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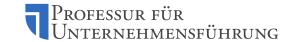
## Status quo and the future of entrepreneurial finance

Prof. Dr. Jörn Block Universität Trier and Erasmus University Rotterdam

> European Centre for Alternative Finance: Crowdfunding Research Week, June 7, 2017



## Agenda for the talk



- Entrepreneurial finance today and in the past
- New players in entrepreneurial finance and why they are there
- The future of crowdfunding

# Entrepreneurial finance today and in the past





#### Venture Capital

An International Journal of Entrepreneurial Finance

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## Financing patterns of European SMEs – an empirical taxonomy

Alexandra Moritz, Joern H. Block & Andreas Heinz

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Firms use more than one financing instrument. There are complementary and substitutive effects between the instruments.

## Data and method – SAFE Survey



#### • Data

- Survey on the access to finance of enterprises (SAFE Survey)
  Conducted on a bi-annual basis by the ECB and once per year
  (before 2013 every two years) by the ECB and EC
- The period Apr. Sep. 2015 (SAFE Survey 2015H1) is used for the analysis
- The survey includes a large number of financing instruments as well as firm-, product- and industry-specific information
- Sample: 13,098 SMEs in 27 European countries

#### Method

- Cluster analysis as explorative analysis to develop SME financing patterns (hierarchical cluster analysis with Ward algorithm and squared Euclidean distance)
- Financing instruments as active cluster variables and firm-, product-, industry- and country-specific variables as passive cluster variables

## Financing patterns of SMEs in Europe



## Explorative cluster analysis: 7 clusters emerge

Financing instruments	Mixed- financed (other loans)	Mixed- financed (retained earnings)	State- subsidized	Debt- financed	Trade-credit financed	Asset- based financed	Internally- financed	Pearson- Chi <sup>2</sup>
Retained earnings or sale of assets	20.6%	100%	17.4%	0.0%	4.6%	0.0%	0.0%	9354.2 ***
Grants or subsidised bank loan	1.3%	3.6%	100%	0.0%	1.5%	0.0%	0.0%	10949.5 ***
Bank overdraft, credit line or credit cards overdraft	48.6%	46.8%	57.5%	82.2%	51.7%	40.9%	0.0%	4183.2 ***
Bank loans	24.3%	26.5%	43.9%	45.2%	24.8%	0.0%	0.0%	2398.9 ***
Trade credit	30.6%	33.8%	32.0%	0.0%	85.4%	0.0%	0.0%	6454.8 ***
Other loan	100%	1.7%	0.0%	0.0%	4.4%	0.0%	0.0%	10061.7 ***
Debt securities issued	0.6%	0.6%	0.2%	0.0%	8.3%	0.0%	0.0%	750.1 ***
Equity	0.8%	1.2%	0.3%	0.0%	10.7%	0.0%	0.0%	934.6 ***
Leasing / factoring	30.9%	38.6%	39.2%	15.6%	35.1%	100%	0.0%	4739.4 ***
Other	1.2%	0.5%	8.5%	0.0%	5.3%	0.0%	0.0%	415.6 ***
No external financing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	12144.0 ***
N	972	1531	956	2062	1886	1174	3563	
Percentage of firms	8.0%	12.6%	7.9%	17.0%	15.5%	9.7%	29.3%	

*Notes*: N=12,144; Pearson's chi-square test: \*\*\*p < 0.01. \*\*p < 0.05. \*p < 0.1.

## Replication



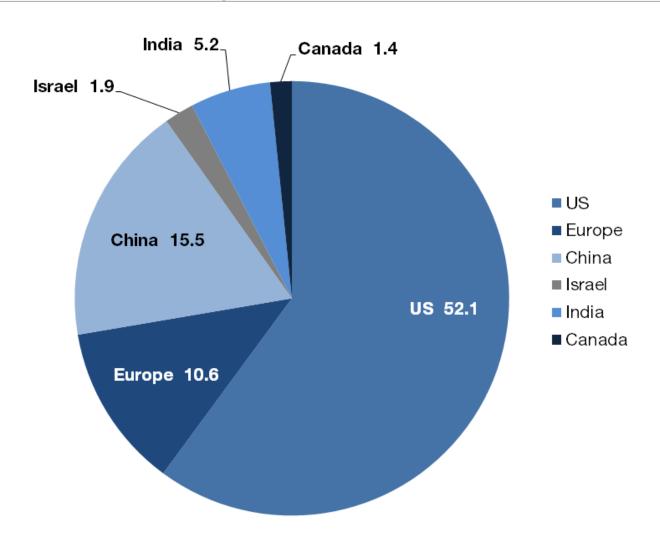
Available at: <a href="http://www.eif.org/news">http://www.eif.org/news</a> centre/research/index.htm

# There are strong country differences

## Top countries for total venture capital invested



Share of total venture capital invested 2014, \$ billions

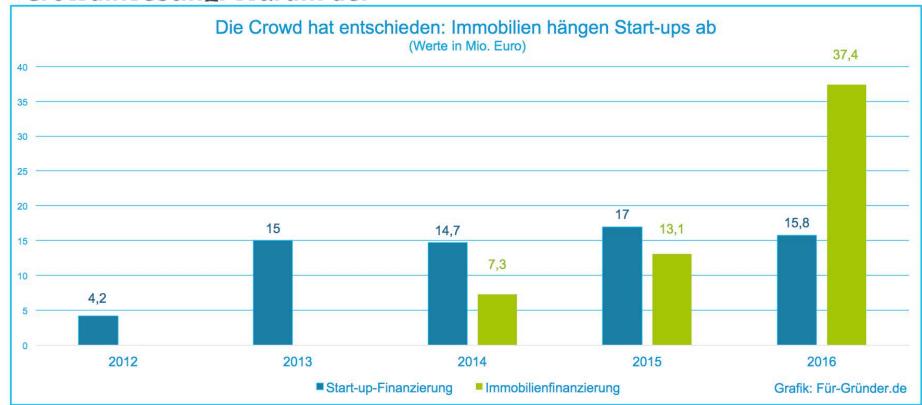


Source: http://www3.weforum.org/docs/WEF Alternative Investments 2020 An Introduction to AI.pdf

# The share of (equity) crowdfunding in SME finance is (still) low ...



#### Crowdinvesting: Warum der



and (in some sectors) even decreasing!

Source: <a href="https://www.fuer-gruender.de/blog/2017/02/crowd-monitor-2016/">https://www.fuer-gruender.de/blog/2017/02/crowd-monitor-2016/</a>

# New players in entrepreneurial finance



#### New players in entrepreneurial finance and why they are there

Joern H. Block • Massimo G. Colombo • Douglas J. Cumming • Silvio Vismara

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Abstract The landscape for entrepreneurial finance has changed strongly over the last years. Many new players have entered the arena. This editorial introduces and describes the new players and compares them along the four dimensions: debt or equity, investment goal, investment approach, and investment target. Following this, we discuss the factors explaining the emergence of the new players and group them into supply- and demand-side factors. The editorial gives researchers and practitioners orientation about recent developments in entrepreneurial finance and provides avenues for relevant and fruitful further research.

 $\label{eq:Keywords} \begin{aligned} & \textbf{Keywords} \;\; & \textbf{Entrepreneurial finance} \cdot \textbf{SME financing} \cdot \\ & \textbf{Financing instruments} \cdot \textbf{New players} \cdot \textbf{Trends} \cdot \\ & \textbf{Crowdfunding} \end{aligned}$ 

JEL classification L26 · G23 · G24

#### 1 Introduction

Young innovative firms play a key role in modern knowledge-based economies because they are an important source of new jobs, radical innovations, and produc-

Open access: <a href="https://link.springer.com/article/10.1007/s11187-016-9826-6">https://link.springer.com/article/10.1007/s11187-016-9826-6</a>

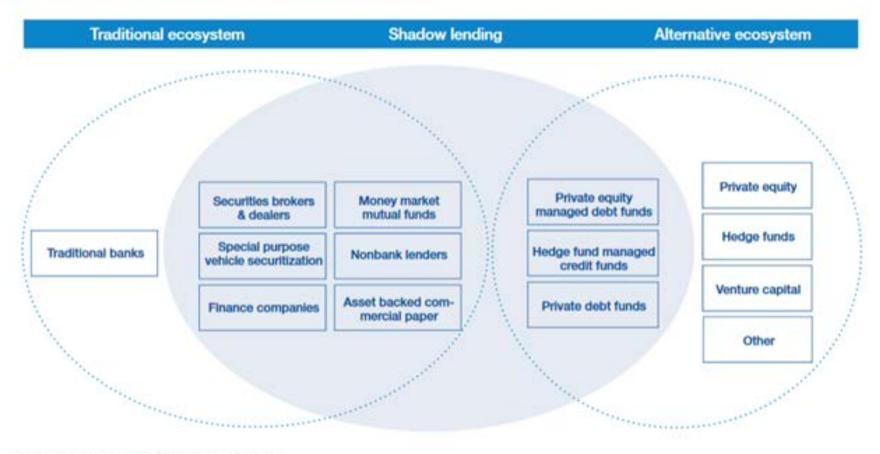
Table 1 An overview and comparison of new players in entrepreneurial finance

New player	Debt or equity	Investment goal	Investment	approach	Investment target	
			Active or passive	Non-financial support	•	
Accelerators (and incubators)	Depends on type of accelerator/ in- cubator	Financial, strategic, political (depends on type of accelerator/incubator)	Active	Management support, training, network access	Early stage start-up	
Angel networks	Equity	Financial	Active	Management support, network access	Early stage start-up	
Crowd						
- Debt-based	Debt	Financial	Passive	None	Early stage start-up or project	
- Donation-based	-	Social	Passive	None	Social venture or project	
- Reward-based	-	Product-related	Passive, Some- times active	Sometimes product testing	Early stage start-up or project	
- Equity-based	Equity	Financial	Passive	None	Early stage start-up or project	
Corporate venture capital (CVC)	Equity	Financial, technological, and strategic	Active	Management support, technology support	Early and later stage start-up	
Family offices	Equity	Financial	Mostly passive	Little	Later stage start-up	
Governmental venture capital (GVC)	Debt or equity	Financial and governmental	Mostly passive	Little	Early and later stage start-up	
IP-based investment funds	-	Financial	Passive	None	Patents	
IP-backed debt funding	Debt	Financial	Passive		IP-based start-ups and established mid- sized firms	
Mini-bonds	Debt	Financial	Passive		Established mid-sized firms	
Social venture funds or social venture capital	Debt and equity	Financial and social	Active	Management support, network access	Social ventures	
University-managed or university- based funds	Mostly equity	Financial and university-related	Active	Management support, network access	Academic and student start-ups	
Venture debt lenders or funds	Debt	Financial	Passive	None	Later stage start-up	

## Different ecosystems



Figure 21: Overview of key actors in the shadow lending system



Source: World Economic Forum Investors Industries

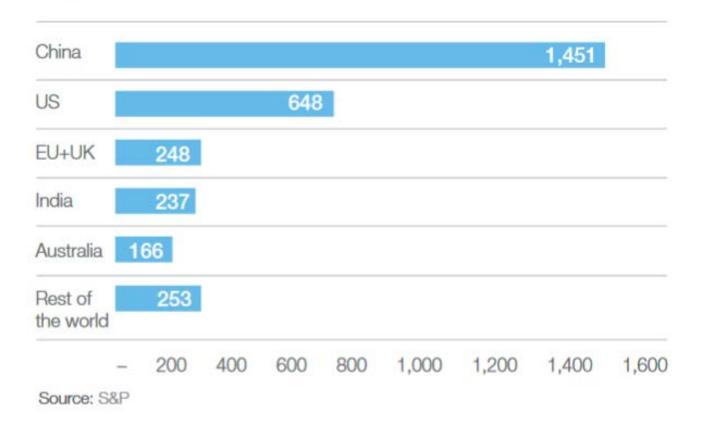
Source: <a href="http://www3.weforum.org/docs/WEF">http://www3.weforum.org/docs/WEF</a> Alternative Investments 2020 An Introduction to AI.pdf

#### Bank disintermediation



Figure 20: Projected value of bank disintermediation in 2018 (\$ billions)<sup>41</sup>

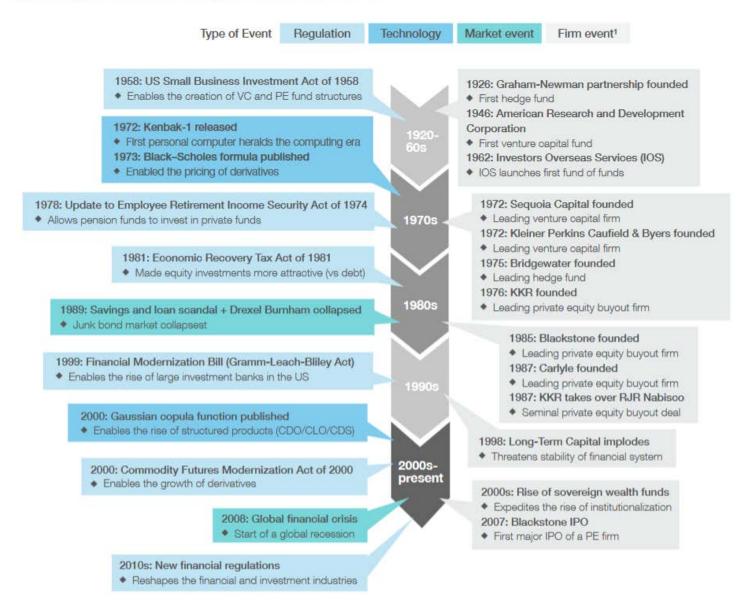
Projected value of bank disintermediation in 2018, \$ billions



Source: <a href="http://www3.weforum.org/docs/WEF\_Alternative\_Investments\_2020\_An\_Introduction\_to\_AI.pdf">http://www3.weforum.org/docs/WEF\_Alternative\_Investments\_2020\_An\_Introduction\_to\_AI.pdf</a>

... and why they are there

Figure 4: Key moments in the history of alternative investments



Source: http://www3.weforum.org/docs/WEF Alternative Investments 2020 An Introduction to AI.pdf

## Supply-side factors



#### • Economic and financial crisis

- 2008/2009 financial crisis reduces supply of funds, increases regulation, and makes it more difficult and costly for banks to provide small firm financing to risky (!) ventures
- But: ECB cuts interest rates to stimulate economy

#### • New regulations

- Increased regulation on traditional stock markets
  → off-exchange transactions grow
- JOBS Act in the US

#### New technologies

- Social media
- Blockchain

#### • Entrepreneurship and innovation policies

- State-owned banks, government venture capital
- Tax deductions and/or subsidies for VCs and BAs

#### **Demand-side factors**



#### • Product-market related factors

- Network effects and winner-take-all markets
- Customer co-creation, mass customization
- Value-added of investors more important
- Growing importance of IP and patents

#### • Disintermediation

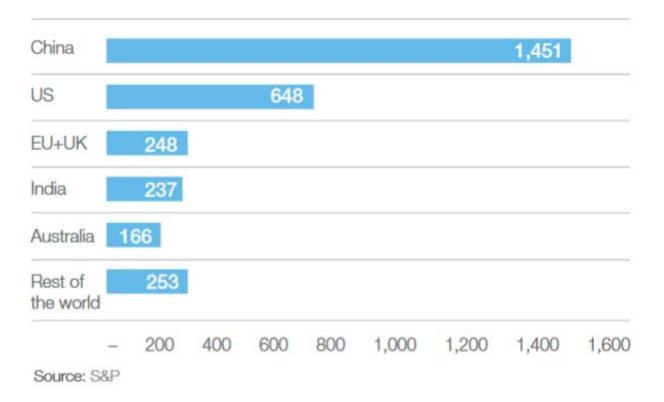
- Do we need more or less or different intermediation?
- What is the role of banks?

#### Reminder: bank disintermediation



Figure 20: Projected value of bank disintermediation in 2018 (\$ billions)<sup>41</sup>

Projected value of bank disintermediation in 2018, \$ billions



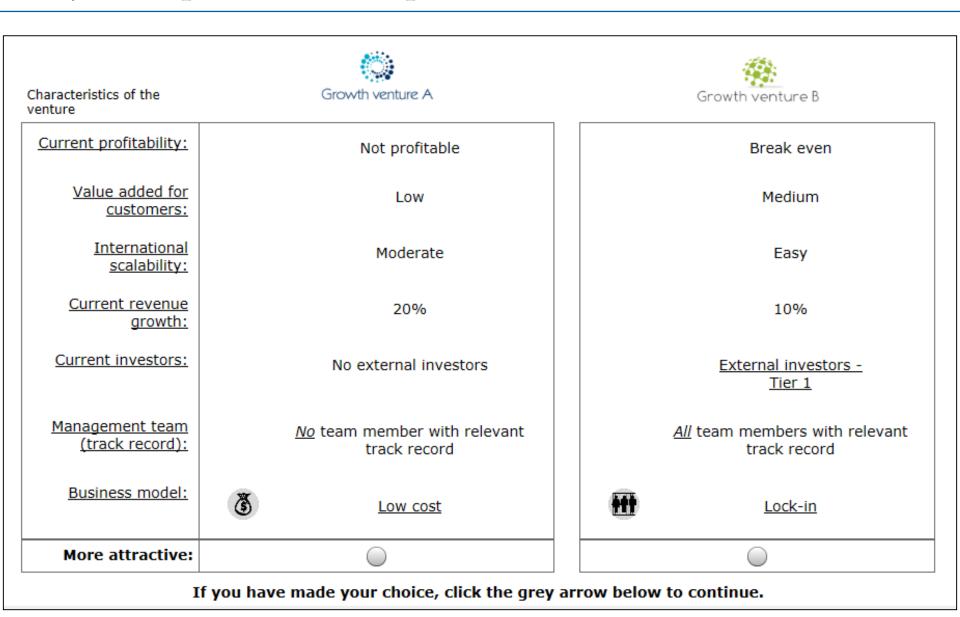
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But: the new players may have new investment criteria

(some preliminary empirical results about CVC and family offices)

## Conjoint experiment – sample choice scenario Trofessur für Unternehmensführung





### More than 800 participants

















ANDREESSEN HOROWITZ



Global growth investors















ORANGE GROWTH









































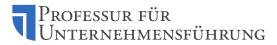








## Attribute importance by investor type (1/3)



### HB regressions by investor type (on dimensions level)

	Family office (Single and multi)		Venture capital fund		Corporate venture capital fund		Growth equity fund	
Management team (track record)	In 99	3	15.40	3	15.33	3	17.60	2
Current profitability	17.60	2	7.37		8.54		17.33	3
Current revenue growth	18.66	1	24.11	1	18.74	2	22.15	1
Current investors	9.13		9.67		11.05		6.47	
Business model	10.51		10.02		11.71		9.76	
Value added for customers	15.90		19.45	2	21.83	1	16.26	
International scalability	11.22		13.98		12.80		10.43	

calculations based on a subsample only.

## Attribute importance by investor type (2/3)



### HB regressions by investor type (on attribute level)

		Family office	Venture capital Fund	Corporate venture capital fund	Growth equity fund
ient	None	-66.75	-58.81	-51.41	-68.74
Management team	Some	20.78	11.97	-3.55	17.12
Mar	All	45.97	46.85	54.96	51.61
t ity	Profitable	56.01	19.50	20.22	54.65
Current profitability	Break even	7.97	5.39	5.03	4.03
O	Not profitable	-63.98	-24.89	-25.25	-58.68
ne	10%	-56.61	-79.06	-46.22	-82.87
reven	20%	-12.60	-35.43	-38.23	-27.60
Current revenue growth	50%	3.79	27.66	12.56	42.49
Cr	100%	65.42	86.84	71.89	67.97

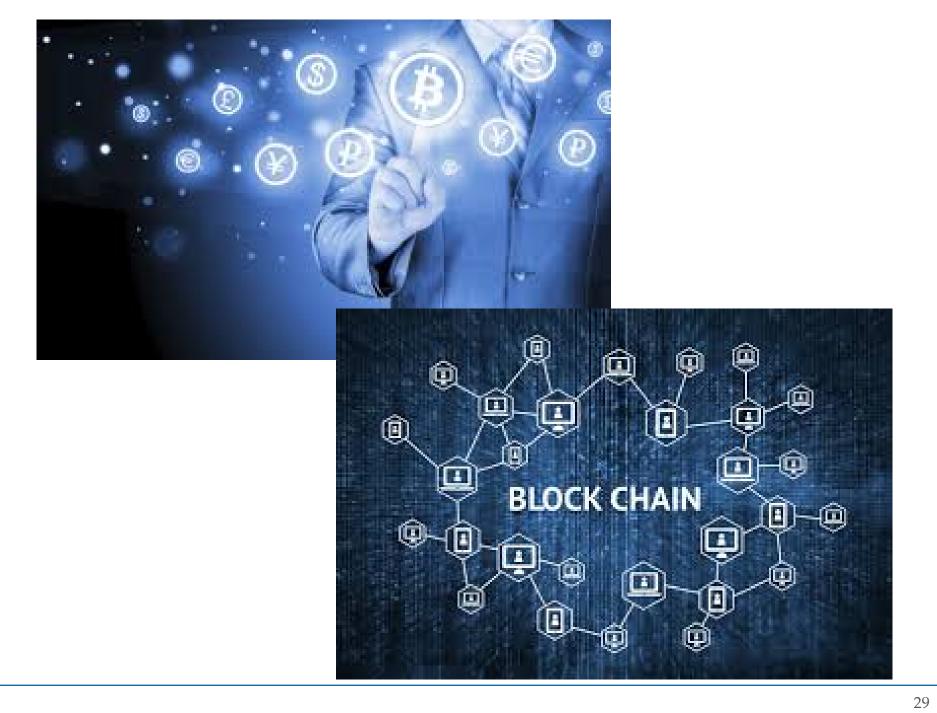
calculations based on a subsample only.

## Attribute importance by investor type (3/3)



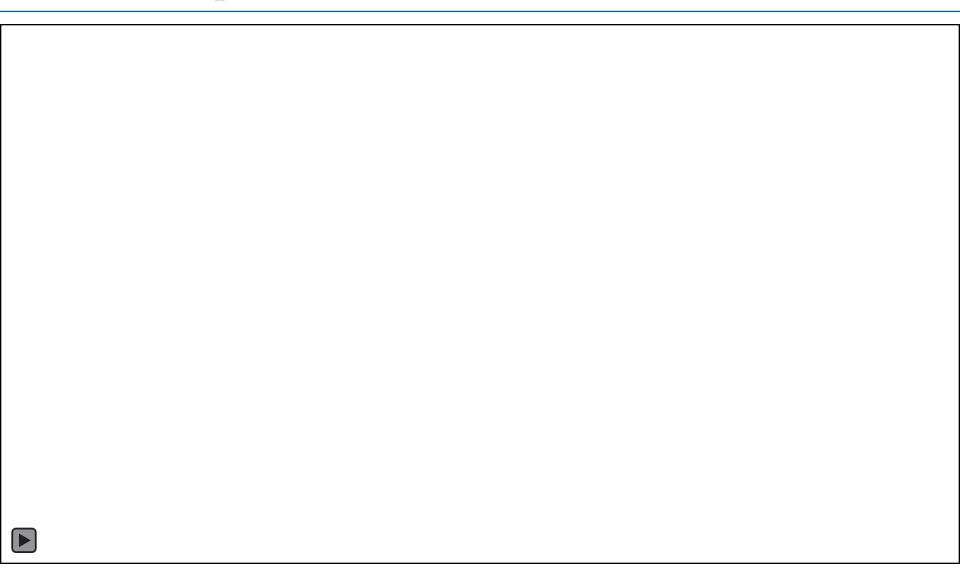
		Family office	Venture capital fund	Corporate venture capital fund	Growth equity fund
stors	No external investors	-2.38	-22.30	-26.14	-10.66
Current investors	External investors - Unfamiliar	-19.24	-14.86	-13.85	-1.04
Curr	External investors - Tier 1	21.63	37.16	39.99	11.70
lel	Innovation-centered	26.19	26.78	25.03	1.51
e mod	Low cost	-22.89	-34.46	-35.75	-16.51
Business model	Lock-in	15.96	18.48	18.53	24.07
Bu	Complementary offering	-19.26	-10.80	-7.81	-9.07
d for	Low	-61.49	-68.50	-82.32	-60.62
Value added for customers	Medium	16.11	3.56	13.94	9.18
Value	High	45.38	64.94	68.38	51.43
onal ty	Easy	26.93	44.48	38.02	30.76
International scalability	Moderate	6.44	7.69	4.98	6.89
Inte	Difficult	-33.37	-52.18	-43.00	-37.65

# The future of crowdfunding



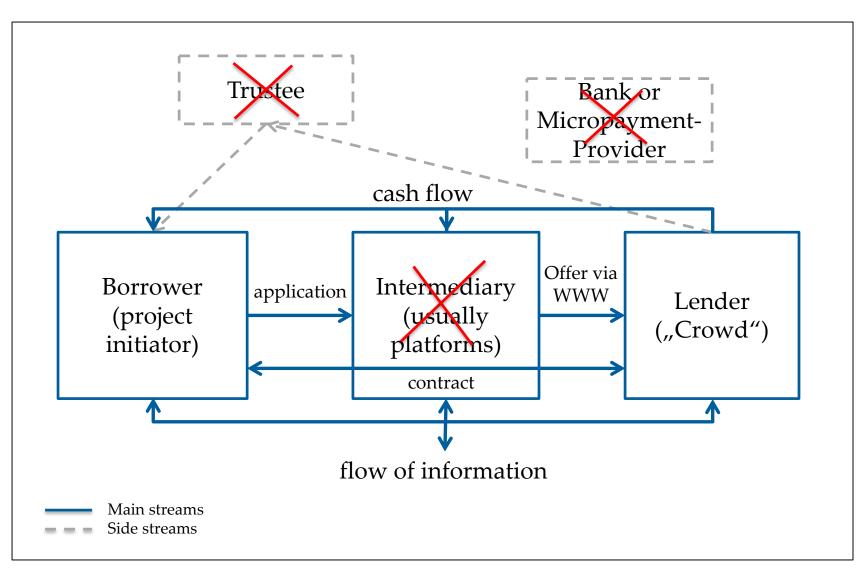
## Blockchain explained





## **Crowdfunding today**

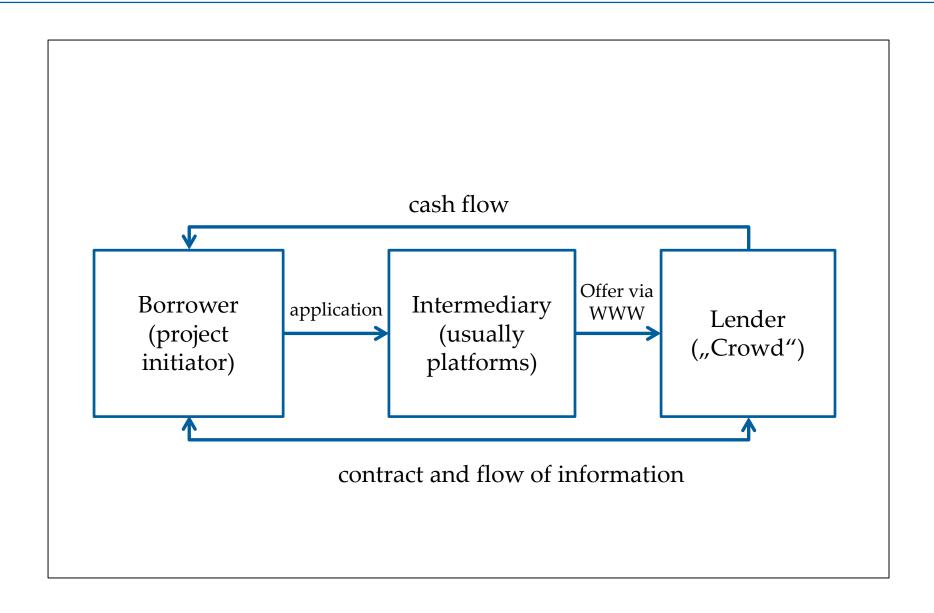




Source: Moritz, A., Block, J. (2014). Crowdfunding und Crowdinvesting: State-of-the-Art der wissenschaftlichen Literatur, ZfKE, 62 (1), 57-90.

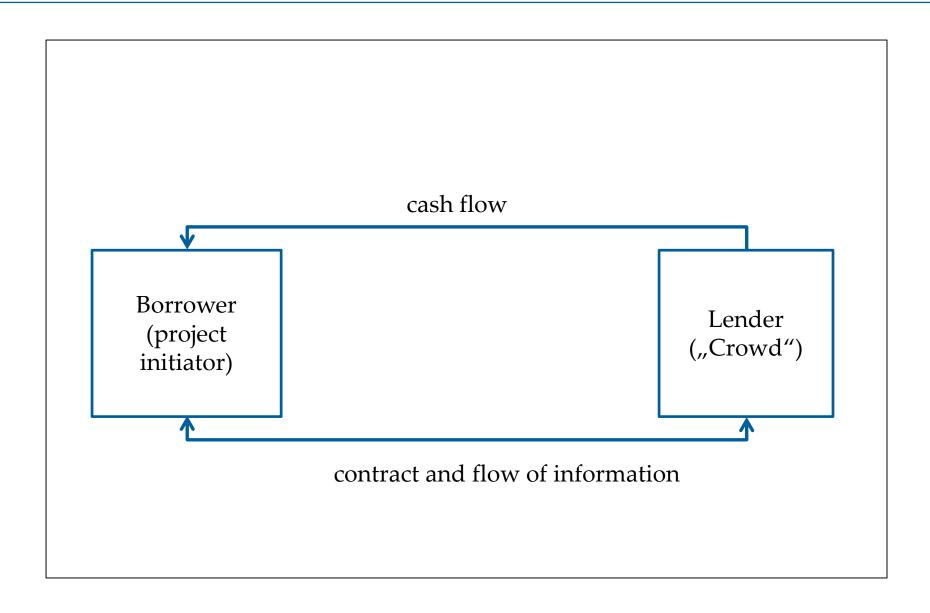
## Crowdfunding in the future - 1





## Crowdfunding in the future - 2





## Already reality today?





Ultimately it is a make or buy decision!

21. März 2016, 08:16 Uhr Crowdlending

#### Fans leihen Hertha BSC eine Million Euro



Hertha-Fans unterstützen ihren Verein nicht nur im Stadion. (Foto: AFP

Der Club leiht sich das Geld über eine Online-Plattform - und hat nach nur neun Minuten den gesuchten Betrag zusammen.

## The underlying question ...



- What is the (value-creating) <u>function of a platform</u> (being an intermediary)?
  - to <u>process the payment</u> between the crowd and the venture/project
  - to do the <u>contracting</u> between the crowd and the venture/project
  - to do the <u>screening</u> (and to give the ventures/projects legitimacy)
  - to <u>provide the crowd</u> through a large installed base (via direct and indirect network effects)
  - to help a venture/project to do marketing and enter a (new) product/geographical
  - **?**???

## Crowdfunding crowdsourcing



- Or: is the platform a way ...
  - to innovate together with (lead) users <u>and</u> at the same time secure funding
  - Will they merge? Complementarities?







# Crowdfunding as a tool for market research and pricing

#### MANAGEMENT SCIENCE

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роі 10.1287/mnsc.1090.1077 © 2010 INFORMS

## The "I Designed It Myself" Effect in Mass Customization

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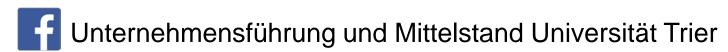
Many companies offer websites that enable customers to design their own individual products, which the manufacturer can then produce to order. To date, the economic value of products self-designed using mass customization (MC) toolkits has been attributed to the two factors of preference fit achieved (which should be as high as possible) and design effort (which should be as low as possible). On the basis of literature on behavioral decision making, we suggest a third factor, namely the awareness of being the creator of the product design. In the course of five different studies, we provide experimental evidence that this "I designed it myself" effect creates economic value for the customer. Regardless of the two other factors, self-designed products generate a significantly higher willingness to pay. This effect is mediated by feelings of accomplishment and moderated by the outcome of the process as well as the individual's perceived contribution to the self-design process. These findings have important implications for MC companies: It is not enough merely to design MC toolkits in such

The business models of crowdfunding platforms will change (and have so already)

## Thank you!

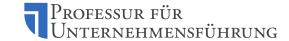
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#### Literature



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