

Innovation between Risk and Reward Set

coordinated by
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Volume 7

Innovation and Financial Markets

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Color Section

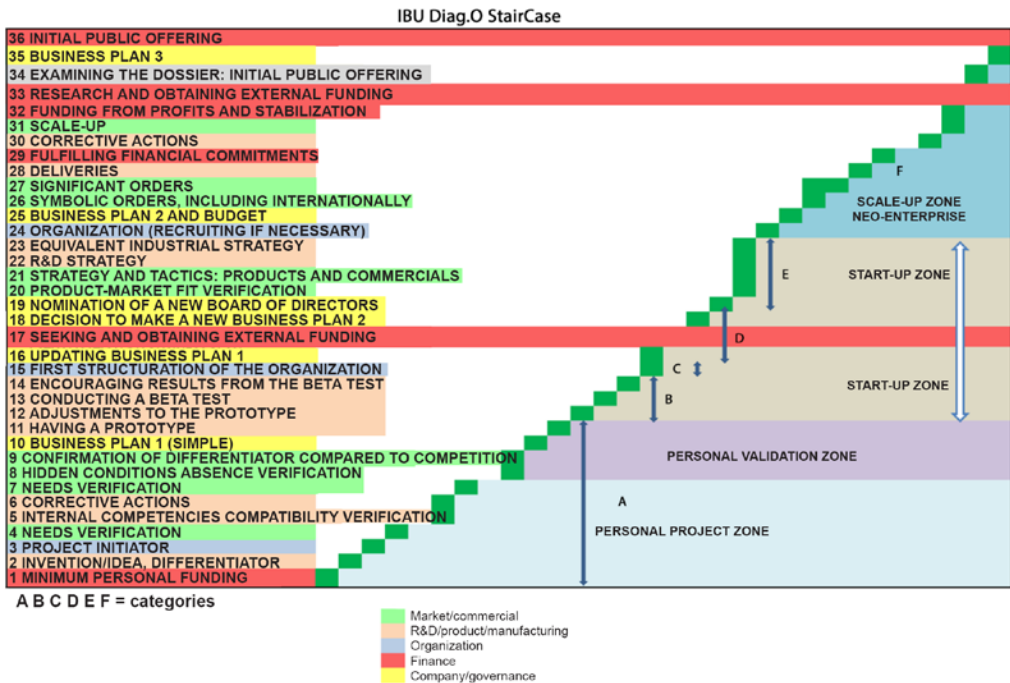


Figure 1.1. Staircase (source: Georges Kayanakis)

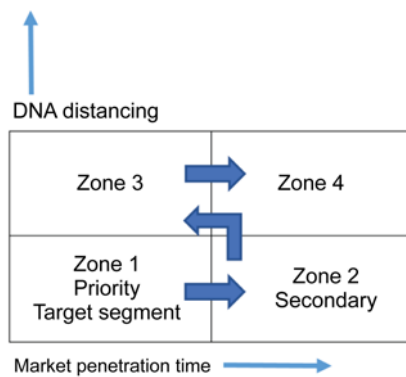


Figure 1.2. Target markets as a function of DNA

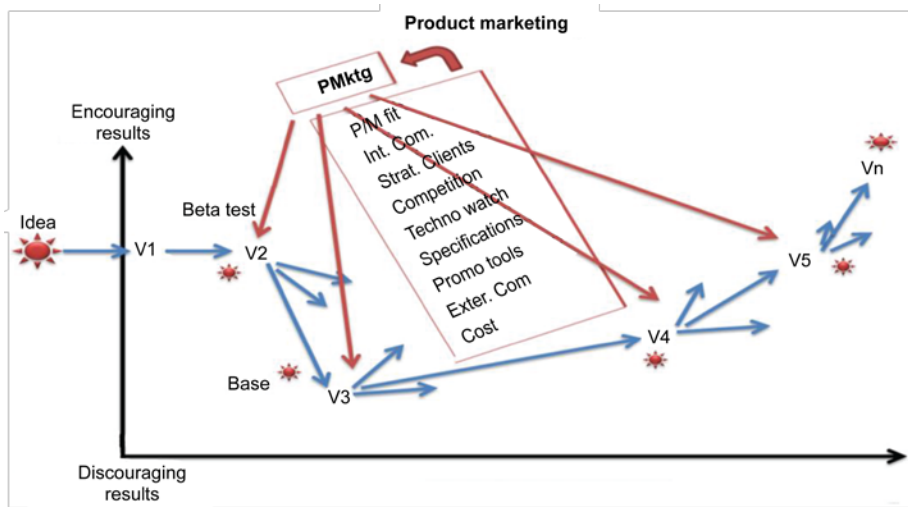


Figure 1.3. From idea to final product. Product marketing action (source: Georges Kayanakis)

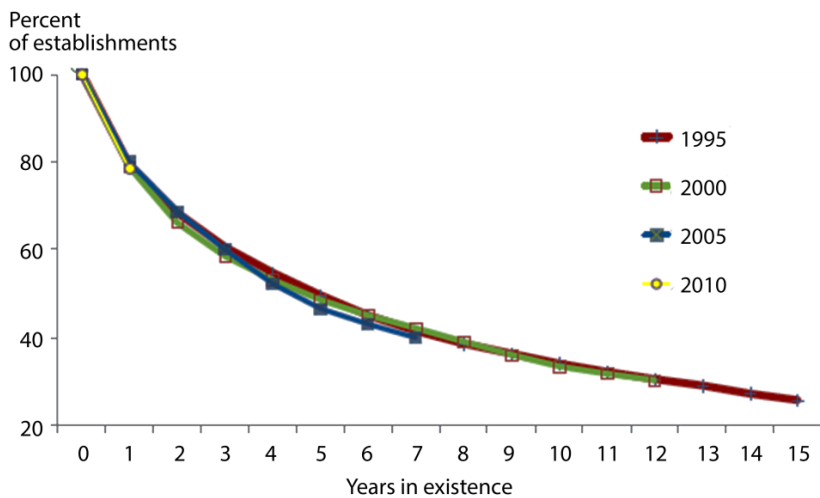


Figure 3.2. Survival rate of business start-ups by year of establishment

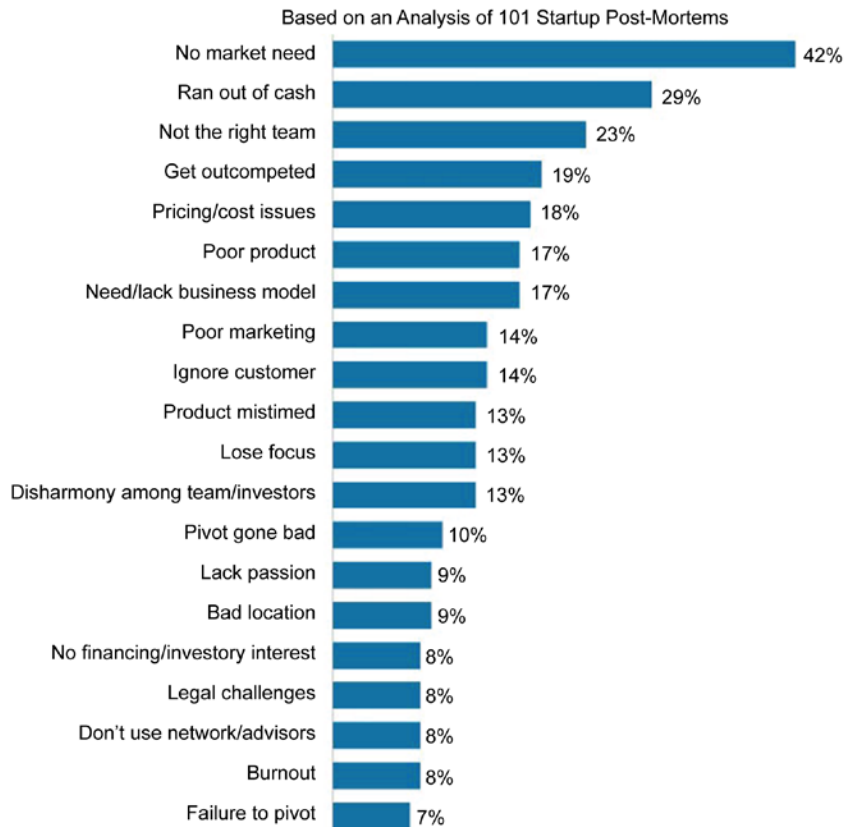


Figure 3.3. *Top 20 causes of start-up failure*

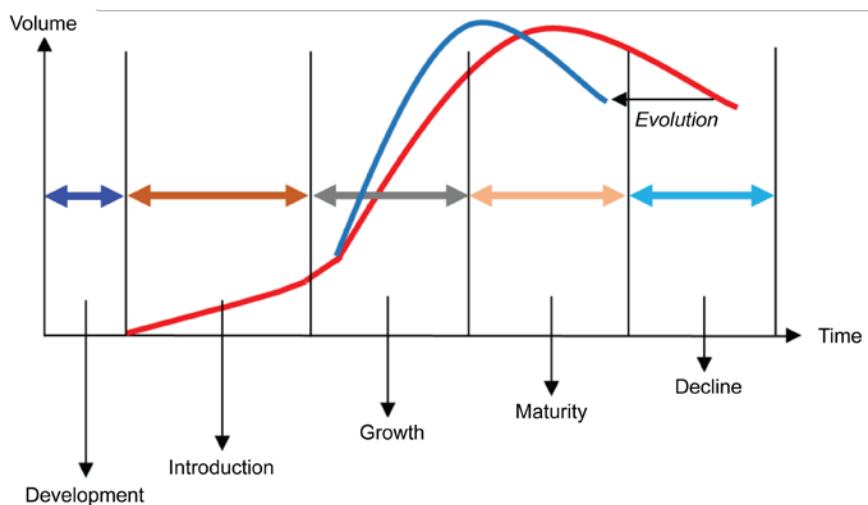


Figure 3.4. *Life cycle of a product/service*

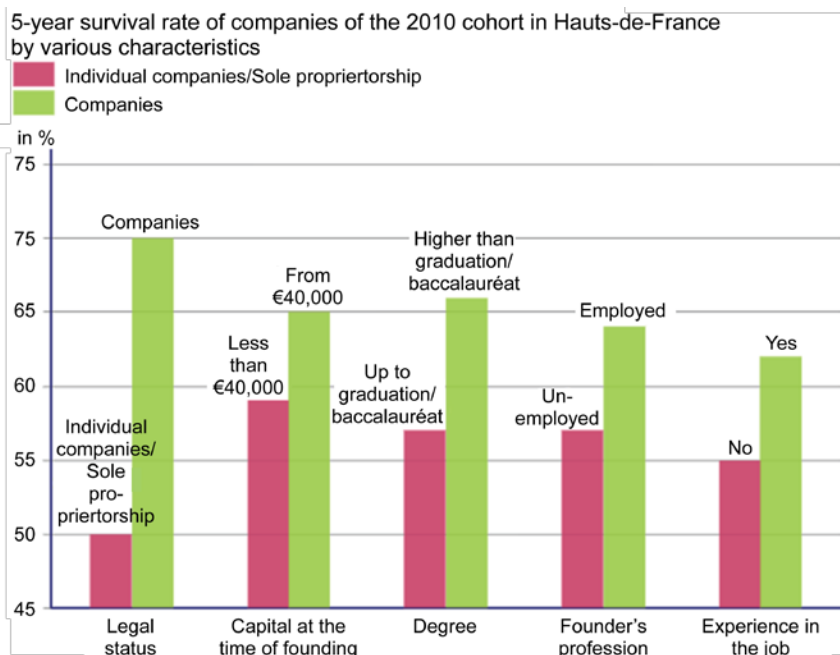


Figure 5.1. Variation in five-year survival rate by five characteristics

FUNDS COLLECTED BY TYPE (AMOUNT IN MILLIONS OF EUROS)

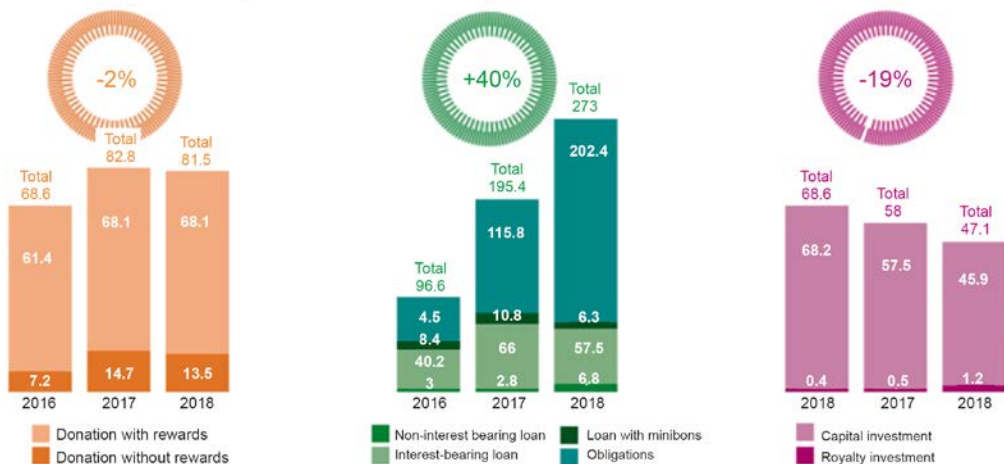
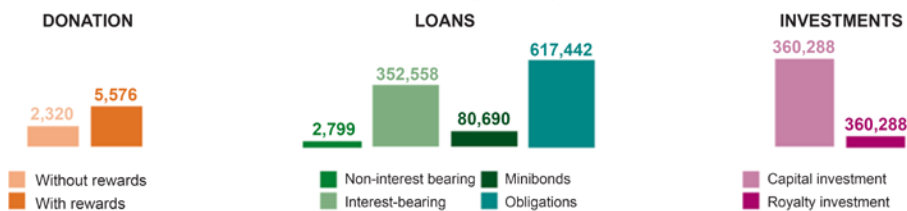


Figure 5.2. Crowdfunding: funds raised by type (source: "Baromètre du crowdfunding 2018", KPMG and Financement Participatif France, 2018)

AVERAGE AMOUNT COLLECTED BY PROJECT IN 2018 (IN EUROS)



AVERAGE NUMBER OF CONTRIBUTORS PER PROJECT (SINCE THE CREATION OF PLATFORMS)

Donation without reward	Donation with reward	Non-interest bearing loan	Interest-bearing loan	Loan with minibonds	Obligations	Capital investment	Royalty investment
38	76	7	1 041	166	142	83	65

AVERAGE CONTRIBUTION PER PROJECT (IN EUROS SINCE THE CREATION OF PLATFORMS)

Donation without reward	Donation with reward	Non-interest bearing loan	Interest-bearing loan	Loan with minibonds	Obligations	Capital investment	Royalty investment
91€	58€	67€	349€	1 785€	7 504€	10 152€	605€

Figure 5.3. Crowdfunding: statistics by project (source: "Baromètre du crowdfunding 2018", KPMG and Financement participatif France, 2018)

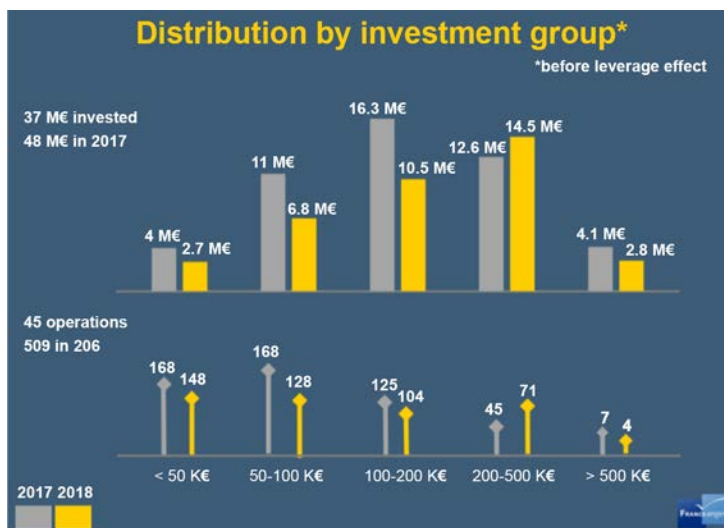


Figure 5.4. Investments by BAs in 2018

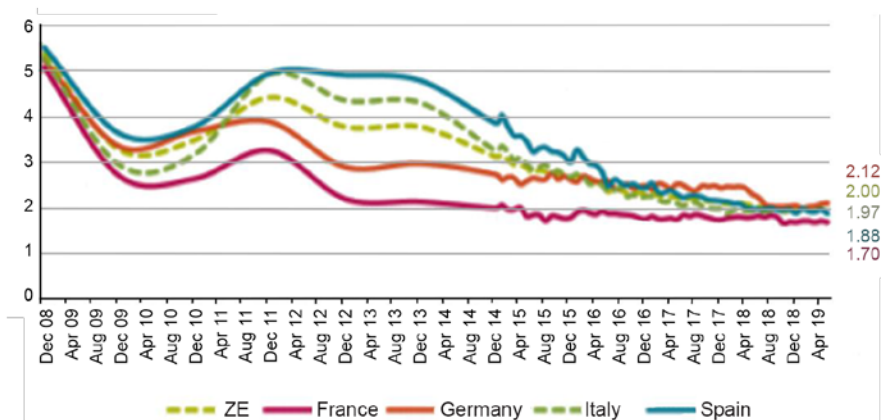


Figure 5.5. Interest rates for new small business credit (%)

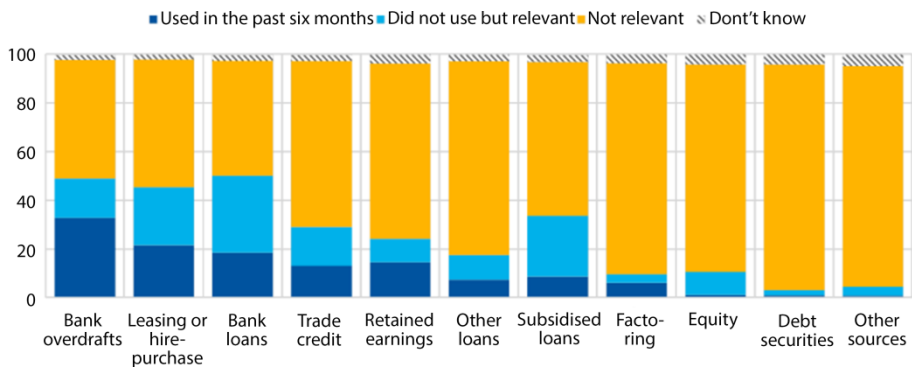


Figure 5.6. Relevance of different sources of financing for SMEs in the euro area

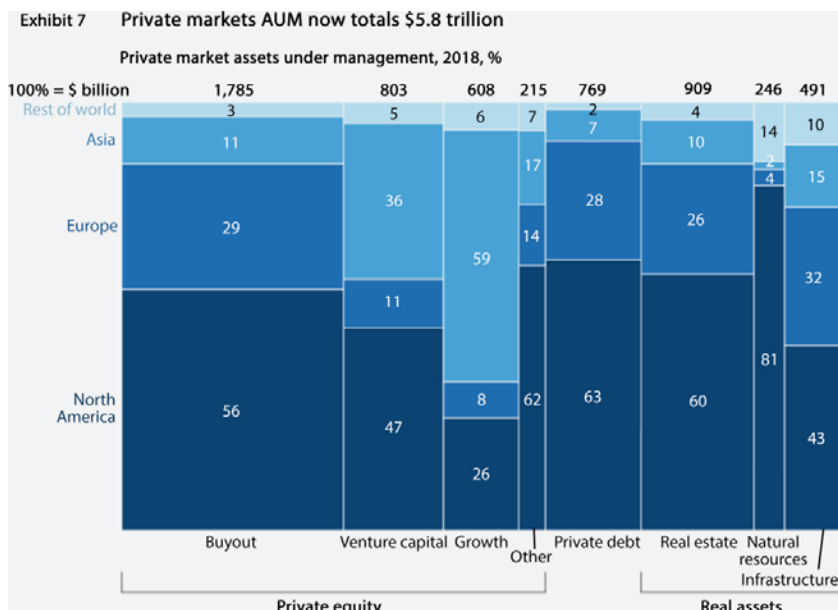


Figure 5.7. Assets under private market management (Bökberg et al. 2019)

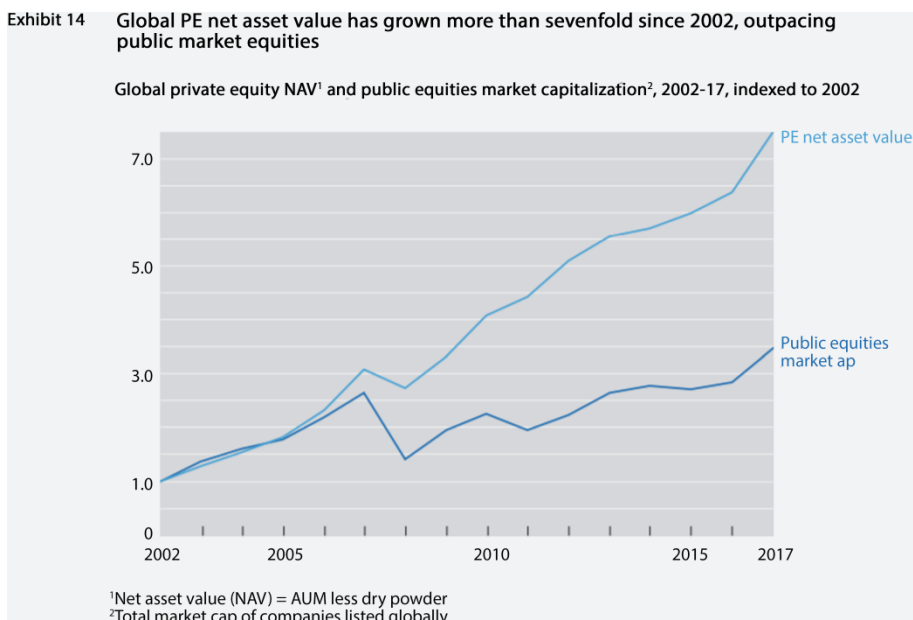


Figure 5.8. Comparison of equity market valuations and private funds (source: McKinsey Report)

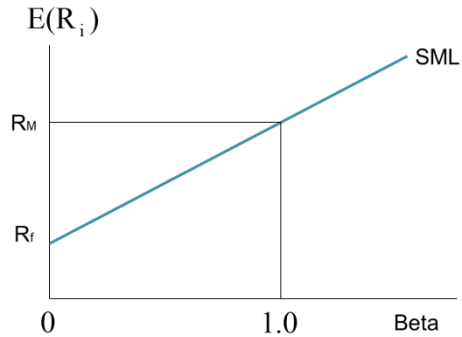


Figure 6.1. Relationship between a share's expected return ($E(R_i)$) and its risk (β) (inspired by Reilly and Brown (2012))

EXHIBIT A | 2019 Most Innovative Companies

1	Alphabet/Google	11	Boeing	21	McDonald's	31	AXA	41	Dell
2	Amazon	12	BASF	22	Marriott	32	Unilever	42	Walmart
3	Apple	13	T-Mobile ²	23	Alibaba	33	Salesforce	43	eBay
4	Microsoft	14	Johnson & Johnson	24	Bayer	34	Pfizer	44	HP Inc.
5	Samsung ¹	15	DowDuPont	25	AT&T	35	Stryker	45	ING
6	Netflix	16	Siemens	26	Allianz	36	NTT Docomo	46	BP
7	IBM	17	Cisco Systems	27	BMW	37	Toyota	47	Daimler ⁴
8	Facebook	18	LG Electronics	28	SAP	38	Volkswagen ³	48	Huawei
9	Tesla	19	Vale	29	Philips	39	3M	49	Rio Tinto
10	Adidas	20	JPMorgan Chase	30	Royal Dutch Shell	40	General Motors	50	Hilton

¹Includes only Samsung Electronics

²Includes only US T-Mobile, not Deutsche Telekom

³Includes Audi and Porsche

⁴Includes Mercedes-Benz

Figure 6.2. Top 50 of BCG's 2019 most innovative companies of BCG (source: Ringel et al. (2019))

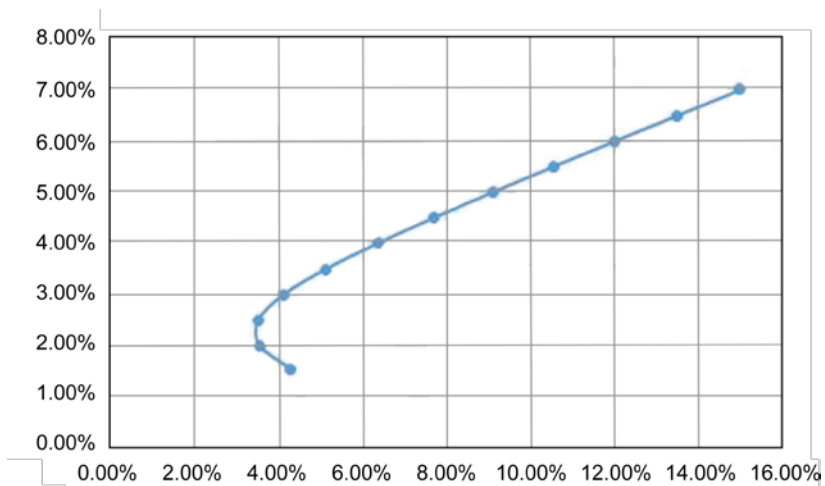


Figure 8.2. Example of an efficient frontier calculated using Excel
(source: Bloomberg)

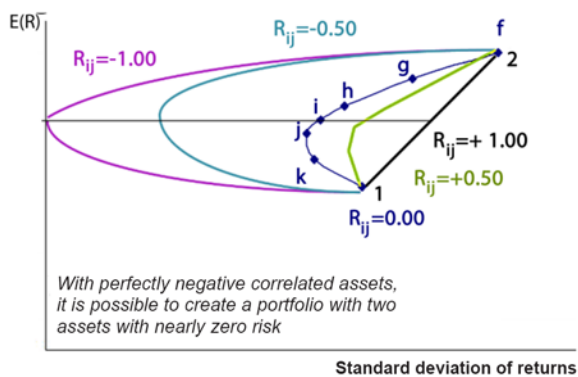


Figure 8.4. Efficient frontiers as a function of asset correlation (inspired by Reilly and Brown (2012))