



DISCUSSION OF “INTERNAL CAPITAL MARKETS OF MULTINATIONAL CORPORATIONS OBSERVED IN ACTION”

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TIAGO PINHEIRO | FINANCIAL STABILITY



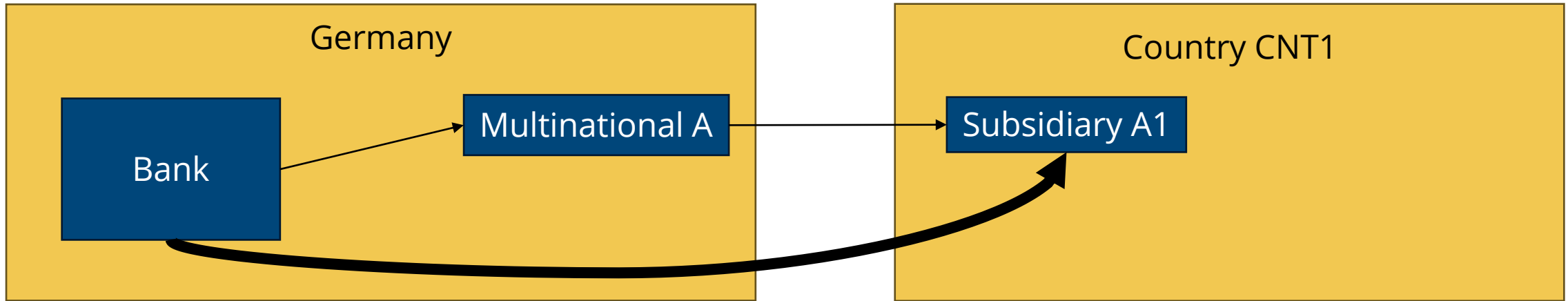
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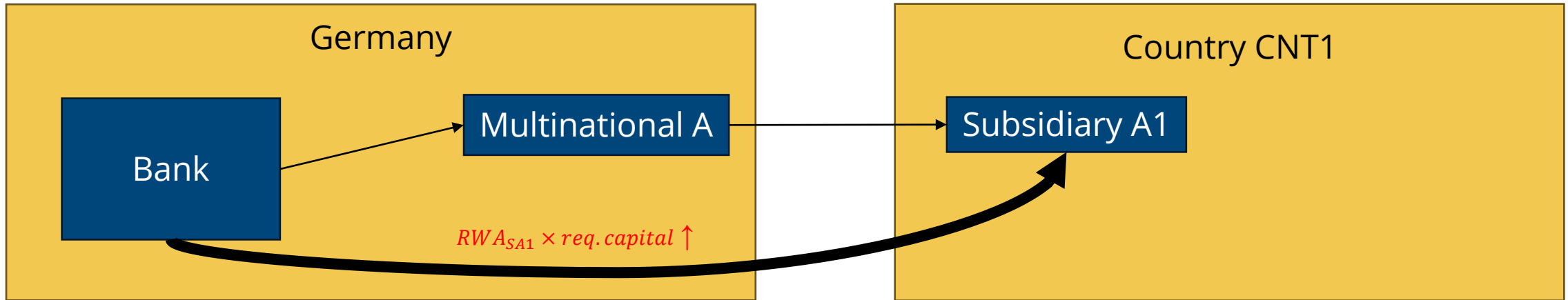
OVERVIEW OF THE PAPER





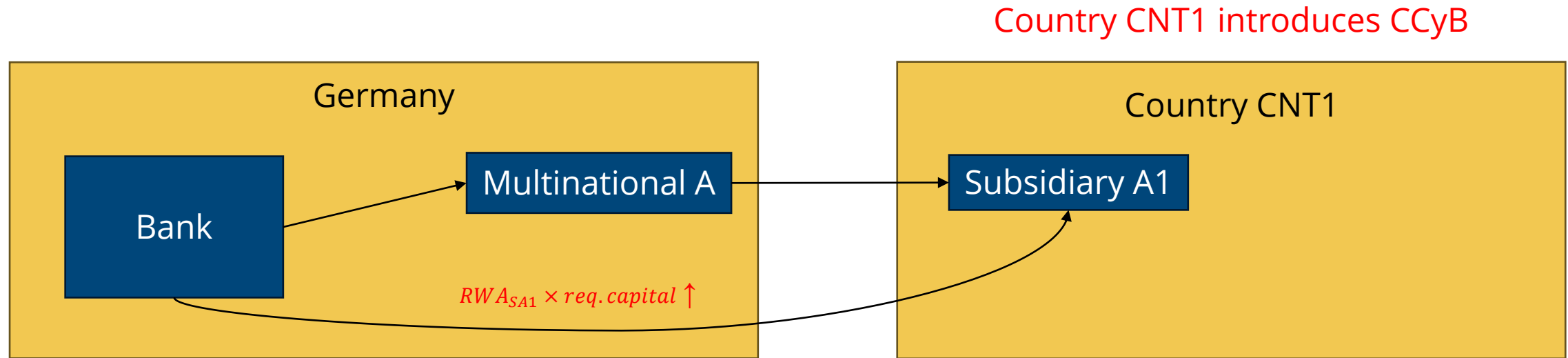
OVERVIEW OF THE PAPER

Country CNT1 introduces CCyB





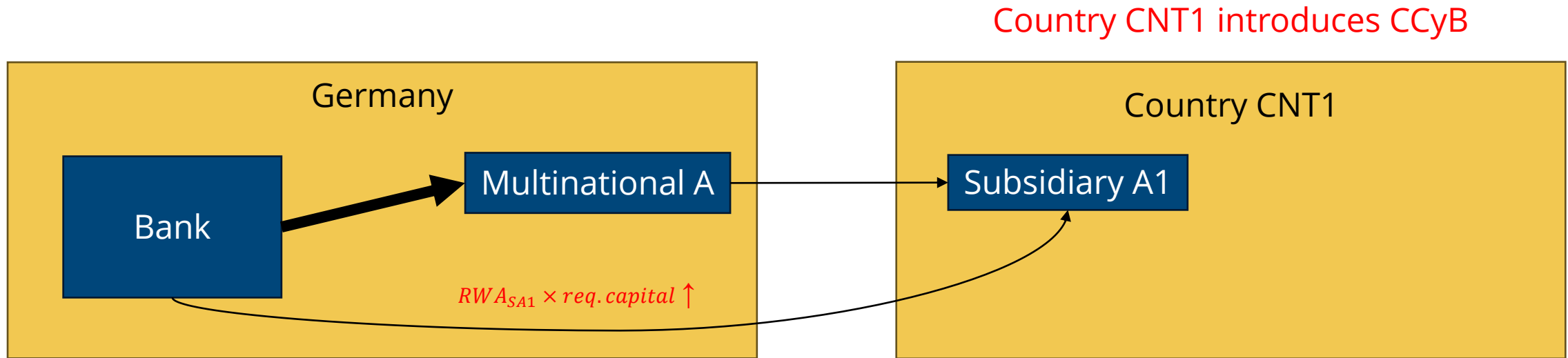
OVERVIEW OF THE PAPER



1. Lending from German banks to subsidiaries of German multinationals located in countries that introduce a CCyB decreases.



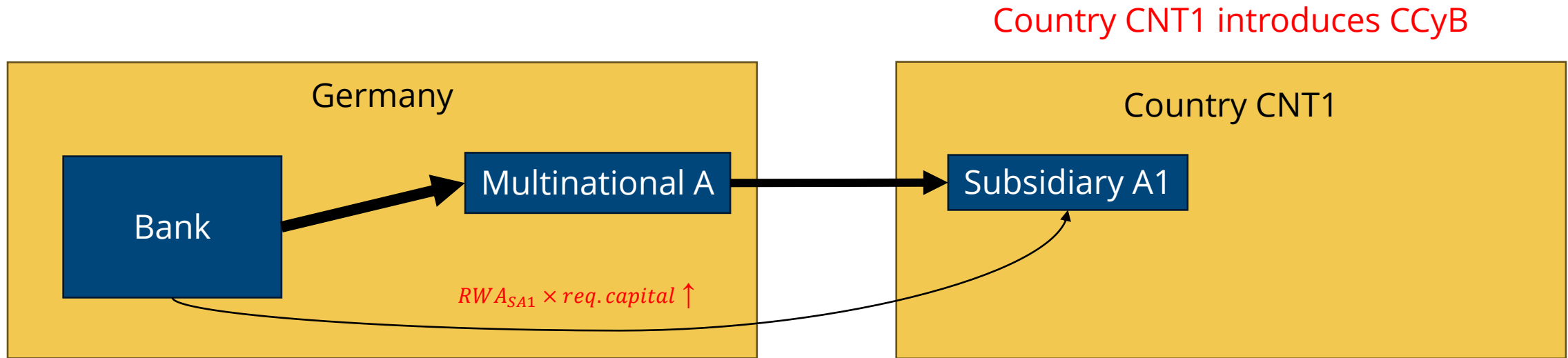
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1. Lending from German banks to subsidiaries of German multinationals located in countries that introduce a CCyB decreases.
2. Lending from German banks to the parents of German multinationals increases.



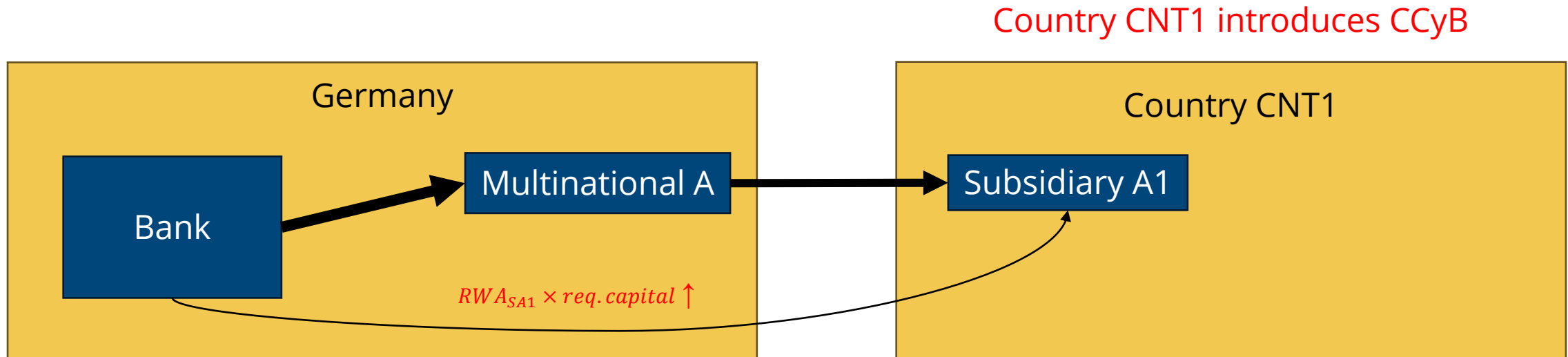
OVERVIEW OF THE PAPER



1. Lending from German banks to subsidiaries of German multinationals located in countries that introduce a CCyB decreases.
2. Lending from German banks to the parents of German multinationals increases.
3. Lending from the parent of a German multinational to a subsidiary located in a country that introduces the CCyB increases.



OVERVIEW OF THE PAPER



1. Lending from German banks to subsidiaries of German multinationals located in countries that introduce a CCyB decreases.
2. Lending from German banks to the parents of German multinationals increases.
3. Lending from the parent of a German multinational to a subsidiary located in a country that introduces the CCyB increases.
4. Lending from German non-banks to parents or subsidiaries increases.



OVERVIEW OF THE PAPER

Other results:

1. The average default probability of borrowers located in countries with a positive CCyB decreases compared to the borrowers located in countries without the CCyB.
 2. This result comes from an decrease in the default probability of subsidiaries in affected countries and an increase in the default probability of the parents of these subsidiaries.
- Sample period 2013Q4 and 2019Q1.



COMMENTS

- Great question! Important topic that is relevant for policy-makers, especially for macroprudential authorities.
- Well developed analysis. Thorough.
- Well-written. Clear. Polished.



NO COUNTRY-TIME CONTROL VARIABLES

- CCyB effect, cross country variation in lending, or reaction to the same macroeconomic conditions that are driving the CCyB?
- The CCyB is a slow moving variable. There is a positive CCyB in only a few countries over the sample period (eg. Norway, Sweden, Slovakia, Czech).
- The CCyB could be capturing country-specific idiosyncrasies or country-time effects rather than the effect of the CCyB.
 - The use of firms' fixed effects in the firm level analysis alleviates this concern. But it doesn't solve it.
- Country-time fixed effects are not feasible. But you could use country fixed effects and macroeconomic variables.
- Provide summary statistics about the number of observations by country.



HOW FAST DO AGENTS RESPOND TO CHANGES IN THE CCyB?

- Loans take time to be repaid.
- If banks and firms take time to respond to changes in the CCyB, are the results underestimating the effect of the CCyB on lending?
- How about using a differences-in-differences analysis of the effect of the CCyB by the length of time since the implementation of the buffer?
- How do results compare with current results?



DOES THE DEFAULT RISK CHANGE?

- Default probabilities' results are less convincing than other results.
- Are the default probability estimates comparable across different lenders? Are they point-in-time or through the cycle? What is the time-horizon? And the frequency of updating? Do default probabilities refer to the firm as a stand-alone entity or as part of a group?
- Parent companies often (*always?*) guarantee the loans of the subsidiaries.
- Lending to a subsidiary is the same as lending to the parent.
- Why should we then observe changes in the default risk of banks' portfolios if banks are just shifting credit from the subsidiary to the parent?



OTHER COMMENTS

- Expand treatment and control groups:
 - Multinationals with subsidiaries located in Germany and parent companies in other countries.
 - Firms receiving loans from German banks and non-banks that are located outside Germany.
 - Firms operating in Germany only.
- The definition of non-banks is narrow.
 - Non-banks includes *all* lenders that are not banks. For example, holders of bonds.
 - Results reflect the response of a specific type of non-banks.
 - The analysis of non-bank behavior should use variables that reflect *all* non-bank lending.



OTHER COMMENTS

- The effect of the CCyB on lending by parent risk:
 - There is limited control for the demand from the borrower.
 - Parents with higher default probability get a smaller increase in credit than parents with a lower default probability.
 - That's expected. Parents with a high default probability are likely to have more debt and so their need for additional credit is limited.
 - The use of industry-quarter fixed effects is a limited way of controlling for the demand for credit.
- In the regression specification you should include the PD of the Parent as a stand-alone regressor. Is this what you call the “base effect”?
 - Report it. What’s the value of the coefficient?
 - We need the coefficient to interpret results.

Panel A. Refinancing of the Parent	
	Bank l
	(1)
Parent with affected subsidiary	0.063*** (3.740)
Parent with affected subsidiary x PD parent	-0.094*** (-4.119)
FIXED EFFECTS & CONTROLS	
Base effect	Yes
Year-quarter	Yes



OTHER COMMENTS

- The effect of the CCyB on lending by parent risk:
 - Not sure what is being analyzed.

risk of firms. Accordingly, if credit supply would be the driving force behind our results, we would expect that banks increase their lending to parents in response to increasing CCyBs for some of their subsidiaries irrespective of the risk of parents. We test this in

- The credit supply depends on the default risk.
- In any case, the default risk of the parent was likely a consideration when lending to the subsidiary before the introduction or increase in the CCyB.
- Are you just measuring the effect of default risk on lending?



OTHER COMMENTS

- Is the response of the German financial system and of the German parents undesirable for the country implementing the CCyB?
 - “... we want to shed light on whether there are **leakages** in national CCyB regulation through multinational firms...”
- The expression “leakages” embeds judgment or a stance regarding policy. No one wants leaks!
- Subsidiaries receive more equity-like funding after the implementation of the CCyB.
- Is the CCyB meant to protect the provision of credit by the local financial system or by the global financial system?
- Should the CCyB be paired with capital controls? What is the welfare-improving policy?
- Key take-away: Don’t use language that has a connotation to describe a positive analysis of the effect of a policy.



OTHER COMMENTS

- In some regressions you often report that you are using time, firm, and time-firm fixed effects. That is not possible.
 - You either use time and firm fixed effects or time-firm fixed effects.
- Once you use the product of fixed effects you can't use any of the fixed effects in isolation. The latter are a linear combination of the former.



THANK YOU