

# Fundraising

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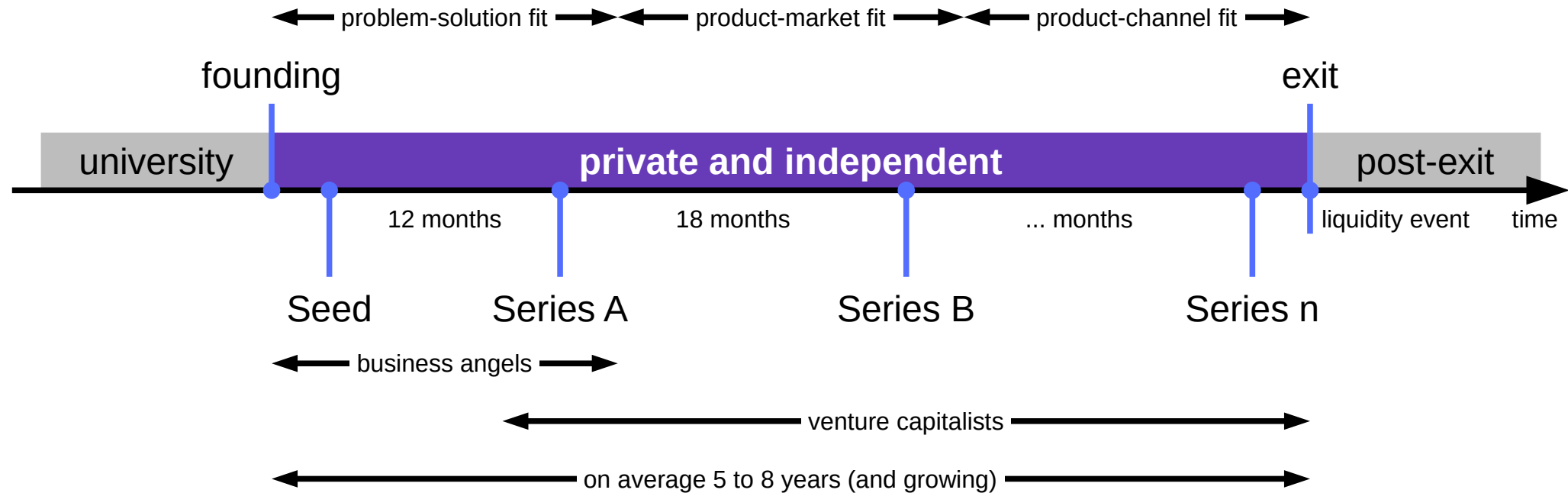
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# Agenda

1. The startup time-line
2. Types of funding
3. The main players
4. Evaluation and valuation
5. The mechanics of a funding round
6. Expectations and risk profiles

# 1. The Startup Time-line

# The Startup Time-line



# Early Financial Needs Time-line

Stage	Headcount	Funding	Responsible
Research	Jane and Jim	(2 people at €80K + €30K) x 4 years	Professor
Validation	Jane, Jim, Tony	(3 people at €80K + €50K) x 2 years	Entrepreneurs
Incorporation	4	(4 people at €80K + €50K) x 2 years	Entrepreneurs
Going concern	n+	(n+ people at €80K + €30K) p.a. + ...	Entrepreneurs

## 2. Types of Funding

# Forms of Funding

Type	Source
Gift	<ul style="list-style-type: none"><li>• Self-exploitation</li><li>• <b>Public and NGO funders</b></li></ul>
Debt	<ul style="list-style-type: none"><li>• Family, friends, and fools</li><li>• Loans</li></ul>
Investment	<ul style="list-style-type: none"><li>• <b>Business angels</b></li><li>• <b>Venture capitalists</b></li></ul>
Projects	<ul style="list-style-type: none"><li>• Public agencies</li><li>• Companies</li></ul>

# Public Funders and Programs (Recap)

#	Phase	Funder	Program	# Persons	Amount [PM p. P.]
1	Basic research	DFG ERC	Sachbeihilfe Advanced Grant	1-3 (up to 6)	36
2	Applied research	BMBF BMWi	VIP+, START interaktiv Various	1-4	18-36
3	Spinning off	BMWi	EXIST Forschungstransfer	3-4	18
4	Starting up	BMWi	EXIST II	3-4	6
5	...	BMWi	KMU Innovativ	...	12-24



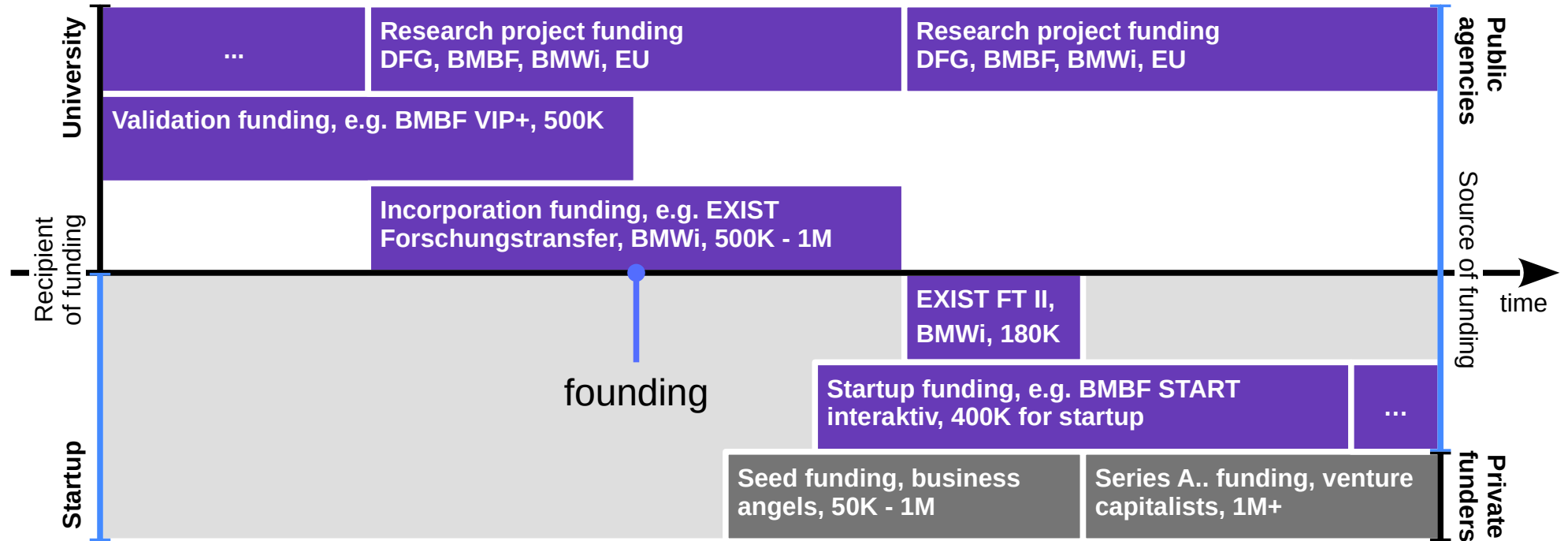
# Business Angels

- A business angel
  - Is typically an individual investing their own money
  - May bring in other business angels
  - Is sometimes specialized, but more often general purpose
- Value proposition
  - Is typically money + personal involvement (expertise, network, etc.)
  - Personal involvement may or may not be a good idea

# Venture Capital Firms

- A venture capital firm
  - Is a financial service firm that promises its investors outsized returns from startup investments
  - May invest in your startup if you fit their bill
  - Is sometimes general purpose, but more often specialized
- Value proposition
  - Is to bring money and more money through partners
  - Sometimes comes with useful services
- “Venture capitalists” = general partners at venture capital firm

# Example Funding Strategy and Time-line



## 3. The Main Players

# The Ecosystem and Its Main Players

- Investors
  - Business angels
  - Venture capital firms
- Facilitators
  - Lawyers
  - Professional organizations
- Enablers / resources
  - Professors
  - Universities

## 4. Evaluation and Valuation

# Valuation Methods

- Cost of replacement (pre-seed)
- Revenue multiples (Series A onwards)
- Discounted cash flows (later)

# Cost of Replacement Method

Asset	Cost of Replacment
Source code	# person months x labor rate
Machinery	Price according to price list Price according to market place
Skilled labor	Recruiting costs



# Revenue Multiples Method

- Value of company = Revenue x Multiple
  - Revenue is typically annual (maybe extrapolated) revenue
  - Multiple is a negotiated factor based on growth rate and industry

Category [1]	Percentage [YoY]	Multiple
Slow growth	<10%	1x – 2x
Stable growth	10% - 30%	2x – 5x
High growth	30% - 100%	5x – 10x
Super high growth	100% - 300%	10x – 15x
Hyper growth	300%+	15x – 25x

[1] See <https://microcap.co/startup-valuation-revenue-multiple>

# Net Present Value / Discounted Cash Flow Method

- The net present value (NPV) of a firm is
  - The sum of all future cash-flows
  - Brought back in value to today
- NPV = sum of (future cash flows at time  $t$  /  $(1 + \text{discount rate})$  to the power of  $t$ )
  - The discount factor is the expected rate of return of comparable investments

$$\text{NPV}(i, N) = \sum_{t=0}^N \frac{R_t}{(1 + i)^t}$$

[1] See [https://en.wikipedia.org/wiki/Net\\_present\\_value](https://en.wikipedia.org/wiki/Net_present_value)

## 5. Mechanics of a Funding Round

# Company Valuation Pre- and Post-Money

Step	Value
Pre-money valuation	€4M
Investment by investor	€1M
Post-money valuation	€5M
Equity stake to investor	20%

# Example Term Sheet 1 /2 [1]

Company:	[____], a Delaware corporation.
Securities:	Series A Preferred Stock of the Company (“ <b>Series A</b> ”).
Investment Amounts:	<p>\$[ ] million from [____] (“<b>Lead Investor</b>”) \$[ ] million from other investors</p> <p>Convertible notes and safes (“<b>Convertibles</b>”) convert on their terms into shadow series of preferred stock (together with the Series A, the “<b>Preferred Stock</b>”).</p>
Valuation:	\$[ ] million <b>post-money</b> valuation, including an available option pool equal to [ ]% of the post-Closing fully-diluted capitalization.
Liquidation Preference:	1x non-participating preference. A sale of all or substantially all of the Company’s assets, or a merger (collectively, a “ <b>Company Sale</b> ”), will be treated as a liquidation.
Dividends:	6% noncumulative, payable if and when declared by the Board of Directors.
Conversion to Common Stock:	At holder’s option and automatically on (i) IPO or (ii) approval of a majority of Preferred Stock (on an as-converted basis) (the “ <b>Preferred Majority</b> ”). Conversion ratio initially 1-to-1, subject to standard adjustments.

[1] See [https://www.ycombinator.com/series\\_a\\_term\\_sheet/](https://www.ycombinator.com/series_a_term_sheet/)

# Example Term Sheet 2 / 2

## Voting Rights:

Approval of the Preferred Majority required to (i) change rights, preferences or privileges of the Preferred Stock; (ii) change the authorized number of shares; (iii) create securities senior or pari passu to the existing Preferred Stock; (iv) redeem or repurchase any shares (except for purchases at cost upon termination of services or exercises of contractual rights of first refusal); (v) declare or pay any dividend; (vi) change the authorized number of directors; or (vii) liquidate or dissolve, including a Company Sale. Otherwise votes with Common Stock on an as-converted basis.

## Drag-Along:

Founders, investors and 1% stockholders required to vote for a Company Sale approved by (i) the Board, (ii) the Preferred Majority and (iii) a majority of Common Stock [(excluding shares of Common Stock issuable or issued upon conversion of the Preferred Stock)] (the “**Common Majority**”), subject to standard exceptions.

## Other Rights & Matters:

The Preferred Stock will have standard broad-based weighted average anti-dilution rights, first refusal and co-sale rights over founder stock transfers, registration rights, pro rata rights and information rights. Company counsel drafts documents. Company pays Lead Investor’s legal fees, capped at \$30,000.

## Board:

[Lead Investor designates 1 director. Common Majority designates 2 directors.]

## Founder and Employee Vesting:

Founders: [\_\_\_\_\_].  
Employees: 4-year monthly vesting with 1-year cliff.

# The Cap(italization) Table [1]

Company GmbH/AG

Finance Round

Investment Pre- Money

Price Per Share

Seed Financing 1. Closing

€ 1.950.000,00

€ 39,00

[1] See

<https://standardsinstitute.de/term-sheet/>

Shareholder	Establishment Of the Company		Financing Round A		Total without Options		Total with Options	
	Shares	in %	Investment	Shares	Shares	in %	Shares	in %
Founder 1	12.500	25,00 %		0	12.500	24,38 %	12.500	21,7%
Founder 2	12.500	25,00 %		0	12.500	24,38 %	12.500	21,7%
Founder 3	12.500	25,00 %		0	12.500	24,38 %	12.500	21,7%
Founder 4	12.500	25,00 %		0	12.500	24,38 %	12.500	21,7%
Investor 1			€ 50.000	1.282	1.282	2,50 %	1.282	2,2%
Investor 2								
Investor 3				0	0	0,00 %	0	0,0%
Investor 4				0	0	0,00 %	0	0,0%
Investor 5								
Options							6.433	11,1%
Total	50.000	100,00 %	€ 50.000	1.282	51.282	100,00 %	57.715	100,00 %

## **6. Expectations and Risk Profiles**



# Risk Profiles and Conflicts of Interest

- Founders
- Investors
  - Business angels
  - Venture capital
  - Private equity

# Summary

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# Thank you! Questions?

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