

5th Basel Sustainability Forum

September 3, 2019

"Sustainable finance refers to any form of financial service integrating environmental, social and governance (ESG) criteria into the business or investment decisions for the lasting benefit of both clients and society at large" (SWISS SUSTAINABLE FINANCE)

Sustainable Finance

ESG, Impact Investing, Innovation

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Dynamics in the institutional framework

Supranational agreements and goals

- 2015 Paris Climate Agreement (197 nations)
- 2015 UN Sustainable Development Goals (17)
- 2018 EU Commission Action Plan on Financing Sustainable Growth (→ <u>transparency</u>: 10 actions → Taxonomy, standards, label, inst. investors, ...)

Regulations (here for Switzerland)

- SIX Directive on Information relating to Corporate Governance (⇒ Opting In for Sustainability Reporting)
- Swiss code of best practice for corporate governance
- Swiss Foundation Code
- Federal Act on War Materials
- .

Sustainable Investment Standards

- UN Principles for Responsible Investment (UN PRI)
- Eurosif Transparency Code (retail SRI funds)
- Febelfin Quality Standard and Label (Belgium)
- FNG Label for Sustainable Mutual Funds
- FNG Sustainability Profiles and Transparency Matrix
- Luxflag ESG label
- Novethic SRI & Green Fund Labels
 - .

Initiatives

- Worldbank: <u>Green Bond</u>
- Inter-American Development Bank (IADB): <u>EYE</u> (Education, Youth, Employment) Bond
- Banks: <u>Green Bonds</u> (wind, solar, ...) and <u>Sustainability</u> <u>Bonds</u> (charitable and energy efficient housing, ...)
- Gvt, int'l / charitable org.: <u>Social Impact «Bonds»</u> (financing re-integration programs, education, ...),
- IDB/Blue Orchard: <u>Refinancing SMEs</u> with governance
- Investment products: <u>ESG ETFs</u>, shares, real estate, ...

The scope of sustainable investing

1. Sustainable Finance and Investment means a lot of things...

- High level criteria: compliant with Sustainable Development Goals (SDGs)
- Approach: **Exclusion** (**ESG**) and social scores (CSR, SRI) versus **impact** (in all E, S, G!)
- Innovation financing: Sustainable economic growth is vital!

2. ... that are not easy for investors to assess...

- Growing investment universe (green bonds, microfinance, social impact bonds, ...) vs. controversial return perspectives and only few impact investments in E and G yet
- Selection «conflicts» (sustainable firms in «bad» sectors; clients with diverse assets)
- Impact requires governance (selection/control of fund flows) and trust between players!

3. ... but with potential to pay off!

- Sustainable Real Estate Finance
- Corporate governance and equity returns
- Venture capital as a key for economic growth

Sustainability according to the UN's SDGs



Investment scope

Market Returns			Concessionary Returns	No Financial Returns	
Traditional Investments	Responsible, sustainable Investments	Impact Investing Return first	Impact Investing Impact first	Venture Philanthropy	Philanthropy Donations
Conventional equity and bond instruments Conventional real estate	Portfolio screening Listed ESG equity and debt funds ESG integration in investments	Thematic impact funds and notes Green bonds and loans Impact PE / VC	Social impact bonds Outcomes-driven loans	Seed capital donations	Charitable donations

Purely profit / Investment

Purely social / Grant

Source: Adopted and adjusted from Credit Suisse: *From Philanthropy to ESG*, https://www.creditsuisse.com/ch/en/asset-management/esg-investing/from-philanthropy-to-esg.html

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Selection of Sustainable Investments

• ESG Ratings

- Basis for sustainable investments, but no ESG rating standard so far
- Transparent methodology = prerequisite for institutional investing
- ESG ratings (several providers) and ESG fund ratings (Morningstar, MSCI ESG Research), CSR (Corporate Social Responsibility), SRI (Socially Responsible Investment)

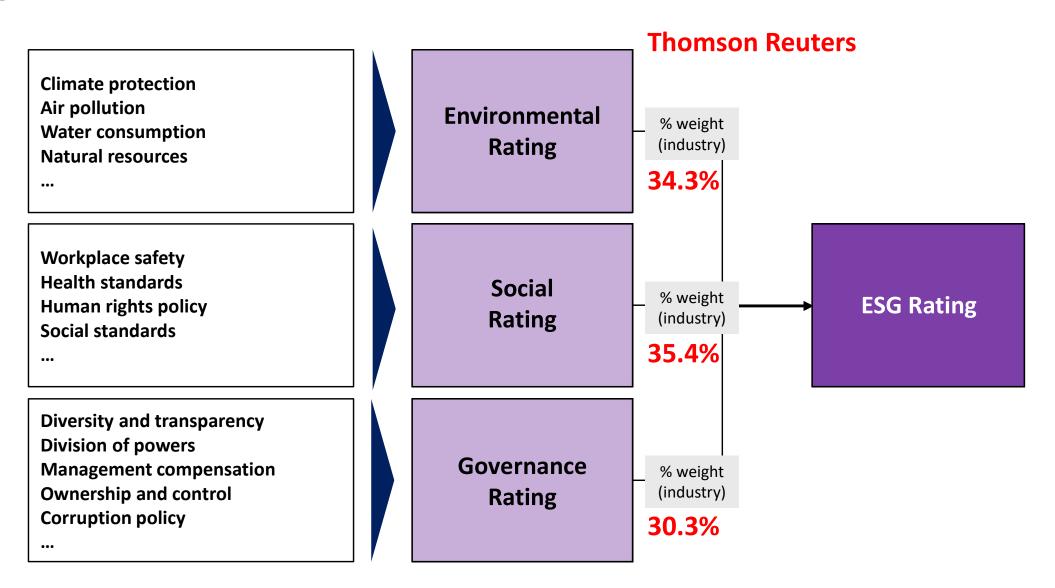
Sustainable fund market

- Growth above market average: 423 funds, CHF 157 bn AuM (2018)
- Passive funds (e.g., ETFs) grow faster than active funds
- Topics: Water funds, energy funds, climate funds, environment funds, social funds, religion funds, sustainable convertible funds, charity funds, impact funds

Strategies of asset managers

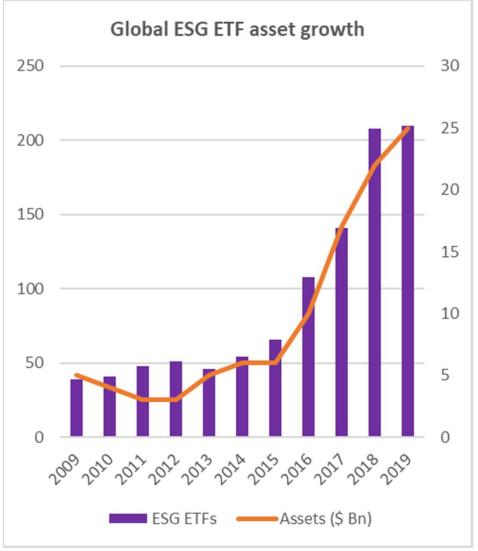
- Exclusion, positive selection, ethical shareholder representation / dialogue, and global initiatives (e.g., Climate Action 100+, Investor Decarbonization, Montréal Carbon Pledge)
- Investments: Mainly focus on <u>stocks</u>. But <u>bonds</u> are growing (e.g., green bond funds).
- Only few sustainable real estate funds and money market funds

Rating methodology: A variety of ESG Criteria



Source: partly adopted from: Stüttgen, M., Mattmann, B.: *IFZ Sustainable Investments Studie 2018 — Differenzierung nachhaltiger Anlagen bei Investoren*. Hochschule Luzern, 2018, 47.

The market: ESG Exchange Traded Funds (ETFs)



Source of data: etfgi.com, 2019

Strong growth of ESG ETFs

- Little growth until 2014
- 2014: \$6 bn total AuM, 54 ETFs
- 2019: \$25 bn total AuM, 210 ETFs

• Multiple drivers

- Less stock investment post financial crisis
- Millennials twice as likely to invest in ESG than older age groups
- Investment criteria (foundations, funds)

Market structure

- Cost for investing in a \$10.000 ETF: \$10-12
- Problem: Variety of ESG classifications!
- Many ESG investments beyond ETFs!

Research: Mixed findings on sustainable investment returns

 Friedmann (1970): «There is one and only one social responsibility of business [...] to increase its profits»

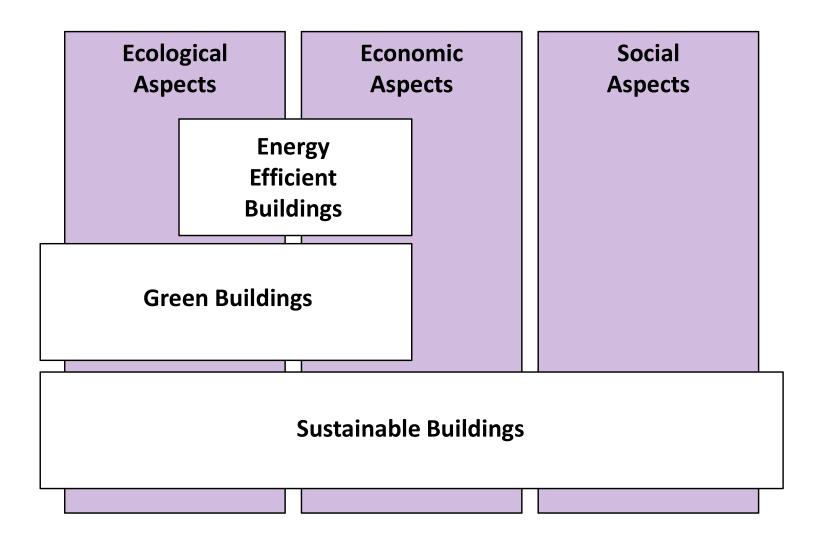
• Higher returns:

- Cerin & Dobers (2001): Dow Jones Sustainability Index (DJSI) outperforms US benchmark and underperforms European benchmark 1993-2000.
- Derwall et al (2005): Portfolios with <u>high ESG scores overperform</u> those with low score.

Lower returns:

- Brammer et al (2006): Stocks with <u>low CSR score</u> achieve high (sic!) returns.
- Renneboog et al (2008): Despite the growth of the sustainable investment universe, these
 investments generate lower returns.
- El Ghoul & Karoui (2017): Funds with <u>lower</u> CSR rating generate <u>higher</u> returns. Investors must be investing because they are getting a «non-financial benefit».
- Riedl & Smeets (2017): Funds investing in sustainable firms generate <u>lower returns</u> and charge <u>higher fees</u>. Investments are explained by <u>social preferences</u>.

Sustainable Real Estate: Dimensions



Source: Feige, A., H., McAllister, P., Wallbaum: *Rental price and sustainability ratings – Which sustainability criteria are really paying back?*, in: Construction Management and Economics, Vol. 31, No. 4, 322-334.

Sustainable Real Estate: Green Premium in Rents and Prices?

- Currently, 50% of the Swiss (40% of the US) energy demand stems from buildings
- International research:
 - Miller, Spivey, & Florance (2008), Eichholtz et al., (2010) and Fuerst et al. (2009) all found evidence for a rent premium of about 3% to 9% for certified green buildings. Reichardt, Fuerst, Rottke, & Zietz, (2012) added over-time trends of rent premiums.
 - The only large-scale <u>residential</u> rent study in the US is Kahn & Kok (2014) with 1.6 million single-family house cases and an estimated 2.1% premium.
 - Feige, Wallbaum, McAllister (2013): Sustainable building characteristics have a positive effect on rental prices (especially when increasing <u>water efficiency</u>, <u>health</u>, <u>comfort</u>, <u>building's</u> <u>safety</u> and security).
- Switzerland:
 - Kempf (2016): sales premium of 23.8% for commercial Minergie labeled Swiss real estate
 - Gantenbein, Kachi, Keller, Melzig (2019): Rent premium of 3-5% for Minergie labeled residential real estate in Switzerland <u>due to label</u>.
 - Institutional investors (PF) increasingly emphasize sustainable real estate investments.

<u>Corporate Governance</u>: Research on Equity Returns

- Multiple studies relate corporate governance related aspects to firm valuation:
 - U.S.: Gompers, P., Ishii, J., Metrick, A. (2003): Corporate Governance and Equity Prices, Quarterly Journal of Economics, 118(1): 107.
 - International: Ammann, M., Oesch, D., Schmid, M. (2011): Corporate governance and firm value: International evidence, *Journal of Empirical Finance*, 18(1): 36-55.
 - **EU**: Bauer, R., Guenster, N., Otten, R. (2004): Empirical evidence on corporate governance in Europe: The effect on stock returns, firm value and performance, *Journal of Asset Management, 5(2): 91-104.*
 - Switzerland: Beiner, S., Drobetz, W., Schmid, M., Zimmermann, H. (2006): An Integrated Framework of Corporate Governance and Firm Valuation. *European Financial Management*, 12(2): 249-283.

On average positive relationship between CG and firm value!

- Some studies consider time-dependence of CG-valuation relationship:
 - Crisis impact (internet bubble burst 2001/2002): Core, J. E., Guay, W. R., Rusticus, T. O. (2006): Does Weak Governance Cause Weak Stock Returns? An Examination of Firm Operating Performance and Investors' Expectations, *Journal of Finance*, 61(2): 655-687.
 - 2008 Financial Crisis (banks only): Beltratti, A. & Stulz, R. M. (2009): Why Did Some Banks Perform Better during the Credit Crisis? A Cross-Country Study of the Impact of Governance and Regulation. Charles A Dice Center Working Paper No. 2009-12.

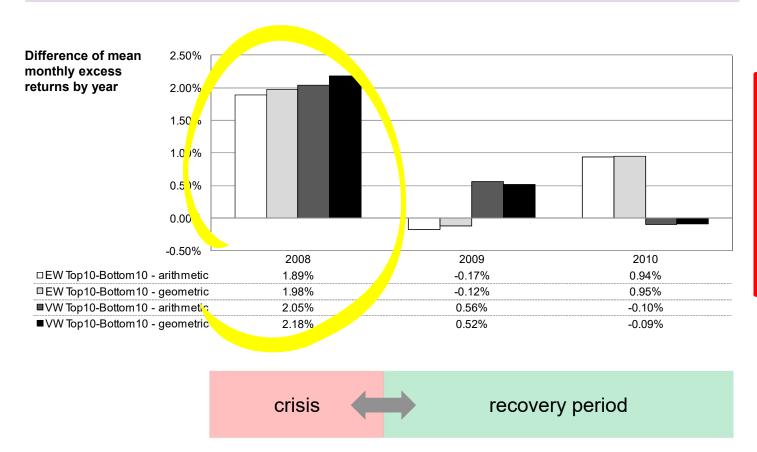


Mixed results with respect to time-dependence

Corporate Governance and Equity Returns: CG in the cycle

ANALYSIS OF RETURNS BY YEAR

Top10 - Bottom10 portfolio = Long 10% with best CG, short 10% with worst CG



KEY OBSERVATIONS

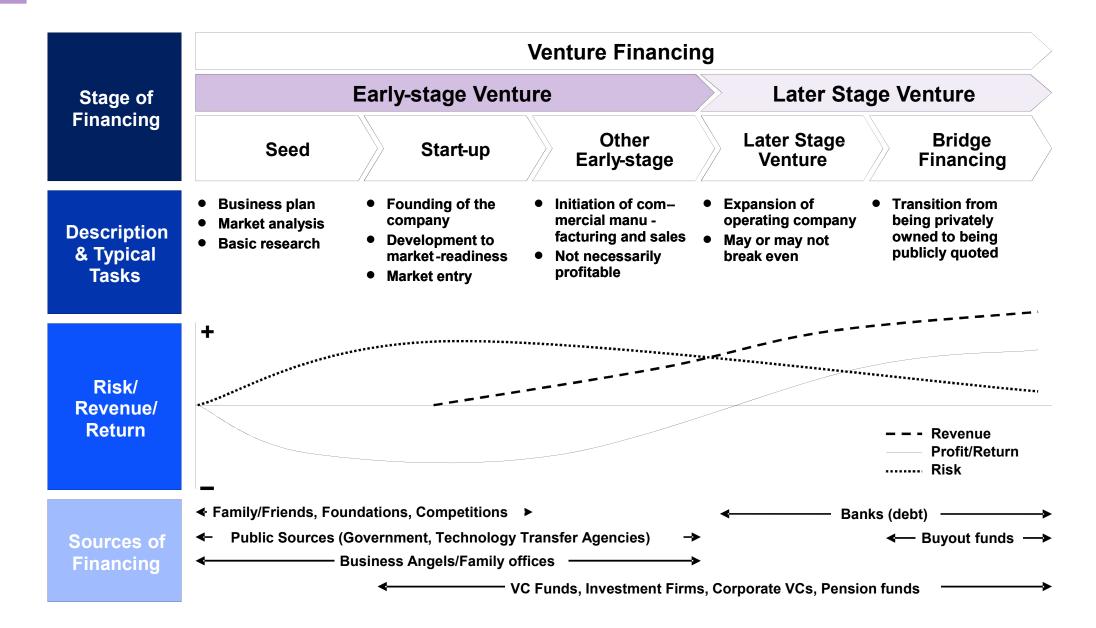
Differences of monthly mean excess returns

- arithmetic vs. geometric means
- equally-weighted (EW) vs. valueweighted (VW) portfolios
- Results suggest strongest outperformance of firms with best CG over firms with worst CG during 2008 Financial Crisis.
- Obviously, CG mattered more to investors during the crisis than in subsequent recovery periods.
- Robustness checks conducted
 - tested for different cut-off points in time crisis/recovery
 - **similar results** when looking at **Top15 vs. Bottom15** and quartiles

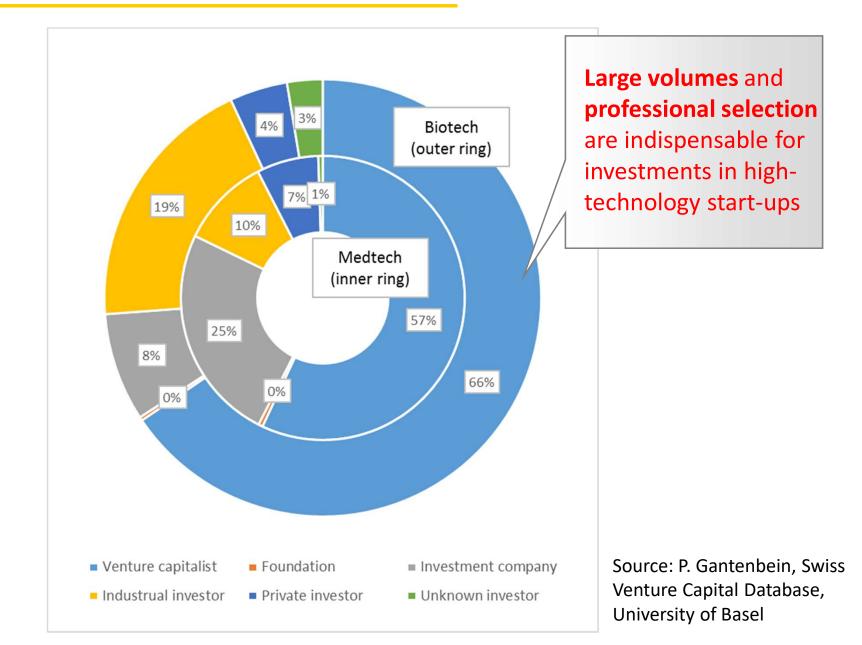
Source: Gantenbein, Pascal & Andreas Rehrauer: *Corporate Governance and Equity Returns: New Evidence from Switzerland and the 2008 Financial Crisis,* working paper.

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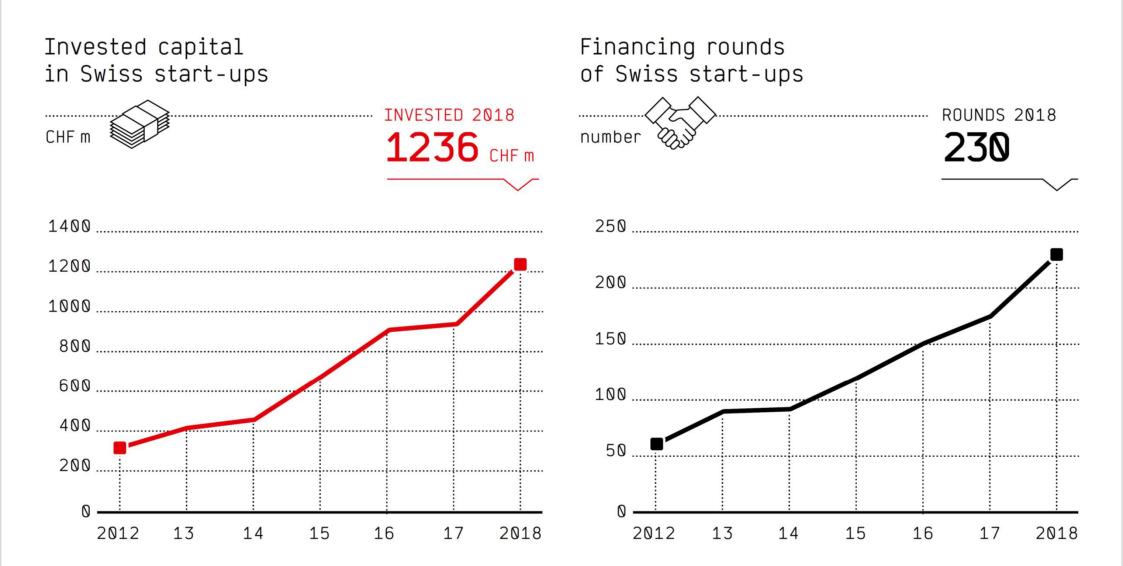
Innovation: Stages of Financing and company growth



Innovation: Importance of the Investor Structure



Innovation: How good is Switzerland?



Innovation: «Ease of doing Business-Index»

1 New Zealand

2 Singapore

...

Ease of doing business rank (1-190) Starting a business (rank) Score for starting a business (0–100) Procedures (number) Time (days) Cost (% of income per capita) Minimum capital (% of income per capita) Dealing with construction permits (rank) Score for dealing with construction permits (0-100)Procedures (number) Time (days) Cost (% of warehouse value) Building quality control index (0-15) Getting electricity (rank) Score for getting electricity (0–100) Procedures (number) Time (days) Cost (% of income per capita) Reliability of supply and transparency of tariffs index (0-8) Registering property (rank) Score for registering property (0–100) 86.12 Procedures (number) 4 Time (days) 16 Cost (% of property value) 0.3 Quality of land administration index (0–30) 23.5

	OECD high income	
38	Ease of doing business score (0–100)	75.69
77	Getting credit (rank)	73
38.41	Score for getting credit (0–100)	60.00
6	Strength of legal rights index (0–12)	6
10	Depth of credit information index (0–8)	6
2.3	Credit bureau coverage (% of adults)	25.4
25.0	Credit registry coverage (% of adults)	0.0
69	Protecting minority investors (rank)	110
71.75	Score for protecting minority investors (0–100)	50.00
13	Extent of disclosure index (0–10)	0
156	Extent of director liability index (0-10)	5
0.7	Ease of shareholder suits index (0–10)	5
9.0	Extent of shareholder rights index (0–10)	8
	Extent of ownership and control index (0-10)	5
11	Extent of corporate transparency index (0–10)	7
94.41		
3	Paying taxes (rank)	20
39	Score for paying taxes (0–100)	87.66
58.1	Payments (number per year)	19
7	Time (hours per year)	63
1.5	Total tax and contribution rate (% of profit)	28.8
16	Postfiling index (0–100)	83.21
36.12		00.2

	8	United States	
GN Pop	 24	Germany	,560 ,017
Trac Scor Time		Azerbaijan	39 1.79
Doci Borc <i>Cos</i> i	 28	Kazhachstan	2
Doci Borc Time		Switzerland	75 201
Doci Border		ance (hours)	2
Docum	nentary	compliance (US\$) ance (US\$)	75 201
Score f Time (c Cost (9	f <mark>or enfo</mark> days) % of cla	ontracts (rank) orcing contracts (0–100) aim value) icial processes index (0–18)	55 64.09 598 24.0 10.5
Score f	for reso	Isolvency (rank) Iving insolvency (0–100)	46 62.67
Recove	% of es ery rate	tate) (cents on the dollar) solvency framework index (0–16)	3.0 4.5 46.8 12.0

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Conclusions

1. ESG criteria

- Sustainability: premiums (e.g., rents) observable, while overall returns questionable
- Governance: Investments more solid in downturn: Impact on risk mitigation, not on returns!
- Strategies: Exclusion (e.g., if not meeting <u>Sustainable Development Goals</u>), dialogue / voting rights, global initiatives. Corporates with sustainability strategy.

2. Impact Investing

- Type of investment: <u>Donation</u>, <u>equity</u>, <u>debt</u> (e.g., social impact bonds SIB, development impact bonds DIB – both with return only given a certain outcome)
- **Outcome**: Difficult **measuring** of a) <u>impact</u> (often intangible), b) <u>return</u>, c) <u>risk premium</u>
- **Governance** (selection of investments, control of fund flows) and **trust** between players!

3. Venturing

- Key to growth and wealth: Start-ups innovate and implement knowledge in products
- Important external financing!
- Different roles of investors along the company life cycle.