Bank versus market financing: implications for systemic risk

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14 November 2018

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Outline

1. Financial stability, systemic risk and the real economy

2. Bank and market financing: implications for systemic risk

3. Policy implications

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Why do we need the financial system?

To improve the allocation of economic resources by:

- Channeling funds from savings to borrowers
- Transforming liquid deposits into long-term loans
- Pricing and diversifying risks
- Reducing information asymmetry between savers and borrowers
- Reducing transaction costs
- Absorbing shocks

What is financial stability?

Financial stability exists when the financial system:

- Efficiently allocates resources
- Effectively prices and manages risks
- Absorbs shocks, and
- Does not itself create risks

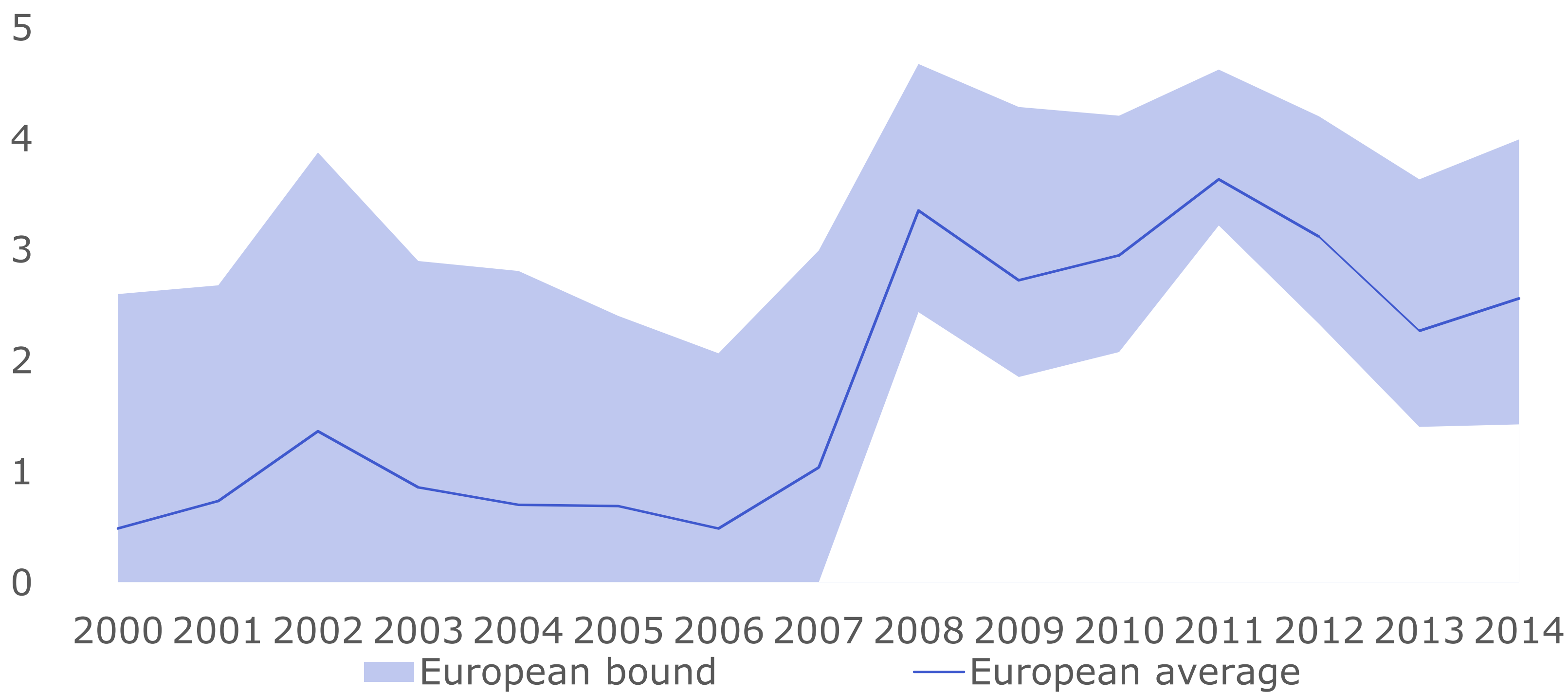
Financial stability upset by systemic risk

Systemic risk:

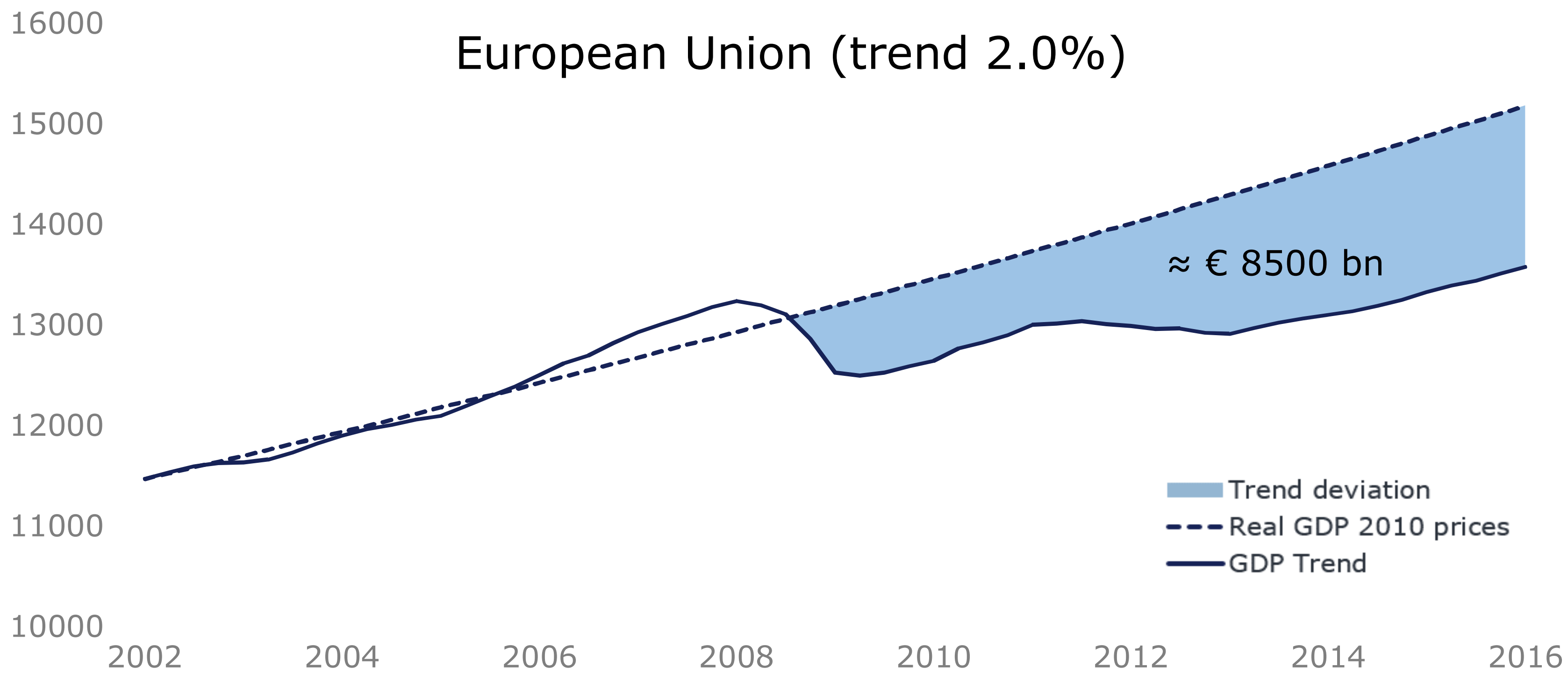
1. Caused by an impairment of all or parts of the financial system

2. Can have serious negative consequences for the real economy

Systemic risk during the financial crisis



Real costs of financial instability



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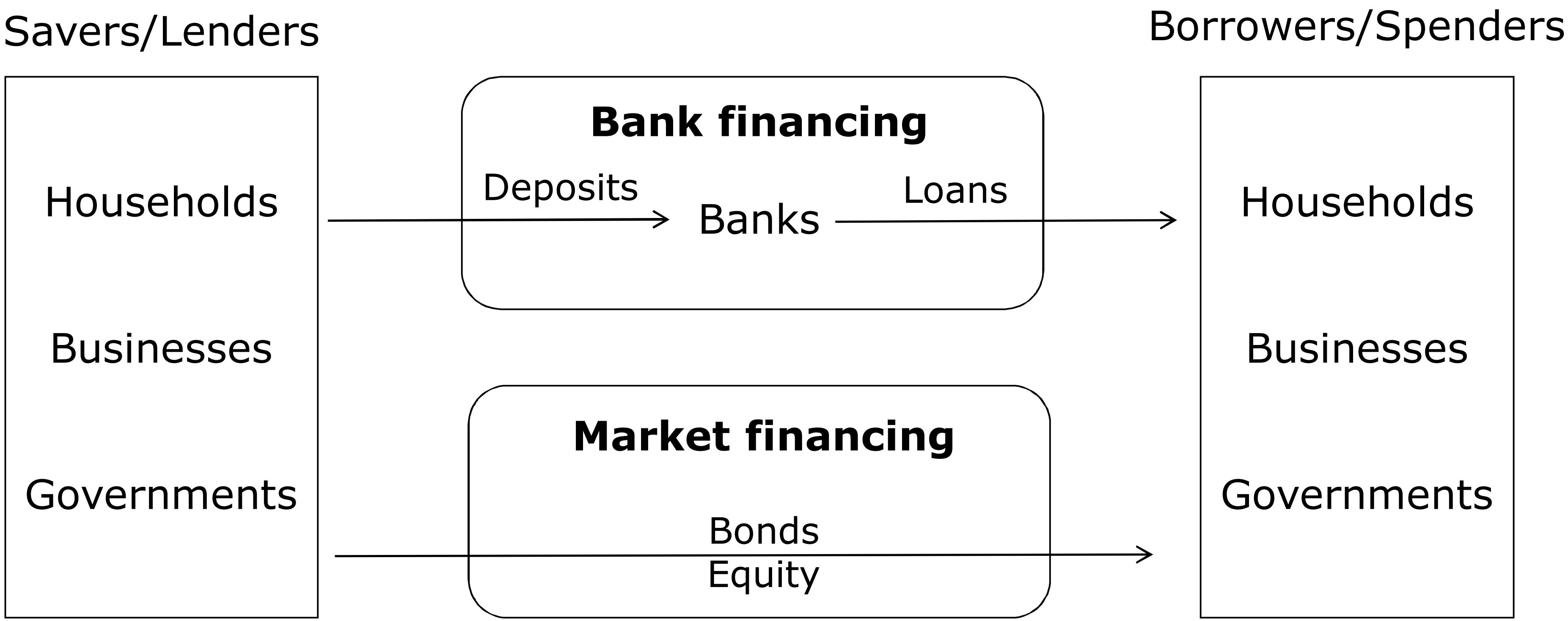
Two stylized forms of finance



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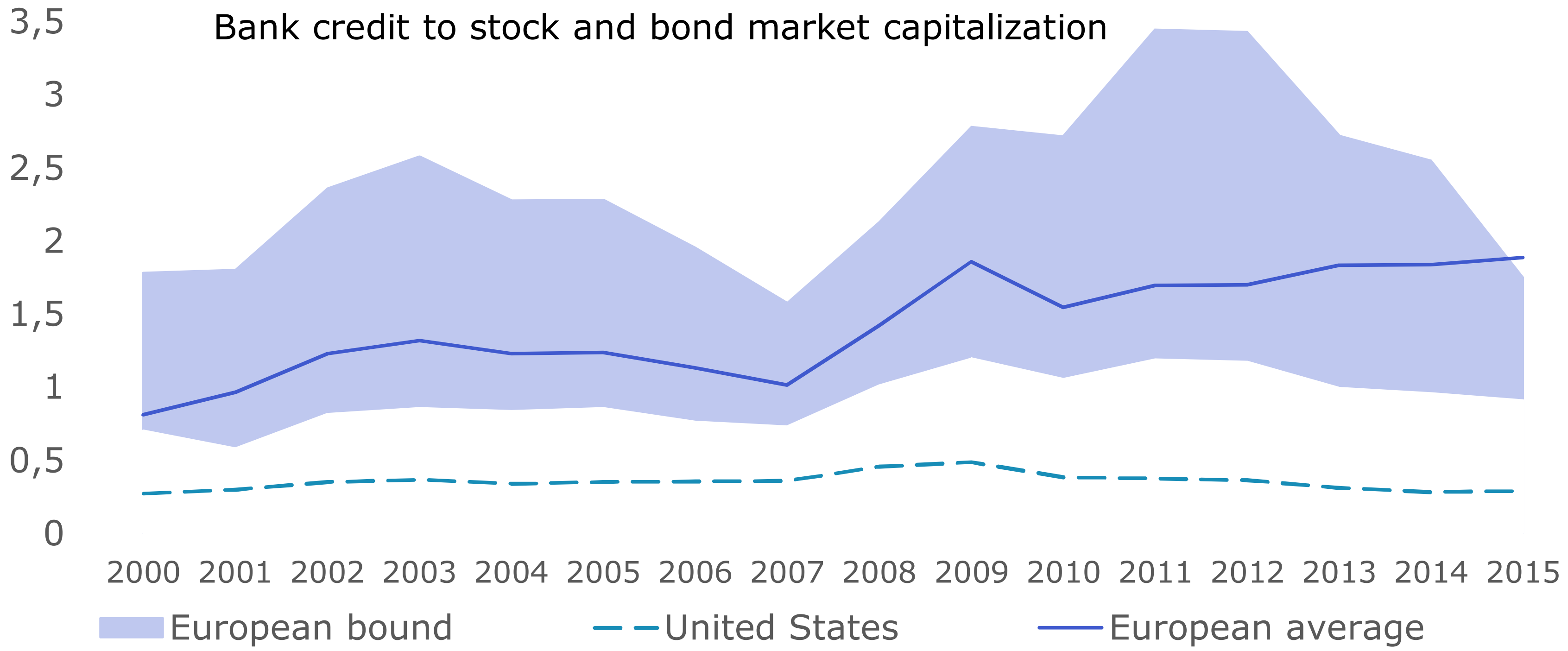
European versus American financial structure



Source: Bats and Houben (2017)

Financial structure and systemic risk

Bank-based structures have more systemic risk than market-based structures, because:

- Banks are more leveraged
- Bank financing has larger asset-liability mismatches
- Banks are more interconnected, with longer and more complex intermediation chains
- Markets can act as ‘spare tire’ financing when bank financing is disrupted

Financial structure and systemic risk

Regressor	Systemic risk			
Bank-to-market financing ratio	0.0075*** (0.0015)		0.0102* (0.0053)	
Bank credit		0.0138** (0.0050)		0.0318** (0.0139)
Non-financial debt market capitalization (log)		-0.0016*** (0.0005)		0.0070 (0.0079)
Stock market capitalization (log)		-0.0120** (0.0057)		-0.0191** (0.0090)
Bank-to-market financing ratio during banking crises	-0.0021 (0.0017)		-0.0079 (0.0057)	
Banking crises	0.0221*** (0.0036)		0.0321*** (0.0095)	
Banking sector concentration	-0.0052 (0.0077)	-0.0043 (0.0086)	-0.0089 (0.0107)	-0.0235 (0.0164)
Banks' noninterest income	-0.0170 (0.0106)	0.0070 (0.0085)	-0.0037 (0.0189)	0.0014 (0.0192)
Constant	0.0127** (0.0054)	-0.0136* (0.0069)	0.0064 (0.0175)	0.0139 (0.0297)
Time fixed effects	No	Yes	No	Yes
N	235	289	235	289
Estimation method	Fixed effects OLS	Fixed effects OLS	GMM	GMM

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Source: Bats and Houben (2017)

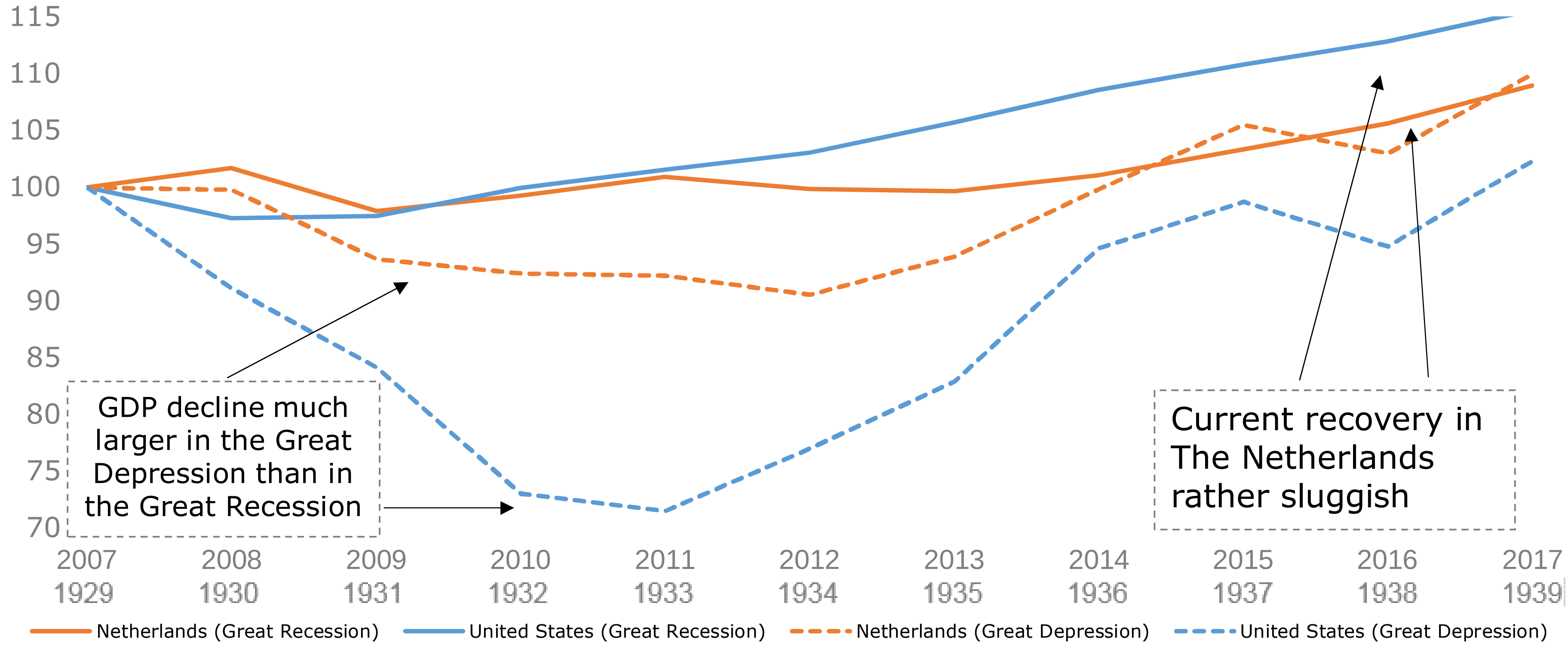
Financial structure and output costs of recessions

Output cost of recessions and financial structure — Table 2

	Financial structure[1]	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
	(I)	(II)	(III)	(IV)	(V)	(VI)
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[2]	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

Source: Gambacorta, Yang and Tsatsaronis (2014)

Real GDP impact of financial crises



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Policy implications

- Increase resilience to systemic risk by reducing bank financing relative to bond + stock market financing
- Advance European capital markets union
- Complete tightening of bank regulation
- Monitor shadow banking system for new risks