

CROWDFUNDING AS A FINANCIAL INNOVATION & CROWDFUNDING SCIENCE: AGENDA & OUTLOOK

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FINANCIAL INNOVATION

Definition

“Financial Innovation embraces changes in the offerings of banks, insurance companies, investment funds and other financial service firms, as well as modifications to internal structures and processes, managerial practices, new ways of interacting with customers and distribution channels” (Mention and Torkkeli, 2012, p.11).

Characteristics

- Making and promotion of financial products and services
- Development of new processes
- Interaction with customers
- Development of new structures for the financial institutions
- *“Financial innovation is associated with different development processes in terms of activities, formality and cross-functional involvement as well as performance outcomes”* (Avlonitis et al., 2001 p.334)
- *“Users often develop and self-provide important financial services before banks or other types of financial service producers begin to offer them”* (Oliveira and von Hippel, 2011, p.806)
- **Societal impact, effect on “real” economy**

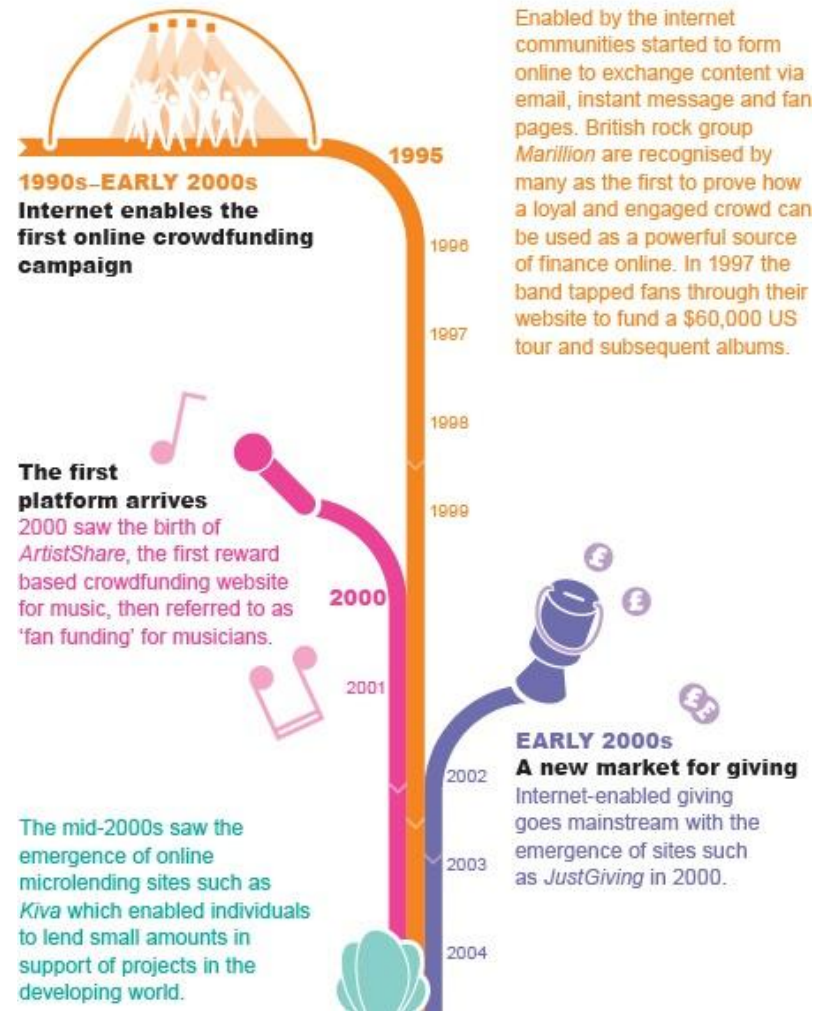
FINANCIAL INNOVATION

- An oxymoron?
- Responsible for the financial crisis?
- Societal impact?
- Sustainable human development?
- Role of Trust ?

*Shifting the focus of
development economics from
national income accounting to
people-centered policies*

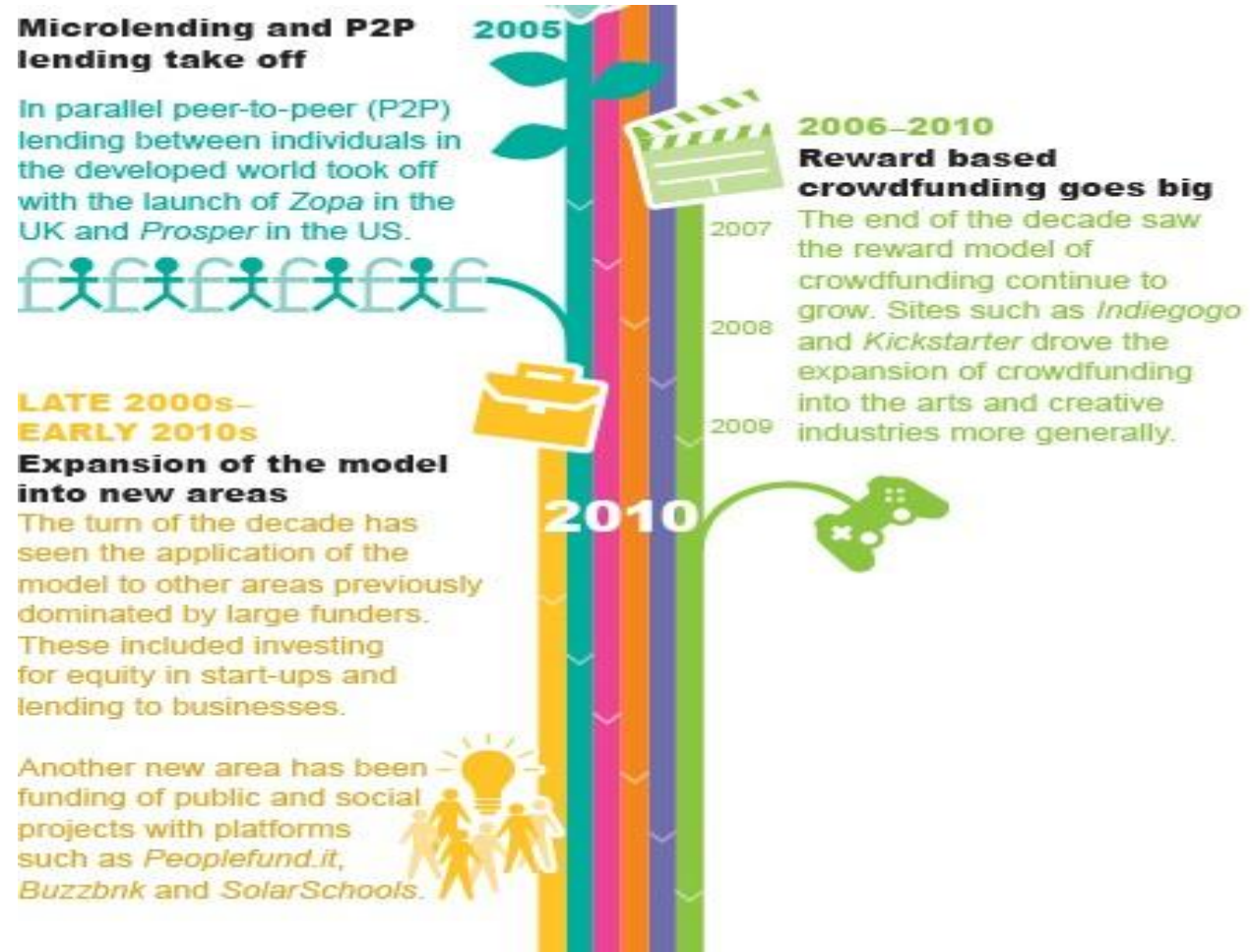
Mahbub ul Haq, 1995

A super short history of modern crowdfunding



Source:

<http://www.nesta.org.uk/news/history-crowdfunding>



GLOBAL CHALLENGES

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What are
the **greatest**
challenges
facing the
world in
2015?

North America Key challenges

- 1 Increasing inequality
- 2 Geopolitical shifts
- 3 Adapting to climate change

Europe Key challenges

- 1 Fostering economic growth and innovation
- 2 Youth unemployment
- 3 EU-Russia relations

Middle East & North Africa Key challenges

- 1 Persistent youth unemployment
- 2 Managing political transitions
- 3 Societal tensions

Asia Key challenges

- 1 Geopolitical tensions
- 2 Structural economic reform
- 3 Managing urbanization

Latin America Key challenges

- 1 Corruption
- 2 Education and skills development
- 3 Increasing inequality

Sub-Saharan Africa Key challenges

- 1 Education and skills development
- 2 Building sustainable governance systems
- 3 Delivering hard infrastructure

Source: Survey on the Global Agenda 2014

Read the report [#Outlook2015](#)



CROWDFUNDING PLATFORMS

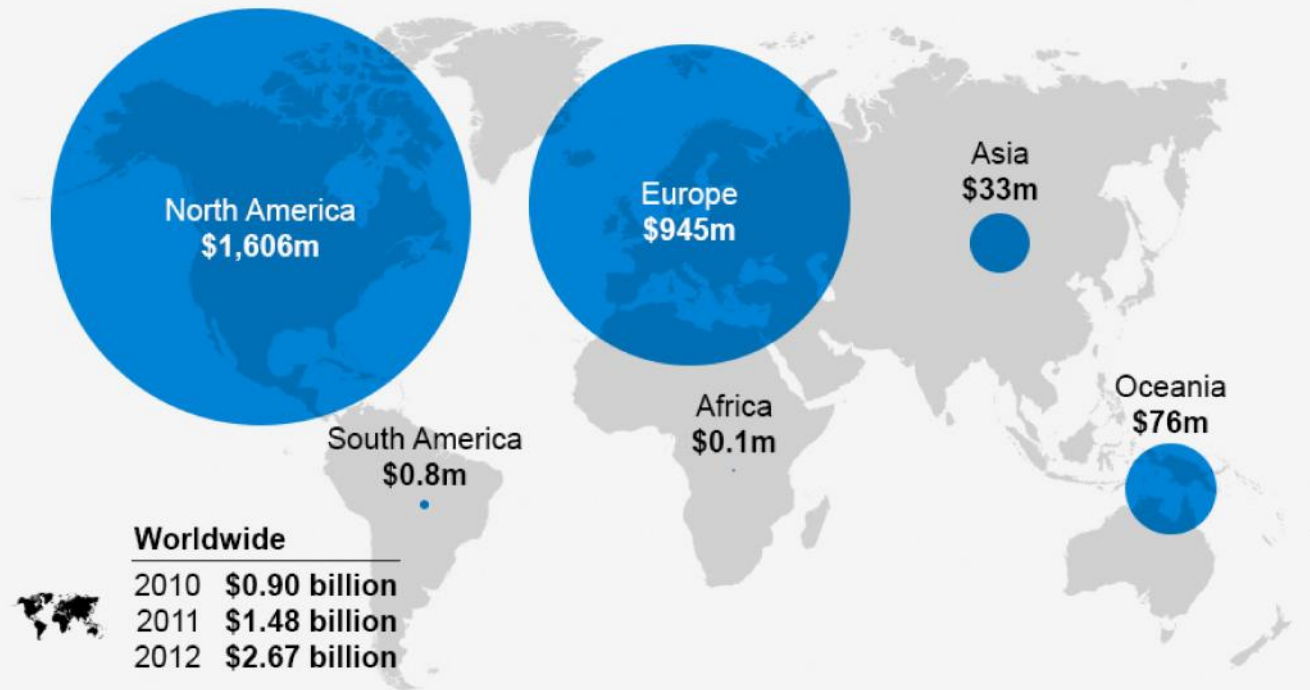
Some facts & figures

Number of crowdfunding platforms in the US	191
Percentage growth of CP worldwide	60%
Worldwide crowdfunding volume	2.8 bn\$ (2012)
Social causes are most active categories	30%
Projects launched on Kickstarter	222,533
Total funds raised of Pebble: e-paper watch	10,266.85K\$
Number of visitors to Crowdcube site in UK	130,184
Source: Statistica, accessed May,8 th , 2015	

CROWDFUNDING : FIGURES

Global Crowdfunding Volume Reaches \$2.7 Billion in 2012

Total funds raised through crowdfunding during 2012 (in million U.S. dollars)



Key statistics: 2014

€2,957 million

Total transaction volume of the online European alternative finance market

144%

Growth of the online European alternative finance market compared with 2013

€620 million

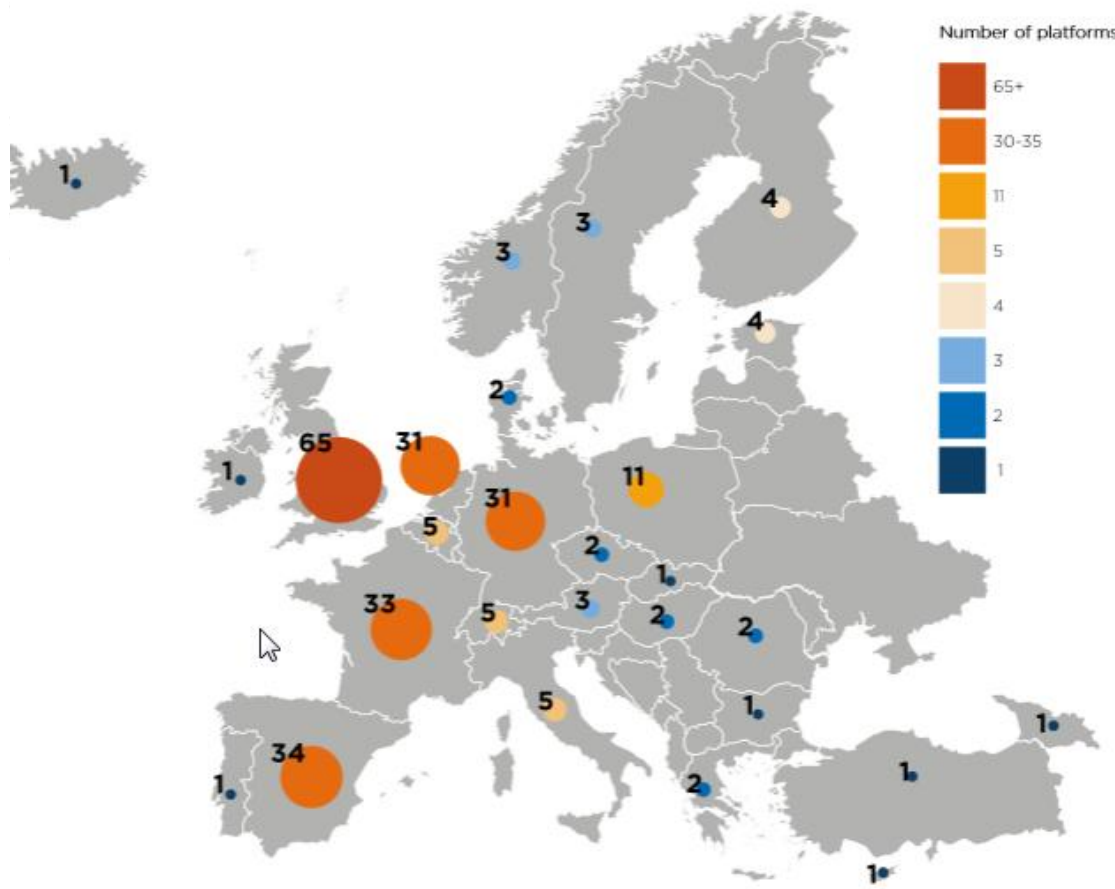
Total transaction volume of the online European alternative finance market excluding the UK

€201 million

Early-stage, growth and working capital funding provided to European start-ups and SMEs through alternative finance platforms

Source: Wardrop et al., (2015) available at http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf

THE GEOGRAPHICAL DISTRIBUTION OF SURVEYED
ALTERNATIVE FINANCE PLATFORMS IN EUROPE
(BY COUNTRY)



Source: Wardrop et al., (2015)
available at
http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf

**A WORKING TAXONOMY OF ALTERNATIVE FINANCE,
WITH VALUE OF 2014 EUROPEAN TRANSACTIONS IN €M
(EXCLUDING THE UK)**

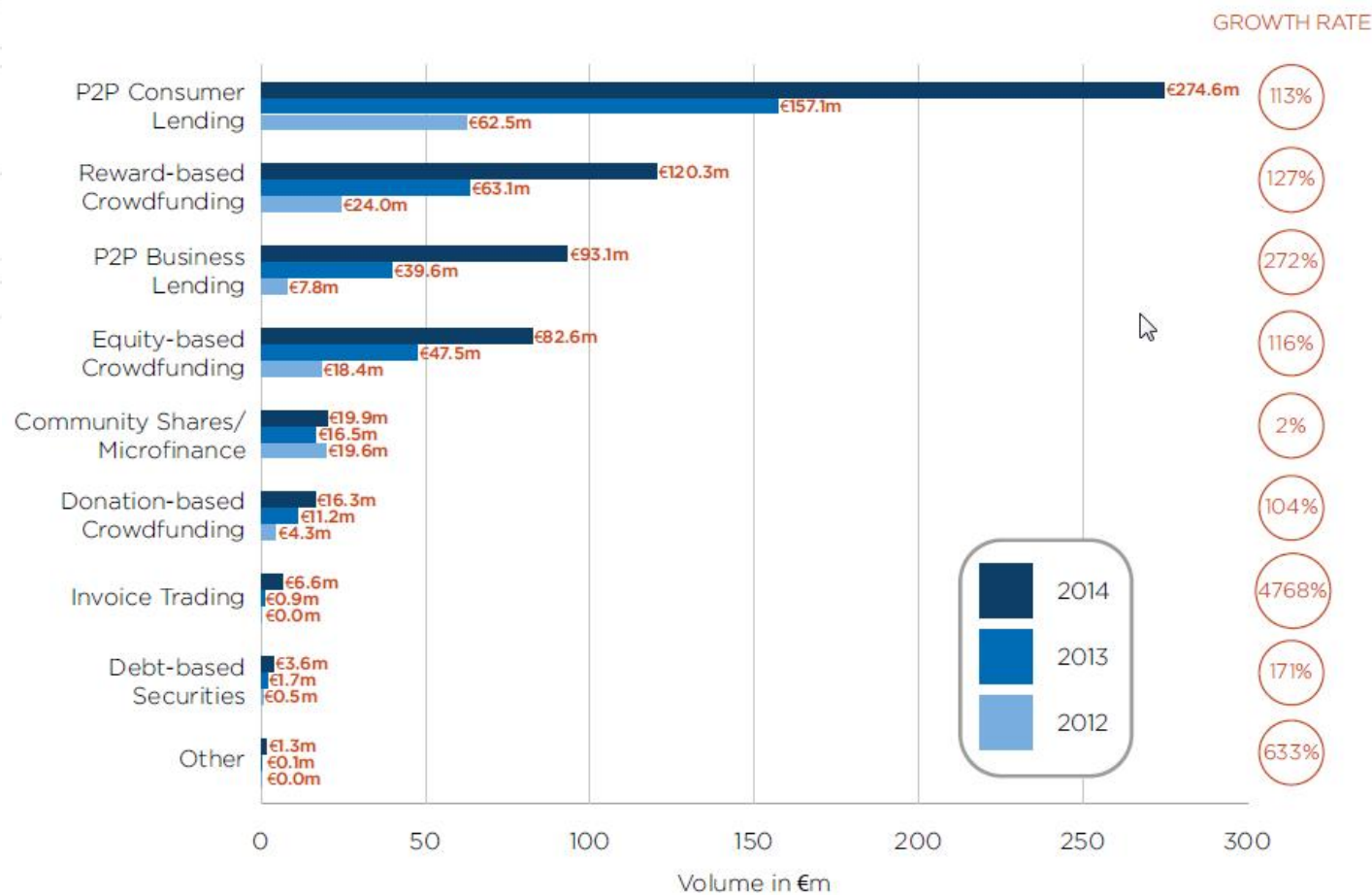


Peer-to-Peer Consumer Lending	Debt-based transactions between individuals; most are unsecured personal loans.	274.62m
Reward-based Crowdfunding	Backers have an expectation that recipients will provide a tangible (but non-financial) reward or product in exchange for their contribution.	120.33m
Peer-to-Peer Business Lending	Debt-based transactions between individual/institutional investors and existing businesses who are mostly SMEs.	93.43m
Equity-based Crowdfunding	Sale of registered security by mostly early-stage firms to investors.	82.56m
Community Shares/ Microfinance	Microfinance refers to the lending of small sums to entrepreneurs who are often economically disadvantaged and financially marginalised. There is a debt obligation incurred, but the amounts lent are very small. Community shares refer to the sale of withdrawable share capital in cooperative and community benefit societies.	19.91m
Donation-based Crowdfunding	No legally binding financial obligation incurred by recipient to donor; no financial or material returns are expected by the donor.	16.34m
Invoice Trading	Firms sell their invoices or receivables to a pool of individual or institutional investors.	6.63m
Debt-based Securities	Lenders receive a non-collateralised debt obligation, typically paid back over an extended period of time. Similar in structure to purchasing a bond, but with different rights and obligations.	3.61m
Pension-led Funding	Mainly allows SME owners/directors to use their accumulated pension funds in order to invest in their own businesses. Intellectual properties are often used as collateral.	N/A

Source: Wardrop et al., (2015) available at http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf

UNDERLYING AIM: GREED OR RECOGNITION?

ALTERNATIVE FINANCE MODELS IN EUROPE (EXCLUDING THE UK)
VOLUME IN €M AND AVERAGE GROWTH RATE
2012-2014



Source: Wardrop et al., (2015) available at http://ec.europa.eu/finance/general-policy/docs/crowdfunding/1503-04-presentations-ecsf_en.pdf

EXAMPLES IN HEALTH/TECH

- **KITE Patch**

- This innovative and **nontoxic patch keeps mosquitoes at bay** for up to 48 hours, by affixing to clothing and deterring insects that track humans by smelling for carbon dioxide. The idea was the brainchild of a University of California team, and the initiative was jumpstarted by generous support from the Bill and Melinda Gates Foundation and National Institutes of Health. Since **exceeding their funding goal seven times** over, Kite - in partnership with Pilgrim Africa – is now working to distribute the magical patch to Uganda, which is heavily affected by mosquito-borne illnesses.
- Source: Indiegogo.com (<https://www.indiegogo.com/projects/kite-patch>)



EXAMPLES IN HEALTH/TECH

- **FORM1**

- With **3D printable clothing** being a prediction for the future, the need for affordable home printer options needs attention now. Well, researchers from the **MIT Media Lab** have taken on the challenge creating the FORM1, a project to create an affordable, professional 3D printer for the public. The FORM1 blew through its **original \$100,000 goal, getting over 2,000 backers and \$3 million dollars in funding.**



Source: Kickstarter (https://www.kickstarter.com/projects/formlabs/form-1-an-affordable-professional-3d-printer/video_share)

EXAMPLES IN HEALTH/TECH

- Scientific crowdfunding

Using Nanoparticles to Activate Immune Cells to Fight Tumors

Gail A. Bishop | Brett Hanson
University of Iowa

\$1,931
Pledged

128% **\$3,500** **0**
Funded Next Goal Days

Success!

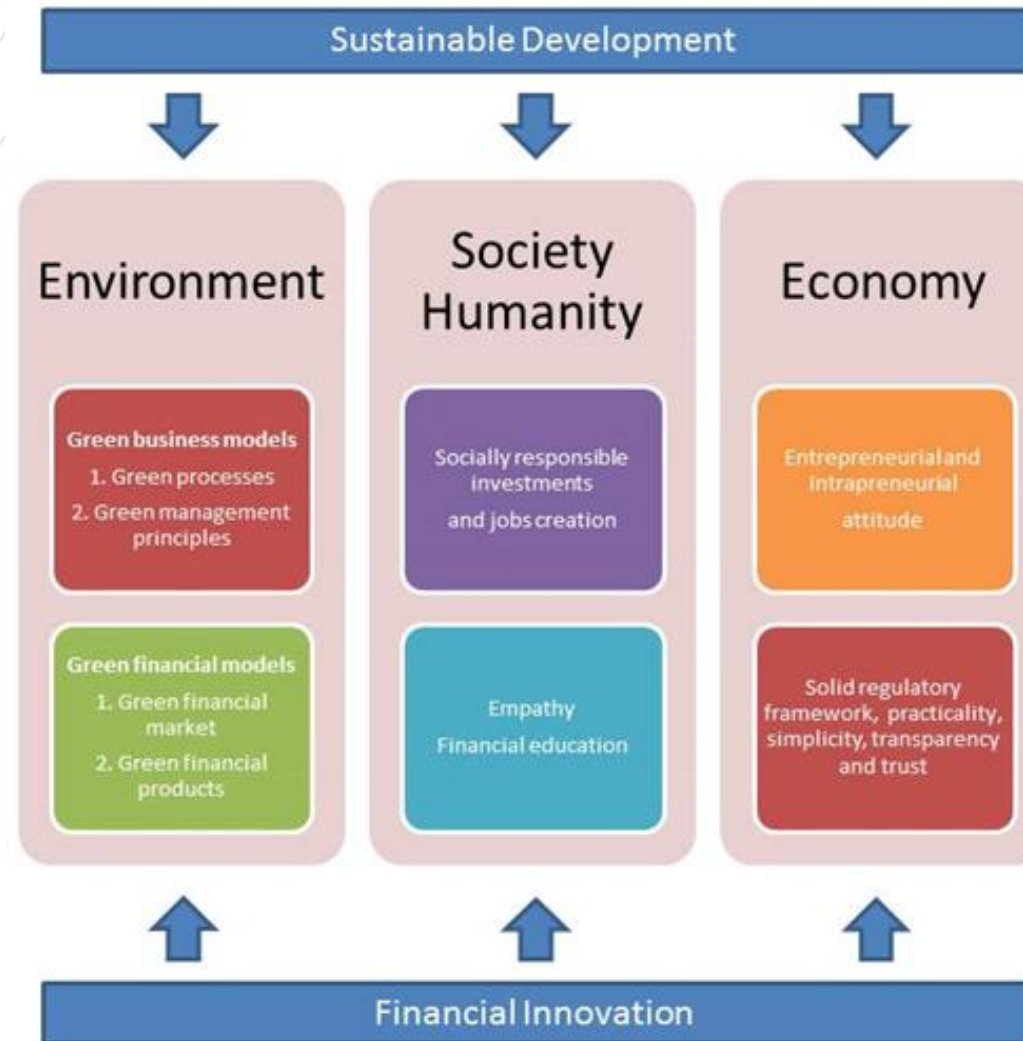
This project was funded on:
19 December 2014

- **Pilot experiment for developing a new cancer treatment** which utilizes the patients own immune system to fight and kill their tumor. Early results are very promising but we want to continue improving our system. By using nanoparticles to stimulate immune cells against tumor targets, we can avoid the potential dangers of directly injecting nanoparticles into patients while harnessing their versatility in antigen and adjuvant delivery

(Source: experiment.com, other platforms are www.petridisch.org and walacea.com)

HUMAN AGENDA

Financial Innovation



Source: Salampasis and Mention, 2013

HUMAN DEVELOPMENT PARADIGM

HIV/AIDS Vaccine & Care, and Microinsurance

Adults and children estimated to be living with HIV | 2013



Total: 35.0 million [33.2 million – 37.2 million]

Source: UNAIDS



A mechanism specifically tailored to the needs of low-income people to protect them against risk in exchange for affordable premiums proportional to the likelihood and cost of the relevant risk.

Can play a vital role in providing ART (anti-retroviral therapy) for those with limited access, financial resources and addressing hospitalisation needs

HUMAN DEVELOPMENT PARADIGM

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Financial Inclusion



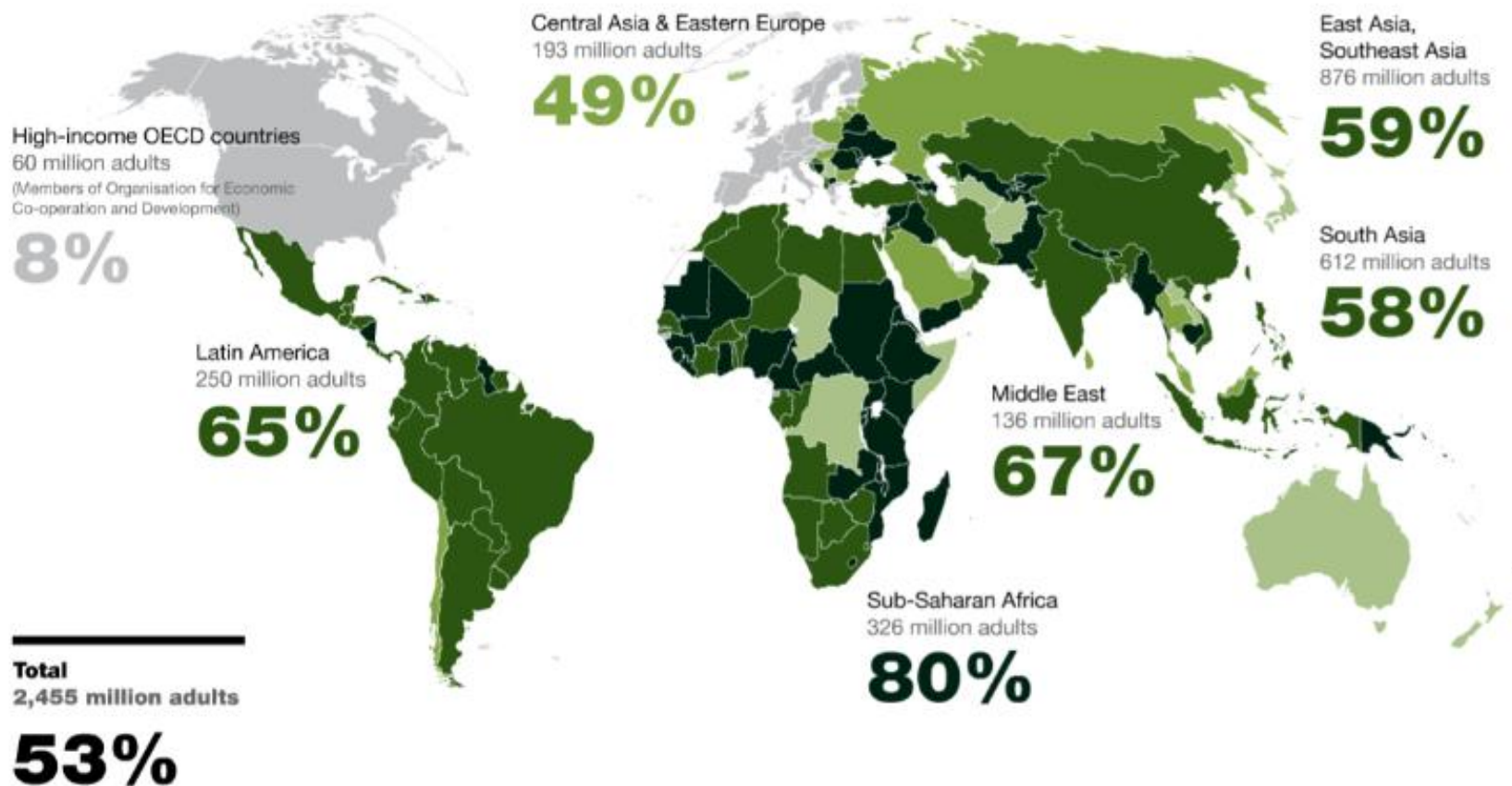
HUMAN DEVELOPMENT PARADIGM

Financial Inclusion

Percentage of total adult population who do not use formal or semiformal financial services

0-25% 26-50% 51-75% 76-100%

Estimates used to calculate regional averages



Lending (274 Companies)

Personal Finance (133 Companies)

Payments (268 Companies)

Retail Investments (94 Companies)

FinTech

1,078 Companies

Contact
info@venturescanner.com
 to see all companies

Institutional Investments (58 Companies)

Equity Financing (120)

Remittances (40)

Business Tools (83)

Crowd-Funding (53)

Consumer Banking (29)

Financial Research (31)

Banking Infrastructure (83)

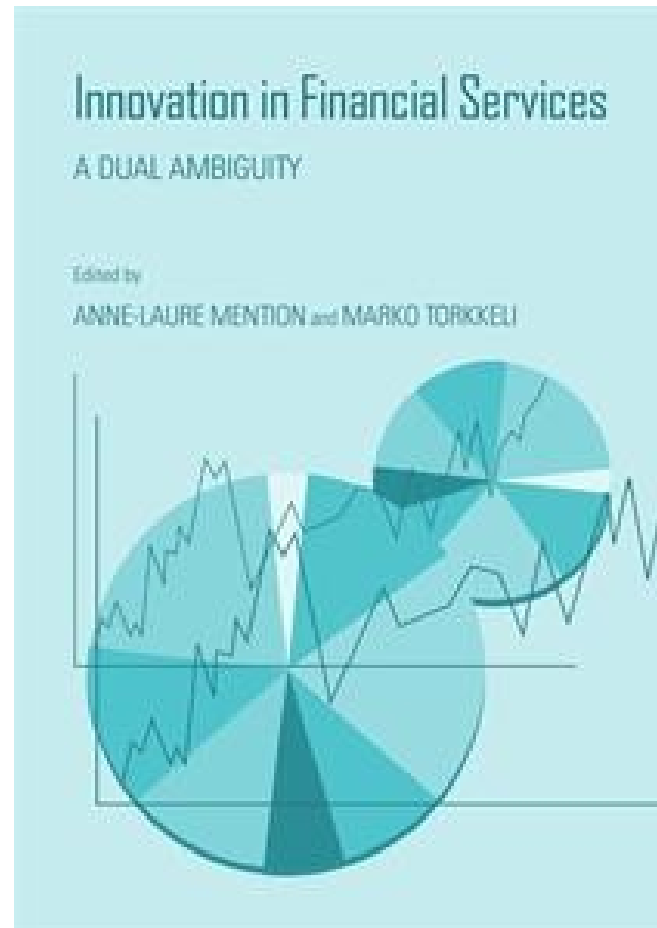
OPEN QUESTIONS

For debate ...

- Ethical issues of crowdfunding for science purposes
- Regulation needs
- Another form of the FinTech revolution
- Trust and the role of the customer
- Greediness, recognition or social commitment
- Complement or substitute to Venture Capital ?
- Threat to the business model of incumbents?
- “Too big to fail”: again, a wrong assumption?

MORE ON FINANCIAL INNOVATION

- <http://www.cambridgescholars.com/innovation-in-financial-services>



**Thank you very much for your kind
attention**



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