



# PISA FINANCIAL LITERACY ASSESSMENT

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## Outline

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- The importance of financial literacy
- The financial literacy assessment in PISA
- Defining financial literacy in PISA
- Organisation of the financial literacy domain
- Sample items



# The importance of financial literacy

## TYPES OF CHILD AND YOUTH BANKING PRODUCTS

Examples of child banking services

Financial institution	Country	Overview of child/youth and services
<b>FINANCIAL PRODUCTS</b>		
<b>BINBANK</b>	Russia	<b>Junior</b> , a debit card for children aged 10-17. The card is able for payments and cash withdrawals. A card is offered to the child.
<b>Hellenic Bank</b>	Cyprus	<b>Winner's Team</b> , a deposit account for children aged 0 to 13 years. Children whose parents have opened a deposit account for them with the bank are issued with a personal bank card and gain membership to the Winner's Team, where, while attending special events, they can learn about financial literacy through play a present: a hippopotamus-shaped mascot.
<b>ICBC</b>	China	<b>Baby Growth Card from China Union Bank</b> of debit cards for children and parent cards – one for the child and two for the parent. The card can be used by parents to teach child the use of bank cards, thereby strengthening their understanding of money matters.
<b>ING</b>	The Netherlands	<b>The Kinderrekening</b> current account offering an interest rate for its holders. Operated by parents and child. The account comes with a complete set of services including a personal cash card. The account is free of charge. From 12-18 years old <b>Jongerenrekening</b> becomes available for secondary school children that provides youth with more autonomy to make simple payments. <b>Studentenrekening</b> is available for youth from 18 years of age who are enrolled in universities.

## How Fintech Companies Can Capture The Millennial Market



Forbes Finance Council, FULL BIO  
Opinions expressed by Forbes Contributors are their own.

Opinion **Serious Money**

## Beware influencers plugging the financial advice gap

Social media stars and rising prices are panicking consumers into snap decisions about money

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Young people warned not to be exploited as 'money mules' for UK criminal gangs

## Payday loan companies target vulnerable students

US says students should apply for hardship grants, not payday loans, faced with financial difficulties

## Apple to refund \$36.5 million for children's purchases

## Young people more likely to become victims of online fraud

A new report from leading thinktank Policy Network commissioned by NatWest shows that younger people are disproportionately the targets of online financial fraud in the UK, whereas the over 75s are least likely to be victims of these offences.

ECONOMY - PIXELS

## Bitcoin, Ethereum... Why young people are getting caught up in cryptocurrency fever

Despite the volatility of digital currencies, many young people are flocking to cryptocurrency products, both because of the allure of easy money and out of a desire to get into the banking system.

By Véronique Chocron

## Young people increasingly targeted to launder proceeds of crime

More than 30,000 cases last year, says report from UK fraud prevention body



# The importance of financial literacy

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- **Trends in the financial landscape**
  - Access to money and financial products and services from a young age
  - Widespread emergence of digital financial products and services: opportunities and risks (cryptoassets, fraud and scams, “finfluencers”, behavioural biases)
  - Sustainable finance
- **Demographic and socio-economic trends**
  - Risk shift and increased individual responsibility
  - Financing higher education
- **Expected benefits of financial education and improved levels of financial literacy**



# The financial literacy assessment in PISA

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## Four assessments of financial literacy of 15-year-old students within PISA:

- The **2022** assessment covers 23 countries/economies:
  - Austria, Brazil, Bulgaria, Canadian provinces, Chile, Costa Rica, Czech Republic, Denmark, Flemish Community of Belgium, Hungary, Indonesia, Italy, Malaysia, the Netherlands, Norway, Peru, Poland, Portugal, Saudi Arabia, Serbia, Spain, the United Arab Emirates and the United States.
- The third assessment in **2018** covered 21 countries/economies:
  - Australia, Brazil, Bulgaria, Canadian provinces, Chile, Estonia, Finland, Georgia, Indonesia, Italy, Latvia, Lithuania, the Netherlands, Peru, Poland, Portugal, the Russian Federation, Serbia, the Slovak Republic, Spain and the United States.
- The second assessment was conducted in **2015** among 15 countries and economies:
  - Australia, the Flemish Community of Belgium, Brazil, the four provinces of Beijing, Shanghai, Jiangsu and Guangdong in China, seven provinces in Canada, Chile, Italy, Lithuania, the Netherlands, Peru, Poland, the Russian Federation, the Slovak Republic, Spain and the United States.
- The first assessment was conducted in **2012** among 18 countries and economies:
  - Australia, the Flemish Community of Belgium, Shanghai-China, Colombia, Croatia, the Czech Republic, Estonia, France, Israel, Italy, Latvia, New Zealand, Poland, the Russian Federation, the Slovak Republic, Slovenia, Spain and the United States.



## Analytical and assessment framework

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- Initially developed for the 2012 assessment
- Revised ahead of the 2022 assessment:
  - recent developments in the financial, economic and socio-demographic landscape that are relevant for the financial literacy of young people,
  - including the growing spread of digital financial products and services
- This was reflected in:
  - Five new cognitive items
  - Revised questionnaire



## PISA defines financial literacy as...

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- **knowledge** and understanding of financial concepts and risks,
- as well as the **skills** and **attitudes**...
- to *apply* such knowledge and understanding...
- in order
  - To **make effective decisions** across a range of financial **contexts**,
  - to improve the **financial well-being** of individuals and society, and
  - to **enable participation in economic life**.



## Organisation of the domain

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Three perspectives on the area to be assessed:

- **Content** comprises the areas of knowledge and understanding that are essential in the area of literacy in question.
- **Processes** describes the mental strategies or approaches that are called upon to negotiate the material.
- **Contexts** refers to the situations in which the domain knowledge, skills and understandings are applied, ranging from the personal to the global.





## Content areas

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- Money and transactions
- Planning and managing finances
- Risk and reward
- Financial landscape



# Content areas

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- **Money and transactions**
  - aware of the different forms and purposes of money
  - confident and capable at handling and monitoring transactions
- **Planning and managing finances**
  - Knowledge and ability to monitor and control income and expenses
  - Knowledge and ability to make use of income and other available resources in the short and long terms to enhance financial well-being:
- **Risk and reward**
  - Identifying and managing risks and rewards associated with life events or the economy, and recognising that certain financial products and processes can be used to manage and offset various risks
  - Understanding the risk inherent in certain financial products, risks and rewards associated with non financial products, or new products
  - trade off risk-reward, contingency planning and diversification
- **Financial landscape**
  - Awareness of the role of regulation and consumer protection, rights and responsibilities
  - Knowledge and understanding of the financial environment, personal financial data
  - Impact of personal financial decisions on the environment and society
  - Influence of economic and external factors



## Processes

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- Identify financial information
- Analyse financial information and situations
- Evaluate financial issues
- Apply financial knowledge and understanding



# Processes

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- **Identify financial information**
  - Searching and accessing sources of financial information, identifying or recognising its relevance
- **Analyse financial information and situations**
  - Recognising relationships in financial contexts
- **Evaluate financial issues**
  - Recognising or constructing financial justifications and explanations, critical thinking
- **Apply financial knowledge and understanding**
  - Applying knowledge in financial contexts



## Contexts

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- Education and work
- Home and family
- Individual
- Societal



## Non-cognitive factors

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- Contextual factors that may be related to students' opportunities to improve their financial literacy, such as **access to information and education**
- Students' behaviours and opportunities to learn by doing in terms of **access to and use of money and financial products**
- **Financial attitudes** that are expected to be associated with cognitive aspects of financial literacy
- Self-reported **financial behaviour** that can be considered as an outcome of the cognitive aspects of financial literacy.



# The interaction of financial literacy with knowledge and skills in other domain

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- Mathematics
- Reading



# Distribution of score points

		Original distribution of score points (in the 2012, 2015 and 2018 assessments)	New suggested distribution of score points (suggested changes are highlighted in <i>italics</i> )
<b>Content</b>	Money and transactions	30-40%	<i>25-35%</i>
	Planning and managing finances	25-35%	<i>20-30%</i>
	Risk and reward	15-25%	<i>20-30%</i>
	Financial landscape	10-20%	<i>15-25%</i>
<b>Process</b>	Identify financial information	15-25%	15-25%
	Analyse financial information and situations	15-25%	<i>25-35%</i>
	Evaluate financial issues	25-35%	25-35%
	Apply financial knowledge and understanding	25-35%	<i>15-25%</i>
<b>Contexts</b>	Education and work	10-20%	10-20%
	Home and family	30-40%	30-40%
	Individual	35-45%	35-45%
	Societal	5-15%	5-15%





# Described proficiency levels

Level	What student can typically do
1	Students can identify common financial products and terms and interpret information relating to basic financial concepts. They can recognise the difference between needs and wants and can make simple decisions on everyday spending. They can recognise the purpose of everyday financial documents such as an invoice and apply single and basic numerical operations (addition, subtraction or multiplication) in financial contexts that they are likely to have experienced personally.
2 Baseline	Students begin to apply their knowledge of common financial products and commonly used financial terms and concepts. They can use given information to make financial decisions in contexts that are immediately relevant to them. They can recognise the value of a simple budget and can interpret prominent features of everyday financial documents. They can apply single basic numerical operations, including division, to answer financial questions. They show an understanding of the relationships between different financial elements, such as the amount of use and the costs incurred.
3	Students can apply their understanding of commonly used financial concepts, terms and products to situations that are relevant to them. They begin to consider the consequences of financial decisions and they can make simple financial plans in familiar contexts. They can make straightforward interpretations of a range of financial documents and can apply a range of basic numerical operations, including calculating percentages. They can choose the numerical operations needed to solve routine problems in relatively common financial literacy contexts, such as budget calculations.



# Described proficiency levels

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Level	What student can typically do
4	<p>Students can apply their understanding of less common financial concepts and terms to contexts that will be relevant to them as they move towards adulthood, such as bank account management and compound interest in saving products. They can interpret and evaluate a range of detailed financial documents, such as bank statements, and explain the functions of less commonly used financial products. They can make financial decisions taking into account longer-term consequences, such as understanding the overall cost implication of paying back a loan over a longer period, and they can solve routine problems in less common financial contexts.</p>
5	<p>Students can apply their understanding of a wide range of financial terms and concepts to contexts that may only become relevant to their lives in the long term. They can analyse complex financial products and can take into account features of financial documents that are significant but unstated or not immediately evident, such as transaction costs. They can work with a high level of accuracy and solve non-routine financial problems, and they can describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape, such as income tax.</p>

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# Sample Question: INVOICE

The **main task** is to know the purpose and demonstrate a basic understanding of an invoice

**Content:** Money and transactions, it involves awareness of the different forms and purposes of money and handling simple monetary transactions such as everyday payments

This is an easy item – **Level 1** on the financial literacy scale (below baseline)

Product code	Description	Quantity	Unit cost	Total (excluding tax)
		20		60 zeds
		60		60 zeds
		10		10 zeds

Total Excluding Tax:	130 zeds
Tax 10%:	13 zeds
Postage:	10 zeds
Total Including Tax:	153 zeds
Already Paid:	0 zeds
Total due:	153 zeds
Date due:	31 March

**Question 1: Why was this invoice sent to Sarah?**

- A. Because Sarah needs to pay the money to Breezy Clothing.**
- B. Because Breezy Clothing needs to pay the money to Sarah.
- C. Because Sarah has paid the money to Breezy Clothing.
- D. Because Breezy Clothing has paid the money to Sarah.

# Sample Question: PAY SLIP

Each month, Jane's salary is paid into her bank account. This is Jane's pay slip for July

EMPL

Positio

The **main task** is read the pay slip and to recognise that Jane's employer will only pay net salary into her bank

**Content:** Money and transactions and the **context** is education and work

Net salary

2500 zeds

Gross salary to date this year

19,600 zeds

**Process:** Identify financial information

Question 1: How much money did Jane's employer pay into her bank account on 31 July?

- A. 300 zeds
- B. 2500 zeds**
- C. 2800 zeds
- D. 19600 zeds

This is a relatively hard item – **Level 4** on the financial literacy scale

# Sample Question: INVOICE



This is a hard item – **Level 5** on the financial literacy scale

**Content:** Money and transactions

Sara Johnson 29 Worthill Rd Kensington Zedland 3122		Breezy Clothing 498 Marple Lane Brightwell and 2090	
		Invoice Invoice Number: 2034 Date issued: 28 February	
<b>Product code</b>			<b>(including tax)</b>
T011			ds
J023	jeans	1	60 60 zeds
S002	scarf	1	10 10 zeds

This item focuses on students' ability to **apply financial knowledge and understanding**

**Question 3:**  
Sara notices that Breezy Clothing made a mistake in the invoice. Sara ordered and received two T-shirts, not three. The postage fee is a fixed charged.

**What will be the total of the new invoice?**

Total Excluding ... zeds  
 Total Inc ... zeds  
 Already ... 0 zeds  
**131 Zeds**  
 Total due: 153 zeds  
 Date due: 31 March

# Sample Question: BANK ERROR

**Content:** financial landscape, because Internet banking is common in the life of students

This is a hard item – **Level 5**

This item focuses on students' ability to **evaluate financial issues**

David works with ZedBank. He receives this e-mail message

Bank se  
Internet banking.

Most imp  
tly your account is no long  
Please click on the link below and follow  
will be asked to provide your Internet ba  
<https://ZedBank.com/>

**Question 1: Which of these statements would be good advice for David?**

Reply to the e-mail message and provide his Internet banking details	Yes / <input checked="" type="radio"/> No
Contact his bank to inquire about the e-mail message	<input checked="" type="radio"/> Yes / No
If the link is the same as his bank's website address, click on the link and follow the instructions	Yes / <input checked="" type="radio"/> No



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