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Abstract

Which financial system for growth and development? Reflections on current regulatory approaches under an endogenous money framework

The paper analyses current approaches for banking and financial system regulation, taking into account the lessons from the theory of endogenous money. After the global financial and economic crisis of 2008/9, different approaches to re-regulating the financial system have been discussed and different countries have taken slightly different paths. Some approaches have focused on shrinking the financial system or on separating the core banking sector from the more speculative elements of the financial system while others have focused on increasing the liability of shareholders by demanding more equity capital with the hope to incentivise less risky behaviour by financial market participants.

The paper argues that under an endogenous money approach, and taking into account the banking system's macroeconomic role for "monetizing capital" (Tobin 1998), there is a case for approaches limiting the banking system's scope and activities. While there can be a justification for allowing a banking system to work without large requirements for equity capital and with occasional public bail-outs of banks (as aggregate investment in this approach is seen as bringing positive macroeconomic externalities and implicit government subsidies through occasional bail-outs might increase output and efficiency of the economy), this point does not hold for all possible activities of the banking sector. An implicit subsidy for speculative activities might even be destabilizing and bring a loss of efficiency. In order to make sure that these implicit subsidies are limited to the monetization of capital, activities thus need to be limited.

In contrast, the approach of tackling financial system volatility mainly through higher capital requirements seems less promising. On the one hand, these rules also burden banks giving loans financing real capital investments. On the other hand, given recent insights from behavioural finance, it seems plausible that there are limits in how far increasing potential liabilities can actually prevent overly risky behaviour.

For developing countries (with larger macroeconomic volatility and hence larger banking sector vulnerabilities), it is argued that the focus should be on developing the core banking sector providing loans to the business sector instead of fostering financial innovation in the form of consumer loans and large derivative markets.

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Which financial system for growth and development?

Reflections on current regulatory approaches under an endogenous money framework

Prof. Dr. Sebastian Dullien
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Program

1. Introduction
2. Regulatory approaches after the financial crisis 2008/9
3. Endogenous money, monetization of capital and regulation
4. Conclusions

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REGULATORY APPROACHES AFTER THE CRISIS

Remember the subprime crisis of 2008/9 and aftermath

- Lending binge in US, UK and Spain
- Complex financial products
- Intransparent linkages
- Bank failures
- Bank bailouts
- In some cases: Sovereign debt problems
- **Push for more regulation**

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Proposed and realized reforms after the financial crisis of 2008/9

Proposal (Dullien et al. 2009/11; Stiglitz et al. 2009; Hellwig 2009)	US	European Union	Basel III
Increase capital requirements	X	X	X
Prohibition of certain financial products		(X)	
Positive list of financial contracts allowed			
Separation of commercial banking from trading activities	(X)		
Severing the link between commercial banks and other financial institutions			
Prohibiting public bail-outs of banks		X	

ENDOGENOUS MONEY, MONETIZATION OF CAPITAL AND REGULATION

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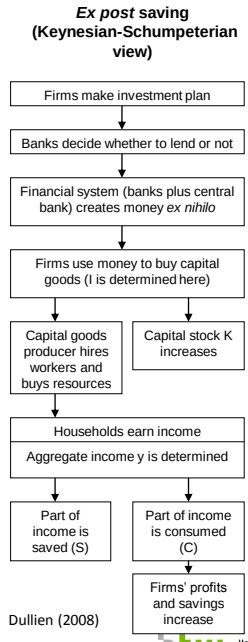
Endogenous money, saving and investment: Flow perspective

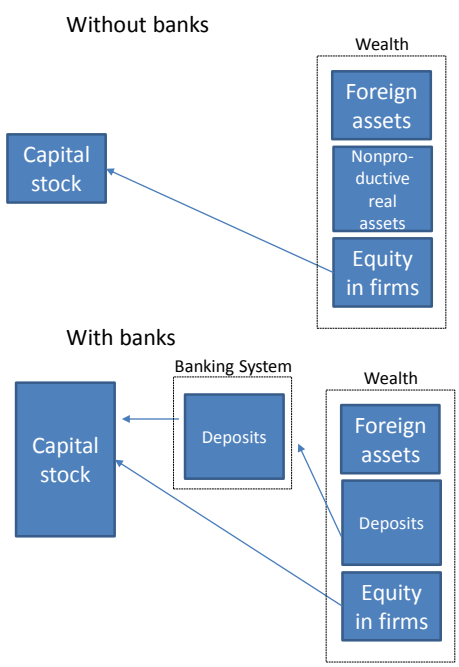
- (Post-)Keynesian view:
  - Central banks can create money ex nihilo
  - In the interaction with commercial bank, investment can be stimulated and saving will be created ex post



Dullien (2008)

Endogenous money and capital stock: Stock perspective

- **But:** Flow perspective not yet an equilibrium perspective (Goodhart 1989)
- In equilibrium money needs to be held by residents
- Holding of deposits in national banking system increases possible capital stock – *monetization of capital* (Tobin 1998)



Bail-out of banks in a world of monetization of capital

- Monetization of capital has important macroeconomic effects (see New Growth Theory)
  - Externalities!
- Yet, banks which monetize capital carry maturity and credit risk
- Large shocks can wipe out banks
- Deposit insurance and bail-outs in large crisis can increase confidence and hence lead to more monetization of capital
- **Implicit subsidy of banks is justified because of positive externalities**

How much money can a central bank create? (Dullien 2009)

- Limit from flow perspective:
  - Commercial banks‘ willingness to lend
  - Possible inflation from excess aggregate demand
- Limit from stock perspective:
  - Public needs to be willing to hold nominal assets in domestic currency

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Problem here: How much are commercial banks willing to lend?

- Reserves are seen to be endogenous (Moore 1988; Bindseil 2004a, b)
  - Not a constraint for banks
- Hence, lending depends on:
  - [Quantity and quality of loan demand]
  - Capital availability (Borio and Disyatat 2010)
  - Banks‘ alternative activities of funds
- **Higher capital requirements can constrain lending!**

But what about Modigliani-Miller for banks?

- But: Basel committee argues that higher capital reuqirements make banks safer, hence it does not raise overall costs of capital
- Is this true?
  - There seems to be a certain liquidity preference for nominally fixed assets or inflation-linked assets (also at the heart of Tobin‘s *monetization of capital*)
  - Hence, equity capital is more expensive than debt financing

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Now effect of regulation/deregulation on monetization of capital

1. Tightening of capital requirements
2. „Bail-in before bail-out“ rules
3. Allowing for alternative activities (loans to hedge funds, speculation etc.)

Tightening of capital requirements and monetization of capital

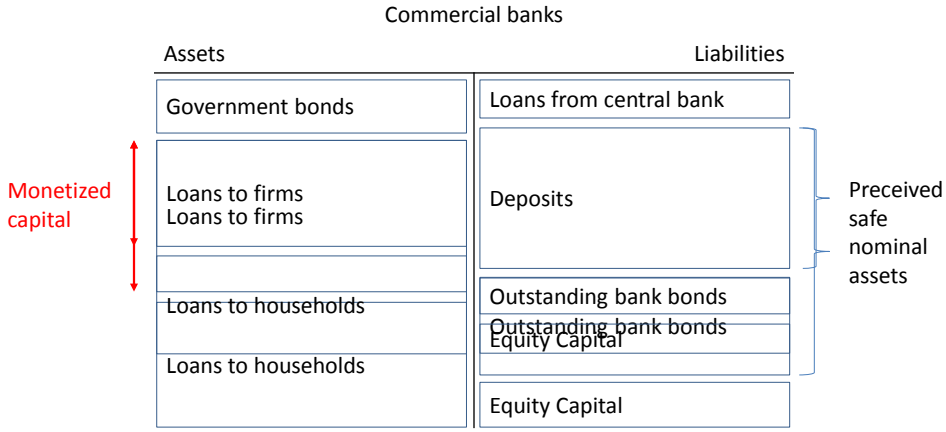
Commercial banks

Assets	Liabilities
Government bonds	Loans from central bank
Loans to firms Loans to firms	Deposits Deposits
	Outstanding bank bonds
Loans to households	Outstanding bank bonds
Loans to households	Equity Capital
	Equity Capital

Monetized capital

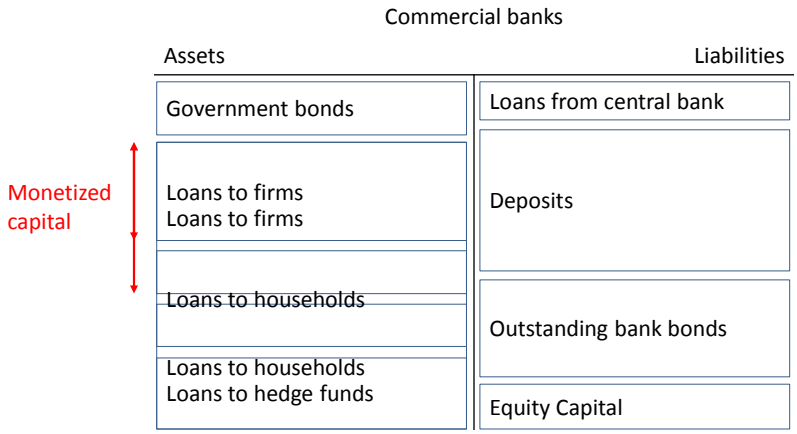
If we now require a higher equity capital ratio, but public does not like to go into riskier assets, bank cut back on lending

„Bail-in before bail-out“ and monetization of capital



If we now require a bail-in of bondholders before any bail-out, public will see bank bonds not as nominal asset anymore and might provide less finance through bonds + equity

Allowing for alternative activities (loans to hedge funds, derivative speculation etc.)



If banks engage in lending to other financial institutions or trade in derivatives, these activities crowd out loans to firms

Summary regulation/deregulation and monetized capital

- Higher capital requirements -> less monetized capital
- Bail-in before bail-out -> less monetized capital
- Speculative activities by banks -> less monetized capital

Alternative approaches to limit bail-outs & high capital requirements

- Limit alternative activities of banks
- Limit financial innovation
- Stabilize macroeconomic environment
  - This will make banks less prone to shocks

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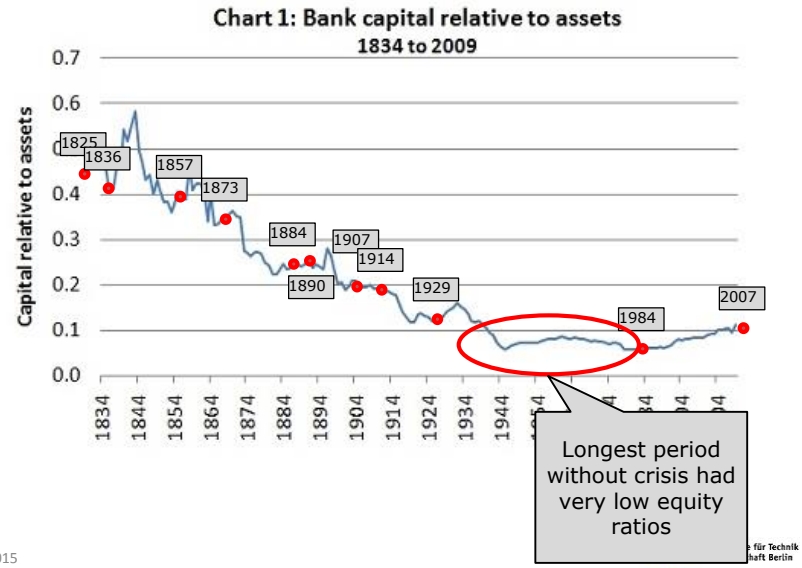
An interesting piece of historical evidence: The US banking system and crises



CONCLUSIONS FOR DEVELOPED COUNTRIES & FOR FINANCIAL SYSTEM DEVELOPMENT

Conclusions for the „North“

- The regulation initiatives in the EU and the US might have focused too much on increasing individual liability

Recommendations for emerging markets/developing countries

- Focus on development of traditional banking services (deposit products, corporate loans, mortgage loans)
- Focus on macroeconomic stabilization
- Less focus on financial innovation
- Less focus on consumer credit

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THANK YOU VERY MUCH FOR YOUR ATTENTION

Tightening of capital requirements and monetization of capital

Commercial banks

Assets	Liabilities
Government bonds	Loans from central bank
Loans to firms	Deposits
Loans to households	Outstanding bank bonds
	Equity Capital

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