



BANK FOR INTERNATIONAL SETTLEMENTS

# Banks vs markets

Leonardo Gambacorta

BE-SUERF conference

Financial intermediation and the future of the banking sector

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*The views expressed are the presenter only and not necessarily those of the BIS*

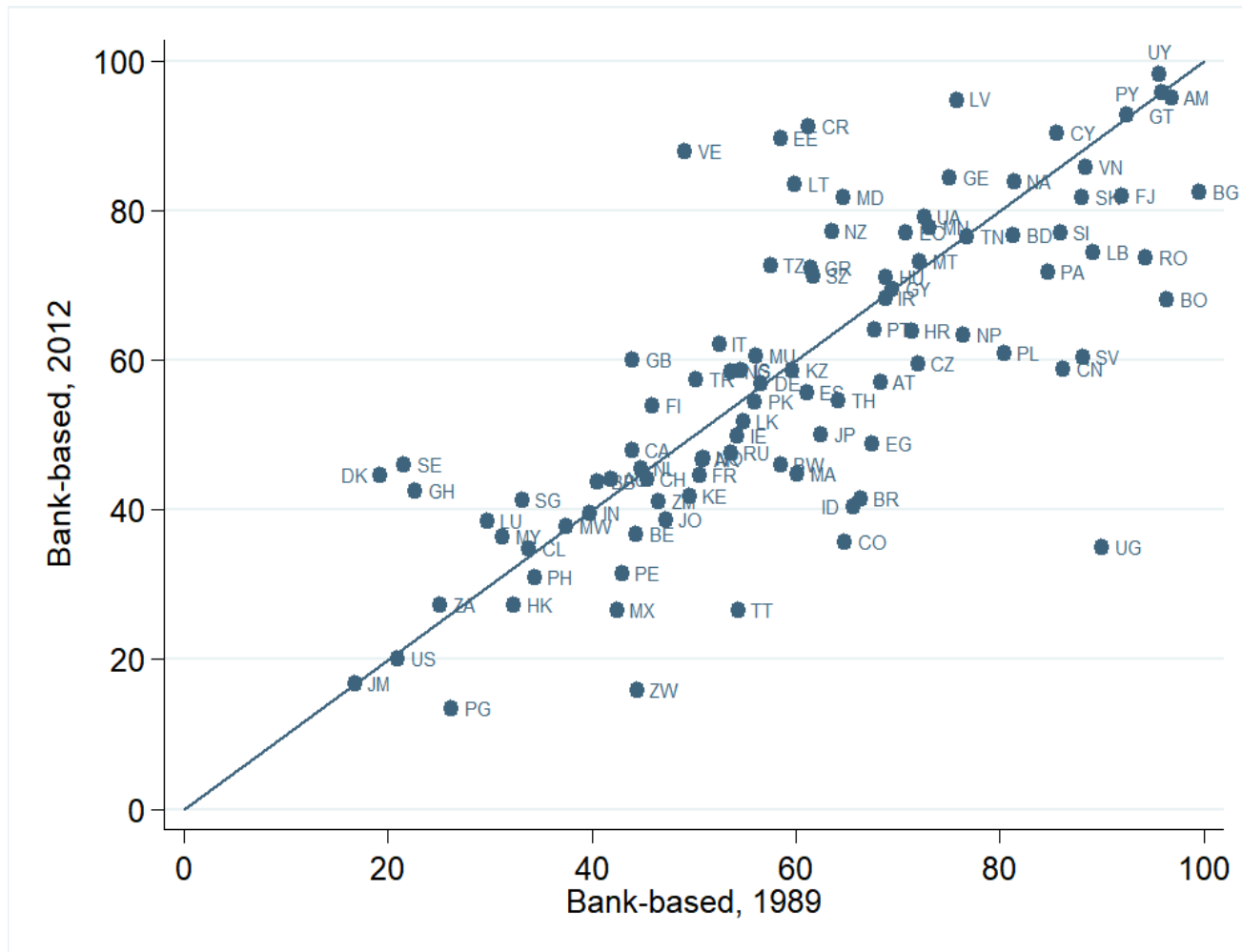


# Outline of the talk

- I. Differences between bank-based finance and market-based finance
- II. Financial structure: impact on growth and inequality
- III. What are the effects in a crisis?
- IV. Conclusions



# A shift towards market-funding

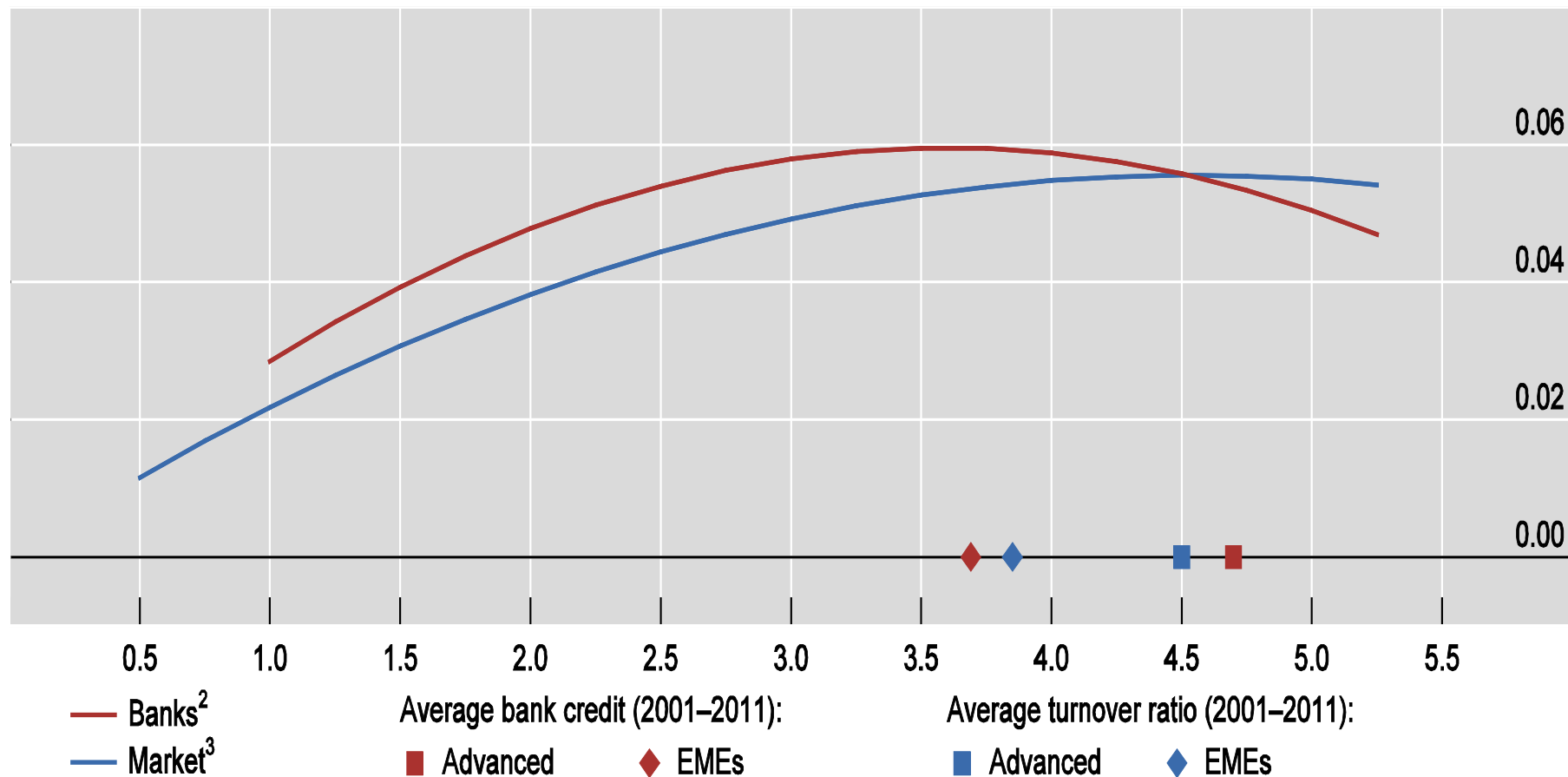


Note: The ratio of bank credit is expressed as a percentage of the sum of bank credit plus bond and equity market capitalisation. A higher value of the indicator suggests financial structure that is more bank-oriented.

Source: Brei, Gambacorta and Ferri, 2018.



# Link between GDP growth per capita and financial structure<sup>1</sup>

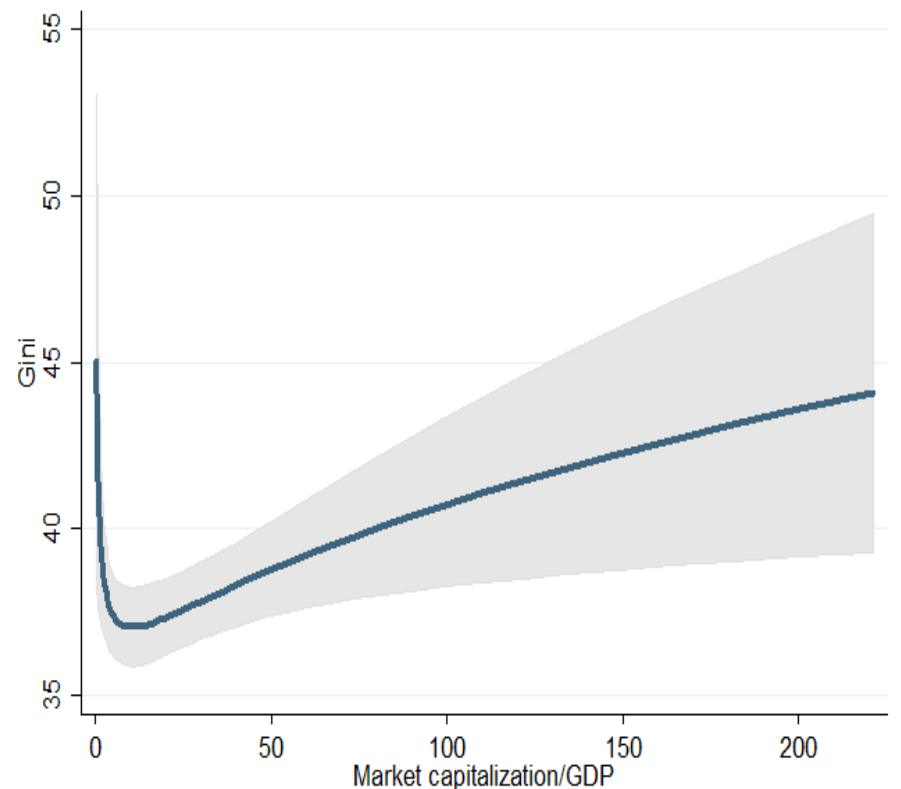
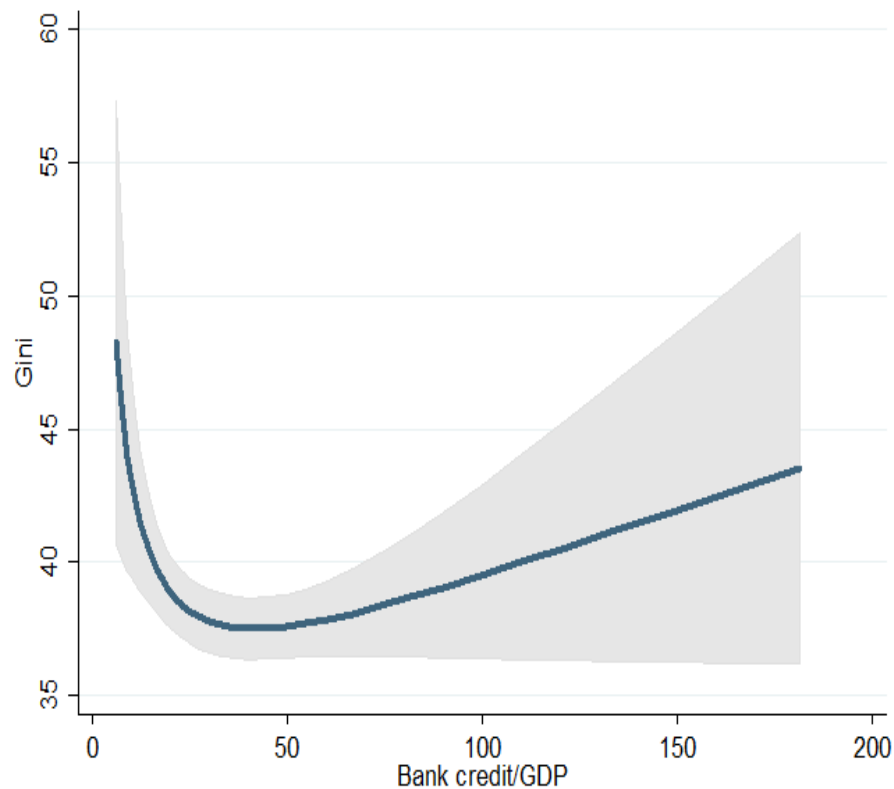


<sup>1</sup> The country sample contains 41 advanced economies and emerging market economies. <sup>2</sup> Bank credit is given by the logarithm of the ratio between bank credit and GDP. <sup>3</sup> The market indicator is given by the logarithm of the turnover ratio. The latter is calculated by the value of the trades of shares on domestic exchanges divided by total value of listed shares.

Source: Gambacorta, Yang and Tsatsaronis (2014).



# Link between income inequality and financial structure



<sup>1</sup> The country sample contains 97 advanced and emerging market economies. <sup>2</sup> Bank credit is given by the logarithm of the ratio between bank credit and GDP. The market indicator is given by the logarithm of the stock market capitalization over GDP.

Source: Brei, Gambacorta and Ferri (2018).

# What are the differences in a financial crisis?

- Bank-oriented systems are less vulnerable to “normal” downturns (Gambacorta et al 2014)
- However, a financial crisis can impair the shock absorbing capacity of relationship banks. When banks are under strain, they are less able to help their clients through difficult times (Bolton et al, 2016)
- During a financial crisis banks may delay necessary balance sheet restructuring (Caballero et al, 2008): they may opt to roll over credit in an effort to postpone loss recognition (so called “zombie lending”)
- This mechanism is not in place for capital market investors. In a financial crisis, therefore, more market oriented systems may speed up the necessary deleveraging, thereby fostering a sustainable recovery (Bech, Gambacorta and Kharroubi, 2014)



# Output cost of recessions and financial structure

	Financial structure <sup>1</sup>	Number of observations	Total real GDP loss (d)+ (r)	Real GDP loss during Downturn (d)	Real GDP loss during Recovery (r)	Primary fiscal balance to GDP
	(1)	(2)	(3)	(4)	(5)	(6)
All downturn episodes	Bank-based	40	4.33	3.73	0.60	-2.11
	Market-based	31	3.73	3.92	-0.19	-1.62
- no financial crisis	Bank-based	26	-0.09	1.70	-1.79	-1.62
	Market-based	16	3.24	3.60	-0.36	-2.02
- with financial crisis	Bank-based	14	12.54	7.51	5.03	-2.99
	Market-based	15	4.24	4.25	-0.01	-1.19

<sup>1</sup> The analysis is based on the database developed in Bech et al (2014) that select a cross section of downturns and subsequent recoveries from a sample of 24 developed countries over the years 1960-2013. Downturns are defined as periods of one or more consecutive years with negative real GDP growth. Similarly, the subsequent recovery is defined as the period from the trough to the year when real GDP recovers to its previous peak. For our exercise, 71 downturns are detected (29 associated with a financial crisis). A country's financial structure is considered as bank-based (market-based) if its bank assets to GDP ratio is above (below) median. The GDP loss is given by the cumulative sum of differences between the peak real GDP and the real GDPs realised during the downturn (or recovery) phase. This can be graphically interpreted as an area that represents the relative GDP loss that the economy suffers during the downturn (and recovery) with respect to the pre-crisis GDP. As GDP growth during the recovery period could be large enough to overcome inside the year the pre-crisis peak, the real GDP loss during the recovery could be negative (a gain with respect to pre-crisis peak).

Source: Bech, Gambacorta and Kharroubi (2014).



# Main takeaways

- I. Financial structure affects output growth and income inequality in a non-linear way
  - ❑ Financial development is not always associated with higher output growth and lower income inequality, especially in the case of market-based finance
  
- II. Bank and market based systems react differently to shocks:
  - ❑ Cost of recession is similar between bank-oriented vs market-oriented systems
  - ❑ In “normal” downturns (not associated with financial crisis) economies with bank-based systems appear more stable
  - ❑ In a financial crisis countries that rely relatively more on bank financing are more severely hit





## References

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