

# Children and Young People Financial Capability Deep Dives Technical Report

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Contents

Introduction	2
Chapter 1: Children and Young People’s Financial Capability Survey	3
Chapter 2: Methodology	4
Chapter 3: Description of variables	7
Chapter 4: Regression analysis results	27
Chapter 5: Regression analysis results: Protective effect of financial education	43

## Introduction

This technical report accompanies the “CYP Fin Cap deep dive – Vulnerability” and “CYP Fin Cap deep dive - Parenting” reports prepared for the Money Advice Service by London Economics. Both reports explore the relationships between children’s characteristics, skills and behaviour, environment or upbringing, and their financial capability.

The first report examines the links between children’s financial capability and a wide range of factors, including individual characteristics (chapter 2 in the report), skills and behaviour (chapter 3) and environment (chapter 4), which can be considered as a potential vulnerability. Potential vulnerabilities include a child having a long-term illness, a child having poor perseverance or a child growing up in an income deprived area.

The second report delves into the role of parents in children’s financial capability by looking at the relationship between parental behaviours and attitudes and the behaviours and attitudes of their children. Parental behaviours and attitudes considered include whether the parent discusses financial matters with the child (see chapter 5 of the report) or whether the parents save regularly (chapter 2).

This document supplements the main reports by expanding on the methodology and data used in the main reports. It also provides the results of the analysis discussed but not presented explicitly in the main reports.

The structure of this document is as follows:

- Chapter 1: provides detail on the dataset used in the analysis of the main reports - the Children and Young People’s Financial Capability survey.
- Chapter 2: explains the methodology used in the analysis for the two deep dive reports.
- Chapter 3: presents detailed descriptions of the variables used in the analysis, including details on coding and data availability.
- Chapter 4: produces the results of the regression analyses discussed in the main reports.
- Chapter 5 shows the results of additional regression analysis performed for the “CYP Fin Cap deep dive – Vulnerability” report. This regression analysis investigates whether the links between financial education and financial capability differ for children with potential vulnerabilities compared to other children.

## Chapter 1: Children and Young People's Financial Capability Survey

The Children and Young People's Financial Capability Survey (CYP FinCap Survey) is a nationally representative study of children aged 4 to 17. A total of 4,958 children were interviewed (817 aged 4 to 6 and 4,141 aged 7 to 17). For each child, a parent, guardian or carer of the child was also interviewed (referred to as the parent throughout this report). It should be noted that the survey is only nationally representative of children. It may not be representative of the parents of the children.

The survey consists of two questionnaires; one for children aged 7 to 17 and their parents, and one for children aged 4 to 6 and their parents. Both questionnaires have a common core of questions asked of the parents. These questions relate to, among other things, child and household characteristics and parental financial capability, behaviours and attitudes.

The questionnaires differ significantly for questions asked of the children for children of different ages. Questions asked of children aged 4 to 6 are completely different to those asked of children aged 7 to 17. Within the older age group, not all questions are asked of all children, either to keep the length of the questionnaire manageable for younger children, or because questions are not relevant for younger children.

The survey was administered using a mixed methodology of online surveys and face to face computer-assisted self-interviews (CASI). Using two methods increases the population that can be reached and therefore allows for a better representation of the UK child population. Fieldwork was conducted during the first half of 2016.

Devolved nations, and children aged 16 and 17, were oversampled. That means that more children from Scotland, Wales and Northern Ireland were sampled than would be needed for a UK-wide representative sample. Similarly, more children aged 16 or 17 were sampled than required for a representative sample. These groups were oversampled to allow for robust analysis of children from these groups and to allow potential to follow up the older children longitudinally if required. The whole sample was then weighted back to be nationally representative when analysing the data.

More detail on the design, sampling and weighting of the CYP FinCap Survey can be found in the survey's technical report<sup>1</sup>.

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<sup>1</sup> Money Advice Service (2017). *Financial Capability of Children, Young People and their Parents in the UK 2016 Technical Report*. Available at: <https://www.moneyadviceservice.org.uk/en/corporate/research>

## Chapter 2: Methodology

This chapter presents the methodology for the analysis behind the “CYP Fin Cap deep dive – Vulnerability” and “CYP Fin Cap deep dive – Parenting” reports. Both of these reports concentrate their analysis on children aged 7 to 17 and do not include those aged 4 to 6 as the questionnaires between the ages are too different to allow meaningful comparison. Both reports use the same methodology based around two different statistical techniques that allow us to establish links between variables.

The core analysis looks at correlations. This allows us to establish whether variables are linked, but does not allow us to establish causal links. Regression analysis is used to test the robustness of the links we observe.

### 2.1. Core analysis: Correlation analysis

The core analysis of the two reports employs a two-step process to establish whether there is a link between financial capability on the one hand, and potential vulnerabilities or parental behaviours and attitudes on the other.

The two-step process can be summarised as follows. In the first step, we look at whether there are differences in financial capability between groups of children using Chi-square tests and ANOVA evaluated at the 99% confidence level. In the second step, we calculate the correlation with financial capability for those potential vulnerabilities and parental behaviours and attitudes for which we have found a difference.

#### Step 1: Chi-square or ANOVA tests

These tests establish whether the financial capability of children with potential vulnerabilities, or parents with particular behaviours or attitudes, is significantly different to that of other children.

A Chi-square test tests whether the proportion of children who give answers indicating good financial capability differs for different groups of children. It is appropriate in cases where financial capability is expressed as a category (e.g. “a child has good financial capability”). It has, therefore, been applied to the underlying indicators of financial capability (see section 3.1).

ANOVA tests whether the average level of financial capability is different for different groups of children. It is appropriate in cases where financial capability is expressed as a score. For example, ANOVA has been applied to the composite measures of financial capability constructed by the Money Advice Service (see section 3.1).

#### Step 2: Correlation analysis

We can establish the direction and strength of a link between two variables by looking at their correlation. The potential vulnerabilities and parental characteristics used here are categorical in nature, so it is important to use the correct type of correlation technique as treating these as continuous would introduce bias. To avoid this, if the outcome of interest is categorical, polychoric correlation has been reported and if the outcome is continuous (as with the financial capability composites) polyserial correlation is used.

The correlation analysis allows to establish the strength of links. We report these strengths as weak and strong. We define what is ‘strong’ or ‘weak’ in the following way:

- Take all observed links with a negative correlation and calculate the median for all of these correlations. Correlations that are smaller (i.e. more negative) than the median are considered strong, correlations larger (i.e. less negative) are considered weak.
- Take all observed links with a positive correlation and calculate the median for all of these correlations. Correlations larger than the median are considered strong, correlations smaller are considered weak.

Taking the median guarantees that outliers do not unduly influence our definition of strength. Note that we define the strength of links separately for the two reports. Therefore, the same correlation might be classified as weak in the “CYP Fin Cap deep dive – Vulnerability” report and strong in the “CYP Fin Cap deep dive – Parenting” report. It is therefore not appropriate to compare the strength of the links across the two reports. The strength of links within the same report, on the other hand, are consistent and can be directly compared.

Table 1 presents the resulting cut-off points for both reports. The table shows that, for instance, a correlation of -0.12 would be classified as weakly negative in the “CYP Fin Cap deep dive – Vulnerability” report but strongly negative in the “CYP Fin Cap deep dive – Parenting” report.

**Table 1: Definition of strength of links**

	CUT-OFF POINT FOR STRONG AND WEAK NEGATIVE LINKS	CUT-OFF POINT FOR STRONG AND WEAK POSITIVE LINKS
CYP Fin Cap deep dive – Vulnerability report	-0.145	0.19
CYP Fin Cap deep dive – Parenting report - composite measures	(no negative links observed)	0.16
CYP Fin Cap deep dive – Parenting report - underlying measures	-0.115	0.18

## Discussion on the validity of tests

The choice of confidence level (99%) is more restrictive than might be usually considered. The motivation for this is two-fold. Firstly, the CYP FinCap Survey has a complex design (see Chapter 1:) which we are not completely able to account for in the analysis. This means that we are too likely to judge our results as statistically significant. By choosing a higher confidence level, the chance of identifying a statistically significant relationship due to spurious correlation decreases.

Secondly, we conduct a large number of tests for the two main reports; nearly 4,000. This increases the chance of finding differences between groups that are generated by pure random chance, known as the multiple testing problem. By choosing a more restrictive confidence level, we decrease the chance of finding such erroneous differences.

In order to keep the survey nationally representative with groups of children being oversampled, the Chi-squared tests were performed on weighted data and used a conservative confidence interval of 99%. The weights used were based on child characteristics (age, gender and ethnicity), geographic characteristics (income deprivation, urban/rural classification) and region of residence.

Weights, however, have not been applied to the data for the correlation analysis. Whether weights need to be applied in the latter case is an open question in the literature without strong recommendations in favour or against<sup>2</sup>; and the correlations were performed to establish the directionality of links, after links were already identified based on weighted data in the first step.

## 2.2. Robustness tests: Regression analysis

The correlation analysis may pick up links between financial capability, and potential vulnerabilities or parental indicators that are explained by differences in factors associated with financial capability rather than financial capability itself. Regression analysis allows us to account for some of these alternative explanations. It is used as a robustness test of the core analysis.

The majority of the regression analysis employs logit regression. This is appropriate for variables consisting of merely two categories and is therefore used for the underlying indicators of financial capability. Logit regression tells us how the probability of having good financial capability differs for different groups of children. In the analysis of the composite measures, we use linear regression with robust standard errors.

In both cases, weights have not been applied to the analysis. The use of weights in regression analysis is still an unresolved problem in the wider literature without strong recommendations how it should be applied<sup>3 4 5</sup>. Weights have not been used in the regression analysis since the objective of these analyses was to identify a relationship, and not to quantify it for the population. To mitigate the risk of identifying spurious relationships in the regression analysis stage, we have used a wide set of control variables as a robustness check and robust standard errors where appropriate.

Regression analysis has been used in the following way. Firstly, a link between a single financial capability indicator and a single vulnerability or parental indicator is investigated with regression analysis, without controlling for other factors, setting up a baseline for our comparison. We need to do this because results for correlation and regression analyses cannot be directly compared. Secondly, we investigate the same link but include a set of control variables (listed in the next section). We compare this regression with the baseline and note whether previously observed links still exist once we control for other factors. Similarly, to the core analysis, all results are evaluated 99% confidence level.

<sup>2</sup> Solon, G., Haider, S.J. and Wooldridge, J. (2013). 'What are we weighting for?', NBER Working Paper 18859. Available at: <http://www.nber.org/papers/w18859.pdf>

<sup>3</sup> Ibid.

<sup>4</sup> Gelman, A. (2007). 'Struggles with survey weighting and regression modelling', Statistical Science Vol. 22, No. 2, 153–164. Available at: <http://www.stat.columbia.edu/~gelman/research/published/STS226.pdf>

<sup>5</sup> Winship, C. and Radbill, L. (1994). 'Sampling weights and regression analysis', Sociological Methods & Research, Vol 23, Iss. 2, 230-257.

### 2.2.1. Description of control variables

In this section, we outline the set of control variables used in the regression analysis. The same set of control variables were used to investigate the links in all of the regression analysis, with a single exception. Responsibility of the parent to set rules for the child has *not* been included as control variable when investigating links between children's financial capability and parents with sole or joint caring responsibilities, as these three variables measure similar aspects of the child's environment.

The following control variables have been used in the regression analysis:

- gender of the child;
- whether the child goes to a private school rather than to a state school or being home-schooled;
- family income;
- age of the child;
- stage of education of the child (primary, secondary or other);
- time spent on the internet in the week prior to the survey by the child;
- age of the parent;
- whether the parent is single (and has never married);
- whether the parent is separated or divorced;
- whether the parent holds a university higher degree (e.g. a Masters);
- whether the parent has a GCSE grade C or equivalent in maths;
- whether the parent has a GCSE grade C or equivalent in English;
- whether there are children in the household older than the child responding to the survey;
- number of children in the household<sup>6</sup>;
- whether the parent has joint responsibilities for setting rules for the child with another adult in the same household<sup>7</sup>;
- whether the main income earner in the family is a manual worker;
- whether the main income earner in the family has a professional, managerial or administrative job; and,
- region of residence.

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<sup>6</sup> Note that the survey does not directly ask about the number of children in the household. With the available data, only a lower bound estimate of the number of children can be established.

<sup>7</sup> Not included when investigating links between children's financial capability and sole or joint caring responsibility.

## Chapter 3: Description of variables

This chapter provides details on the variables used in the “CYP Fin Cap deep dive – Vulnerability” and “CYP Fin Cap deep dive – Parenting” reports. The indicators of children’s financial capability common to both reports are outlined first. Then, the indicators of potential vulnerability are outlined. Lastly, indicators on parental behaviour and attitudes are outlined.

### 3.1. Children’s capabilities

In this section we outline the indicators for children’s financial capability common to both main reports analysis. The indicators are grouped according to an exercise undertaken by the Money Advice Service that constructed four financial capability indicators based on the CYP Outcomes Framework:

- Level of **Ability**: children’s financial knowledge and skills;
- **Mindset**: children’s values and attitudes towards money;
- Level of financial **Connection**: children’s engagement with money and access to financial products/services; and,
- Financial **Behaviours**: children’s actions with money.

We present details on both the composite measures and the indicators underlying the composites used in the main reports. The composites do not contain all outcomes that are important for children’s financial capability. These indicators are grouped under “Other aspects of financial capability”.

#### 3.1.1. Ability

**Table 2: Ability indicators used in composite measures**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
Composite measure	-	-	Continuous	7-17	-
Chooses correct coins when paying	When your child pays for things in shops, does he/she usually choose the right coins or notes to pay?	Parent	1 if yes, 0 if no	7-17	Children who pay for things in shops
Waits for and/or checks change	When your child pays for things in shops, does he/she wait for any change? When your child pays for things in shops, does he/she check he/she has the right change?	Parent	1 if yes on either of the questions, 0 if no	7-17	Children who pay for things in shops
Displays good financial knowledge (as indicated through the knowledge index)	Range of questions reflecting the child’s ability to correctly answer questions testing financial knowledge. Different questions underlie this variable for children of different ages	Child	-	7-17	-
Can read bank statement	Looking at this example of a bank statement, how much money was in the account at the end of February?	Child	1 if answered correctly, 0 otherwise	12-17	-



VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Understands interest rates</b>	<p>Suppose you put £100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made</p> <p>If the inflation rate is 5% and the interest rate you get on your savings is 3%, will your savings have more, less or the same amount of buying power in a year's time?</p>	Child	1 if both questions are answered correctly, 0 otherwise	12-17	-
<b>Can read a payslip</b>	<p>[Looking at the provided payslip], how much has Sally paid towards her retirement so far this year?</p> <p>[Looking at the provided payslip], how much was Sally paid this month before any tax or deductions were taken?</p>	Child	1 if both questions are answered correctly, 0 otherwise	14-17	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

**Table 3: Other ability indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Answered question about currency correctly [Correctly combines currency]</b>	<p>I want to buy these lollipops. They cost £1.50. Which coins will I need to buy them?</p> <p>A game I like costs £35. How many £5 notes will I need to buy it?</p>	Child	1 if both questions are answered correctly, 0 otherwise	7-11	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

### 3.1.2. Mindset

Table 4: Mindset indicators used in composite measure

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
Composite measure	-	-	Continuous	7-17	-
Agrees thinking about money does not make them anxious	Thinking about my financial situation makes me anxious	Child	1 if the child strongly or slightly disagrees, 0 otherwise	11-17	-
Agrees they feel confident managing money	How confident do you feel managing your money? Please answer on a scale of 0-10, where 0 is 'not at all confident' and 10 is 'very confident'	Child	1 if child answers with 8 or higher, 0 otherwise	12-17	-
Says they prefer not to borrow	Below are some things people your age have said about borrowing money. Which one best describes how you feel about borrowing money?	Child	1 if child answer preferring not to borrow or only if it can be paid back, 0 otherwise	12-17	-
Would save more of £10 windfall	Imagine someone gives you £10. How much would you spend and how much would you save for later?	Child	1 if the child would save at least £5, 0 otherwise	7-17	-
Would save more of £100 windfall	Imagine someone gives you £100. How much would you spend and how much would you save for later?	Child	1 if the child would save at least £75, 0 otherwise	12-17	-
Is not bothered by parents not giving what she/he sees in shops [Accepts not getting things]	I don't like it when my parents or carers say I cannot have things I see in shops	Child	1 if the child strongly or slightly disagrees, 0 otherwise	7-17	-
Is not bothered by friends having things he/she does not have [Accepts getting less than friends]	"I don't like it when friends have things I don't have	Child	1 if the child strongly or slightly disagrees, 0 otherwise	7-17	-
Compares prices	When you want to buy something for yourself, how often do you look in different places or stores to compare prices?	Child	1 if the child answers often, 0 otherwise	11-17	-
Understand that money has value	How well do you think your child understands the following about money? That money has value	Parent	1 if parent answers very well or quite well, 0 otherwise	7-17	-
Understand that you have to make choices when spending money	How well do you think your child understands the following about money? That you have to make choices when you spend your money	Parent	1 if parent answers very well or quite well, 0 otherwise	7-17	-

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Understands that adverts try to sell things</b>	How well do you think you child understands the following about money? That adverts and some TV programmes are trying to sell them things	Parent	1 if parents answers very well or quite well, 0 otherwise	7-17	-
<b>Is able to explain choices made when spending</b>	Is your child able to do any of the following? Explain the choices he/she makes when he/she spends his/her money”.	Parent	1 if the child is always able to do this, 0 otherwise	7-17	-
<b>Is able to recognise difference between needs and wants</b>	Is your child able to do any of the following? Able to recognise the difference between something he/she wants (e.g. games) and something he/she needs (e.g. food)	Parent	1 if the child is always able to do this, 0 otherwise	7-17	-

Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

**Table 5: Other mindset indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Does not ask for things after been told he/she can't have them [Doesn't ask for things repeatedly]</b>	Does your child ever ask for things after he/she's been told he/she can't have them	Parent	1 if yes, 0 if no	7-17	-

Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

### 3.1.3. Connection

**Table 6: Connection indicators used in composite measure**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Composite measure</b>	-	-	Continuous	7-17	-
<b>Knows the type of bank account</b>	Do you know what type of bank account you have?	Child	0 if the child does not know, 1 otherwise	8-17	Children who have a bank account
<b>Does things with his/her bank account (child question)</b>	Which of the following do you do with your bank account(s)?	Child	1 if the child does at least 3 things with a bank account (excluding mobile or online banking), 0 otherwise	8-17	Children who have a bank account
<b>Uses internet banking and/or mobile banking</b>	Which of the following do you do with your bank account(s)?	Child	1 if the child uses <i>both</i> internet and mobile banking, 0 otherwise	8-17	Children who have a bank account
<b>Talks about money with appropriate people</b>	Do you talk about your money with any of the following people?	Child	0 if the child talks to no one or only friends, 1 otherwise	7-17	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

**Table 7: Other connection indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Has a bank account</b>	Do you have a bank account of your own?	Child	1 if yes, 0 if no	7-17	-
<b>Pays for things in shops</b>	Does your child ever pay for things in shops him/herself, such as toys, food or sweets (with either their money or your money)?	Parent	1 if yes, 0 if no	7-17	-
<b>Pays for things online</b>	Does your child ever pay for things online him/herself, such as apps, games or music (with either their money or your money)?	Parent	1 if yes, 0 if no	7-17	-
<b>Gets money</b>	Where do you get your money from?	Child	1 if the child gets money from anywhere, 0 otherwise	7-17	-
<b>Pays for non-school clothes and shoes</b>	Do you have to pay for any of the following things out of your own money?	Child	1 if the child reports paying for non-school clothes and shoes, 0 otherwise	11-17	Children who get money

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Pays for snacks or sweets</b>	Do you have to pay for any of the following things out of your own money?	Child	1 if the child reports paying for snacks or sweets, 0 otherwise	11-17	Children who get money
<b>Pays for presents for other people</b>	Do you have to pay for any of the following things out of your own money?	Child	1 if the child reports paying for presents for other people, 0 otherwise	11-17	Children who get money
<b>Pays for going out with friends</b>	Do you have to pay for any of the following things out of your own money?	Child	1 if the reports paying for going out with friends, 0 otherwise	11-17	Children who get money
<b>Earns regular money</b>	In which of the following ways does your child get money of his/her own?	Parent	1 if the parent reports any regular source of money, 0 otherwise	7-17	-

*Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

### 3.1.4. Behaviour

**Table 8: Behaviour indicators used in composite measure**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Composite measure</b>	-	-	Continuous	7-17	-
<b>Saves up more frequently (e.g. weekly, monthly)</b>	How often do you put money aside into your savings?	Child	1 if the child saves every week, every month or most months, 0 otherwise	8-17	Children who get money
<b>Spends money he/she gets less often</b>	How often do you spend that money on things you want?	Child	1 if the child answers never, 0 otherwise	8-17	Children who get money
<b>Plans how to pay for things</b>	How often do you plan how you are going to pay for things you need?	Child	1 if the child answers always or often, 0 otherwise	14-17	Children who get money
<b>Sticks to agreements when paying online</b>	When your child pays for things online such as apps, games or music, does he/she stick to any agreements that you have about buying online?	Parent	1 if yes, 0 if no	7-17	Children who pay for things online
<b>Appropriately keeps track of spending</b>	How do you keep track of the money you get and the money you spend?	Child	0 if the child only keeps track in his/her mind or not at all, 0 otherwise	14-17	Children who get money
<b>Is able to save up for short time for something he/she wants</b>	Is your child able to do any of the following? Save up for a short period of time to buy something he/she wants	Parent	1 if the child is always able to do this, 0 otherwise	7-17	Children who save up to buy specific items

*Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

**Table 9: Other behaviour indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Saves up more often when he/she gets money</b>	When you get money, how often do you save at least some of it, say by putting it in a piggy bank or cash box or into your bank account?	Child	1 if the child does this every time or most times, 0 otherwise	8-17	Children who get money
<b>Can pay an unexpected bill</b>	If you received a higher than usual phone bill or there was something unexpected you needed to buy, how would you pay for it?	Child	1 if the child would work extra hours, would pay through savings or with own money, 0 otherwise	15-17	-
<b>Is able to manage day-to-day money or allowance</b>	Is your child able to do any of the following? Manage his/her own day-to-day money or allowance	Parent	1 if the child is always able to do this, 0 otherwise	7-17	-

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Has money in appropriate financial products</b>	Does your child have money in any of the following places?	Parent	0 if the child has no money, the parents look after their money or has money only in a piggy bank, 1 otherwise (which includes savings and current account, a Child Trust Fund, credit union account, NS&I Savings, Premium Bonds or a junior ISA)	7-17	-
<b>Does something with his/her bank account (parent question)</b>	Which of the following does your child do with his/her bank account(s)?	Parent	0 if the child does nothing with his or her bank account, 1 otherwise	7-17	Children who have money in a bank account

*Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

## 3.2. Potential vulnerabilities (CYP Fin Cap deep dive – Vulnerability)

This section presents the indicators of potential vulnerability as used in the “CYP Fin Cap deep dive – Vulnerability” report. Indicators are presented in the order presented in that report.

Section headings refer to the chapters and sections in the report for easier reference.

### 3.2.1. Individual characteristics (chapter 2)

**Table 10: Indicators of individual characteristics**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Ethnicity of parent is black or ethnic minority</b>	Which of the following best describes your ethnic group?	Parent*	0 if the parent reports a White ethnic background (excluding Gypsy or Irish Traveller), 1 otherwise	7-17	-
<b>Child has long-standing illness</b>	Does your child have any long-standing physical or mental impairment, illness or disability? By 'long-standing' we mean anything that has troubled your child over a period of at least 12 months or that is likely to trouble your child over a period of at least 12 months.	Parent	1 if yes, 0 if no	7-17	-

*Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service. \*We only observe ethnicity of the parent filling in the survey, not of the child or the other parent.*



### 3.2.2. Individual skills and behaviour (chapter 3)

#### Behavioural and social-emotional characteristics (section 3.1)

**Table 11: Indicators of behavioural and social-emotional characteristics**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Child displays poor behaviour</b>	Child is irritable or quick to anger (children aged 7 to 17) I get angry quickly (children aged 12 to 17) Child is often disobedient (children aged 7 to 17) I am generally willing to do what is asked of me (for example - by teachers or parents) [children aged 12 to 17]	Combination of parent and child	Initial score derived from Principal Component Analysis*  Final variable takes the value 1 for the 25% of children with the lowest scores and 0 for all other children	7-17	-
<b>Child has poor perseverance</b>	Child finishes a task he/she has been asked to do I carry on with a task whether it is difficult or not	Combination of parent and child	Initial score derived from Principal Component Analysis*  Final variable takes the value 1 for the 25% of children with the lowest scores and 0 for all other children	7-17	-
<b>Child has low self-esteem</b>	When you have to say things in front of teachers, do you usually feel shy? (children aged 7 to 17) Are there lots of things about yourself you would like to change? (children aged 7 to 17) How true do you think this statement is of you? I have high self-esteem (children aged 12 to 17)	Child	Initial score derived from Principal Component Analysis*  Final variable takes the value 1 for the 25% of children with the lowest scores and 0 for all other children	7-17	-
<b>Child has poor self-efficacy</b>	When nice things happen to you is it only good luck? (children aged 7 to 17) Nothing I do will make much difference to my money situation (children aged 12 to 17)	Child	Initial score derived from Principal Component Analysis*  Final variable takes the value 1 for the 25% of children with the lowest scores and 0 for all other children	7-17	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service. \*The variables are categorical in nature, i.e. our data represents categories rather than values. This makes standard PCA invalid. However, all our variables are also ordered, i.e. we can establish a ranking of the categories from best to worst. Therefore, we can apply polychoric PCA

## Cognitive vulnerabilities (section 3.2)

Table 12: Indicators of cognitive vulnerabilities

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
Performance in maths is below expectation (parent's recall of last school report)	Thinking about your child's last school report, did your child's teacher say they were performing? In Maths	Parent	1 if performance was below expectation, 0 otherwise	7-17	-
Performance in English is below expectation (parent's recall of last school report)	Thinking about your child's last school report, did your child's teacher say they were performing? In English	Parent	1 if performance was below expectation, 0 otherwise	7-17	-
Child does not have a GCSE grade C or better in maths	Do you hold the equivalent of GCSE/O-level/CSE grade C or above in mathematics?	Child	1 if no, 0 if yes	17	-
Child does not have a GCSE grade C or better in English	Do you hold the equivalent of GCSE/O-level/CSE grade C or above in English?	Child	1 if no, 0 if yes	17	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

### 3.2.3. Environmental factors (chapter 4)

#### Family structure (section 4.1)

**Table 13: Indicators of family structure**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Parent has sole caring responsibility over the child</b>	Thinking about caring and parenting responsibility for your child, are you.....?	Parent	1 if the parent is solely responsible, 0 otherwise	7-17	-
<b>Parent has joint caring responsibility with parent not in the household</b>	Thinking about caring and parenting responsibility for your child, are you.....?	Parent	1 if the parent is jointly responsible with another adult not living with the parent, 0 otherwise	7-17	-
<b>Child is looked after*</b>	What is your relationship to the child participating in the survey?	Parent	0 if the relationships is (step-)father or mother, 1 otherwise*	7-17	-
<b>Child has caring responsibilities in the household</b>	Does your child have a regular, ongoing role looking after or caring for yourself, or any relatives who are ill, disabled or elderly? This could be with personal, practical or emotional support (e.g. carry out everyday tasks such as washing, dressing, or cleaning).	Parent	1 if yes, 0 if no	7-17	-
<b>Child has young parents</b>	Age of the child Age of the parent	Parent	The age of the child was subtracted from the age of the parent. The final variables takes the value 1 if the parent was 20 years or younger at the birth of the child, 0 otherwise**	7-17	-
<b>Child lives in multi-generational household</b>	In which of these ways do you occupy your home?	Parent	1 if the parents respond they live with their parents, grandparents or other family members, or if they live in some other arrangement. 0 otherwise.	7-17	-

*Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service. \*Note that survey was not able to reach those in residential care or those young people living independently with Local Authority support. \*\*Note that the age of the parent is only available in age bands. As a result, all parents we have been categorised as "young" (i.e. 20 years or younger at the birth of the child) are appropriately categorised; however, at the margin, there may be a small number of parents that are categorised as being "not-young" (i.e. over the age of 20 at the time of the birth of their child) that were in fact at or below the age of 20.*

## Economic circumstances (section 4.2)

Table 14: Indicators of economic circumstances

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Child lives in income deprived area</b>	Derived from the Index of Multiple Deprivation – Income Domain*	-	1 if the child lives in the 20% most income deprived areas, 0 otherwise	7-17	-
<b>Child lives in social housing</b>	In which of these ways do you occupy your home?	Parent	1 if parent rents from local authority of housing association, 0 otherwise	7-17	-
<b>Main income earner is unemployed</b>	Please indicate to which occupational group the Main Income Earner in your household belongs, or which group fits best	Parent	1 if the main income earner is unemployed or not working due to long-term sickness, 0 otherwise	7-17	-
<b>Over-indebted (according to the Money Advice Service definition)</b>	To what extent do you feel that keeping up with your bills and credit commitments is a burden?  In the last 6 months, have you fallen behind on, or missed, any payments for credit commitments or domestic bills for any 3 or more months? These 3 months don't necessarily have to be consecutive months.	Parent	1 if debt is a heavy burden, or if the parent has fallen behind bills, or both. 0 otherwise.	7-17	-
<b>Family income is low</b>	Which band from the grid below does your household's total gross income from all sources fall into?	Parent	1 if household income is lower than £17,500 per year, 0 otherwise.	7-17	-

Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service. \*Note that the Index of Multiple Deprivation is constructed differently in the four Home Nations.

### Financial resilience segmentation (section 4.3)

The following indicators of potential vulnerability are based on the financial resilience segmentation created by the Money Advice Service. This segmentation groups people according to their level of financial resilience.<sup>8</sup>

**Table 15: Financial resilience segmentation**

VARIABLE	CODING	AGE AVAILABLE	NOTES
<b>Segment: Struggling (vs. squeezed or cushioned)</b>	1 if the household is classified as “struggling”, 0 if the household is classified as “squeezed” or “cushioned”	7-17	“Struggling” is the most vulnerable group, “cushioned” is the least vulnerable group
<b>Segment: Squeezed (vs. cushioned)</b>	1 if the household is classified as “squeezed”, 0 if the household is classified as “cushioned”	7-17	“Struggling” is disregarded in this variable
<b>Sub-segment: Over-burdened</b>	1 if the household is classified as “overburdened”, 0 otherwise	7-17	Overburdened household are struggling families dependent on benefits and likely to be over-indebted
<b>Sub-segment: Struggling younger adults or struggling working families</b>	1 if a household is classified as “struggling younger adults” or “struggling working family”, 0 otherwise	7-17	Younger adults are household with parents under the age of 35 years. Working families are households with children, with parents around 35-45 years old and in employment
<b>Sub-segment: Struggling working families</b>	1 if the household is classified as “struggling working family”	7-17	Working families are households with children, with parents around 35-45 years old and in employment
<b>Sub-segment: Squeezed younger families and couples</b>	1 if the household is classified as “squeezed younger family or couple”	7-17	Younger families are household with parents under the age of 35 years.
<b>Sub-segment: Older squeezed</b>	1 if the household is classified as “older squeezed”	7-17	Older families are families with parents around pre-retirement age (i.e. age 55 to 64)

Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

<sup>8</sup> More information on the financial resilience segmentation can be obtained from <https://www.moneyadviceservice.org.uk/en/corporate/research>

### 3.3. The impact of financial education in schools (CYP Fin Cap deep dive – Vulnerability, chapter 5)

This section outlines the indicators of school-based financial education received by children as used in the “CYP Fin Cap deep dive – Vulnerability” report.

**Table 16: Financial education indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
Child has had any financial education	Have you learnt about how to manage your money in school or college?	Child	1 if yes, 0 if no	7-17	-
Child has had financial education in maths class	Which subjects did you learn how to manage your money in?	Child	1 if child reports having received financial education maths class, 0 otherwise	12-17	-
Child has had financial education in personal, social, health and economic (PSHE) class	Which subjects did you learn how to manage your money in?	Child	1 if the child reports having received financial education in PSHE, 0 otherwise	12-17	-
Child has had financial education in citizenship class	Which subjects did you learn how to manage your money in?	Child	1 if the child reports having received financial education in citizenship class, 0 otherwise	12-17	-
Child has had financial education in business and finance class	Which subjects did you learn how to manage your money in?	Child	1 if the child reports having received financial education in business & finance class, 0 otherwise	12-17	-

*Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

### 3.4. Parental behaviours and attitudes (CYP Fin Cap deep dive – Parenting)

In this section, we describe the indicators of parental behaviours and attitudes as used in the “CYP Fin Cap deep dive – Parenting” report. Indicators are presented in the order presented in that report.

Section headings refer to the relevant chapters in the report for easier reference.

#### 3.4.1. Parents’ financial capability (chapter 2)

**Table 17: Parents’ financial capability indicators**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Parent does not feel anxious thinking about his/her financial situation</b>	To what extent do you agree or disagree with the following statements about money? Thinking about my financial situation makes me anxious	Parent	1 if the parent strongly or slightly disagrees, or neither agrees nor disagrees. 0 otherwise	7-17	-
<b>Parent feels he/she can change his/her financial situation</b>	To what extent do you agree or disagree with the following statements about money? Nothing I do will make much difference to my financial situation	Parent	1 if the parent strongly or slightly disagrees, or neither agrees nor disagrees. 0 Otherwise	7-17	-
<b>Grandparents talked to parents about money</b>	Now here are some things parents and carers have said about teaching children about money. To what extent do you agree or disagree with these statements? My parents never talked to me about money	Parent	1 if the parent strongly or slightly disagrees. 0 Otherwise	7-17	-
<b>Parent saves regularly</b>	Which of these best describes how often you put money aside into savings?	Parent	1 if the parent saves every month or most months, 0 otherwise	7-17	-
<b>Parent sets clear rules for the child about money that he/she sticks to</b>	On a scale of 0 to 10, where 0 means ‘it doesn’t sound like me at all’, and 10 means ‘it sounds a lot like me’, to what extent would you say that I set clear rules or agreements for my child about money that I stick to.	Parent	1 if the parent reports 8 or higher, 0 otherwise	7-17	-
<b>Parent feels very confident managing money</b>	On a scale of 0 to 10, where 0 is ‘not at all confident’ and 10 is ‘very confident’, how confident do you feel managing your money?	Parent	1 if the parent reports 8 or higher, 0 otherwise	7-17	-
<b>Parent can pay unexpected £300 bill without resorting to credit or other external resources</b>	Thinking about an unexpected bill which you have to pay within seven days from today. Which, if any of the following would you do to pay a bill of £300? If you think you would do more than one, please select the main thing you would do, that is the one you would get the most money from.	Parent	1 if the parent reports that the bill would be paid with own money or by dipping into savings, 0 otherwise	7-17	-

Note: a dash (“-”) means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service

### 3.4.2. Responsibilities given to the child (chapter 3)

**Table 18: Indicators of responsibilities given to the child**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
Child is involved in decisions how the child's money is spent	Who is mainly responsible for deciding how your child's day-to-day money is spent?	Parent	1 if the child decides, or parent and child decide together. 0 otherwise*	7-17	Children who get money
Child is involved in decisions whether to save any of their money	When you have money, who usually decides whether you save any of it?	Child	1 if the child decides, or parent and child decide together. 0 otherwise*	7-17	Children who get money

*Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

*\*A secondary variable was created taking the value 1 if the child decides and 0 if the child and parent decide together, disregarding children who are not involved in the decision. This allows us to analysis whether the level of responsibility matters.*



### 3.4.3. Role modelling (chapter 4)

**Table 19: Indicators of role modelling**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>Parent discusses where money in the household comes from with child</b>	How often do you talk to your child about where the money your household has comes from?	Parent	1 if this happens often or sometimes, 0 otherwise*	7-10	-
<b>Parent discusses the choices made when spending money with child</b>	How often do you talk to your child about the choices you make when spending your money?	Parent	1 if this happens often or sometimes, 0 otherwise*	7-17	-
<b>Parent discusses the risks of debt and borrowing with child</b>	How often do you talk to your child about the risks associated with borrowing money, and the impact of getting into debt?	Parent	1 if this happens often or sometimes, 0 otherwise*	12-17	-
<b>Parent shows child how to set a budget</b>	How often do you show your child how to set a budget?	Parent	1 if this happens often or sometimes, 0 otherwise*	11-17	-
<b>Parent shows child how to check a bank balance</b>	How often do you show your child how to check your bank balance?	Parent	1 if this happens often or sometimes, 0 otherwise*	7-17	-
<b>Parent shows child how to pay different household bills</b>	How often do you show your child how you pay the different household bills?	Parent	1 if this happens often or sometimes, 0 otherwise*	14-17	-
<b>Parent feels very confident talking about managing money with child</b>	On a scale of 0 to 10, where 0 is 'not at all confident' and 10 is 'very confident', how confident do you feel talking to your child about how to manage money?	Parent	1 if the parent reports an 8 or higher, 0 otherwise	7-17	-
<b>Can be a good role model</b>	To what extent do you agree or disagree with the following statements about money? I feel able to be a good role model for my children around money.	Parent	1 if the parent strongly or slightly agrees, 0 otherwise	7-17	-

*Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service. \*A secondary variable was constructed taking the value 1 if this happens often, and 0 if this happens only sometimes. This allows us to analyse whether frequency matters.*

### 3.4.4. Attitudes towards teaching children about money (chapter 5)

**Table 20: Indicators of attitudes towards teaching children about money**

VARIABLE	UNDERLYING QUESTION(S)	RESPONDENT	CODING	AGE AVAILABLE	OTHER ROUTING
<b>General attitude towards children's involvement in finances</b>	At what age group do you think parents and carers should start doing the following with their children to help them become good with their money when they grow up? (covers multiple questions)	Parent	Based on Latent Class Analysis. See more details below.*	7-17	-
<b>Parent thinks that parents should start talking about bills that need to be paid to a child by age 7</b>	At what age group do you think parents and carers should start doing the following with their children to help them become good with their money when they grow up? Talk about bills that need to be paid (e.g. heating, electric, phone etc.)	Parent	1 if the parent answer that this should happen with children aged 7 or younger, 0 otherwise	7-17	-
<b>Parent thinks that children should be given an allowance to a child by age 7</b>	At what age group do you think parents and carers should start doing the following with their children to help them become good with their money when they grow up? Give them their own spending money/allowance	Parent	1 if the parent answers that this should happen with children aged 7 or younger, 0 otherwise	7-17	-
<b>Parent thinks that parents should talk about debt and borrowing to a child before age 7</b>	At what age group do you think parents and carers should start doing the following with their children to help them become good with their money when they grow up? Talk to them about debt and borrowing	Parent	1 if the parent answers that this should happen with children aged 7 or younger, 0 otherwise	7-17	-
<b>Parent thinks that a person's money habits are formed by age 7</b>	At what age do you think a person's money habits and attitudes, for example being a spender or a saver, get established?"	Parent	1 if the parent believes that habits are formed by age 7, 0 otherwise	7-17	-
<b>Parent thinks that children should be free to start making mistakes with own money by age 11</b>	At what age do you think that children should have the freedom to start making mistakes with their money and learn from them?	Parent	1 if the parent thinks that freedom should be given by the age of 7, 0 otherwise	7-17	-
<b>Parent thinks that children should be exposed to understanding how money works</b>	Here are some things parents and carers have said about teaching children about money. To what extent do you agree or disagree with these statements? Children should be protected from understanding how money works.	Parent	1 if the parent strongly or slightly disagrees, 0 otherwise	7-17	-

*Note: a dash ("-") means that either the cell is not applicable for the variable or variables have been derived by the Money Advice Service*

\*Parents were grouped according to the probability that they responded that parents should start demonstrating financial matters to children:

- aged 7 or younger
- aged 8 to 11
- aged 12 to 15, and
- aged 16 or 18, or not at all.

Each parent was assigned to the age group they were most likely to respond with.

The final variables compared parents who were most likely to respond that financial matters should be demonstrated to 7-year-olds or younger with parents who were most likely to respond that financial matters should be demonstrated only to 16-year-olds or older, or not at all. The first group was assigned the value 1, the second group was assigned the value 0.

## Chapter 4: Regression analysis results

We present the results of the regression analysis undertaken for the “CYP Fin Cap deep dive – Vulnerability” and “CYP Fin Cap deep dive – Parenting” reports in this chapter. For a description of the methodology, see Chapter 2.

The tables overleaf combine the two main elements of the regression analysis methodology. The colour coding shows whether there is a link between a financial capability indicator, and a potential vulnerability indicator or an indicator of parental behaviours and attitudes, based on the regression analysis *without* any control variables. A red cell indicates a negative link and a green cell indicates a positive links. A white cell indicates that no links have been found.

If a cell contains a cross (✕), the analysis shows that factors such as gender, family income and parents’ educational attainment (see section 2.2.1 for a full list) can explain the links between financial capability, and potential vulnerability and parental behaviours indicators. If a cell does not contain a cross, the analysis shows that the link remains even when we introduce control variables.

Note the tables overleaf are based on regression analysis, whereas the tables in the two main reports are based on Chi-square tests and correlation analysis. Therefore, there might be discrepancies between the tables presented in this report and the two main reports in terms of the links we observe. Furthermore, this report makes no distinction between ‘weak’ and ‘strong’ links as discussed in the main report. The definition used to establish whether a link is weak or strong has been created for the correlation analysis, and cannot be translated directly to regression analysis.

The following sections present the results first for the different types of potential vulnerabilities used in the “CYP Fin Cap deep dive – Vulnerability” report, and second for the parental indicators used in the “CYP Fin Cap deep dive – Parenting” report. As mentioned in Chapter 2:, the composite measures for financial capability were only used for the latter report. Therefore, results of regression analysis on the composite measures are only presented those elements of analysis related to that report.

## 4.1. Potential vulnerabilities (CYP Fin Cap deep dive – Vulnerability)

### 4.1.1. Individual characteristics (chapter 2)

Figure 1: Regression results for individual characteristics, underlying variables



Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

### 4.1.2. Individual skills and behaviour (chapter 3)

#### Behavioural and social-emotional skills (section 3.1)

**Figure 2: Regression results for behavioural and social-emotional skills, underlying variables**



#### Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

#### Direction of links and impact of control variables

Negative link without controls	
Positive link without controls	
Control explains link	X

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

## Cognitive vulnerabilities (section 3.2)

Figure 3: Regression results for cognitive vulnerabilities, underlying variables

Ages 7-17					Maths below expectation	No maths GCSE or better	English below expectation	No English GCSE or better
<b>Ability</b>								
Chooses correct coins								
Waits for or checks change								
Knowledge index								
Can read bank statement								
Understand interest rates								
Can read payslip								
Correctly combines currency								
<b>Mindset</b>								
Is not anxious about money								
Confident managing money								
Prefers not to borrow								
Saves more of £10								
Saves more of £100								
Accepts not getting things								
Accepts getting less than friends								
Compares prices								
Understanding: money has value								
Understanding: money and choices								
Understanding: adverts sell things								
Can explain choices								
Understands difference needs/wants								
Doesn't ask for things repeatedly								
<b>Connection</b>								
Bank account: knows type								
Bank account: uses (child)								
Uses mobile/internet banking								
Talks about money								
Bank account: has one								
Pays for things in shops								
Pays for things online								
Gets money								
Pays for: clothes								
Pays for: snacks								
Pays for: presents								
Pays for: going out								
Earns regular money								
<b>Behaviour</b>								
Saves up frequently								
Spends money less often								
Plans spending								
Sticks to online paying agreements								
Tracks spending								
Can save for short time								
Saves up when receives money								
Can pay unexpected bill								
Can manage money/allowance								
Has money in financial products								
Bank account: uses (parent proxy)								
<b>Type of financial capability composite measure</b>								
Ability								
Mindset								
Connection								
Behaviour								
Other non-composite aspect of financial capability								
<b>Direction of links and impact of control variables</b>								
Negative link without controls								
Positive link without controls								
Control explains link								

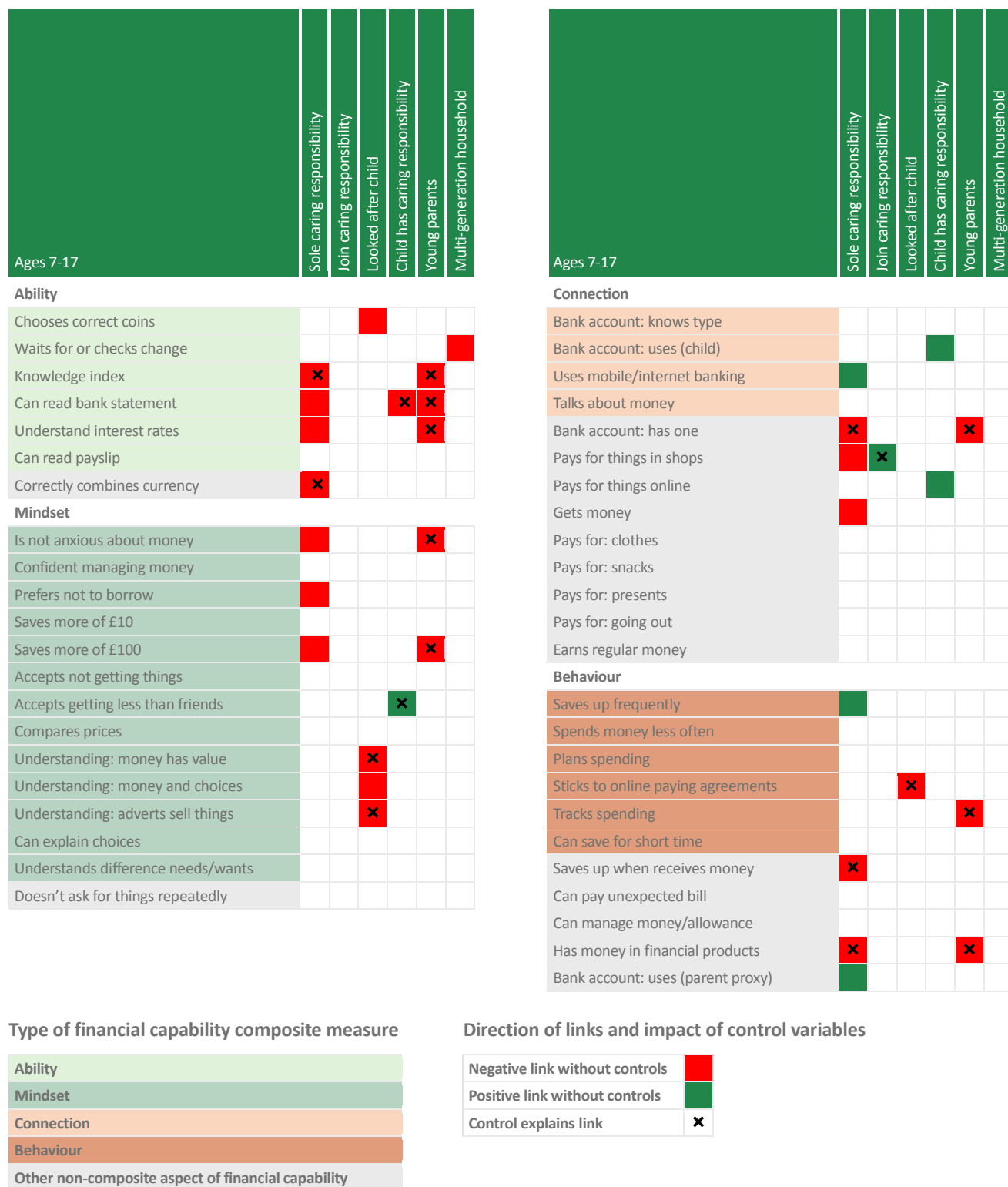
Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

### 4.1.3. Environmental factors (chapter 4)

#### Family structure (section 4.1)

Figure 4: Regression results for family structure, underlying variables



Note that the set of control variables do not include rule setting responsibilities of the parent when looking at links for sole or joint caring responsibility.

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports



## Economic circumstances (section 4.2)

**Figure 5: Regression results for economic circumstances, underlying variables**



*Note that not all financial capability indicators are available for all ages.*

*Existence of links without controls is based on regression results and might therefore differ from tables in the main reports*

## Financial resilience segmentation (section 4.3)

Figure 6: Regression results for the financial resilience segmentation, underlying variables

Ages 7-17		Struggling v squeezed/cushioned	Squeezed v cushioned	Over burdened	Struggling young/working families	Struggling working families	Squeezed young families	Older squeezed
<b>Ability</b>								
Chooses correct coins								
Waits for or checks change								
Knowledge index		x	x	x	x	x	x	
Can read bank statement		x	x	x			x	
Understand interest rates		x	x	x			x	
Can read payslip				x				
Correctly combines currency								
<b>Mindset</b>								
Is not anxious about money							x	
Confident managing money								
Prefers not to borrow							x	
Saves more of £10		x						
Saves more of £100		x	x					
Accepts not getting things								
Accepts getting less than friends		x		x				
Compares prices								
Understanding: money has value		x	x	x				
Understanding: money and choices		x		x				
Understanding: adverts sell things		x		x				
Can explain choices		x						
Understands difference needs/wants			x					
Doesn't ask for things repeatedly			x	x				
<b>Connection</b>								
Bank account: knows type			x					
Bank account: uses (child)			x					
Uses mobile/internet banking								
Talks about money			x					
Bank account: has one		x	x	x			x	
Pays for things in shops					x		x	
Pays for things online		x	x	x			x	
Gets money								
Pays for: clothes		x		x				
Pays for: snacks		x		x				
Pays for: presents								
Pays for: going out								
Earns regular money		x	x	x			x	
<b>Behaviour</b>								
Saves up frequently		x	x					
Spends money less often								
Plans spending								
Sticks to online paying agreements								
Tracks spending			x					
Can save for short time		x	x					
Saves up when receives money		x		x				
Can pay unexpected bill		x			x			
Can manage money/allowance		x	x	x				
Has money in financial products				x	x	x		
Bank account: uses (parent proxy)			x	x				

## Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

## Direction of links and impact of control variables

Negative link without controls	x
Positive link without controls	
Control explains link	x

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

## 4.2. The impact of financial education in schools (CYP Fin Cap deep dive – Vulnerability, chapter 5)

Figure 7: Regression results for financial education, underlying variables

Ages 7-17	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance
<b>Ability</b>					
Chooses correct coins					
Waits for or checks change					
Knowledge index					
Can read bank statement					
Understand interest rates					
Can read payslip					
Correctly combines currency					
<b>Mindset</b>					
Is not anxious about money					
Confident managing money					
Prefers not to borrow					
Saves more of £10					
Saves more of £100					
Accepts not getting things					
Accepts getting less than friends					
Compares prices					
Understanding: money has value					
Understanding: money and choices					
Understanding: adverts sell things					
Can explain choices					
Understands difference needs/wants					
Doesn't ask for things repeatedly					
<b>Connection</b>					
Bank account: knows type					
Bank account: uses (child)					
Uses mobile/internet banking					
Talks about money					
Bank account: has one					
Pays for things in shops					
Pays for things online					
Gets money					
Pays for: clothes					
Pays for: snacks					
Pays for: presents					
Pays for: going out					
Earns regular money					
<b>Behaviour</b>					
Saves up frequently					
Spends money less often					
Plans spending					
Sticks to online paying agreements					
Tracks spending					
Can save for short time					
Saves up when receives money					
Can pay unexpected bill					
Can manage money/allowance					
Has money in financial products					
Bank account: uses (parent proxy)					

### Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

### Direction of links and impact of control variables

Negative link without controls	
Positive link without controls	
Control explains link	

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

### 4.3. Parental behaviours and attitudes (CYP Fin Cap deep dive – Parenting)

#### 4.3.1. Parents' financial capability (chapter 2)

Figure 8: Regression results for parents' financial capability, underlying variables

Ages 7-17		Not anxious about financial situation	Can change financial situation	Grandparents talked about money	Parents save regularly	Confident managing money	Parent can pay unexpected bill
<b>Ability</b>							
Chooses correct coins							
Waits for or checks change							
Knowledge index				x		x	
Can read bank statement			x	x		x	x
Understand interest rates		x	x	x	x	x	
Can read payslip							
Correctly combines currency			x				
<b>Mindset</b>							
Is not anxious about money							
Confident managing money							
Prefers not to borrow			x				
Saves more of £10							
Saves more of £100			x			x	
Accepts not getting things							
Accepts getting less than friends							
Compares prices							
Understanding: money has value							
Understanding: money and choices							
Understanding: adverts sell things		x			x		
Can explain choices							
Understands difference needs/wants		x					
Doesn't ask for things repeatedly		x					
<b>Connection</b>							
Bank account: knows type							
Bank account: uses (child)							
Uses mobile/internet banking							
Talks about money							
Bank account: has one		x	x	x			
Pays for things in shops			x	x			x
Pays for things online							
Gets money							
Pays for: clothes							
Pays for: snacks							
Pays for: presents							
Pays for: going out							
Earns regular money				x	x		x
<b>Behaviour</b>							
Saves up frequently							
Spends money less often							
Plans spending							
Sticks to online paying agreements						x	x
Tracks spending							x
Can save for short time							
Saves up when receives money			x				
Can pay unexpected bill						x	
Can manage money/allowance		x					
Has money in financial products		x		x			
Bank account: uses (parent proxy)					x	x	x

#### Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

#### Direction of links and impact of control variables

Negative link without controls	
Positive link without controls	
Control explains link	x

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

Figure 9: Regression results for parents’ financial capability, composites

Ages 7-17	Not anxious about financial situation	Can change financial situation	Grandparents talked about money	Parents save regularly	Confident managing money	Parent can pay unexpected bill
Ability	×					×
Mindset						
Connection	×	×				
Behaviour						

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Direction of links and impact of control variables

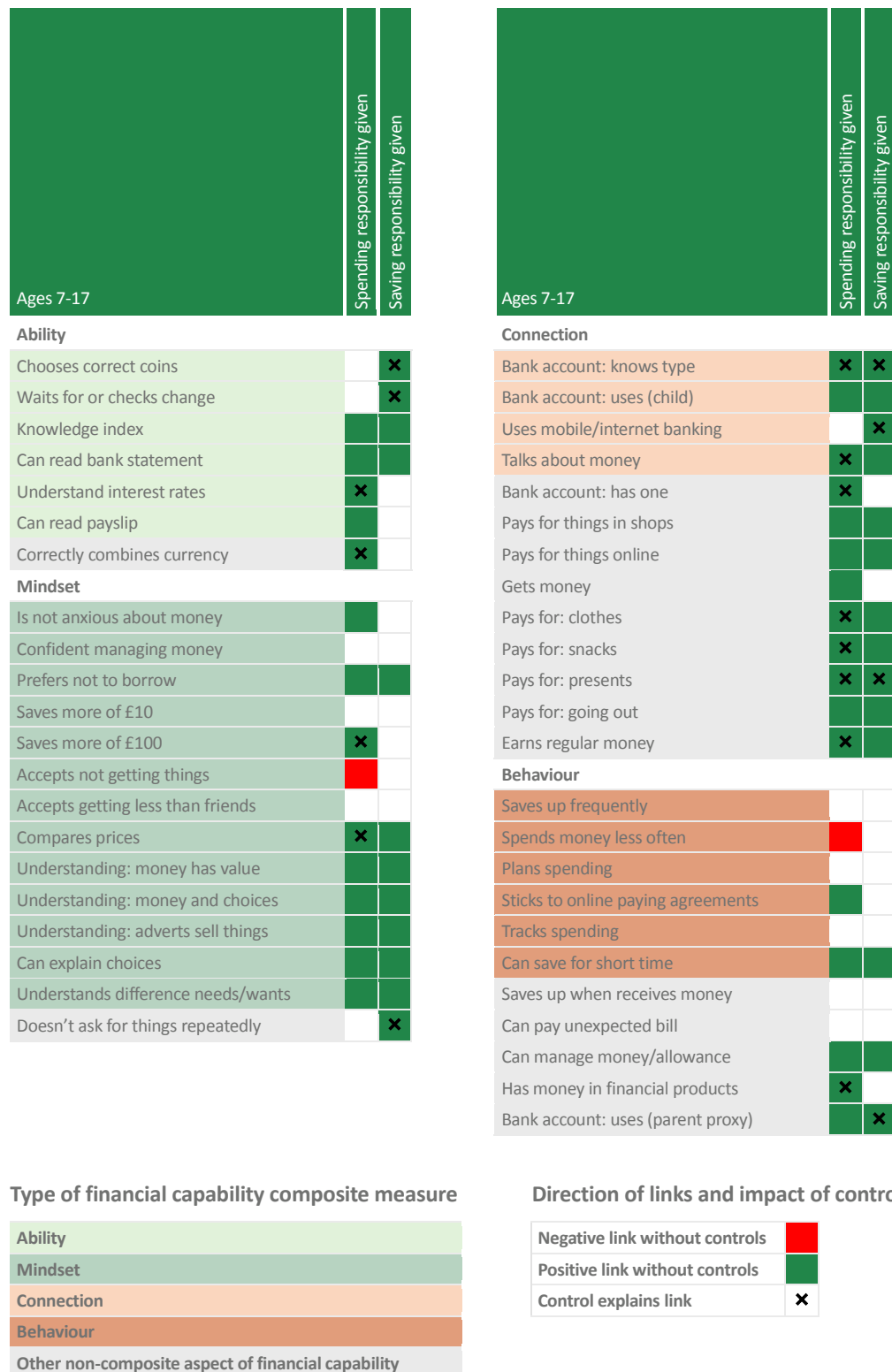
Negative link without controls	
Positive link without controls	
Control explains link	×

*Note that not all financial capability indicators are available for all ages.*

*Existence of links without controls is based on regression results and might therefore differ from tables in the main reports*

### 4.3.2. Responsibilities given to the child (chapter 3)

Figure 10: Regression results for responsibilities given to the child, underlying variables



Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

Figure 11: Regression results for responsibilities given to the child, composites

Ages 7-17	Spending responsibility given	
	Saving responsibility given	
Ability		
Mindset		
Connection		
Behaviour		

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Direction of links and impact of control variables

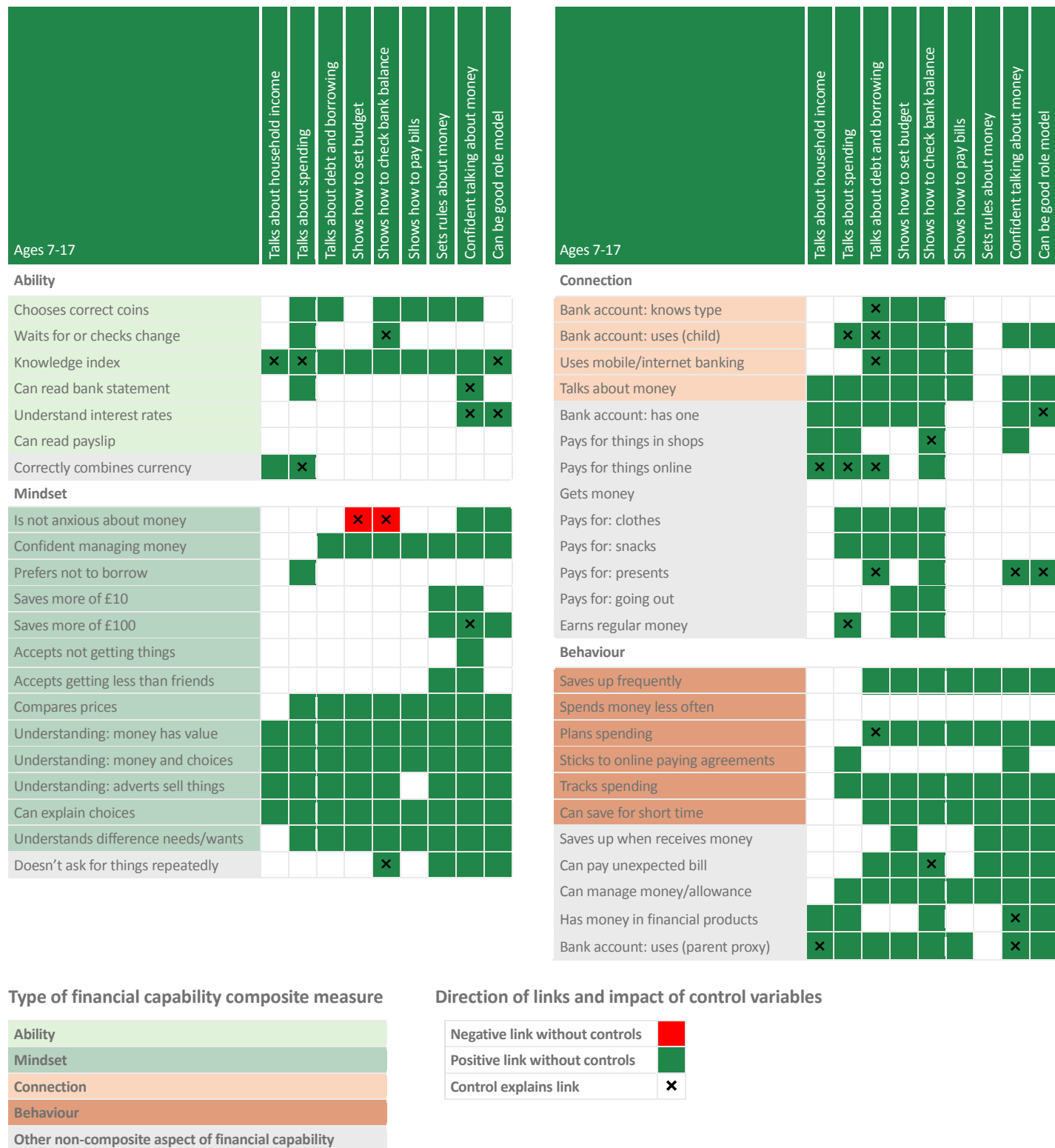
Negative link without controls	
Positive link without controls	
Control explains link	✗

*Note that not all financial capability indicators are available for all ages.*

*Existence of links without controls is based on regression results and might therefore differ from tables in the main reports*

### 4.3.3. Role modelling (chapter 4)

Figure 12: Regression results for role modelling, underlying variables



Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports



Figure 13: Regression results for role modelling, composites

Ages 7-17	Talks about household income	Talks about spending	Talks about debt and borrowing	Shows how to set budget	Shows how to check bank balance	Shows how to pay bills	Sets rules about money	Confident talking about money	Can be good role model
Ability									
Mindset									
Connection									
Behaviour									

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Direction of links and impact of control variables

Negative link without controls	
Positive link without controls	
Control explains link	✗

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

#### 4.3.4. Attitudes towards teaching children about money (chapter 5)

Figure 14: Regression results for attitude towards teaching children about money, underlying variables

Ages 7-17		General attitude involvement	Talk about bills by age 7	Give money by age 7	Talk about debt by age 7	Money habits formed by age 7	Give freedom with money by age 7	Expose to how money works
<b>Ability</b>								
Chooses correct coins		×						
Waits for or checks change								
Knowledge index								
Can read bank statement								
Understand interest rates								
Can read payslip								
Correctly combines currency								×
<b>Mindset</b>								
Is not anxious about money		×						
Confident managing money								
Prefers not to borrow								
Saves more of £10								
Saves more of £100								
Accepts not getting things								
Accepts getting less than friends								
Compares prices								
Understanding: money has value								
Understanding: money and choices								
Understanding: adverts sell things								
Can explain choices								
Understands difference needs/wants								
Doesn't ask for things repeatedly		×	×					
<b>Connection</b>								
Bank account: knows type		×						×
Bank account: uses (child)								
Uses mobile/internet banking		×						
Talks about money								
Bank account: has one								×
Pays for things in shops								
Pays for things online								
Gets money								
Pays for: clothes								
Pays for: snacks								
Pays for: presents								
Pays for: going out								
Earns regular money								
<b>Behaviour</b>								
Saves up frequently								
Spends money less often								
Plans spending								
Sticks to online paying agreements								
Tracks spending								
Can save for short time								
Saves up when receives money			×		×			×
Can pay unexpected bill								
Can manage money/allowance								
Has money in financial products			×					
Bank account: uses (parent proxy)		×	×					

#### Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

#### Direction of links and impact of control variables

Negative link without controls	×
Positive link without controls	
Control explains link	×

Note that not all financial capability indicators are available for all ages.

Existence of links without controls is based on regression results and might therefore differ from tables in the main reports

Figure 15: Regression results for attitude towards teaching children about money, composites

Ages 7-17	General attitude involvement	Talk about bills by age 7	Give money by age 7	Talk about debt by age 7	Money habits formed by age 7	Give freedom with money by age 7	Expose to how money works
Ability							
Mindset							
Connection							✗
Behaviour							

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Direction of links and impact of control variables

Negative link without controls	
Positive link without controls	
Control explains link	✗

*Note that not all financial capability indicators are available for all ages.*

*Existence of links without controls is based on regression results and might therefore differ from tables in the main reports*

## Chapter 5: Regression analysis results: Protective effect of financial education

In this chapter, we present results for additional regressions performed for section 5.2 of the “CYP Fin Cap deep dive – Vulnerability” report. That section analyses whether financial education has a protective effect for potentially vulnerable children and whether the effect differs from other children.

More precisely, we define three groups of potentially vulnerable children:

- children that have any cognitive vulnerability;
- children that have any behavioural or social-emotional vulnerability; and
- children that live in a Struggling household according to the financial resilience segmentation used by the Money Advice Service.

Firstly, we use regression analysis to investigate whether there is a link (and its direction) between financial capability indicators and financial education indicators for children classified as potentially vulnerable *only*. As in Chapter 4:, links are evaluated at the 99% confidence level, and no distinction is made between weak and strong links. These results are shown in Figure 16, Figure 17 and Figure 18.

Secondly, we test whether each possible link between financial capability and financial education is different for children categorised according to these potential vulnerabilities and other children. Figure 19, Figure 20 and Figure 21 present the results. If the link between a financial education indicator and a financial capability indicator differs between potentially vulnerable children and other children<sup>9</sup>, the relevant cell contains a tick mark and is coloured blue. Otherwise, the cell is left empty.

As an example, consider the link between a child having had any school-based financial education and the child’s ability to choose coins correctly, for children that have any cognitive vulnerability. Figure 16 shows that there is a positive link between these two indicators for children with any cognitive vulnerability. Figure 19 shows that the link does *not* differ between children with any cognitive vulnerability and other children.

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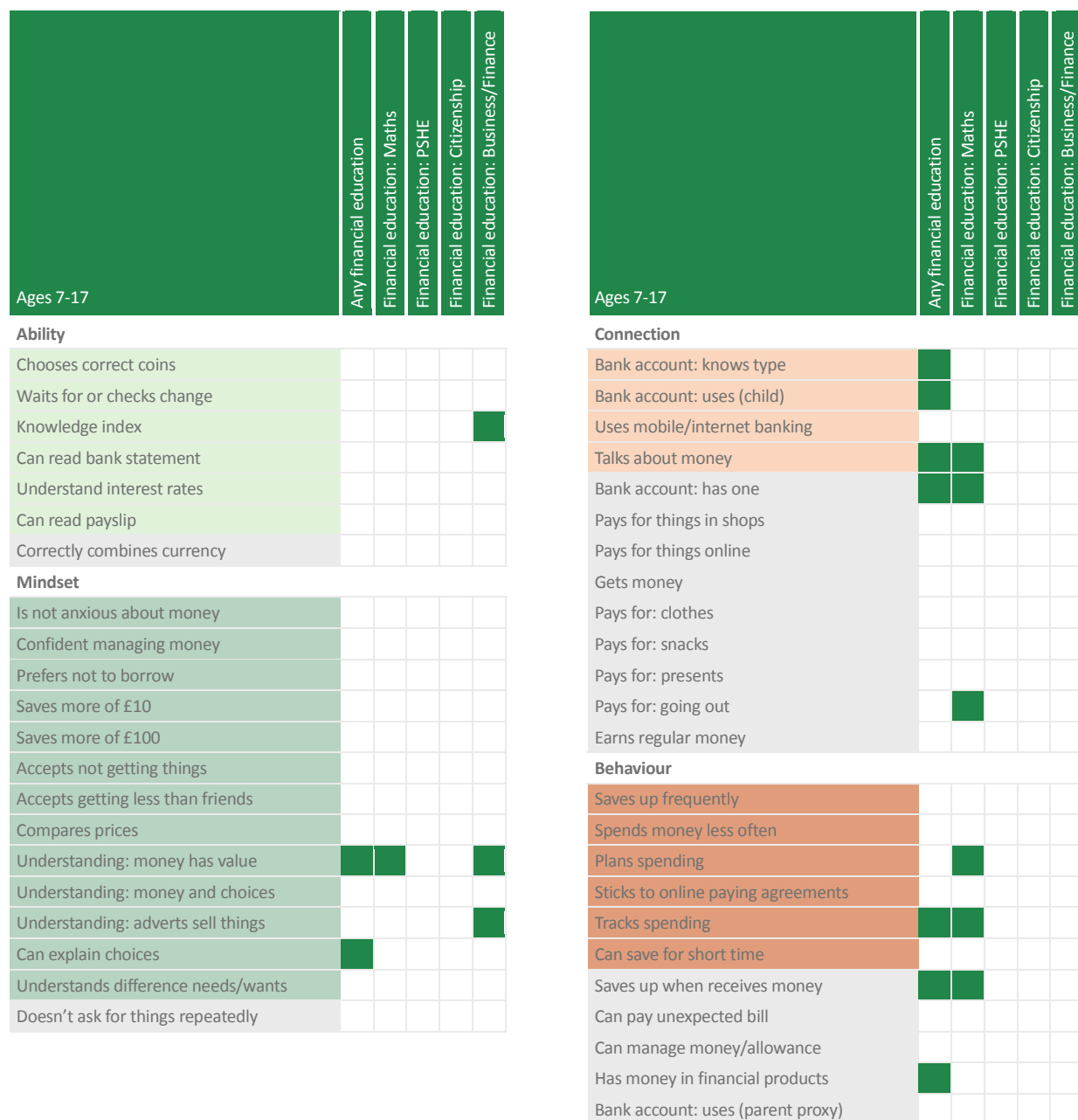
<sup>9</sup> Evaluated at the 99% confidence level.

## 5.1. Role of financial education for vulnerable children

Figure 16: Results for children with any cognitive vulnerability



Note that not all financial capability indicators are available for all ages.

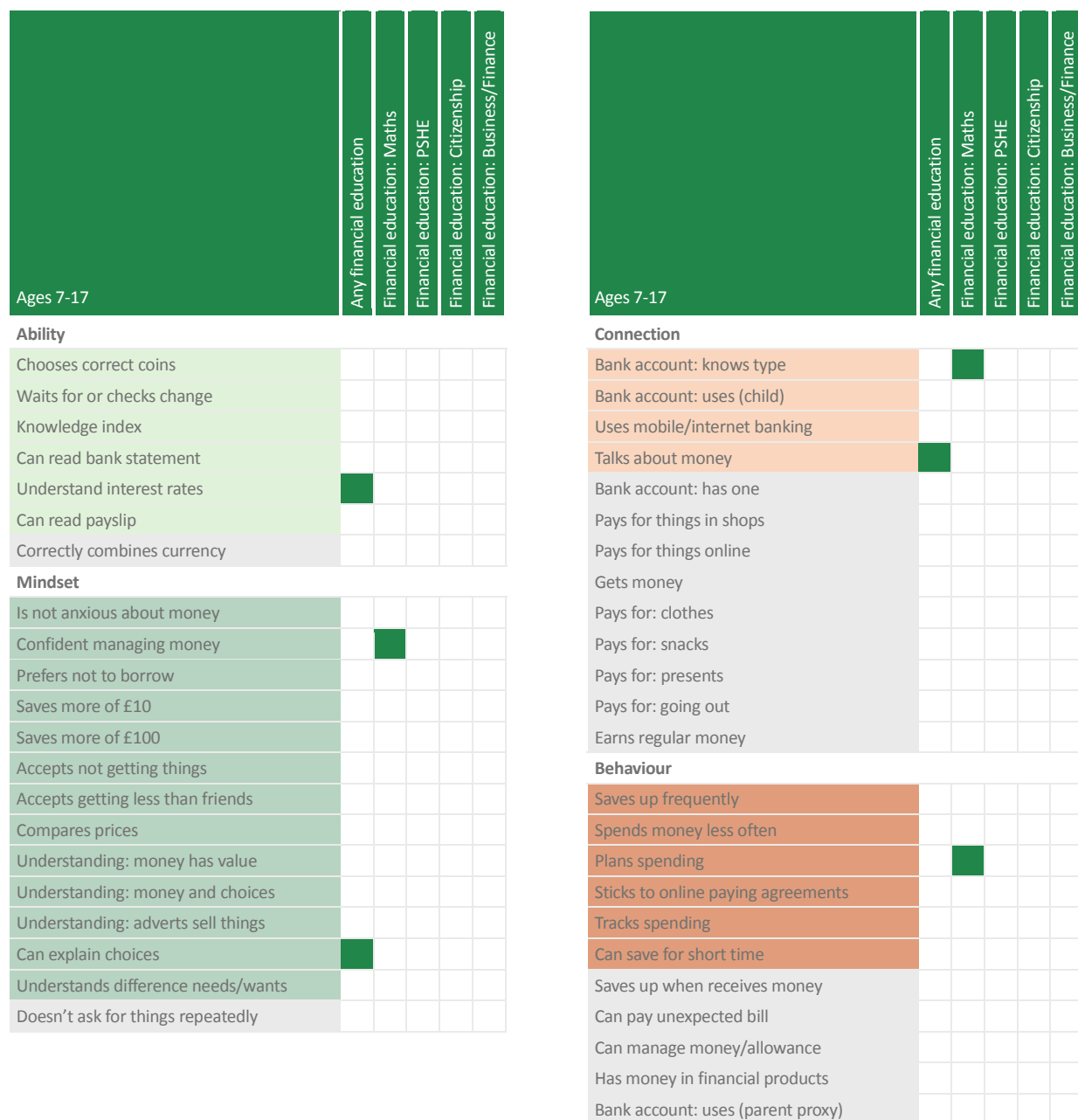
**Figure 17: Results for children with any behavioural or social-emotional vulnerability****Type of financial capability composite measure**

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

**Direction of links and impact of control variables**

Negative link without controls
Positive link without controls

Note that not all financial capability indicators are available for all ages.

**Figure 18: Results for children that live in struggling households****Type of financial capability composite measure**

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

**Direction of links and impact of control variables**

Negative link without controls
Positive link without controls

Note that not all financial capability indicators are available for all ages.

## 5.2. Comparing the role of financial education for vulnerable children with its role for other children

Figure 19: Results for children with any cognitive vulnerability

Ages 7-17					
	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance
<b>Ability</b>					
Chooses correct coins					
Waits for or checks change					
Knowledge index					
Can read bank statement					
Understand interest rates					
Can read payslip			✓		
Correctly combines currency					
<b>Mindset</b>					
Is not anxious about money					
Confident managing money					
Prefers not to borrow	✓	✓			
Saves more of £10					✓
Saves more of £100					
Accepts not getting things					
Accepts getting less than friends					
Compares prices					
Understanding: money has value					
Understanding: money and choices					
Understanding: adverts sell things					
Can explain choices					
Understands difference needs/wants					
Doesn't ask for things repeatedly					
<b>Connection</b>					
Bank account: knows type					
Bank account: uses (child)					
Uses mobile/internet banking					
Talks about money					
Bank account: has one					
Pays for things in shops					
Pays for things online					
Gets money					
Pays for: clothes					
Pays for: snacks					
Pays for: presents					
Pays for: going out					
Earns regular money					
<b>Behaviour</b>					
Saves up frequently					
Spends money less often					
Plans spending					
Sticks to online paying agreements					
Tracks spending					
Can save for short time					
Saves up when receives money					
Can pay unexpected bill					
Can manage money/allowance					
Has money in financial products					
Bank account: uses (parent proxy)					

### Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Significant difference between groups



Note that not all financial capability indicators are available for all ages.



**Figure 20: Results for children with any behavioural or social-emotional vulnerability**

Ages 7-17	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance
<b>Ability</b>					
Chooses correct coins					
Waits for or checks change					
Knowledge index					
Can read bank statement					
Understand interest rates					
Can read payslip					
Correctly combines currency					
<b>Mindset</b>					
Is not anxious about money					
Confident managing money					
Prefers not to borrow					
Saves more of £10					
Saves more of £100					
Accepts not getting things					
Accepts getting less than friends					
Compares prices					
Understanding: money has value					
Understanding: money and choices					
Understanding: adverts sell things					
Can explain choices					
Understands difference needs/wants					
Doesn't ask for things repeatedly					
<b>Connection</b>					
Bank account: knows type					
Bank account: uses (child)					
Uses mobile/internet banking					
Talks about money					
Bank account: has one					
Pays for things in shops					
Pays for things online					
Gets money					
Pays for: clothes					
Pays for: snacks					
Pays for: presents					
Pays for: going out					
Earns regular money					
<b>Behaviour</b>					
Saves up frequently				✓	
Spends money less often					
Plans spending					
Sticks to online paying agreements					
Tracks spending					
Can save for short time					
Saves up when receives money					
Can pay unexpected bill					
Can manage money/allowance					
Has money in financial products					
Bank account: uses (parent proxy)					✓

**Type of financial capability composite measure**

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Significant difference between groups



Note that not all financial capability indicators are available for all ages.

Figure 21: Results for children that live in struggling households

Ages 7-17	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance
<b>Ability</b>					
Chooses correct coins					
Waits for or checks change					
Knowledge index					
Can read bank statement					
Understand interest rates					
Can read payslip					
Correctly combines currency					
<b>Mindset</b>					
Is not anxious about money					
Confident managing money					
Prefers not to borrow					
Saves more of £10					
Saves more of £100					
Accepts not getting things	✓				
Accepts getting less than friends					
Compares prices					
Understanding: money has value					
Understanding: money and choices					
Understanding: adverts sell things					
Can explain choices					
Understands difference needs/wants					
Doesn't ask for things repeatedly					
<b>Connection</b>					
Bank account: knows type					
Bank account: uses (child)					
Uses mobile/internet banking					
Talks about money					
Bank account: has one					
Pays for things in shops					
Pays for things online					
Gets money		✓	✓		
Pays for: clothes					
Pays for: snacks					
Pays for: presents					
Pays for: going out					
Earns regular money	✓				
<b>Behaviour</b>					
Saves up frequently					
Spends money less often					
Plans spending					
Sticks to online paying agreements					
Tracks spending					
Can save for short time					
Saves up when receives money					
Can pay unexpected bill					
Can manage money/allowance					
Has money in financial products					
Bank account: uses (parent proxy)					

## Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Significant difference between groups ✓

Note that not all financial capability indicators are available for all ages.

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