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# Identifying Systemically Important Banks in Kosovo

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### **Outline**

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- What is systemic risk?
- ➤ What are SIFIs and why are they important?
- > The measurement of systemic importance
- ➤ Identification of the systemically important banks in Kosovo (SIBs)
- Conclusion



# Introducing SIFIs

- > During financial crises, financial institutions are more fragile to shocks (Bernanke and Gertler, 1989)
- ➤ The recent financial crisis 2007/2008 serves as an example where the failure of individual institutions helped spreading the shocks across the financial sector and proclaimed the crisis into the real sector
- In order to preserve the financial stability, a key policy lesson from the crisis is to pay attention to the systemic risk (Tarashev et al., 2010)
- Motivation to rethink the previous financial regulatory framework (e.g. Basel II)



## What is systemic risk

#### Systemic Risk

- ➤ The European Systemic Risk Board (2010): disruptive event in the financial system that has the potential to promulgate the adverse effects to the internal market, as well as the real economy
- ➤ IMF, FSB and BIS (2009): '...an impairment or disruption to the flow of financial services ...
  - > when the cost of financial services would increase sharply
  - due to shocks originating outside the financial system, as well as within the financial system
- ⇒ The systemic event becomes a *macroeconomic problem* so the costs inferred are system wide

#### Idiosyncratic Risk

- > one financial institutions experiences difficulties in performing daily tasks due to a risky investment or, a particular bank suffers depositors' run
- ⇒ costs inferred of *microeconomic significance*
- Cross-sectional dimension
- Time-series dimension



## What are SIFIs and why they are important

- SIFIs microprudential perspective
- SIFIs macroprudential perspective
- ➤ Weistroffer (2011):
- 1) **GOOD**: Relevant and indispensable for the well functioning of the financial system and economy
- 2) **BAD**: Their malfunction imposes high costs to the economy
- Contagion effect ('domino effect')
- > **Precautionary measures** to reduce the systemic importance (as proposed by the ESRB):
- ✓ Countercyclical capital buffers
- ✓ Prevent maturity mismatch
- ✓ Limiting the expectations of bail out
- ✓ Reduce exposure concentration
- ✓ Risk-based deposit insurance scheme, etc.



## Methodology for the Identification of SIFIs

- → Market based technique
  - > Developed financial systems
- → Indicator based technique
  - ➤ Moldavian, Czech republic, Australian authorities (Komarkova et al., 2011; Moore and Zhou, 2012; Bramer and Gischer, 2012)

#### Criteria (BCBS, 2011):

- ✓ Size
- ✓ Interconnectedness
- ✓ Substitutability
- Complexity
- o Cross jurisdictional activity
- ➤ Reference system → Domestic market
- ➤ 8 banks, balance sheet indicators, 2012 data



# **Indicators**

#### Table 1. Balance sheet indicators for identifying SIBs in Kosovo

Criteria	Indicators					
Size = 40%	1. Cash and balances with CBK					
	2. Deposits					
	3. Participation share in banks' own resources					
	4. Bank placements from other banks					
	5. Securities					
	6. Retained profit					
	7. The share of the number of total depositors					
	8. The share of banking system liquid assets					
Substitutability = 40%						
	9. The share of agricultural loans					
	10. The share of household loans					
	11. The share of trade loans					
	12. The share of industry loans					
	13. The share of Government banking sector deposits					
	14. The share of public enterprises' deposts					
	15. The share of total loans to total assets					
Interconnectedness = 20%						
	16. Bank placements on other banks					
	17. Securities					
	18. Subordinated debt					



# Results

Table 2. The identification of the SIBs in Kosovo

*Banks/Criteria	Size	Substitutability	Interconnectedness		
Bank A	V	V	V		
Bank B					
Bank C					
Bank D					
Bank E	√	√	$\checkmark$		
Bank F					
Bank G	√	√	$\checkmark$		
Bank H		$\checkmark$			

<sup>\*</sup>Note: The ordering of the banks is random.



# Contagion risk

Table 3. Assets/Tier I capital of the bank in column to the bank in row

EXPOSURE MATRIX	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F	Bank G	Bank H
Bank A		0.00	0.00	10.84%	0.00	0.00	0.00	0.00
Bank B	0.00		0.21%	0.06%	0.01%	0.00	0.05%	0.00
Bank C	0.00	0.00		0.11%	1.80%	0.00	0.13%	0.00
Bank D	0.002%	0.00	6.50%		0.24%	0.00	0.00	0.00
Bank E	0.00	0.00	0.10%	0.004%		0.00	0.00	0.00
Bank F	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Bank G	0.00	0.00	9.02%	18.32%	0.38%	4.26%		0.00
Bank H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	



### Thank you!

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