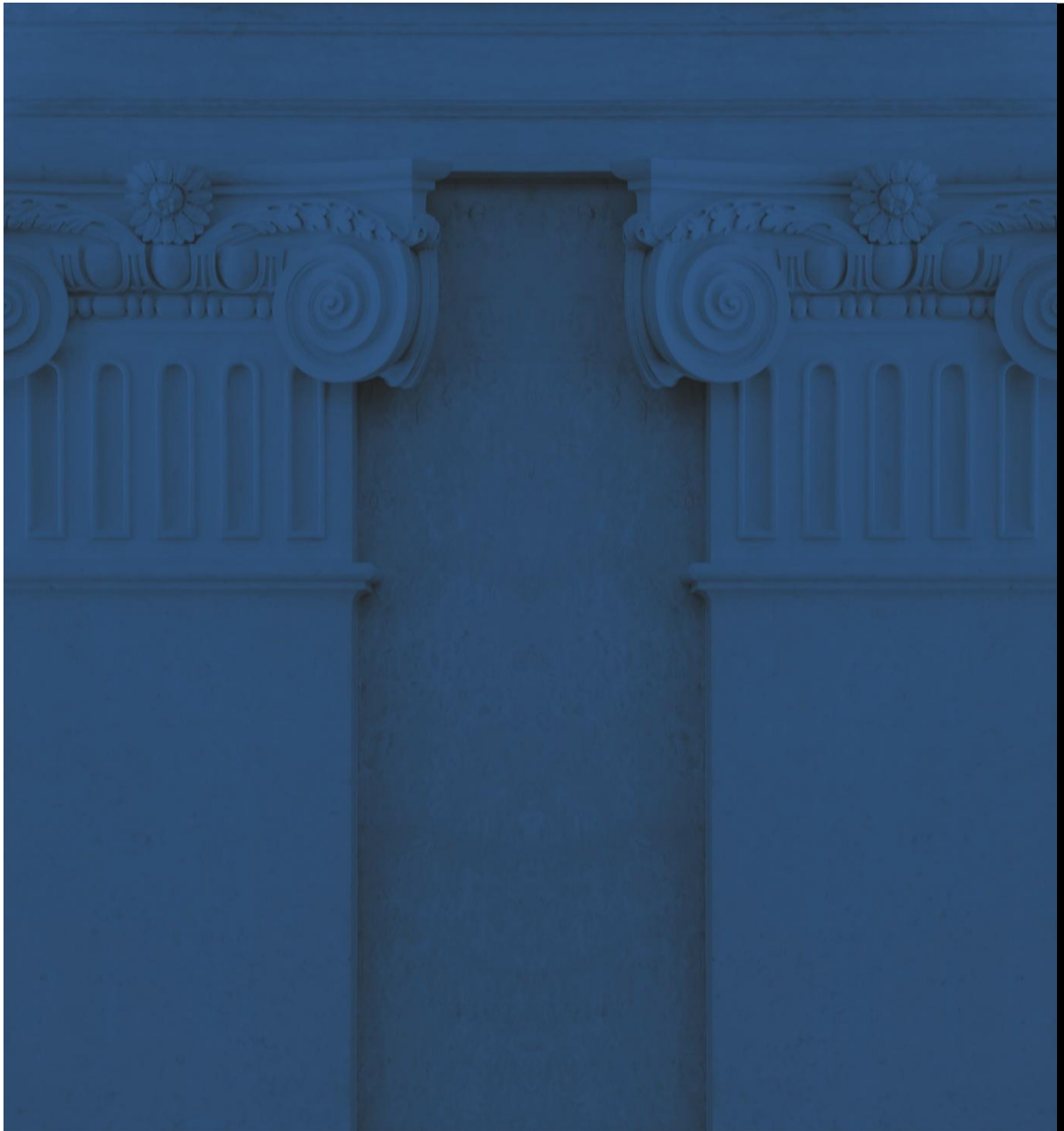




DISCUSSION OF “THE INTEROPERABILITY OF FINANCIAL DATA”

EBA RESEARCH WORKSHOP | NOVEMBER, 2025

TIAGO PINHEIRO | FINANCIAL STABILITY





The views expressed in this discussion are those of the author and do not necessarily represent those of Banco de Portugal or the Eurosystem.



OVERVIEW OF THE PAPER

Question:

1. What is the effect on welfare of open banking, open finance, and open banking in the presence of a data-sharing CBDC?



OVERVIEW OF THE PAPER

Question:

1. What is the effect on welfare of open banking, open finance, and open banking in the presence of a data-sharing CBDC?

Results:

1. Open banking improves welfare. Banks' profits increase under some conditions. Some firms earn lower profits.



OVERVIEW OF THE PAPER

Question:

1. What is the effect on welfare of open banking, open finance, and open banking in the presence of a data-sharing CBDC?

Results:

1. Open banking improves welfare. Banks' profits increase under some conditions. Some firms earn lower profits.
2. Open finance improves welfare more than open banking. Banks are worse off and firms are better off.



OVERVIEW OF THE PAPER

Question:

1. What is the effect on welfare of open banking, open finance, and open banking in the presence of a data-sharing CBDC?

Results:

1. Open banking improves welfare. Banks' profits increase under some conditions. Some firms earn lower profits.
2. Open finance improves welfare more than open banking. Banks are worse off and firms are better off.
3. Open banking in the presence of a data-sharing CBDC increases welfare. It increases banks' profits but it does the opposite to firms.

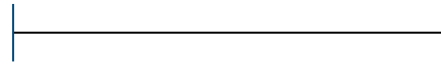


OVERVIEW OF THE PAPER

Payments market

Bank

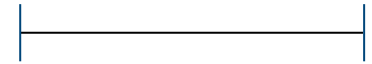
Fintech P.



Credit market

Bank

Fintech C.



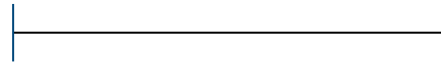


OVERVIEW OF THE PAPER

Payments market

Bank

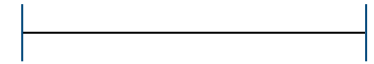
Fintech P.



Credit market

Bank

Fintech C.



No interoperability

Rents

Rents



OVERVIEW OF THE PAPER

Payments market



Bank's rents

Bank's market
share increases

Credit market



Bank's rents

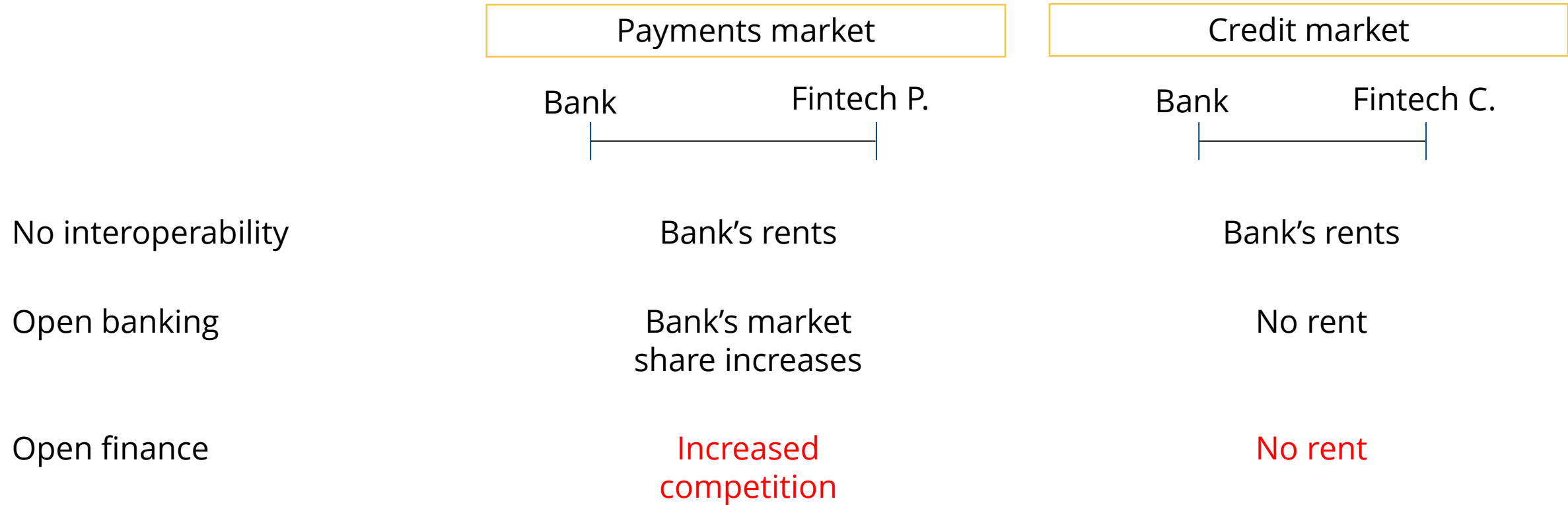
No rent

No interoperability

Open banking



OVERVIEW OF THE PAPER





COMMENTS

- Topical issue that is relevant for policy-makers. Important question.



COMMENTS

- Topical issue that is relevant for policy-makers. Important question.
- Analytical clarity! Simple and insightful setting, a combination that is not always easy to achieve.



COMMENTS

- Topical issue that is relevant for policy-makers. Important question.
- Analytical clarity! Simple and insightful setting, a combination that is not always easy to achieve.
- Good intuition, well developed. Great understanding and transparency about the assumptions driving results.



COMMENTS

- Topical issue that is relevant for policy-makers. Important question.
- Analytical clarity! Simple and insightful setting, a combination that is not always easy to achieve.
- Good intuition, well developed. Great understanding and transparency about the assumptions driving results.
- Analysis of winners and losers under different regulatory regimes.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.
- This motivation stems from the unrealistic timing of the model in which the payment market settles before the credit market.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.
- This motivation stems from the unrealistic timing of the model in which the payment market settles before the credit market.
 - But, in reality, firms can contract payment providers at any time. Often a firm is required to have an account with the bank it borrows from.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.
- This motivation stems from the unrealistic timing of the model in which the payment market settles before the credit market.
 - But, in reality, firms can contract payment providers at any time. Often a firm is required to have an account with the bank it borrows from.
 - More importantly, the information needed for monitoring the borrower is generated after the lending agreement and not before.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.
- This motivation stems from the unrealistic timing of the model in which the payment market settles before the credit market.
 - But, in reality, firms can contract payment providers at any time. Often a firm is required to have an account with the bank it borrows from.
 - More importantly, the information needed for monitoring the borrower is generated after the lending agreement and not before.
- The assumption of uniform pricing in payment services prevents banks from bundling the payment and credit services, i.e., from offering a menu of payment prices and interest rates.



IS UNIFORM PRICING IN PAYMENT SERVICES REALISTIC?

- Banks cannot commit to a price for payment services that varies together with the interest rate of a hypothetical future loan.
- This motivation stems from the unrealistic timing of the model in which the payment market settles before the credit market.
 - But, in reality, firms can contract payment providers at any time. Often a firm is required to have an account with the bank it borrows from.
 - More importantly, the information needed for monitoring the borrower is generated after the lending agreement and not before.
- The assumption of uniform pricing in payment services prevents banks from bundling the payment and credit services, i.e., from offering a menu of payment prices and interest rates.
- Is there empirical evidence supporting this assumption? What happens when it is relaxed?



FIXED COST OF MONITORING: DOES IT MAKE SENSE?

- Monitoring in the form of information processing does seem to have economies of scale.



FIXED COST OF MONITORING: DOES IT MAKE SENSE?

- Monitoring in the form of information processing does seem to have economies of scale.
- But one can think of monitoring as a continuous variable rather than a discrete one. Banks can choose a monitoring intensity depending on the size of the loan.



FIXED COST OF MONITORING: DOES IT MAKE SENSE?

- Monitoring in the form of information processing does seem to have economies of scale.
- But one can think of monitoring as a continuous variable rather than a discrete one. Banks can choose a monitoring intensity depending on the size of the loan.
- Increasing the monitoring intensity increases the monitoring costs and decreases the private benefits of control.



FIXED COST OF MONITORING: DOES IT MAKE SENSE?

- Monitoring in the form of information processing does seem to have economies of scale.
- But one can think of monitoring as a continuous variable rather than a discrete one. Banks can choose a monitoring intensity depending on the size of the loan.
- Increasing the monitoring intensity increases the monitoring costs and decreases the private benefits of control.
 - In the model, m could vary between 0 and 1 and potentially with the size of the loan.



FIXED COST OF MONITORING: DOES IT MAKE SENSE?

- Monitoring in the form of information processing does seem to have economies of scale.
- But one can think of monitoring as a continuous variable rather than a discrete one. Banks can choose a monitoring intensity depending on the size of the loan.
- Increasing the monitoring intensity increases the monitoring costs and decreases the private benefits of control.
 - In the model, m could vary between 0 and 1 and potentially with the size of the loan.
- If monitoring varies with the size of the loan, what's the effect on welfare of the different regimes?



ARE FIRMS' PAYMENT PROCESSING BENEFITS NEGLIGIBLE?

- In the model, these gains are relevant for welfare but not for firms' capital.
 - A firm's capital does not change with the profit it makes by hiring payment services.



ARE FIRMS' PAYMENT PROCESSING BENEFITS NEGLIGIBLE?

- In the model, these gains are relevant for welfare but not for firms' capital.
 - A firm's capital does not change with the profit it makes by hiring payment services.
- How is this inconsistency justified?



ARE FIRMS' PAYMENT PROCESSING BENEFITS NEGLIGIBLE?

- In the model, these gains are relevant for welfare but not for firms' capital.
 - A firm's capital does not change with the profit it makes by hiring payment services.
- How is this inconsistency justified?
- If gains from payment services are added to the firm's capital they create another link between the payments' market and the subsequent credit market, and in the effects of the different regimes.



ARE FIRMS' PAYMENT PROCESSING BENEFITS NEGLIGIBLE?

- In the model, these gains are relevant for welfare but not for firms' capital.
 - A firm's capital does not change with the profit it makes by hiring payment services.
- How is this inconsistency justified?
- If gains from payment services are added to the firm's capital they create another link between the payments' market and the subsequent credit market, and in the effects of the different regimes.
- Suggestions:
 1. Add the firms' profits from payment services their capital and find the solution to the fixed-point problem.
 2. Assume that profits from payment services are negligible and analyze welfare without them.
 3. Change the timing of the model and allow for contracting of credit and payment services at the same time. The profits from the latter cannot be added to capital because they have not materialized at the time of contract. They could be used to pay back the loan, though.



OTHER COMMENTS

- Open banking increases banks' profitability if banks have can extract rents in the payment services market. What empirical evidence supports the existence of market power in that market?



OTHER COMMENTS

- Open banking increases banks' profitability if banks have can extract rents in the payment services market. What empirical evidence supports the existence of market power in that market?
- If open banking is profit-increasing for banks, why haven't banks voluntarily set it up?



OTHER COMMENTS

- Open banking increases banks' profitability if banks have can extract rents in the payment services market. What empirical evidence supports the existence of market power in that market?
- If open banking is profit-increasing for banks, why haven't banks voluntarily set it up?
- What prevents firms from sharing payments' data if it can then be monitored and receive a better deal in the credit market?
 - If firms can voluntarily share payments' data, would open banking and open finance have any impact on welfare?



OTHER COMMENTS

- Open banking increases banks' profitability if banks have can extract rents in the payment services market. What empirical evidence supports the existence of market power in that market?
- If open banking is profit-increasing for banks, why haven't banks voluntarily set it up?
- What prevents firms from sharing payments' data if it can then be monitored and receive a better deal in the credit market?
 - If firms can voluntarily share payments' data, would open banking and open finance have any impact on welfare?
- Why won't the Fintech payments' provider share its clients data? It increases its profit.



OTHER COMMENTS

- Typo at the top of p. 15 in expression $v = \rho_H \theta - 1 - M$. It should read as $v = \rho_H \phi - 1 - M$.
- Typo in equation (1). The direction of the inequality should be the opposite of the one in the paper.
- Typo at the top of p. 19, just above equation (6). Where it says “breaks down above the threshold $\bar{k}$...”, it should say “breaks down below the threshold $\bar{k}$...”. I’m not sure what is meant by lending breaking down, though. Lending still occurs below that threshold.



CONCLUSION

- Important questions: Open banking, open finance, analysis of the heterogeneity of welfare effects.
- Simple and useful setting.
- Great intuition and clarity in explaining results.
- Carry-on with the analysis by making the setting more realistic.



THANK YOU