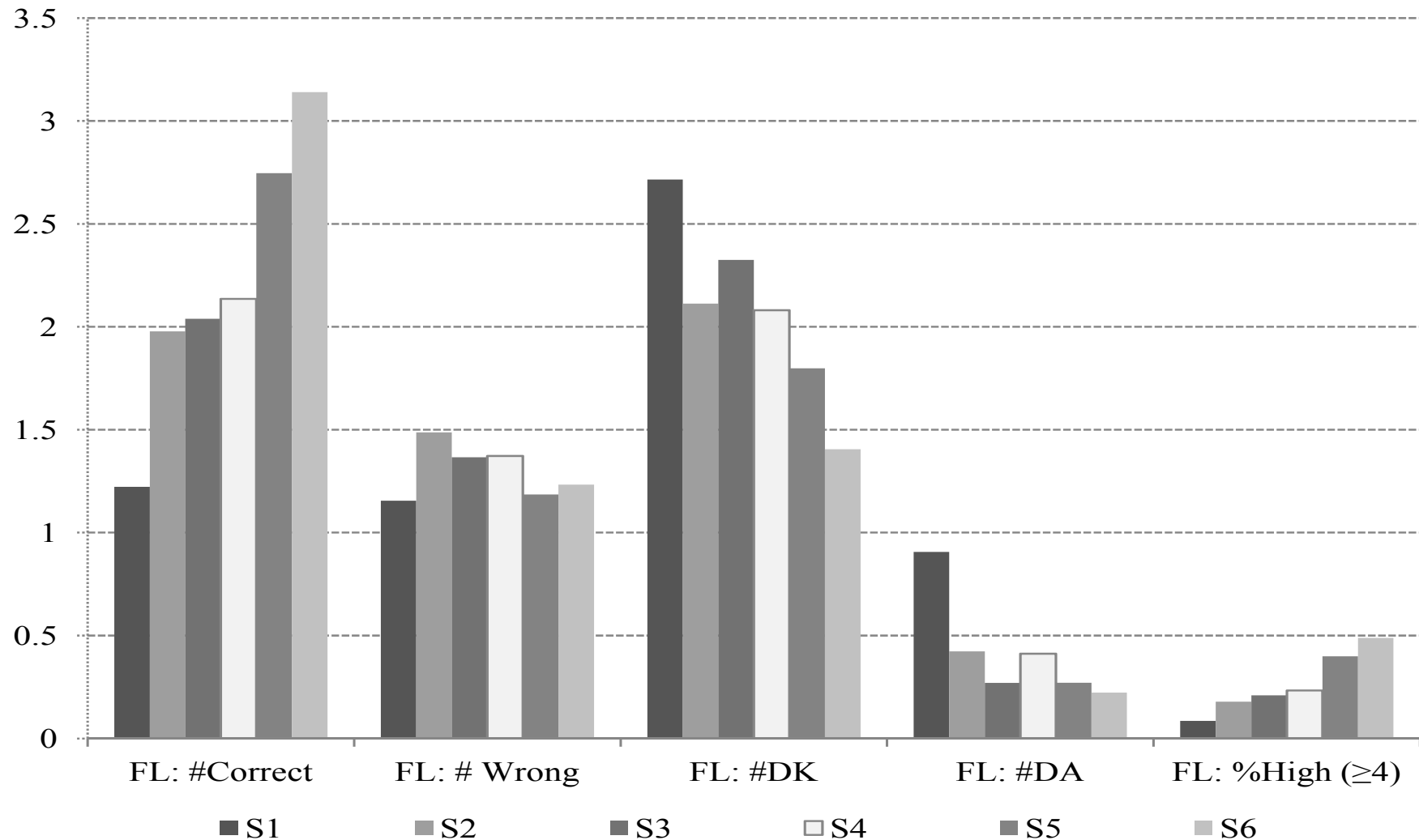
# Financial literacy by age



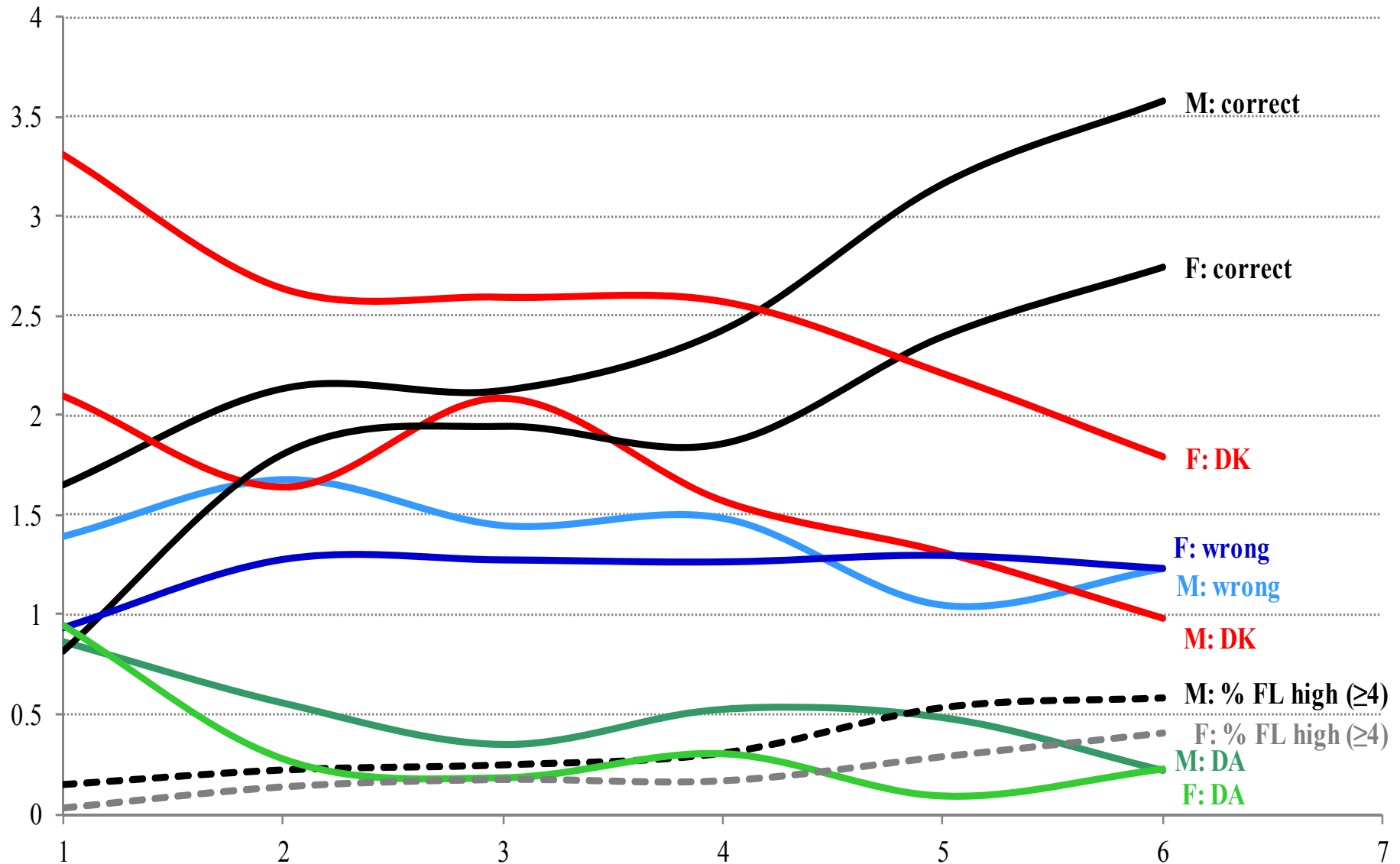
## Notes:

Weighted summary statistics at the Scottish population level.

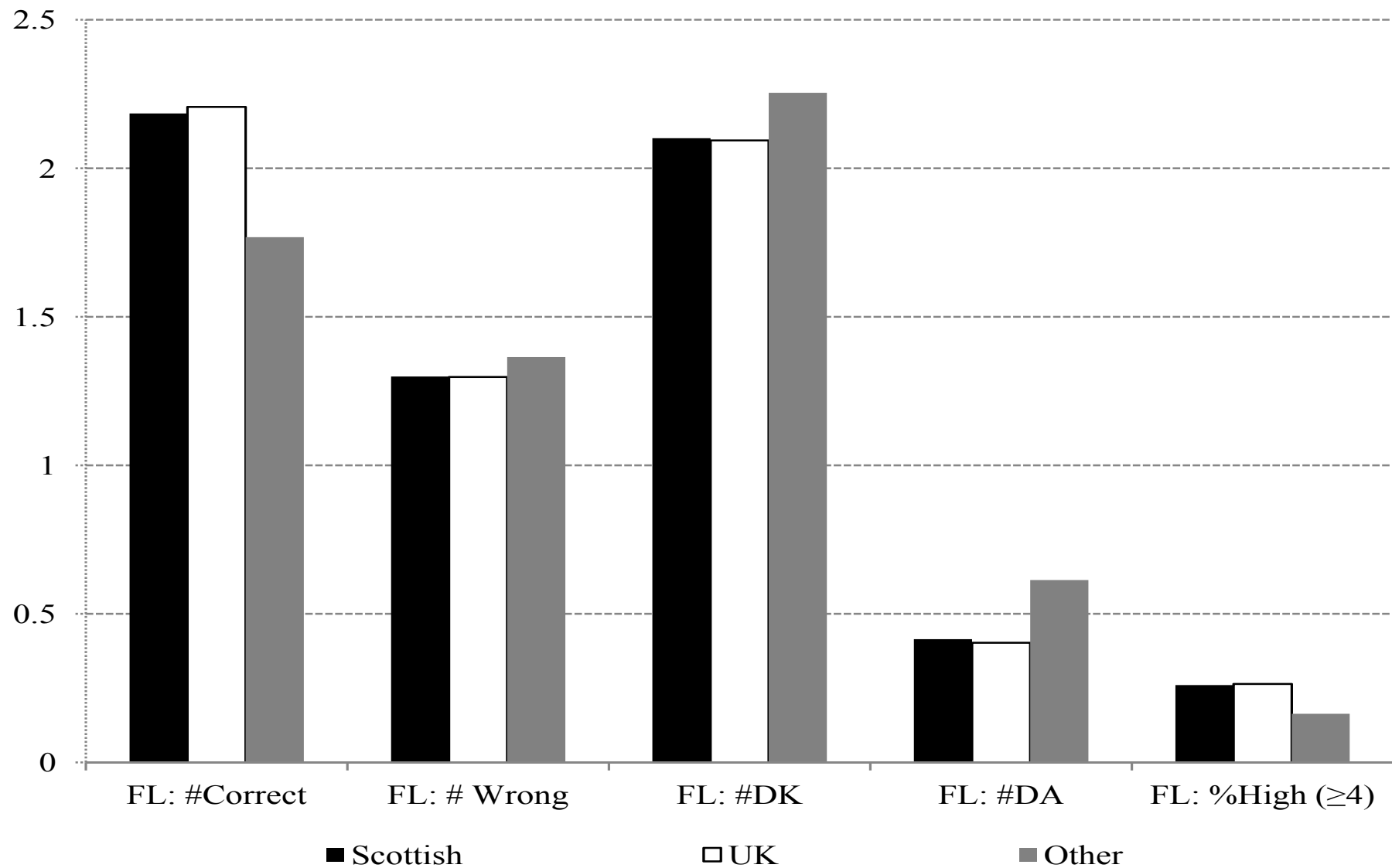
# Financial literacy by year of schooling



# Financial literacy by gender/year of schooling



# Financial literacy by ethnicity



# Summary of main regression results

## Individual effects

- Men more likely to have a higher number of correct responses
  - Result persistent across all 6 questions
- Nationalities other than UK are less financially literate
  - Effect in the magnitude of 15-20%
- Major rises in financial literacy at years S2 and S5 of the schooling system

## School effects

- Schools with higher free-school-meal proportions score lower on financial literacy
- Schools with higher fractions of ethnic minorities score lower on financial literacy
- Mostly non-robust and inconsistent evidence on the effect of school and class size
  - Smaller schools appear to be doing somewhat better
- Schools ranking higher (better) on multiple deprivation-area index have higher financial literacy scores – residential area effects appear insignificant
- The difference between school and residential area – in terms of SIMD2012 – exerts a large significant impact on financial literacy scores – 15% effect (upward mobility?)

# Individual characteristics and financial literacy

	Poisson (1)	Poisson (2)	Poisson (3)	Poisson (4)	Poisson (5)	OLS (6)	Tobit (7)
Male	0.280*** [0.045]	0.261*** [0.044]	0.279*** [0.045]	0.285*** [0.045]	0.289*** [0.046]	0.625*** [0.109]	0.776*** [0.138]
Ethnicity: Scottish	-0.128** [0.065]	-0.138** [0.064]	-0.119* [0.065]	-0.072 [0.069]	-0.064 [0.069]	-0.194 [0.184]	-0.195 [0.220]
Ethnicity: Other	-0.287*** [0.086]	-0.272*** [0.085]	-0.260*** [0.086]	-0.212** [0.090]	-0.205** [0.089]	-0.455** [0.215]	-0.505* [0.260]
Economics background	0.068 [0.050]	0.065 [0.050]	0.063 [0.050]	0.050 [0.049]	0.040 [0.048]	0.071 [0.107]	0.130 [0.137]
School year S2	0.488*** [0.099]	- [0.099]	0.467*** [0.155]	0.401** [0.161]	0.339*** [0.081]	0.021 [1.226]	1.095*** [0.204]
School year S3	0.557*** [0.106]	- [0.106]	0.656*** [0.172]	0.658*** [0.192]	0.606** [0.264]	0.465 [1.331]	1.666** [0.675]
School year S4	0.572*** [0.107]	- [0.107]	0.812*** [0.201]	0.755*** [0.224]	0.684*** [0.197]	0.707 [1.292]	2.113*** [0.518]
School year S5	0.842*** [0.111]	- [0.111]	1.115*** [0.222]	1.086*** [0.251]	0.646** [0.259]	0.459 [1.354]	1.847** [0.744]
School year S6	0.926*** [0.101]	- [0.101]	1.174*** [0.232]	1.187*** [0.261]	0.910*** [0.230]	1.167 [1.405]	2.708*** [0.648]
Age: 12	- [0.134]	0.086 [0.134]	-0.013 [0.130]	0.01 [0.126]	-0.013 [0.122]	-0.084 [0.160]	-0.105 [0.277]
Age: 13	- [0.140]	0.488*** [0.140]	0.02 [0.176]	0.069 [0.171]	0.059 [0.173]	0.046 [0.297]	-0.074 [0.425]
Age: 14	- [0.146]	0.530*** [0.146]	-0.14 [0.202]	-0.092 [0.207]	-0.069 [0.212]	-0.196 [0.404]	-0.394 [0.549]
Age: 15	- [0.151]	0.569*** [0.151]	-0.286 [0.206]	-0.269 [0.213]	-0.198 [0.217]	-0.489 [0.421]	-0.775 [0.567]
Age: 16	- [0.147]	0.794*** [0.147]	-0.282 [0.232]	-0.276 [0.239]	-0.175 [0.248]	-0.404 [0.539]	-0.633 [0.682]
Age: 17	- [0.145]	0.899*** [0.145]	-0.243 [0.245]	-0.243 [0.257]	-0.177 [0.264]	-0.36 [0.605]	-0.494 [0.766]
Age: 18	- [0.195]	0.958*** [0.195]	-0.192 [0.279]	-0.066 [0.276]	0.229 [0.299]	0.412 [0.681]	0.466 [0.852]
Resid. condition: Very good	0.462** [0.221]	0.358 [0.238]	0.431* [0.247]	0.387 [0.240]	0.32 [0.241]	0.634 [0.446]	0.626 [0.488]
Resid. condition: Fairly good	0.464** [0.226]	0.368 [0.244]	0.429* [0.251]	0.391 [0.243]	0.318 [0.244]	0.622 [0.457]	0.612 [0.504]
Resid. condition: Neither good nor bad	-0.021 [0.221]	-0.121 [0.235]	-0.034 [0.241]	-0.024 [0.229]	-0.041 [0.223]	-0.015 [0.402]	-0.399 [0.458]
Resid. condition: Fairly bad	0.418 [0.259]	0.349 [0.278]	0.371 [0.266]	0.357 [0.252]	0.351 [0.252]	0.684 [0.495]	0.646 [0.603]
Urbanisation FE	+	+	+	+	+	+	+
Residence FE (Local authority)	+	+	+	+	+	+	+
School FE	-	-	-	+	+	+	+
Class FE	-	-	-	-	+	+	+
No. of Observations	1,945	1,933	1,933	1,933	1,933	1,933	1,933



# School characteristics and financial literacy

	Poisson (1)	Poisson (2)	Poisson (3)	Poisson (4)	OLS (5)	Tobit (6)
Full-time equivalent (FTE)	0.073 [0.065]	0.145** [0.060]	0.127** [0.057]	-0.017 [0.042]	-0.038 [0.089]	-0.034 [0.123]
Free school meals (% registered)	-0.003 [0.019]	-0.046*** [0.016]	-0.055*** [0.019]	-0.024* [0.013]	-0.068** [0.029]	-0.096** [0.039]
Catholic denomination	0.152 [0.210]	0.672*** [0.130]	0.613*** [0.203]	0.207 [0.145]	0.23 [0.256]	0.507 [0.385]
Capacity	0.007 [0.006]	-0.008 [0.007]	-0.016** [0.007]	-0.003 [0.005]	-0.004 [0.010]	-0.005 [0.014]
Urbanisation/School: Accessible Rural	0.116 [0.300]	-0.056 [0.284]	0.029 [0.286]	-0.468*** [0.181]	-0.782** [0.364]	-1.114** [0.520]
Urbanisation/School: Accessible Small Town	0.232 [0.302]	-0.598** [0.257]	-0.109 [0.339]	-0.153 [0.286]	-0.655 [0.468]	-0.732 [0.677]
Urbanisation/School: Other Urban Areas	0.564* [0.309]	0.325 [0.242]	0.511* [0.287]	0.130 [0.237]	0.400 [0.422]	0.648 [0.598]
Urbanisation/School: Remote Rural	0.68 [0.420]	0.277 [0.347]	0.968** [0.483]	0.426 [0.441]	0.460 [0.641]	0.738 [0.957]
Urbanisation/School: Remote Small Towns	0.204 [0.389]	0.282 [0.259]	-0.047 [0.327]	-0.105 [0.310]	-1.146 [0.755]	0.124 [0.792]
School size: 2	-1.105*** [0.300]	-1.489*** [0.397]	-1.786*** [0.314]	-0.808*** [0.273]	-0.870** [0.367]	-1.704*** [0.558]
School size: 3	-0.975*** [0.328]	-0.970** [0.404]	-1.015*** [0.387]	-0.289 [0.220]	-0.301 [0.478]	-0.821 [0.674]
School size: 4	-0.778*** [0.274]	-0.791*** [0.305]	-0.723** [0.295]	-0.344* [0.176]	-0.478 [0.387]	-0.846 [0.544]
School size: 5 (largest centile)	-1.193*** [0.375]	-1.495*** [0.416]	-1.271*** [0.439]	-0.409 [0.251]	-0.347 [0.505]	-0.884 [0.716]
Class size: 11-15	-0.330*** [0.120]	-0.296*** [0.110]	-0.280*** [0.105]	0.041 [0.108]	0.082 [0.253]	0.138 [0.321]
Class size: 16-20	-0.344** [0.136]	-0.314** [0.128]	-0.332*** [0.122]	0.098 [0.138]	0.135 [0.308]	0.228 [0.415]
Class size: 21-25	-0.364** [0.151]	-0.371*** [0.136]	-0.316** [0.137]	-0.08 [0.121]	-0.197 [0.275]	-0.159 [0.372]
Class size: 26-30	-0.319*** [0.114]	-0.301*** [0.111]	-0.301*** [0.106]	0.171 [0.109]	0.225 [0.248]	0.399 [0.330]
School condition: B	0.126 [0.155]	- [0.155]	-0.039 [0.133]	0.064 [0.094]	0.299 [0.182]	0.237 [0.264]
School condition: C	0.569** [0.279]	- [0.279]	1.019*** [0.376]	0.399 [0.382]	0.297 [0.620]	0.469 [0.857]
School condition: D	0.259 [0.477]	- [0.477]	0.176 [0.334]	0.04 [0.321]	-0.987* [0.546]	-1.198 [0.788]
School suitability: B	- [0.136]	-0.255* [0.136]	-0.249** [0.120]	-0.155 [0.102]	-0.354* [0.181]	-0.355 [0.268]
School suitability: C	- [0.228]	0.771*** [0.228]	0.849*** [0.208]	0.567*** [0.214]	0.805** [0.392]	1.377*** [0.525]
School suitability: D	- [0.319]	0.018 [0.319]	-1.167* [0.606]	-0.545 [0.508]	-0.971 [0.926]	-1.358 [1.303]
School minority: 0-5%	0.007 [0.400]	0.596 [0.376]	0.973*** [0.350]	0.618** [0.247]	0.687* [0.401]	1.285** [0.572]
School minority: 5 -10%	0.411 [0.401]	1.005*** [0.367]	1.572*** [0.336]	0.948*** [0.358]	0.991** [0.485]	1.805*** [0.699]
School minority: 10 -20%	0.497* [0.283]	0.439* [0.238]	0.586** [0.229]	0.262 [0.185]	-0.001 [0.297]	0.331 [0.448]
Individual characteristics	-	-	-	+	+	+
School region FE (Local Authority)	+	+	+	+	+	+
No. of Observations	1,944	1,944	1,944	1,932	1,932	1,932

# Financial literacy: Other categories

	<u>Poisson</u>		<u>Poisson</u>		<u>Poisson</u>	
	(1)		(2)		(3)	
	#Wrong responses		#DK responses		#DA responses	
SIMD 2012 rank by school postcode	0.029	[0.027]	-0.032	[0.033]	-0.764***	[0.160]
Residence rank-School rank≤0	0.020	[0.064]	-0.042	[0.059]	-0.520***	[0.189]
Full-time equivalent (FTE)	0.096**	[0.038]	-0.011	[0.058]	-0.226	[0.225]
Free school meals (% registered)	-0.032**	[0.016]	0.041**	[0.017]	-0.051	[0.071]
Catholic denomination	0.123	[0.141]	0.23	[0.196]	-0.609	[0.472]
Capacity	-0.006	[0.004]	-0.003	[0.007]	0.049**	[0.025]
Urbanisation/School: Accessible Rural	0.428	[0.276]	-1.384***	[0.336]	4.989***	[1.879]
Urbanisation/School: Accessible Small Towns	0.204	[0.263]	-0.023	[0.288]	3.033	[3.903]
Urbanisation/School: Other Urban Areas	0.384**	[0.181]	-0.820**	[0.338]	2.11	[1.663]
Urbanisation/School: Remote Rural	0.346	[0.332]	-0.226	[0.393]	1.217	[3.026]
Urbanisation/School: Remote Small Towns	0.518*	[0.279]	-0.581*	[0.306]	0.713	[1.531]
School size: 2	-1.109***	[0.198]	0.155	[0.279]	2.262***	[0.562]
School size: 3	-1.004***	[0.231]	0.693**	[0.334]	1.066	[1.231]
School size: 4	-0.638***	[0.181]	0.594**	[0.275]	-0.891	[0.932]
School size: 5 (largest)	-0.611**	[0.288]	0.243	[0.315]	0.104	[1.304]
Class size: 11-15	-0.173	[0.153]	-0.091	[0.160]	14.869***	[0.898]
Class size: 16-20	-0.121	[0.167]	-0.127	[0.213]	14.871***	[0.928]
Class size: 21-25	-0.168	[0.148]	0.187	[0.174]	14.374***	[1.098]
Class size: 26-30	0.006	[0.155]	-0.137	[0.163]	14.537***	[0.969]
School condition: B	-0.179**	[0.088]	-0.181	[0.121]	-0.339	[0.276]
School condition: C	0.272	[0.294]	-0.301	[0.379]	0.307	[2.708]
School condition: D	-0.868***	[0.292]	1.686***	[0.365]	0.567	[2.260]
School suitability: B	0.262***	[0.083]	-0.139	[0.134]	0.169	[0.404]
School suitability: C	0.550***	[0.123]	-0.302	[0.196]	-2.087	[1.306]
School suitability: D	-1.315***	[0.405]	0.845	[0.522]	1.024	[3.232]
School minority: 0-5%	1.167***	[0.194]	-0.053	[0.269]	-5.045***	[1.117]
School minority: 5 -10%	0.865***	[0.148]	0.163	[0.167]	-3.383***	[0.963]
School minority: 10 -20%	0.991***	[0.213]	0.062	[0.280]	-5.512***	[1.276]
Male	0.153***	[0.053]	-0.475***	[0.060]	0.466***	[0.176]
Ethnicity: Scottish	0.096	[0.102]	0.061	[0.120]	0.54	[0.486]
Ethnicity: Other	0.138	[0.120]	0.105	[0.129]	0.746*	[0.445]
Economics background	0.254***	[0.050]	0.029	[0.059]	-1.902***	[0.233]
House/flat: Very good condition	-0.449***	[0.172]	0.036	[0.288]	-0.133	[0.943]
House/flat: Fairly good condition	-0.484***	[0.179]	0.107	[0.294]	-0.471	[0.957]
House/flat: Neither good nor bad condition	-0.724***	[0.189]	0.297	[0.292]	0.228	[0.944]
House/flat: Fairly bad condition	-0.482	[0.328]	0.2	[0.307]	-3.158**	[1.557]
School year S2	0.246*	[0.126]	-0.365**	[0.153]	0.091	[0.423]
School year S3	0.302*	[0.171]	-0.565***	[0.180]	-0.504	[0.634]
School year S4	0.258	[0.207]	-0.466**	[0.224]	-1.175*	[0.662]
School year S5	0.065	[0.280]	-0.591**	[0.262]	-3.368***	[0.778]
School year S6	0.256	[0.323]	-0.795***	[0.264]	-4.454***	[0.909]
Age	+		+		+	
School region FE (Local Authority)	+		+		+	
No. of Observations	1,861		1,861		1,861	

# Deprivation, mobility and financial literacy

	Poisson (1)	Poisson (2)	Poisson (3)	Poisson (4)	OLS (5)	Tobit (6)
SIMD 2012 rank by school postcode	0.099*** [0.032]	-	0.083** [0.034]	0.105*** [0.035]	0.226*** [0.063]	0.320*** [0.087]
SIMD 2012 rank by residence postcode	-	0.033 [0.021]	0.033 [0.021]	-	-	-
Residence rank-School rank≤0	-	-	-	0.128** [0.060]	0.306** [0.128]	0.403** [0.167]
Full-time equivalent (FTE)	-0.009 [0.042]	0.013 [0.047]	0.019 [0.048]	0.009 [0.047]	-0.006 [0.093]	0.017 [0.127]
Free school meals (% registered)	-0.013 [0.012]	-0.021 [0.013]	-0.012 [0.013]	-0.013 [0.012]	-0.043* [0.025]	-0.060* [0.034]
Catholic denomination	0.313** [0.134]	0.203 [0.167]	0.295* [0.167]	0.245 [0.164]	0.232 [0.237]	0.545 [0.359]
Capacity	-0.012** [0.006]	-0.004 [0.006]	-0.011 [0.007]	-0.010 [0.007]	-0.017 [0.011]	-0.025* [0.015]
Urbanisation/School: Accessible Rural	-0.621*** [0.192]	-0.449** [0.185]	-0.568*** [0.195]	-0.611*** [0.195]	-1.237*** [0.358]	-1.745*** [0.551]
Urbanisation/School: Accessible Small	-0.28 [0.190]	-0.242 [0.290]	-0.338 [0.223]	-0.303 [0.216]	-0.739* [0.393]	-0.881 [0.544]
Urbanisation/School: Other Urban Area	-0.22 [0.212]	0.107 [0.246]	-0.181 [0.252]	-0.177 [0.248]	-0.151 [0.394]	-0.16 [0.585]
Urbanisation/School: Remote Rural	0.214 [0.267]	0.281 [0.429]	0.113 [0.298]	0.114 [0.296]	0.047 [0.503]	0.125 [0.728]
Urbanisation/School: Remote Small Town	0.042 [0.269]	0.019 [0.303]	0.141 [0.270]	0.155 [0.279]	-1.047 [0.736]	0.666 [0.737]
School size: 2	-0.830*** [0.238]	-0.844*** [0.279]	-0.855*** [0.253]	-0.839*** [0.255]	-0.923** [0.368]	-1.826*** [0.535]
School size: 3	-0.116 [0.215]	-0.436** [0.214]	-0.286 [0.219]	-0.257 [0.217]	-0.223 [0.456]	-0.742 [0.636]
School size: 4	-0.280* [0.168]	-0.419** [0.176]	-0.356** [0.173]	-0.387** [0.169]	-0.508 [0.355]	-0.908* [0.494]
School size: 5 (largest)	-0.125 [0.271]	-0.548** [0.251]	-0.304 [0.274]	-0.259 [0.264]	0.032 [0.517]	-0.395 [0.718]
Class size: 11-15	0.086 [0.105]	0.024 [0.107]	0.061 [0.104]	0.071 [0.105]	0.197 [0.236]	0.298 [0.298]
Class size: 16-20	0.167 [0.129]	0.043 [0.140]	0.102 [0.134]	0.12 [0.132]	0.241 [0.282]	0.381 [0.381]
Class size: 21-25	0.002 [0.111]	-0.106 [0.119]	-0.038 [0.112]	-0.039 [0.107]	-0.043 [0.245]	0.051 [0.328]
Class size: 26-30	0.228** [0.100]	0.159 [0.109]	0.204** [0.102]	0.198** [0.100]	0.348 [0.218]	0.578** [0.292]
School minority: 0-5%	0.991*** [0.284]	0.654** [0.273]	0.959*** [0.321]	0.914*** [0.323]	1.233** [0.473]	2.100*** [0.667]
School minority: 5 -10%	0.277* [0.160]	0.274 [0.180]	0.289* [0.160]	0.251 [0.163]	-0.016 [0.261]	0.335 [0.390]
School minority: 10 -20%	1.063*** [0.286]	0.906** [0.370]	1.002*** [0.324]	0.939*** [0.330]	1.083** [0.495]	1.963*** [0.679]
Individual characteristics	+	+	+	+	+	+
School condition and suitability	+	+	+	+	+	+
School region FE (Local Authority)	+	+	+	+	+	+
No. of Observations	1,932	1,861	1,861	1,861	1,861	1,861

# Conclusions

## ➤ A “playground” survey on Scottish schools

- Strong advantages – links to the literature, but also limitations
- Space for improvement in the future – teacher skills characteristics and student performance of particular interest
- Space for potential policy updating – targeted interventions

## ➤ Some potentially interesting insights

- Gender and gender/age
- Deprivation and differences between school-residential area – “upward school mobility”
- Other school characteristics seem to matter less – Could teacher quality and skills, including FL, make a difference?
- Effects from financial literacy on regular smoking?

## ➤ Still preliminary findings