Challenges for financial inclusion: the role for financial education and new directions

Magda Bianco
Bank of Italy and G20/GPFI Co - Chair

FRB - GFLEC Financial Literacy Seminar Series

Washington, 29 April 2021

Challenges for financial inclusion: the role for financial education and new directions

joint work with

Daniela Marconi

Angela Romagnoli

Massimiliano Stacchini

Agenda

1. Financial Inclusion: what is it and why it matters?

2. What drives it? The role for financial education

3. Digitalization and Financial Inclusion

4. New directions

Agenda

1. Financial Inclusion: what is it and why it

Financial Inclusion

Financial inclusion entails **individuals and businesses having access to useful and affordable financial products and services** that meet their needs for transactions, payments, savings and insurance and are delivered in a responsible and sustainable way (World Bank)

Varies with country financial development

Usually proxied by access to and use of formal financial services (typically «account»), but it’s not the only dimension

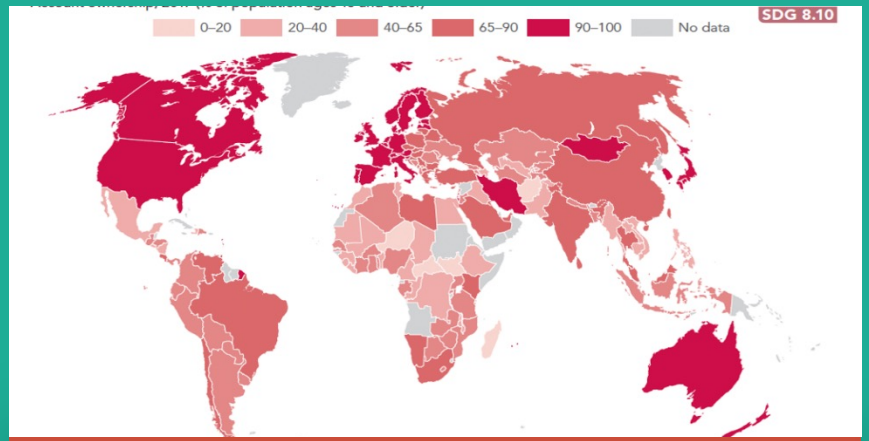
RELEVANCE OF FINANCIAL INCLUSION

In 2010 the G20 established the **Global Partnership for Financial Inclusion**, an inclusive platform for all G20 countries, interested non-G20 countries and relevant stakeholders to carry forward work on financial inclusion, including the implementation of the Financial Inclusion Action Plan, endorsed at the G20 Summit in Seoul

Also with many Implementing Partners (WB, OECD, AFI, CGAP, IFC, SMEFF, BTCA, IFAD…) developed analyses, principles, policy suggestions to enhance financial inclusion

GPFI

WORK ON FINANCIAL INCLUSION HAS BENEFITED FROM…

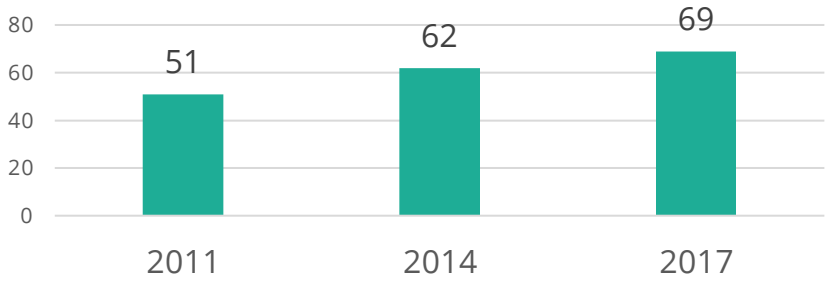


World Bank
Global Findex Database

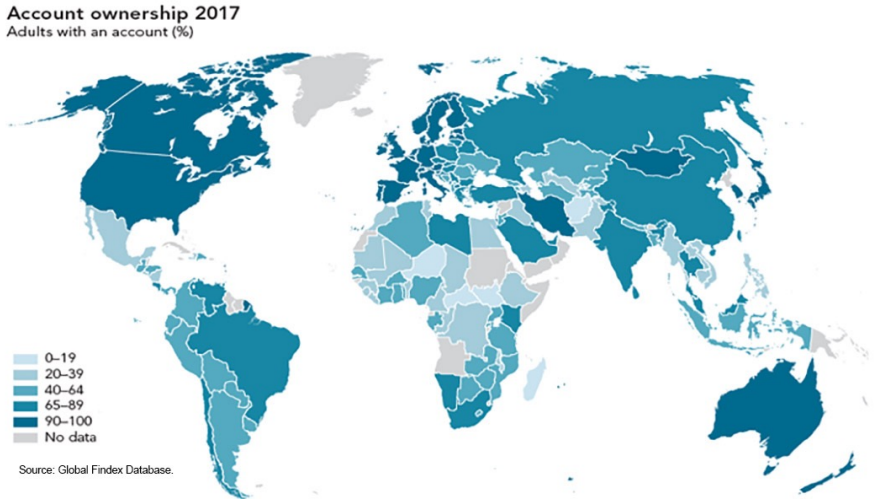
IMF
Financial Access Survey

Improvements but…

% of individuals with an account has increased…



.. but huge differences across countries



Why it matters?

Early studies (based on case studies)

- **Having an account** increases savings, increases female empowerment, enhances investments of entrepreneurs; helps in coping with micro and macroeconomic shocks as it facilitates financial planning of expenses according to current and expected income and the intertemporal shift of financial resources.
- **Not having an account**: makes liquidity management and payments difficult; cash transactions present financial and personal risks

Why it matters?

- Positive impact on **growth** (Sahay, 2015)
- Reduce **inequalities** (Cihák et al, 2020), through increase in resilience, in risk sharing
- Reduce **poverty** (Loukoianova and Yang, 2018; Bettini, Pigini, Zazzaro, 2020; Banerjee et al. 2019)
- Financial **stability**?

Agenda

2. What drives it? The role for financial education

Research and policy question

Policies should be data driven

Relevance of supply and demand constraints (Claessens and Rojas-Suarez, 2020)

Analysis of financial inclusion

Linear Probability Model

$$Y_i = \beta_1 X_{i1} + \cdots + \beta_k X_{ik} + u_i$$

where:

Y_i = 1 if inclusion lower than median value and 0 otherwise

X_i is a vector of covariates

i= i-th country

Levels regression

$$Y_i = \beta_1 X_{i1} + \cdots + \beta_k X_{ik} + u_i$$

where:

Y_i = % of adults (+25) with an account

X_i is a vector of covariates

Analysis of financial inclusion

Data

(110 countries, 2017)

WB Databases

- Findex
- World Development Indicators
- Digital Adoption Index Database
- Global Financial Inclusion and Cons Protection Survey
- S&P Gallup (Klapper, Lusardi, van Oudheusden, 2015)

IMF

- International Financial Statistics

ILO

- Labor statistics

Analysis of financial inclusion

Explanatory variables (expected impact on financial inclusion)

- GDP per capita (supply and demand) (+)

Policy variables

- National Financial Inclusion/Development Strategy (+/-)
- National Financial Education Strategy (+)
- Tax incentive savings scheme (+)
- Stand alone FCP regulation (+)
- ID proof of income (-)
- Creditor Legal Rights (+)
- Ease of Doing Business (+)

Demand variables

- People digital adoption (+)
- Financial knowledge (+)
- Female labor market participation (+)
- % of NEET (-)

Analysis of financial inclusion (supply constraints) – LPM

Impact of X on the probability of being in the low financial inclusion group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	GDPPC	PDA	GDP_PDA	NFIS	FSDFI	FSDFI_NDSFI	SUPPLY
GDP per capita (high=1; low=0)	-0.564***		-0.638***				-0.544***
	(0.079)		*(0.127)*				*(0.082)*
People Digital Adoption (high=0; low=1)		0.491***	0.095				
		(0.084)	*(0.132)*				
National Financial inclusion startegy (NFIS): if exists=1				0.208**		0.169	
				(0.104)		*(0.108)*	
Financial Sector Development Strategy +Financial Inlcusion (FSDFI): if exists=1					0.228**	0.207*	0.132
					(0.103)	*(0.117)*	*(0.093)*
National Development Strategy +Financial Inclusion (NDSFI): if exist =1						-0.037	
						(0.121)	
Constant	0.745***	0.218***	0.589***	0.405***	0.397***	0.366***	0.698***
	(0.059)	*(0.056)*	*(0.129)*	*(0.056)*	*(0.056)*	*(0.06)*	*(0.071)*
Observations	110	110	110	110	110	110	110
R-squared	0.319	0.242	0.336	0.035	0.043	0.065	0.333

OLS regressions; robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1. The dependent variable is binary variable for low financial inclusion.

Analysis of financial inclusion (demand constraints)

LPM and levels

	(1) LPM	(2) LPM	(3) LPM	(4) Levels	(5) Levels
	NEET	NEET&FK	CREDIT/GDP	NEET&FK	Female participation rate&FK
GDP per capita (high=1; low=0 for LPM; log for levels)	-0.469***	-0.330**	-0.251*	15.369***	14.317***
	(0.124)	*(0.148)*	*(0.136)*	*(3.78)*	*(2.63)*
Credit to GDP (high=1; low=0 for LPM; % of GDP for levels)			-0.267**	0.067***	0.084***
			(0.105)	*(0.02)*	*(0.01)*
Financial knowlwdge rate		-0.007*	-0.008**	0.393***	0.247***
		(0.004)	*(0.004)*	*(0.03)*	*(0.02)*
ID+ Proof of Income (yes=1; no=0)	0.225***	0.219***	0.202***	0.4338	2.453
	(0.073)	*(0.077)*	*(0.068)*	*(3.077)*	*(2.823)*
NEET (% of young)	0.010**	0.016**	0.013**	-0.029***	
	(0.005)	*(0.006)*	*(0.006)*	*(0.01)*	
Female labor market participation rate					0.331**
					(0.15)
Financial Capability/Literacy/Education Strategy: if exists=1	-0.167**	-0.180**	-0.159**	13.007***	7.355***
	(0.087)	*(0.086)*	*(0.076)*	*(2.47)*	*(1.53)*
Constant	0.415**	0.289	0.483***	70.524***	68.329***
	(0.168)	*(0.173)*	*(0.179)*	*(1.334)*	*(1.376)*
Observations	81	79	79	73	90
R-squared	0.589	0.553	0.604	0.813	0.759

OLS regressions; robust standard errors in parentheses. The dependent variable is binary variable for low financial inclusion in LPM regressions and the percentage of adults (age 25+) who report having an account for regressions in levels. The variable financial knowledge is transformed to make it orthogonal to NEET and female participation rate. All regressions control for tax incentive saving schemes and for existence of financial protection policies.

Conclusion and issues….

FINANCIAL EDUCATION

1 It matters, especially policies

DIGITALIZATION

2 Not significant (but 2017 data… and no digital skills included)

CONSUMER PROTECTION

3 Not significant, but summarized in one variable

Agenda

3. Digitalization and Financial Inclusion

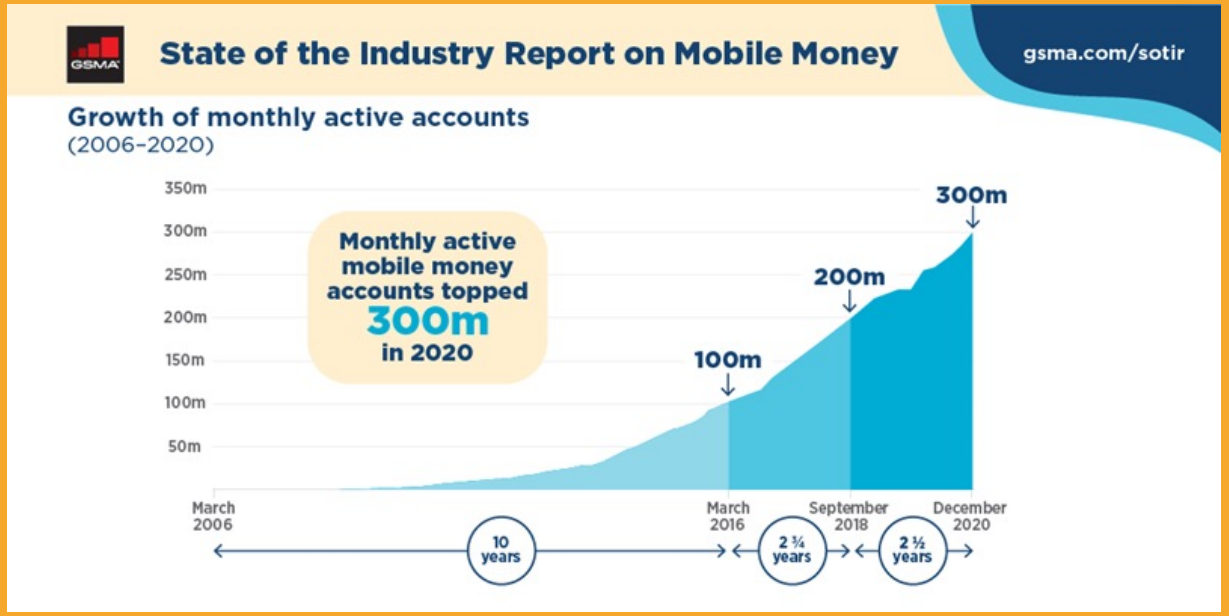
Enormous push in digitalization during the pandemic

When accompanied by enabling factors (infrastructures/regulation), greater opportunities from:

- new products or different quality (speed, easiness..)
- new processes (credit scoring..)
- new actors (Small Tech, BigTech..)

with preferences and habits of customers evolving…

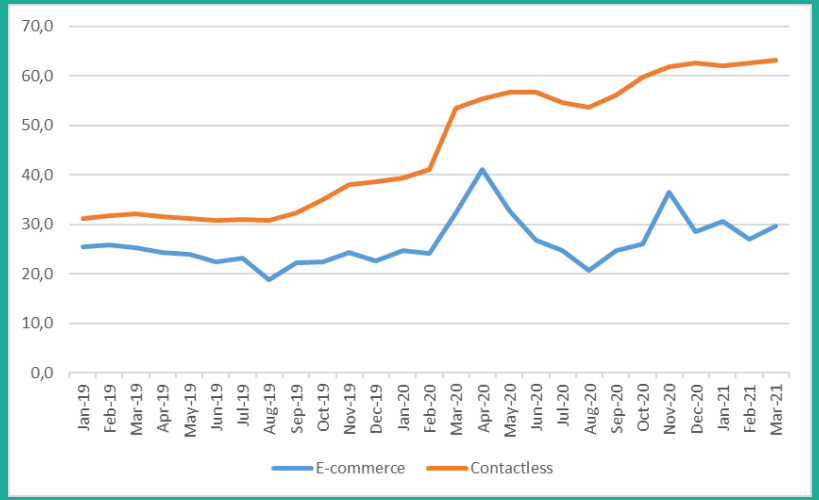
Global use of mobile money accounts



GSMA, 2021, State of the Industry Report on Mobile Money

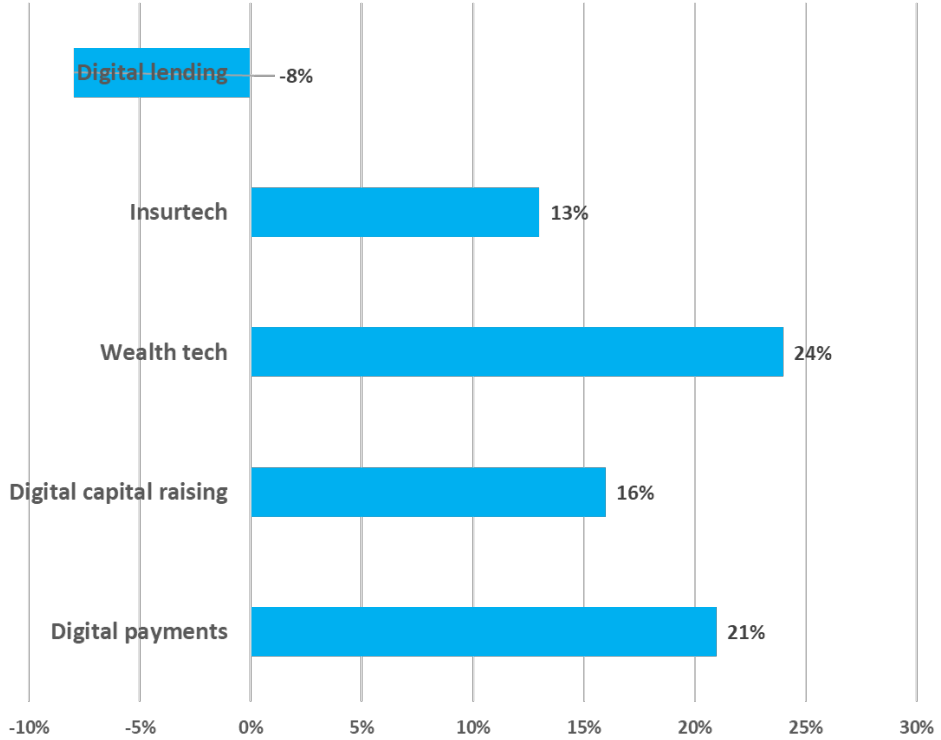
Digital payments in Italy

Contactless and e-commerce card transactions
(% of total card transactions)



Bank of Italy

Growth of various financial instruments



FinTech industry July 2019/July 2020

(survey on 1,385 fintech firms operating in 169 jurisdictions)

CCAF, WBG, WEF (2020), The Global Covid-19 FinTech Market Rapid Assessment Study

Opportunities for inclusion

Mobile money in Kenya and then sub-saharian countries allowed a large number of unbanked to have access to an account (save, obtain credit…)

Transition **from cash to bank accounts** to receive govt support enhanced formal access

Transition **from cash to formal intermediaries** for remittances expanded supply and induced inclusion

Challenges

Survival of some financial institutions

New exclusions

Cyber risks

Privacy risks

Digital skills

Are digital skills becoming complementary to financial literacy?

Financial literacy vs digital skills

$$Y_i = \beta_1 X_{i1} + \cdots + \beta_k X_{ik} + u_i$$

where:

Y_i = PISA score for financial literacy

X_i = vector of covariates (numeracy, literacy, ESCS, digital skills, country, school)

i= i-th student

Data

- PISA 2018 for Chile, Estonia, Finland, Italy, Latvia, Lithuania, Poland, Slovak Republic, Spain, US
- around 40.000 15 years old students

Financial literacy vs digital skills

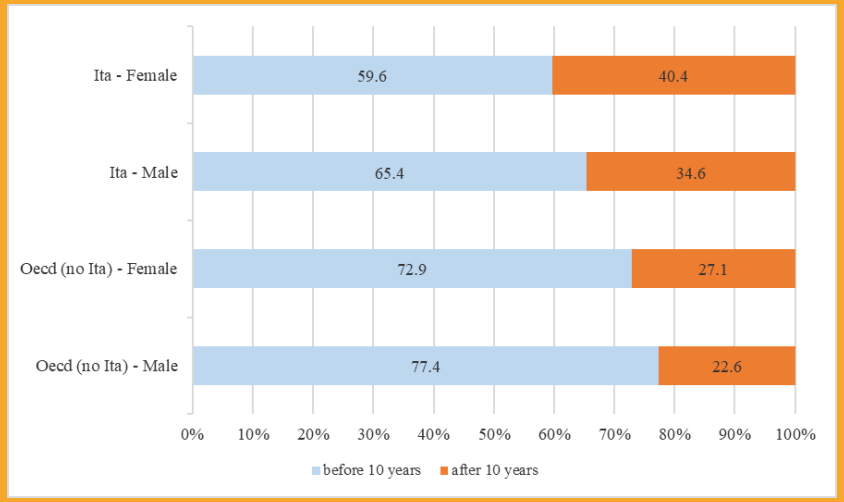
3 Hypotheses

H0: earlier use of digital devices associated to higher financial literacy

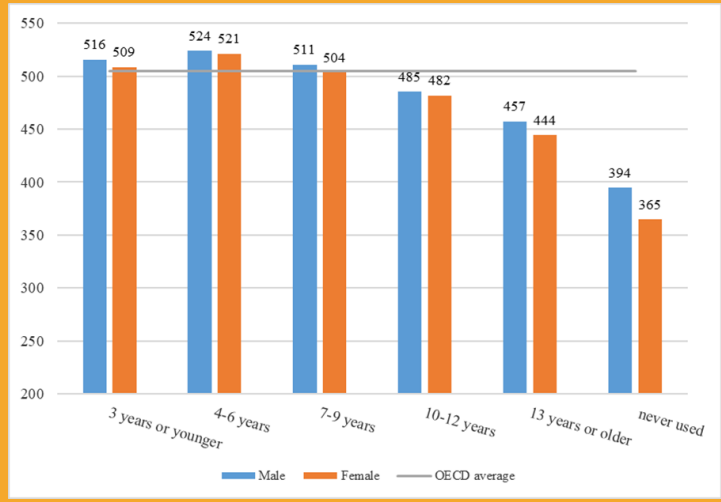
H1: higher use of digital devices for staying informed associated to higher financial literacy

H2: higher confidence with digital financial services associated to higher financial literacy

Distribution of students by age at which they start using a digital device



Financial literacy lower for students starting later to use of digital devices



Complementarity btw digital skills and financial literacy

	1	2	3	4	5	6	7	8
math	0.667***	0.657***	0.666***	0.656***	0.667***	0.657***	0.662***	0.653***
reading	0.308***	0.316***	0.307***	0.314***	0.304***	0.312***	0.308***	0.316***
female	-7.404***	-7.688***	-7.213***	-7.485***	-7.042***	-7.524***	-6.189***	-6.496***
ESCS	1.961**	1.891**	1.778*	1.702**	1.303	1.373*	1.027	1.017
Age when student starts to use digital media:								
10-12 years			-2.497	-3.007	-2.416	-3.01	-1.642	-2.199
13 years or later			-7.046**	-7.286**	-5.401	-6.076	-5.261	-5.848
Use of digital media for reading news					4.788***	4.046***	3.322**	2.522*
FLCONICT							6.432***	6.527***
Observations	46248	46248	46248	46248	42782	42782	39093	39093
Rsquared	0.822	0.82	0.822	0.821	0.821	0.819	0.826	0.825
School FE	YES		YES		YES		YES	
Country FE		YES		YES		YES		YES

Agenda

4. New directions

New directions…

DATA

1 Need more data and richer definitions for financial literacy

RESEARCH

2 Better identify causal links

G20 ITALIA 2·0·2·1

POLICIES

3 Need to be data based.. But urgent..

G20/GPFI Priorities

For 2021: policies mitigating negative consequnces of pandemic through the reponsible use of digital financial services

Report on digitalization in pandemic: opportunities and challenges with focus on vulnerables

Survey and Report on effective financial consumer protection policies to support inclusion

Report on supporting resilience and transformation through digital financial literacy

Survey and Report on the supply of digital finance to MSMEs to cope with emergency and stimulate transformation

Survey and Report on MSMEs financial and digital competencies

Final outcome

Menu of **policy options** (best practices) to be shared across member (and not) countries

Accompanied with **data, statistical evidence, or case studies**

Need to work/share with stakeholders and research

Challenges for financial inclusion: the role for financial education and new directions