Digitalization, financial Knowledge and financial Decisions

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Research questions

➢ Is the propensity to save and then to invest related to digital skills and financial knowledge?

➢ Do digital skills and financial knowledge affect people's attitudes towards digital payments and digital financial services?

➢ Is there a gender gap?

Motivation

➢Rapidly changing financial landscape, driven by the digitalization

➢Individuals are called to make more complex financial decisions early in life

➢Growing attention to digital skills in combination with financial skills:

  "digital financial literacy"

➢Implications for financial well-being and financial inclusion

Literature

❖Fintech improves financial culture/behavior (French et al., 2020; Viviano & Michelangeli (2021) - Fintech and technology could also be detrimental to financial well-being (Lee et al., 2022; Lyons & Kass-Hanna 2022)

❖Financial culture and risky digital financial products (Panos et al. 2020; Engels et al., 2020)

❖Financial literacy and gender gap (D'Alessio et al., 2020; Guiso and Zaccaria, 2021; Paladino 2022)

❖Digitalization and financial inclusion (Bianco et al. 2022)

❖Financial literacy, investment decisions and gender gap (Bucher-Koenen et al., 2021; Bannier & Neubert 2016)

Contribution to the literature

❖ First, we provide a first survey-based evidence for Italy on how digital and financial skills correlates with saving, investment decision and the attitudes towards digital payments and finance. To our knowledge, there are no similar studies and evidence readily available that investigate the role of the two skills together

❖ Second, we provide fresh evidence on the relative importance of these two skills in financial decisions

❖ Third, we provide fresh evidence of the significant gender gap in moving from saving to investment decisions

Data

- Two waves of a novel survey on the financial and digital skills of the Italian population aged between 16 and 64 years

- The first wave was collected in December 2019, involving 2,020 individuals; the second wave was run in the first half of December 2021, in the midst of a new Covid-19 pandemic wave, involving 2,001 subjects. The two waves have no panel component and are comparable in terms of socio-demographic characteristics of the interviewees

Main questions:
  - Socio-demographic (sex, age, residence, family type, education etc.)
  - Economic situation (life style, independence, profession etc.)
  - Digital skills (perceived and managed)
  - Financial knowledge (perceived)
  - Financial decisions (savings, (non) financial investment, payment means)
 - Opinion (Risk/benefits of digital financial services, digital payments)

Changes between the two waves

❖ **The opinions towards the use of digital technologies in finance did not change**

- ✓ 70% of the sample is in favor of the use of digital payment technologies. The same share of respondents thinks that digital financial services (DFSs) will improve the access to finance
- ✓ 60% of the respondents agree that DFSs will increase the knowledge of the mechanism behind finance and economics

❖ **The self-assessment of digital skills and the self-assessment of financial knowledge are significantly lower in the second wave**

- ✓ After the pandemic a larger share of respondents declare to have no financial knowledge at all (15.7%, compared to 4.2% before the pandemic)

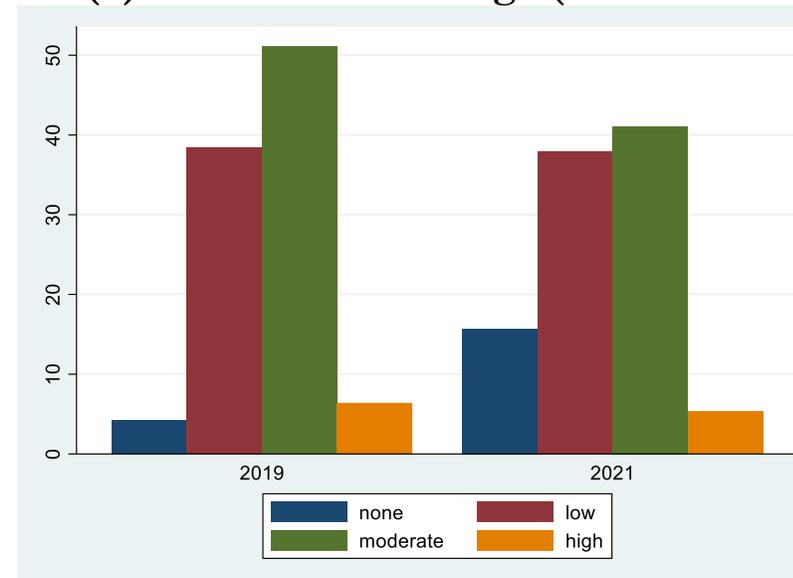# The pandemic affected the self confidence towards digital skills and financial knowledge

Digital skills and financial knowledge before and after the pandemic

(a) Digital skills (self-assessed)

(b) Financial knowledge (self-assessed)
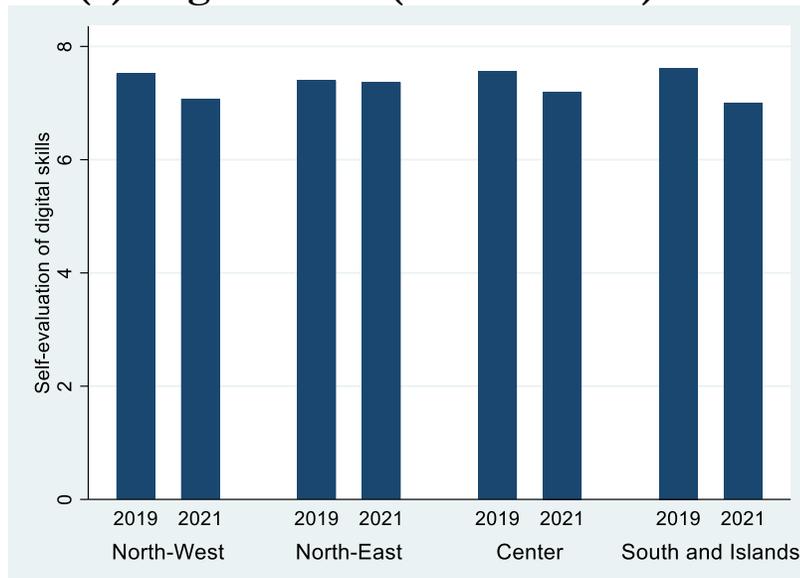
Note: the scale is from 1 to 10

Note: the level of financial knowledge is assessed on a likert scale form 1 (no knowledge) to 4 (high knowledge)

Identikit of financial knowledgeable and digital skilled

	Financial knowledge	Digital skill
Digital skills (self evaluation)	(+)***	
Financial knowledge (self assessed)		(+)***
Female	(-)***	(-)***
Age	(-)	(-)***
Income	(+)***	(+)**
Education	(+)***	(+)***
family status	YES	YES
Location	YES	YES
financially independent	YES	YES
Profession	YES	YES
Sources of information	YES	NO
Observations	4021	4021

Saving and investment

➢ How do digital skills and financial knowledge correlate with financial behaviour after controlling

for other individual characteristics?

➢ What kind of financial behaviour?

- Propensity to save (ordered)
- Investment (yes/no)

➢ We estimate ordered probit models for the propensity to save (ordinal multiple choice answers),

we use a probit model for holding investment or not (binary variable)

Financial behaviour

	Propensity to save	Investment (yes/no)
Digital skills (self evaluation)	(+)**	Not significant
Financial knowledge (self assessed)	(+)***	(+)***
Female	Not significant	(-)***
Age	(-)*	(+)***
Income	(+)***	(+)***
Education	(+)*	(+)***
family status	YES	YES
Location	YES	YES
financially independent	YES	YES
Profession	YES	YES
Observations	4021	4021

Digital skills, saving and investment
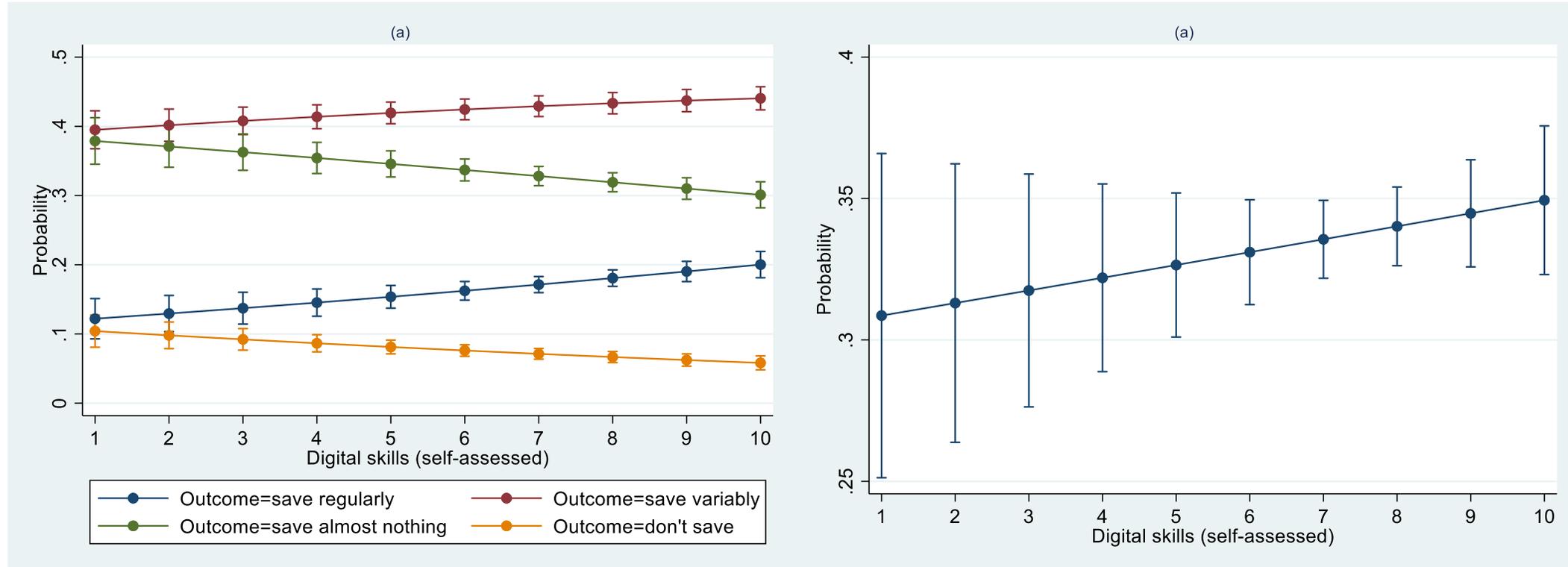
Note: Predictive margins with 95% confidence intervals based on probit regressions.

Financial knowledge, saving and investment
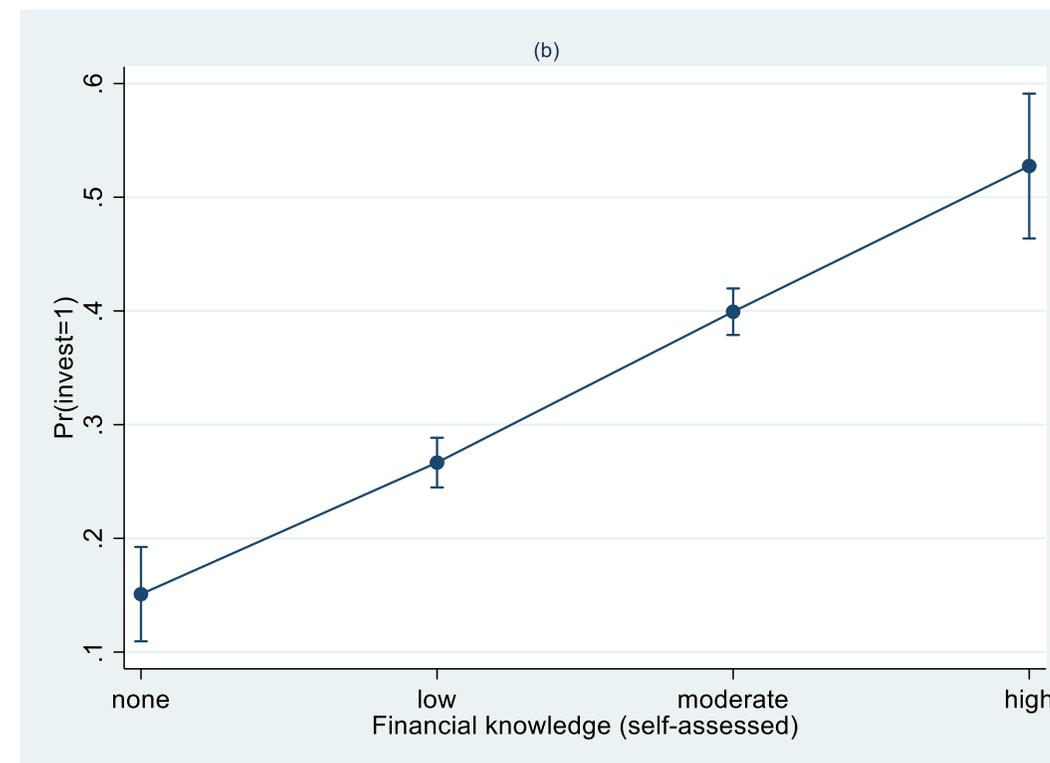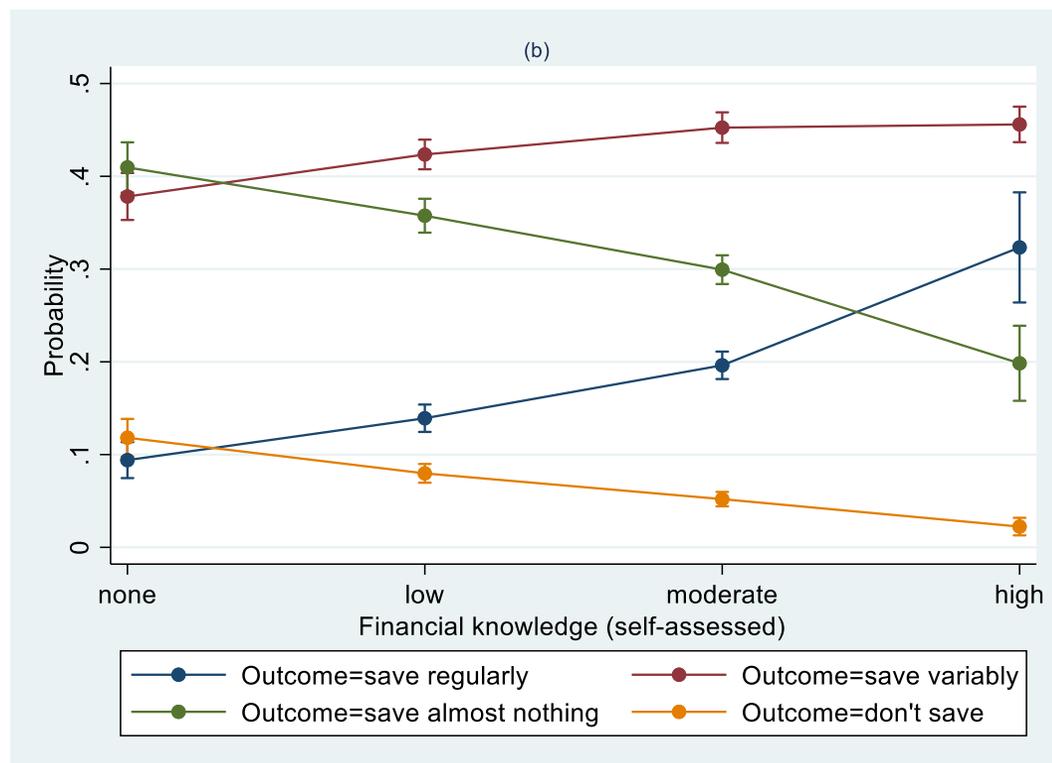
Note: Predictive margins with 95% confidence intervals based on probit regressions.

Traceable Payments

➢ «In general, are you in favour of a law that incentivise traceable payments?»

➢ We check whether digital skills and financial knowledge correlate with the answer to the

  question, controlling for other relevant individual characteristics

➢ Ordered probit (ordinal multiple choice answers)

Traceable payments

	Would you be in favour of a law to trace payments?
Digital skills (self evaluation)	(+)***
Financial knowledge (self assessed)	(+)***
Female	(-)*
Age	(-)*
Income	(+)***
Education	(+)***
family status	YES
Location	YES
financially independent	YES
Profession	YES
Observations	4021

Digital finance and benefits for financial inclusion and financial knowledge

➢ Do digital skills and financial knowledge correlate with the perceived

   benefits of digital financial services (DFS) on:

   ➢ financial inclusion (DFS ⇒ greater access to products and services once exclusive)
   ➢ financial knowledge (DFS ⇒ increased knowledge on how economy and finance work)

➢ Controlling for other individual characteristics (age, degree, job, etc.)

➢ Ordered probit (ordinal multiple choice answers)

Digital finance: financial inclusion and financial knowledge

	Digital Finance and Financial Inclusion	Digital Finance and financial knowledge
Digital skills (self evaluation)	(+)***	(+)***
Financial knowledge (self assessed)	(+)***	(+)***
Female	Not significant	Not significant
Age	(-)***	(-)***
Income	(+)***	(+)***
Education	Not significant	Not significant
family status	YES	YES
Location	YES	YES
financially independent	YES	YES
Profession	YES	YES
Observations	4021	4021

Key takeaways

✓ Digital skills and financial knowledge are both important in shaping financial behavior and attitudes, including towards digital financial services

✓ Digital skills are a useful complement to manage personal budgets, monitoring expenses and therefore to saving money at the end of the month; they correlate positively with the likelihood to favor traceable payments and with higher perception of the benefits of the diffusion of digital financial services

✓ However, differently from financial knowledge, digital skills appear irrelevant to make investment decisions. In fact, the decision to invest is a more complex task, which demands a higher degree of financial knowledge while digital skills alone are of little help

✓ Digital and financial skills are both positively associated with educational and income levels and are characterized by a significant gender gap

✓ Women have a lower propensity to invest then men, even controlling for digital skills and financial knowledge

Policy implications

❑ Improving educational attainment from young ages - especially in terms of financial and digital skills - and closing the gender gap are the promising pathways to upgrade financial behaviors and attitudes towards digital financial services

❑ In order to promote a more active participation to financial markets, digital transition needs to be accompanied by targeted educational interventions to raise the general level of financial literacy

Thank you for your attention!