

Cambridge Judge Business School

Raising financial capital

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Objectives:

- Planning your funding strategy – key questions
- Appropriate funding sources
- Cash burn rate - the 'Valley of Death'
- Valuing new ventures
- Structuring equity investments
- Sources of equity – Venture Capital
- Debt finance

The bootstrapper's mantra....

"Never buy new what can be bought second-hand

Never buy what can be rented

Never rent what can be borrowed

Never borrow what can be begged

Never beg what can be salvaged"



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The difference between species



Venture Capitalist



Corporate Banker



Both are dangerous, but at least VCs are predictable

Planning your funding strategy - ten key questions:

- i. How much do you need?
- ii. When do you need it?
- iii. How long will it take to raise the money?
- iv. How long will it last?
- v. What will it be used for?
- vi. What *type* of money do you need?
- vii. From whom will you raise it?
- viii. How expensive is the money?
- ix. How and when do you plan to repay it?
- x. Is the business actually fundable?

Additional factors to consider when raising money

1. The 'type' of business you are starting affects the type of financial capital you can access
2. What 'stage of development' your business is at and how soon you are likely to generate sales revenue affects
3. The perceived risks determine the returns expected by financiers
4. Your attitude towards sharing ownership and control
5. Your bargaining power relative to the providers of capital



If you cannot convince an investor that they will get *six to ten times their money back* after 5 years they are VERY unlikely to invest...

Debt vs. Equity

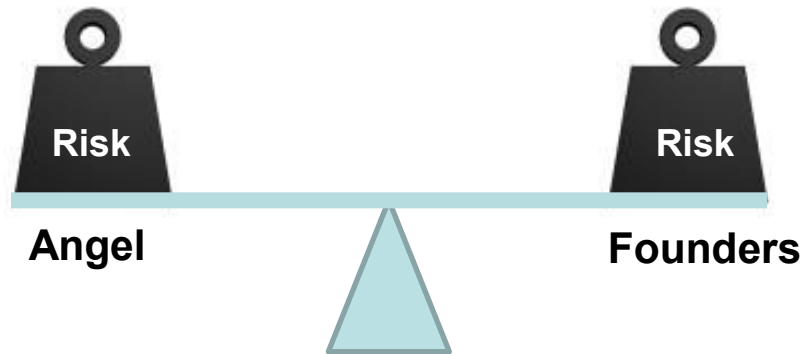
Key Features:	Equity	Debt
Dilution of ownership	✗	✓
Cost of money	✗	✓
Time taken to raise money	✗	✓
Cost associated with raising money	✗	✓
Available to 'lifestyle' businesses	✗	✓
Paid back if business fails	✓	✗
Smart money	✓	✗
Requires regular repayments	✓	✗
Can be raised pre-revenue	✓	✗
Security taken over assets	✓	✗
Directors guarantees required	✓	✗
Increases fixed costs and BEP	✓	✗

 **Disadvantage for founders**

 **Advantage for founders**

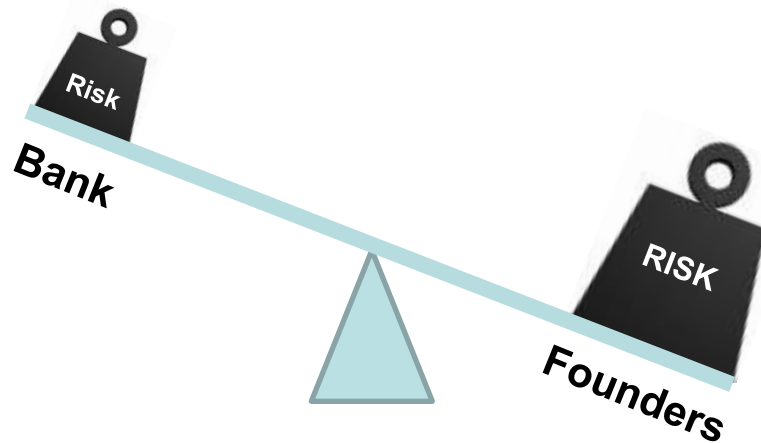
Who assumes the risk?

Equity invested by business angels



- Perform due diligence
- Require *warranties* from founders
- Require founders to invest their own money
- Funds released in stages based on the achievement of agreed milestones

Money borrowed from a bank

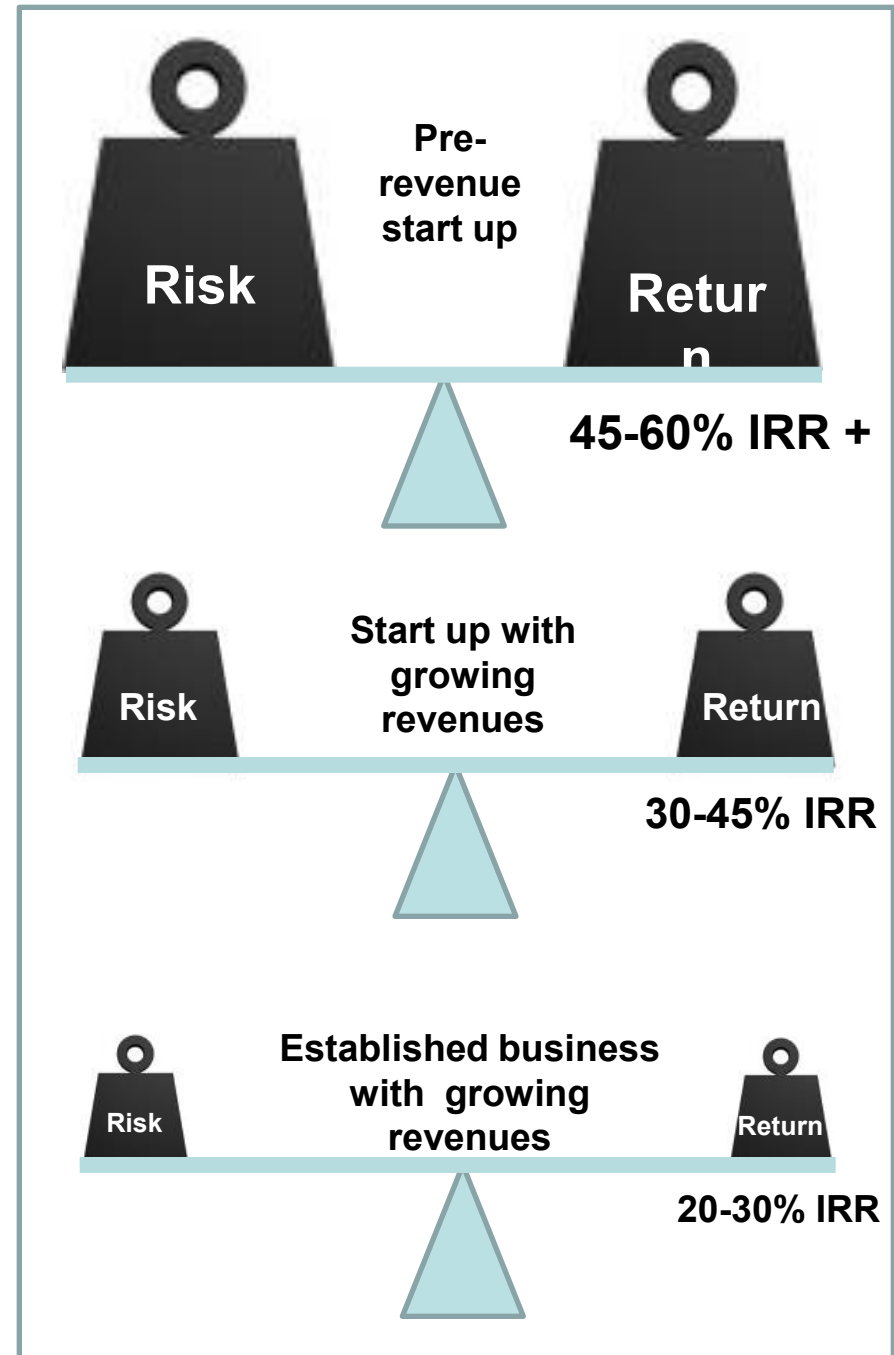


- Only lend to established businesses with sales revenue
- Take *security* (a legal right to sell) against the assets of the business
- Insist on *personal guarantees* from the Directors of the business
- Sometimes use the Enterprise Finance Guarantee Scheme (EFGS)

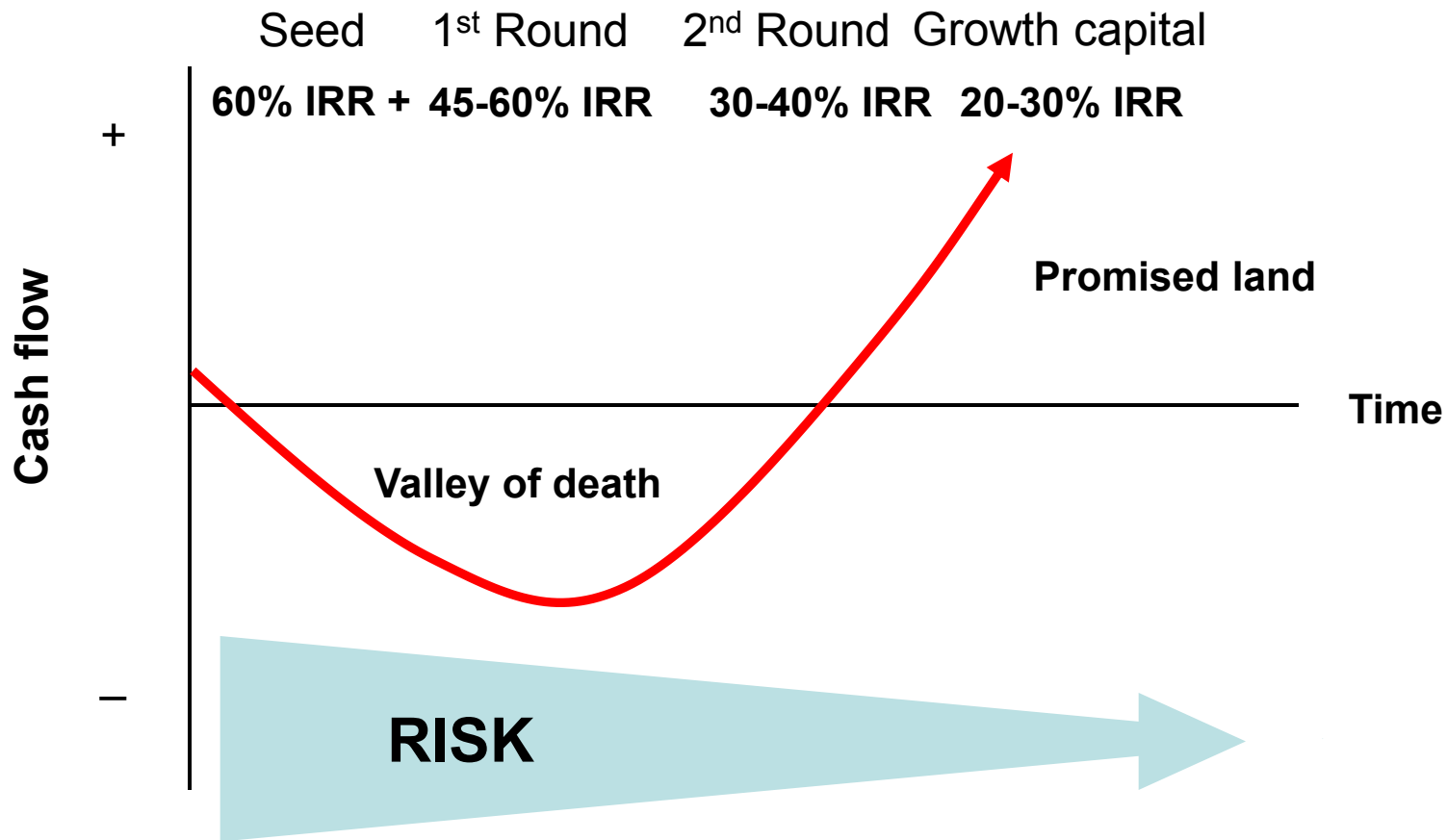
Perceived risk must be balanced by returns...

Risks - (MMIST)

- **Management** – will the team fall apart, can they execute?
- **Market** - is there a growing market, will customers buy?
- **Industry** - will competitors kill you, do you have a protectable advantage?
- **Supply chain** - will suppliers and distributors deal with you and on what terms?
- **Technology** - does it work, can you make it work, how much will this cost?



Risk and cost of equity capital



Estimating the cost of equity (IRR)

Return Multiple

	1.5x	2.0x	3.0x	4.0x	5.0x	6.0x	7.0x	8.0x	9.0x	10.0x
2	22%	41%	73%	100%	124%	145%	165%	183%	200%	216%
3	14%	26%	44%	59%	71%	82%	91%	100%	108%	115%
4	11%	19%	32%	41%	50%	57%	63%	68%	73%	78%
5	8%	15%	25%	32%	38%	43%	48%	52%	55%	58%
6	7%	12%	20%	26%	31%	35%	38%	41%	44%	47%
7	6%	10%	17%	22%	26%	29%	32%	35%	37%	39%
8	5%	9%	15%	19%	22%	25%	28%	30%	32%	33%
9	5%	8%	13%	17%	20%	22%	24%	26%	28%	29%
10	4%	7%	12%	15%	17%	20%	21%	23%	25%	26%

Return too low

Acceptable return (2nd Round)

Acceptable return (Growth)

Useful formulae:

Return Multiple = $(1 + \text{Internal Rate of Return})^{\text{Term of investment}}$

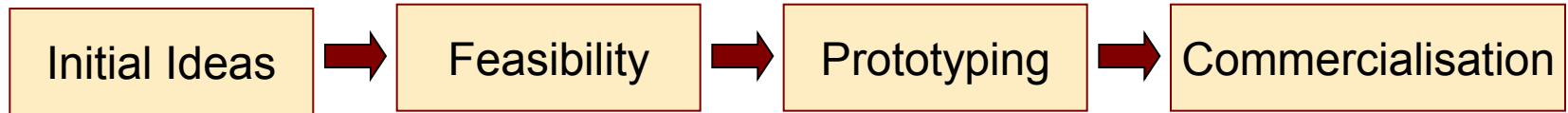
Internal Rate of Return = $(\text{Return Multiple}^{(1/\text{Term of investment})}) - 1$

~~W~~ Health Warning



Do not try to finance your business with debt until you have reliable cash flow from sales...

Early Stage Funding Options



Own savings, earned income, friends & family,

Grants (TSB, EU, Regional), Accelerators

Start-up loan scheme

Equity crowd funds, Seed funds (SEIS)

Business Angels

Venture Capital

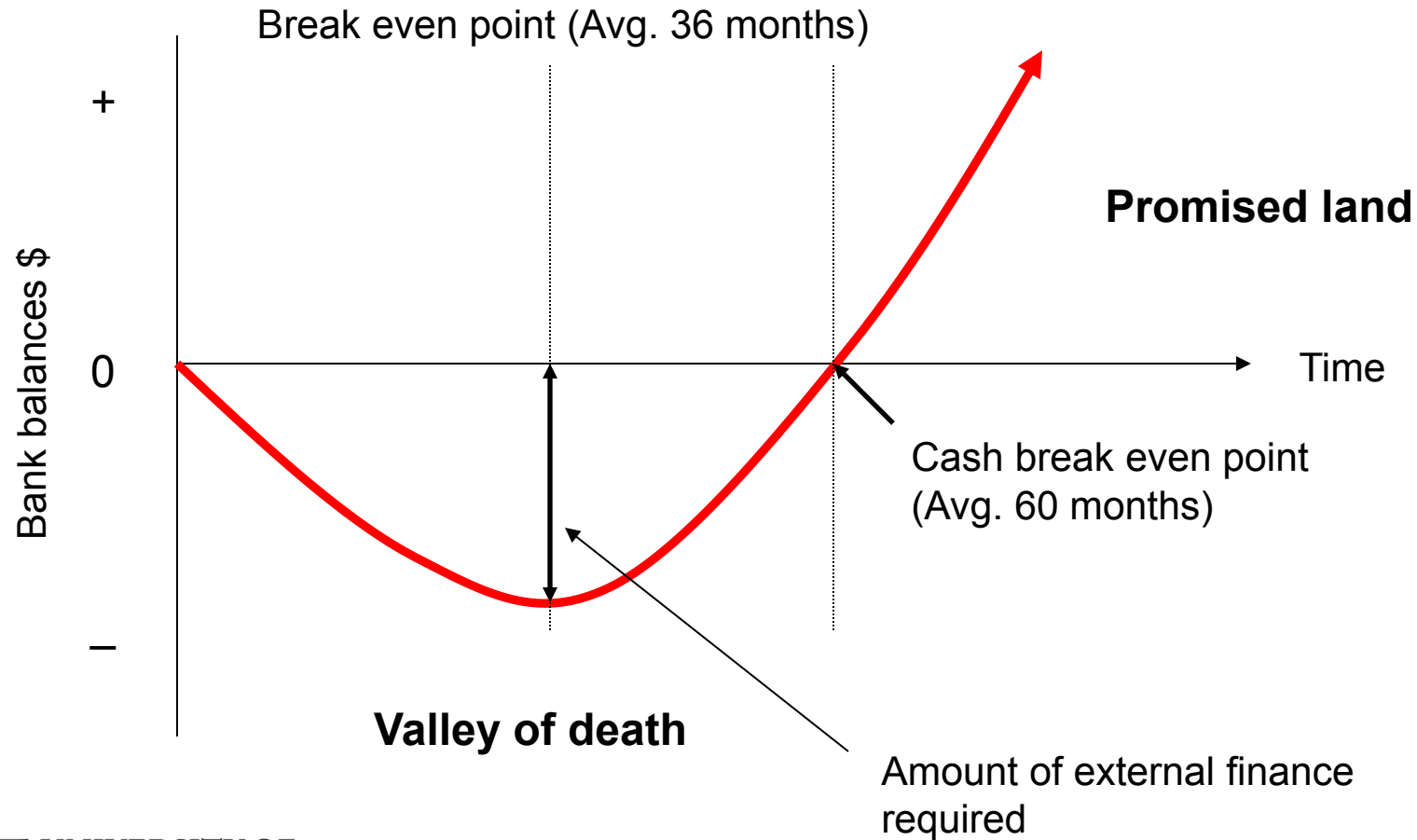
Bank Loans

Real Sales!

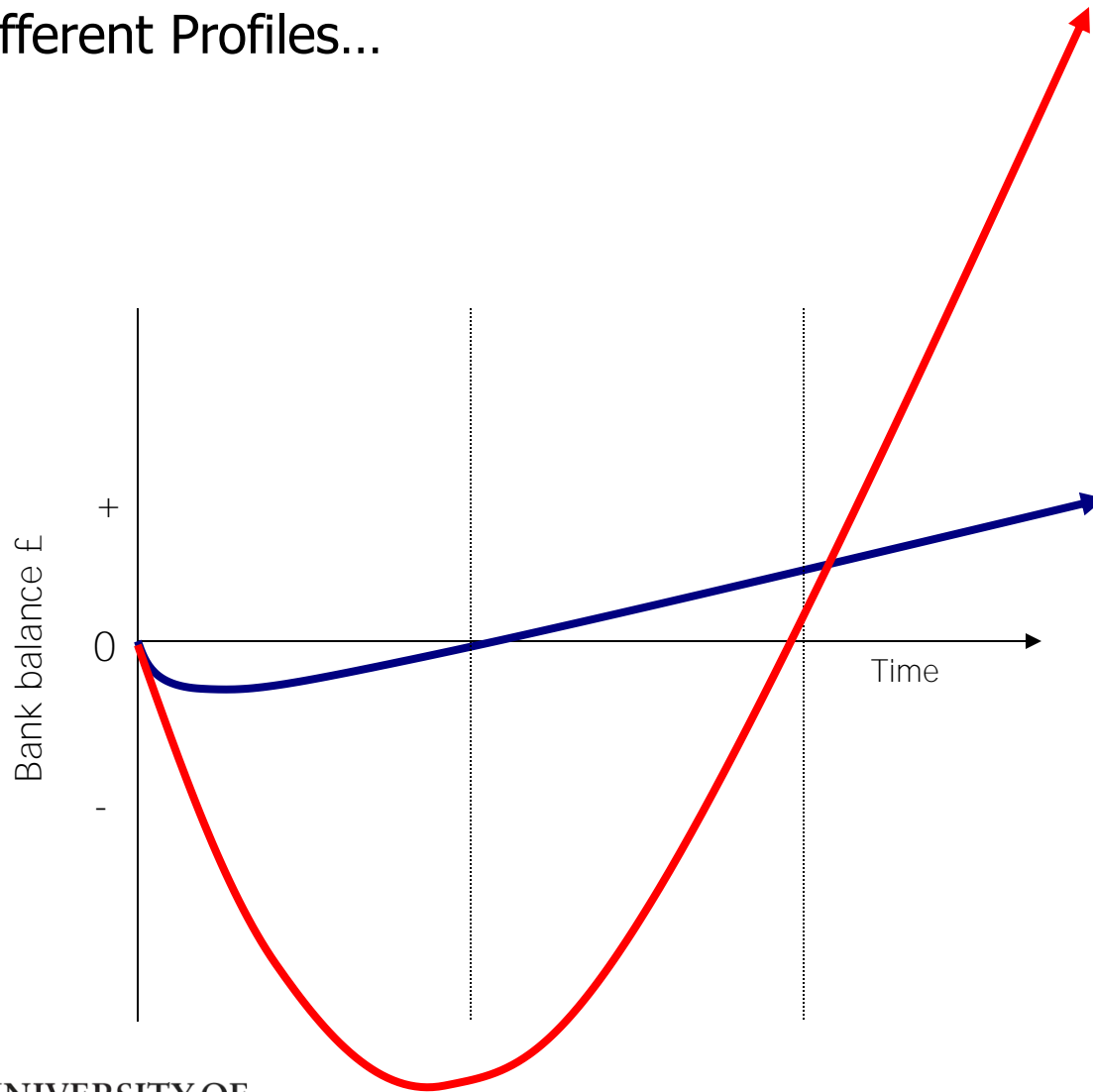


Until you have a workable business model your options are extremely limited...especially without secure IP

Financing the journey to the promised land



Different Firms, Different Profiles...



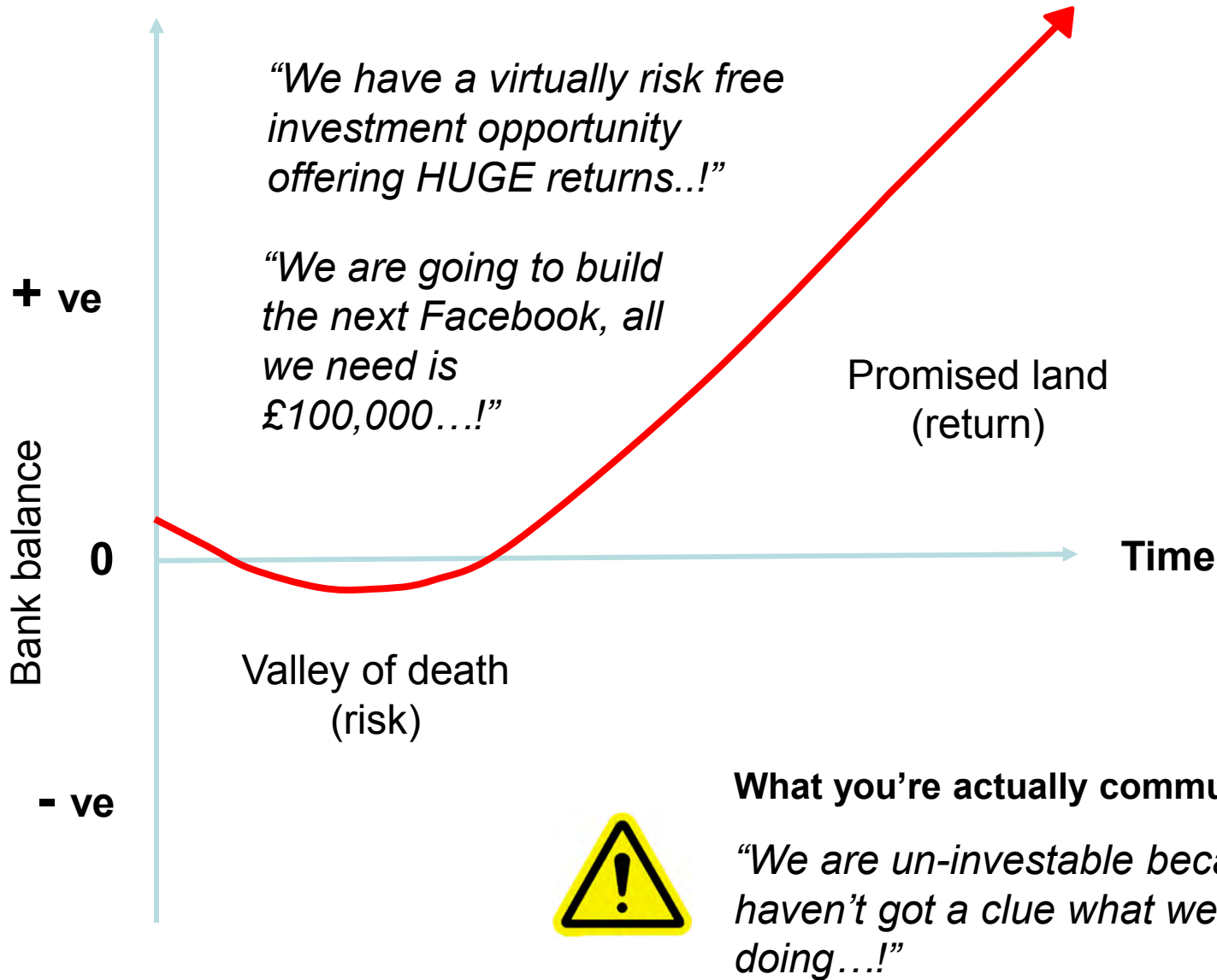
Technology firm

- Large investment required
- Late break-even
- Huge upside (Microsoft)

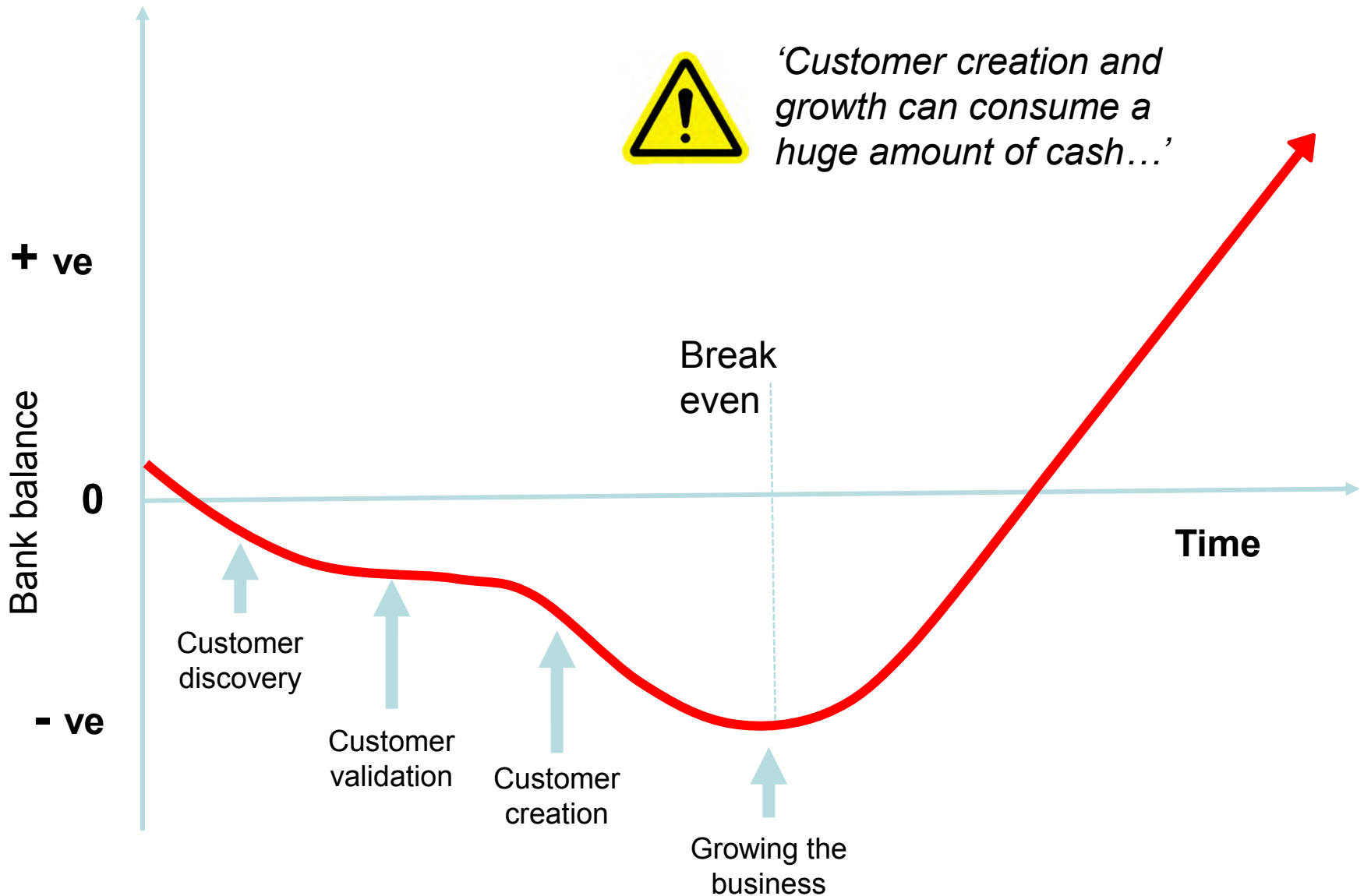
Consulting firm

- Low investment required
- Early break-even
- Modest upside

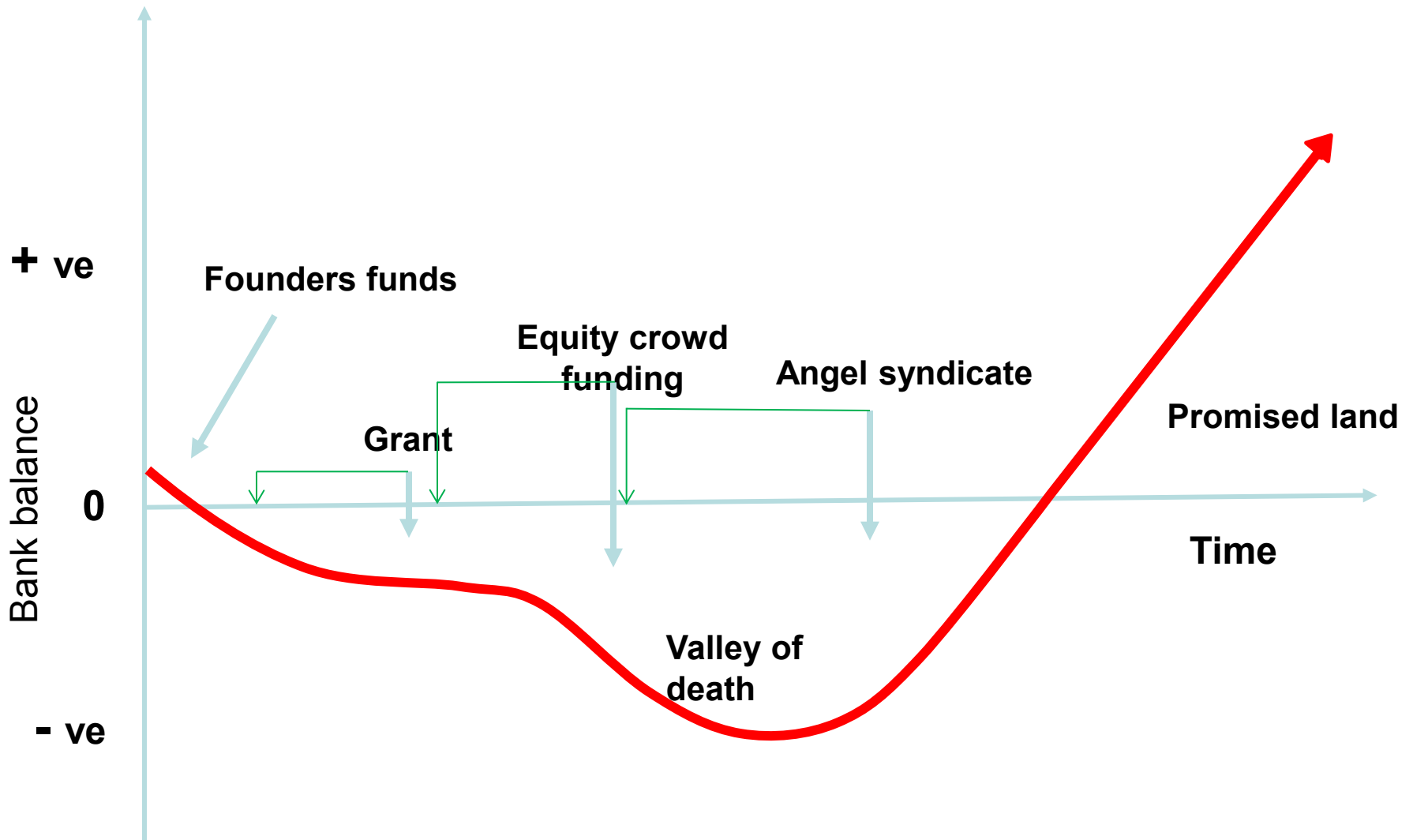
A guaranteed method for putting off investors!



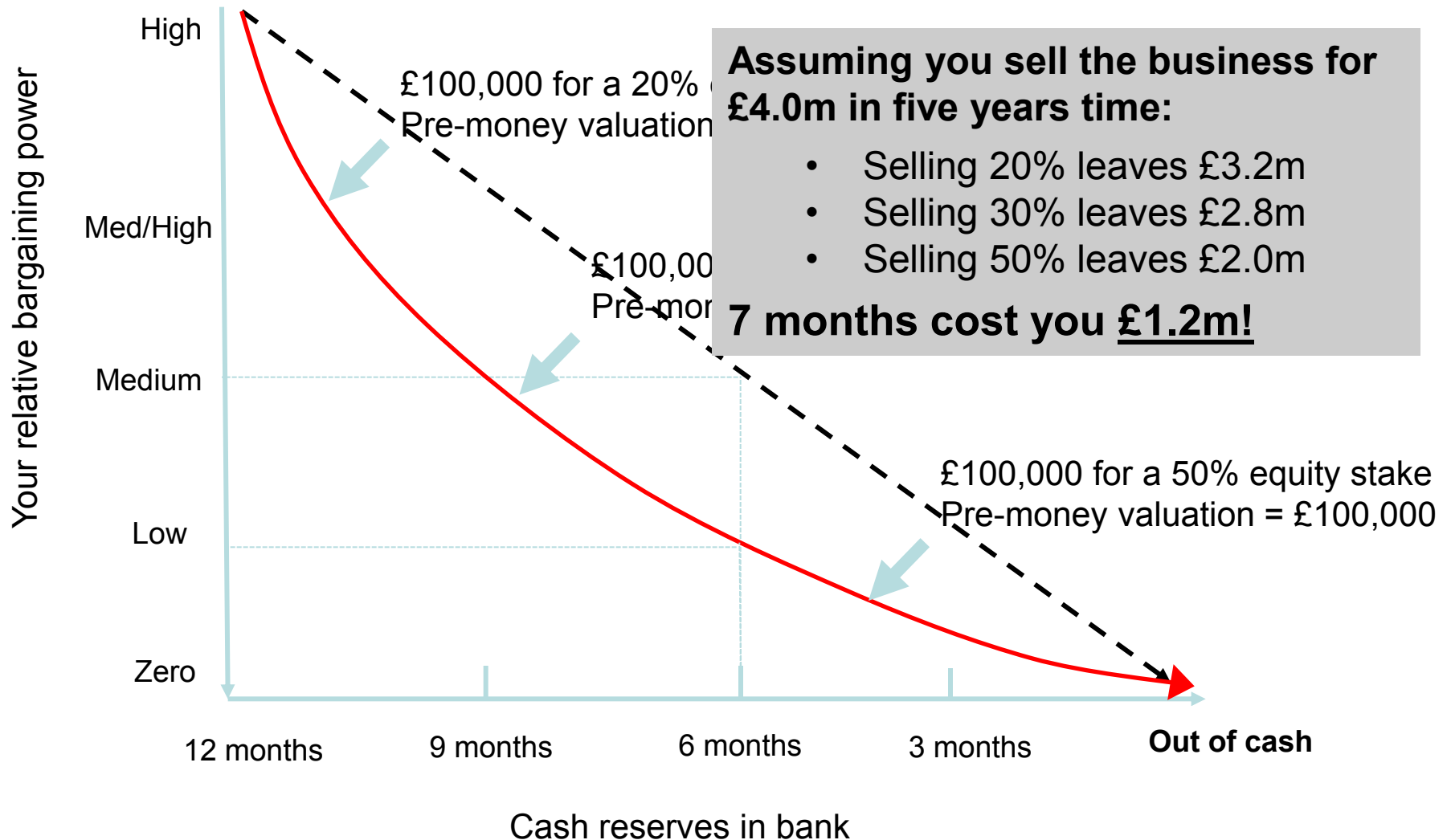
A typical lean start up cash flow profile



Filling the 'Valley of Death'



Your relative bargaining power when raising money from equity investors



How long does it take to raise money?

- Venture capital – 12 to 18 months
- Angel equity – 6 to 9 months
- Crowd funding – 3 to 6 months
- Bank debt – 2 months
- Off Balance Sheet finance – 1 month



***It always takes longer than
you anticipate!!***

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Valuation

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The VC valuation method

Most Angels and VCs wish to **exit after 5 years** (the target year)

The **internal rate of return** required (discount rate) will depend on the level of perceived risk. Let's call it **45%**

The multiple (M) of the investment required by the investor is simply calculated as follows:

$$M = (1 + \text{internal rate of return})^{\text{the target year}}$$

$$\text{Thus } M = (1 + 0.45)^5 = \mathbf{6.41}$$

The **capital return (CR)** is simply the multiple (M) times the original investment (I). Lets call I £1.1m giving us:

$$CR = 6.41 \times 1.1 = \text{£}7.05\text{m}$$

The **percentage ownership (PO)** expected by the investor will be:

$$PO = \frac{\text{Capital Return}}{\text{Market Valuation (in target year)}} \times 100\%$$

Our task is now to estimate a **market value (MV)** in year 5 (the target year). The most common way of doing this is to use the ***price to earnings ratio (PE)** for comparative firms. Thus:

$$\text{Market value} = PE \times \text{projected earnings in target year (NPBIT)}$$

*Note: PE ratio = share price/earnings per share (EPS = NPBIT/number of shares)

Let's assume that the PE ratio for similar quoted firms is 26 and that **projected NPBIT** in year 5 is £1m

The **unadjusted Market Value** in year 5 is thus $26 \times £1.0\text{m} = \text{£}26.0\text{m}$

The required percentage ownership is, therefore:

$$\frac{7.05}{26.00} \times 100\% = \mathbf{27.1\%}$$

In practice, however, the PE of quoted companies may be subject to a discount by the investor. This can easily amount to **30%** but is a matter for negotiation....Thus:

$$\text{PE (adjusted)} = \text{PE} - (\text{PE} \times \text{discount rate})$$

So

$$\text{PE (adjusted)} = 26 - (26 \times 0.30) = \mathbf{18.20}$$

Thus, if a discount rate of 30% is applied the percentage ownership required rises:

$$\frac{7.05}{18.20} \times 100\% = \mathbf{38.7\%}$$

Therefore, it is in your interests to persuade the investor that:

1. The risks (managerial, market, industry and technological) are low so that the required annual rate of return (which reflects financial risk) can be reduced
2. That earnings in the target year are realistic so as to avoid too heavy a discount
3. That the PE ratio is indeed comparable.

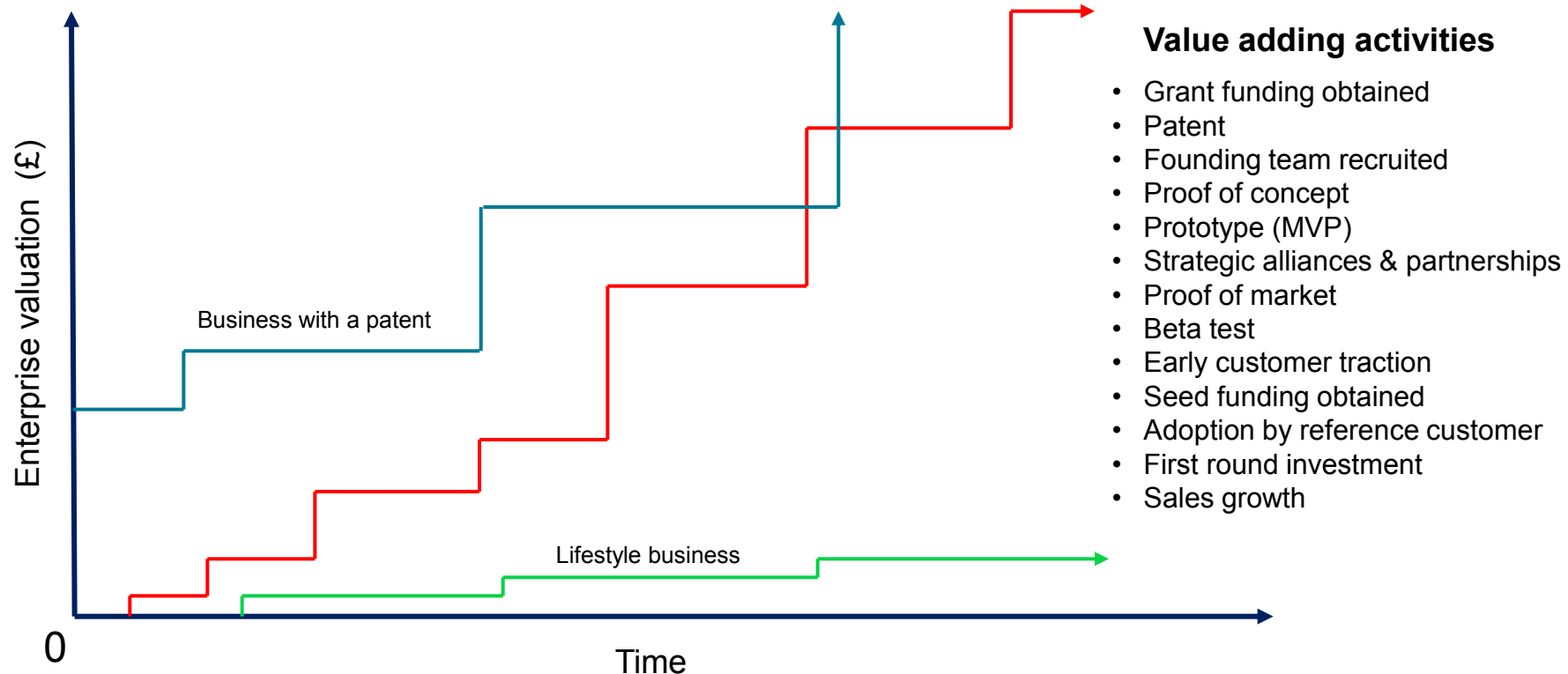
“What does your business have that justifies your pre-money valuation?”

- Rapid traction and (better still) real sales...
- Investors understand that success is 1% inspiration and 99% effort
- Investors respect passionate, focussed and hard working teams that deliver tangible results *quickly*...
- 80% Action 20% Analysis (unlike Business School)
- Your past and present achievements (e.g. tangible business results) count for more than wishful thinking.



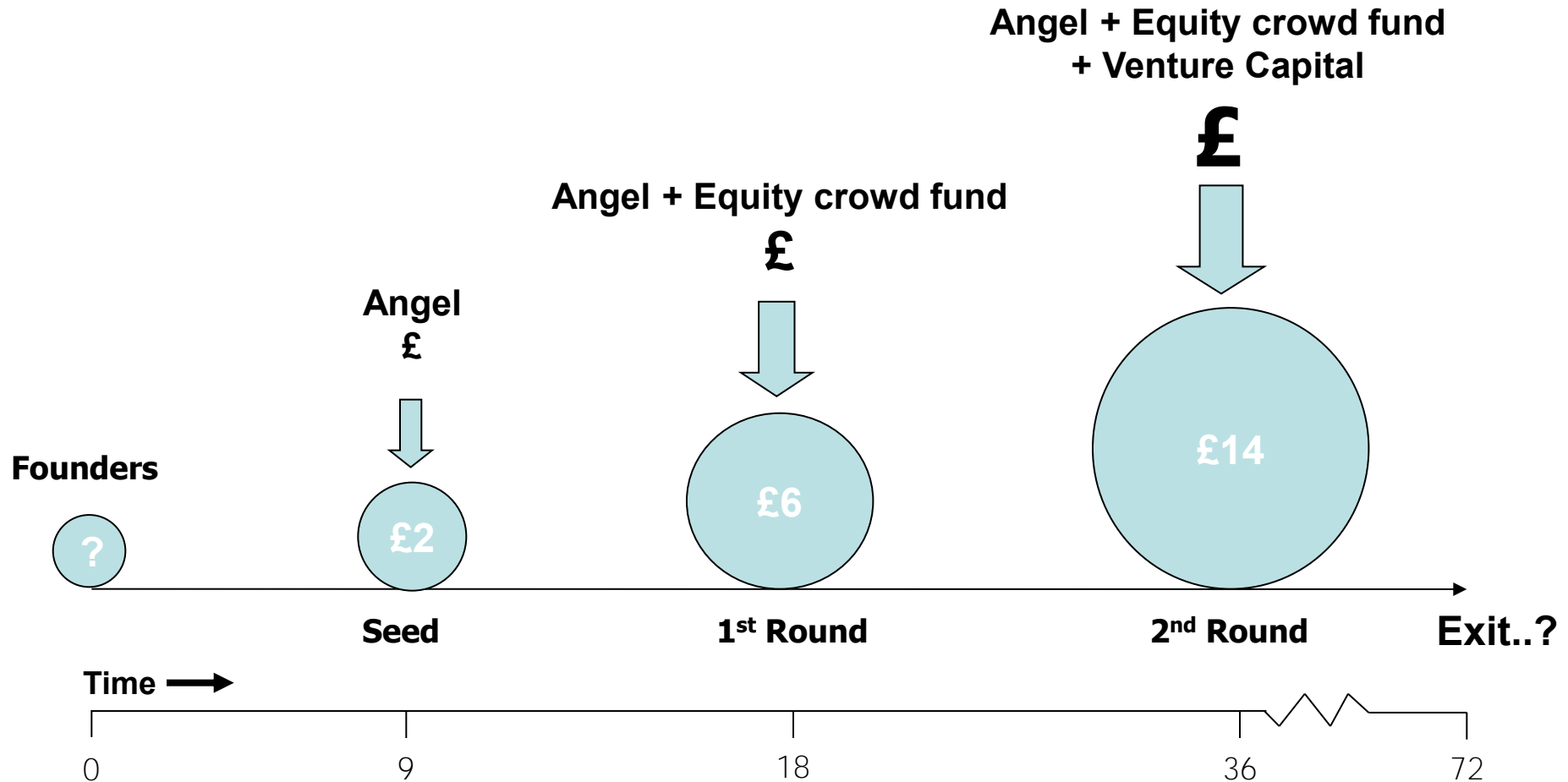
The value of your business is what someone is prepared to pay!

Building Enterprise Value



1. In the absence of defensible IP a business idea *has no value*
2. Understand precisely what adds value from the POV of an investor
3. Spend your time working on these things!

The investment lifecycle of a start-up



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Structuring equity investments

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Nosh Ltd.

The business was founded in 2005 with 10000 shares split between Liz (7000) and Simon (3000)

At this point we *do not know the value* of these shares...



The share price (or value) of an unquoted company is only known at the time the deal is done...

After 18 months an investor, Bob, offers to invest £18,000 in return for a 45% equity stake in the business.

Structuring the deal:

Stage 1. The first step is to calculate the pre-money valuation (its value before the investment is made):

Pre-Money Value = (Amount of investment/equity stake) – amount of investment

So:

$$(\text{£}18,000 / 0.45) - \text{£}18,000 = \text{£}22,000$$



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Stage 2. We now need to calculate the value of each share which is simply:

Pre-money valuation/number of shares. So, $\text{£}22,000/10000 = \text{£}2.20$

Note: The share price (or value) of an unquoted company is only known at the time the deal is done...



You need to understand that equity investments are negotiated in percentages (e.g. 45% for $\text{£}18,000$) but structured using shares.



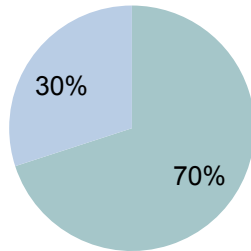
When a business raises money by selling equity it issues new shares to the investor. The investor does not take a proportion of the shares that already exist (e.g. 45% of 10,000 shares)

Stage 3. Calculate the number of new shares to be issued. The deal share price is $\text{£}2.20$ and $\text{£}18,000$ is being invested. The number of new shares will, therefore be: $\text{£}18,000/\text{£}2.20 = \textbf{8182}$

The total number of shares is now $10,000 + 8182 = 18182$

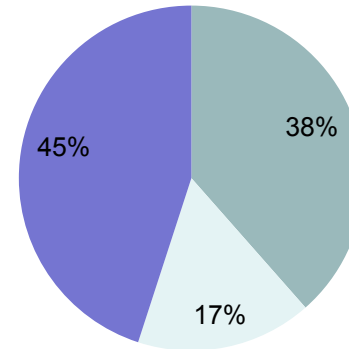
Pre-money = £22,000

■ Liz ■ Simon



Post-money = £40,000

■ Liz ■ Simon ■ Bob



In summary:

1. Calculate the 'pre-money valuation'
2. Calculate the deal share price by dividing the pre-money valuation by the number of shares
3. Determine the number of new shares to be issued by dividing the investment amount by the deal share price.

Second round investment

In early 2009 Liz, Simon and Bob agreed to sell 30% of the equity in Nosh to Johnston Press for £165,000

Structuring the deal:

Stage 1. Calculate the pre-money valuation (its value before the investment is made):

Pre-Money Value = (Amount of investment/equity stake) – amount of investment

So: (£165,000 / 0.30) - £165,000 = **£385,000**

Stage 2. Calculate the deal share price

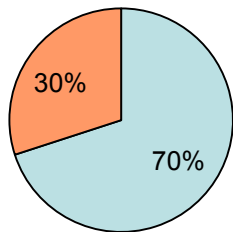
Pre-Money Value /number of shares = £385,000/18182

Deal share price is therefore £21.17

Stage 3. Calculate the number of new shares to be issued

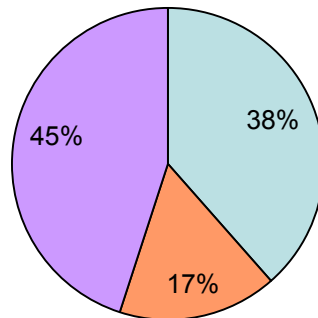
Investment amount/deal share price = £165,000/21.17

Number of shares issued to Johnston Press = 7792



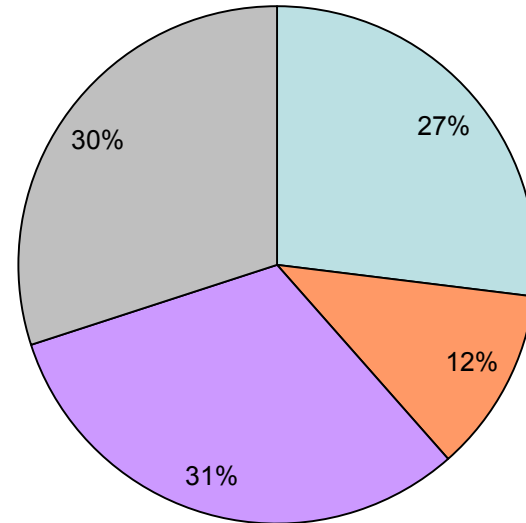
□ Liz □ Simon

£22,000



□ Liz □ Simon □ Bob

£40,000



□ Liz □ Simon □ Bob □ Johnston Press

£550,000



Bob is happy because his £18,000 is now worth £170,500 even though his ownership share has been diluted from 45% to 31%

A Bad Second round investment – ‘Down Round’

In early 2009 Liz, Simon and Bob agreed to sell 30% of the equity in Nosh to Johnston Press for £15,000.

They are not happy about this but they have no choice, without the investment the business will become insolvent.

Structuring the deal:

Stage 1. Calculate the pre-money valuation (its value before the investment is made):

Pre-Money Value = (Amount of investment/equity stake) – amount of investment

So: $(£15,000 / 0.30) - £15,000 = \mathbf{£35,000}$

Stage 2. Calculate the deal share price

Pre-Money Value /number of shares = $£35,000/18182$

Deal share price is therefore £1.92 (Down from £2.20)

Stage 3. Calculate the number of new shares to be issued

Investment amount/deal share price = £15,000/1.92

Number of shares issued to Johnston Press = 7792



Bob has protected himself with a
'full-ratchet' anti-dilution clause....!

He will be **fully compensated** for his loss by the re-allocation
of shares from Liz and Simon

Stage 1: Calculate the financial loss to Bob

$$8182 \times (£2.20 - £1.92) = £2250$$

Stage 2: Calculate the number of shares required to compensate him

$$£2250 / £1.92 = 1169$$

Stage 3: Calculate the number of shares reallocated from Liz and Simon

$$\text{Liz} = 1169 \times 0.7 = 818$$

$$\text{Simon} = 1169 \times 0.3 = 351$$

Stage 4: Calculate the new ownership percentages

Liz	$7000 - 818 = 6182$	23.8%
Simon	$3000 - 351 = 2649$	10.2%
Bob	$8182 + (818 + 351) = 9351$	36%
Johnston Press	7792	30%



The value of Bob's original investment (£18,000) has been maintained.....

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Early stage equity finance

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Sources of Equity Finance

- Your personal wealth (savings, equity in house) and that of business partners
- Family
- Crowd funding <£1m
- Business Angels <£1m (some syndicates may do more)
- Venture capital >£2m
- Corporate partners



Crowd funding – ‘The democratisation of capital...?’

- New platforms and agencies
- Crowd funding transactions growing at over 100% per annum

Much of this is due to:

- The inability (or unwillingness) of banks to lend to small businesses
- Low rates of interest
- Regulatory reform
- Tax incentives
- The relatively low cost of launching a crowd funding campaign



Types of crowd funding

Four broad categories:

1. **Equity** – Money is invested in the business in return for an ownership stake (e.g. Seedrs, Crowdcube, Syndicate Room)
2. **Debt** – Money is lent to the business (e.g. Funding circle)
3. **Reward** – Money is ‘given’ in return for non monetary rewards such as the goods or services to be produced by the business (e.g. Kickstarter)
4. **Donation** – Money is given to support good causes (e.g. Justgiving, Spacehive)



Crowd funding helps to validate your ideas and gain exposure for your business...

Equity crowd funding platforms

- Average success rate is approximately 20%
- Transaction *sizes* have grown significantly in 2014
- Valuation – On *most* platforms you decide the valuation!
- All-or-nothing vs. keep what you get?
- Nominee structure?
- Fees – usually in the range of 5% to 7.5% of sum raised
- Due diligence – Basic legal checks but not into the idea or tech!

Raising money on equity crowdfunding platforms

1. Research - Study successful campaigns and the many online guides
2. Plan your campaign carefully
3. Set a realistic valuation – It increases the odds of success
4. Build awareness – use your personal and professional networks, social media and promote through your website (no spam though)!
5. Build momentum by ‘pump-priming’ the campaign
6. Make a *professional* video pitch
7. Proactively manage your campaign



Campaigns are quickly becoming FAR more professional..!

Business Angels

- Business Angels (*'Angels'*) are high net worth individuals who invest their *own money* into early stage new ventures.
- Often (but not always) experienced entrepreneurs
- Often (but not always) provide 'smart money' by providing advice and making introductions to suppliers, distributors and customers
- £20-£250k is usual investment but some 'super angels' and angel syndicates may invest far larger amounts (£1m +)
- They use their contacts and *angel networks* to find investment opportunities
- Increasingly using 'angel led' crowd funding platforms such as Syndicate Room
- There are approximately 8,000 active angels in the UK



To be considered by angels, your investment should (must) be eligible for the Seed Enterprise Investment Scheme (SEIS)

Seed Enterprise Investment Scheme (SEIS)

For companies

- Maximum total SEIS investment £150,000
- Must be under two years old
- Fewer than 25 employees
- Gross assets of under £200,000
- Be in an approved sector
- UK registered with UK operations
- Funds must be used within 3 years

For investors

- Max investment £100,000
- 50% income tax relief
- Returns are free of CGT
- Losses written down against tax
- Can have ordinary shares only
- Scheme closes 5th April 2017

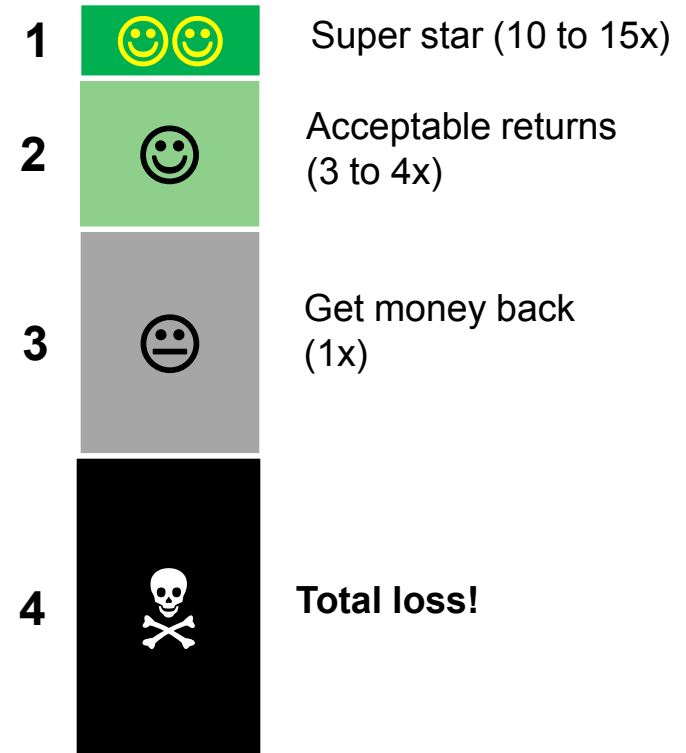


**To avoid delays in closing your funding round,
apply for your SEIS certificate well in advance**

Returns to angel investors

- They understand that a *high percentage of new ventures fail* or underperform
- Even with experience and due diligence it is very difficult to 'pick winners'
- To manage this risk they build a portfolio of investments (8 to 10)
- They are unlikely to invest unless the upside potential is *6 to 10x their money back*
- Overall, **returns average 2.2x** (an IRR of 22.4% after 4 years)
- This compares very favourably to later stage venture capital funds!

A typical angel portfolio



The big question... “Will this investment give me *at least 6 times* my money back inside 5 years?”

Business Angel resources

Angel networks and
service providers

<http://www.ukbusinessangelsassociation.org.uk/member/directory>

News and
information about
angel investing

<http://www.angelnews.co.uk/>

A useful introduction
to angel investing

<http://www.investmentuk.net/primer-on-angel-investments.php>

HMRC site on SEIS

<http://www.hmrc.gov.uk/seedeis/>

Enterprise investment
scheme association

<http://www.eisa.org.uk/>

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Venture capital

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So...you want to raise venture capital?

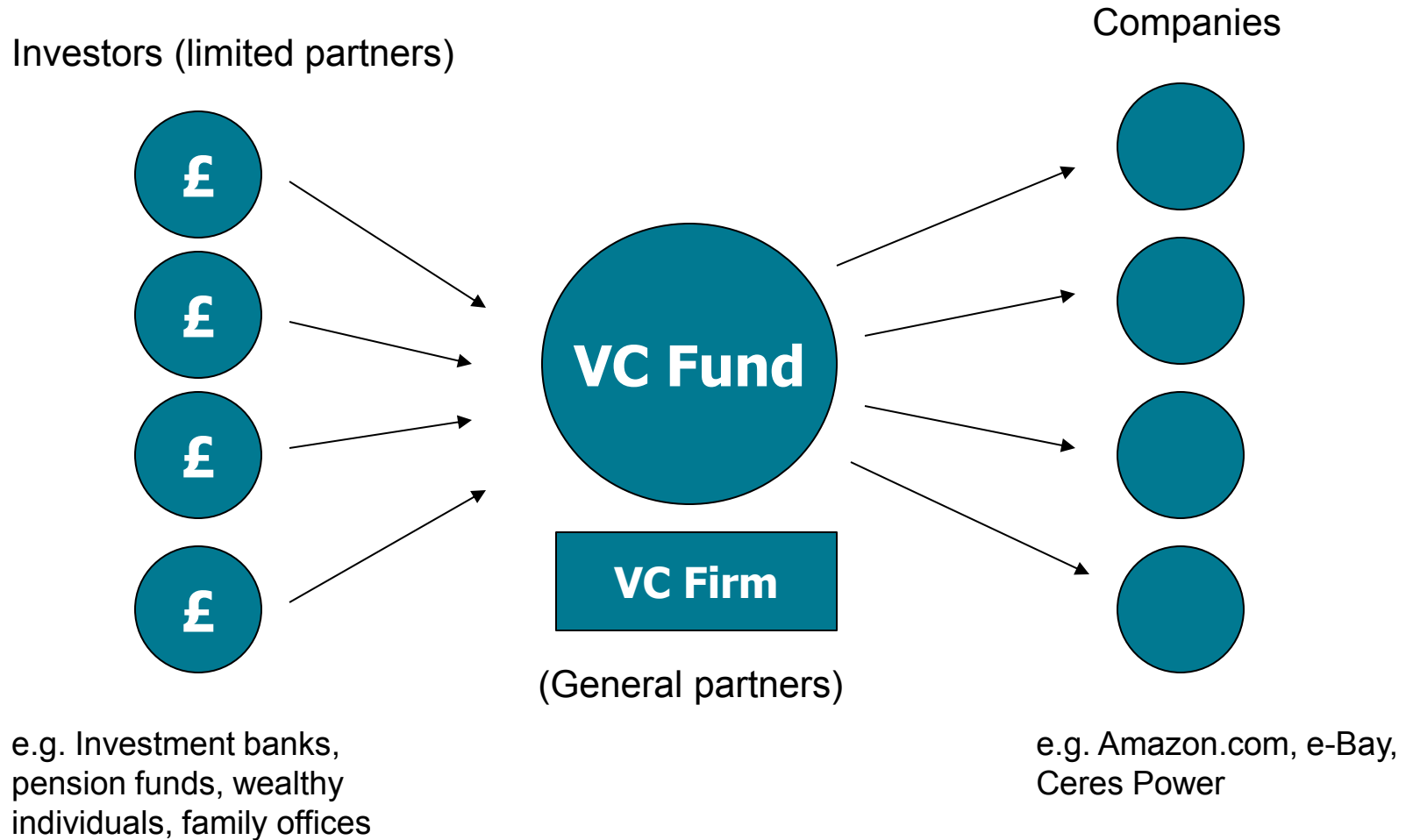
“My name is Rupert
Although I am cultivated I am utterly ruthless
You are not my customer
You are not my friend
I do not care about you or your hirelings
If you fail me I WILL ruin you

Now...how may I help you?”



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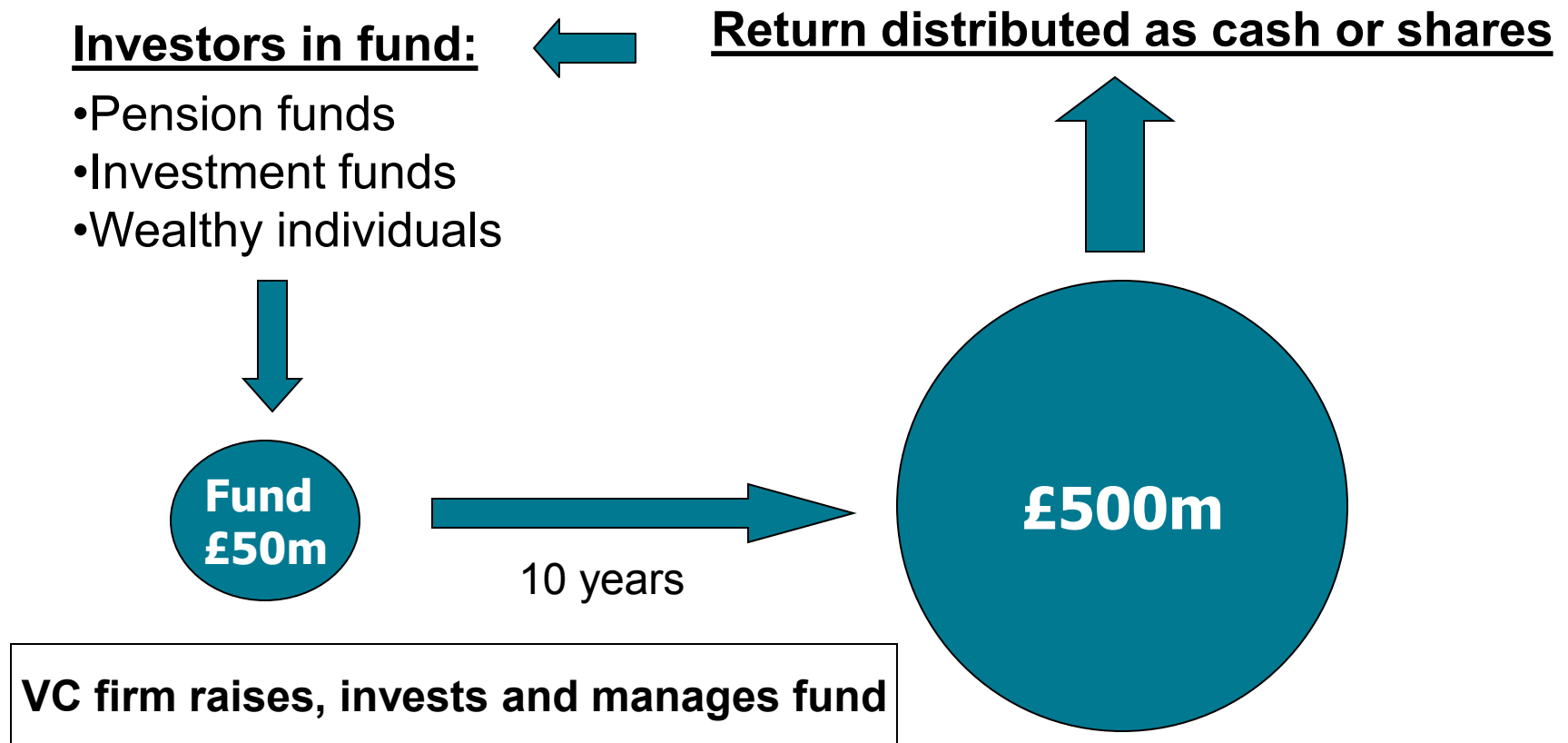
Venture Capitalists are Intermediaries



VCs think in milestones...and
dream of EXITS

***“Nobody makes real money
until the exit...!”***

The Venture Capital Cycle



VC firm keeps 20% of any return over 100% (Carried Interest)
+ charges a 2% management fee

Venture Capital - Some basics

- Equity is invested in *rounds* (seed, 1st Round, 2nd Round, etc.)
- Each round is released in 'tranches' based on the achievement of **milestones**
- Be prepared for founder share vesting clauses!
- Some terms will alarm you...
- They always require a board seat
- Deal structures vary widely, ***you need to take professional advice***

VC Share Rights

The 'convertible, redeemable, preferred ordinary share'...



They get their money back first and foremost under all circumstances...!

Example:

A VC invests £2.0m in return for a 50% stake in your company.

After 5 years the business is sold for £4.0m, what is the return to the investor?

If the company is sold for £4 million...

- VC receives its £2 million back (like a loan)
- £2 million remains
- VC receives its 50% share of remaining £2 million (= £1 million)

= £3 million for VC

= £1 million shared out by other shareholders

VC receives 75% of the proceeds...

And if the company is sold for £10 million

- VC receives its £2 million back (like a loan)
- £8 million remains
- VC receives its 50% share of remaining £8 million (= £4 million)

= £6 million for VC

= £4 million shared out by other shareholders

VC receives 60% of the proceeds...

But..beware of the 'Liquidity Preference'

Company is sold for £4.0m and there is a **2x liquidity preference** in the term sheet...

- VC receives its 2 x £2 million back (like a loan) = £4m
- £ zero remains

= £4 million for VC

= £ zero for the other shareholders

VC receives 100% of the proceeds...

And if the company is sold for £10 million

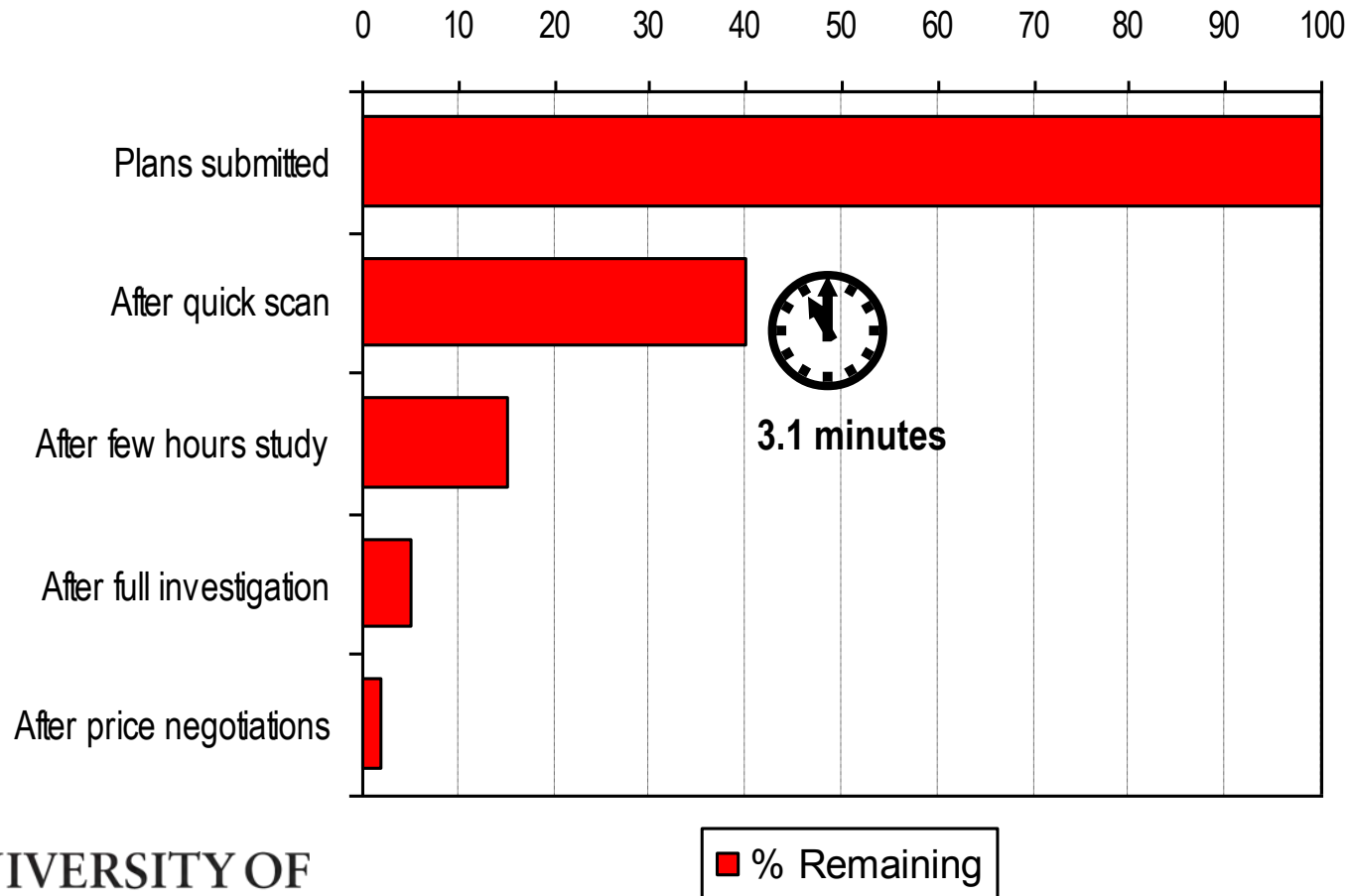
- VC receives its 2 x £2 million back (like a loan) = £4m
- £6 million remains
- VC receives its 50% share of remaining £6 million (= £3 million)

= £7 million for VC

= £3 million shared out by other shareholders

VC receives 70% of the proceeds...

VC decision making



What VCs say they look for....

- **The team** - Especially positive if they have worked together before
- **Clean IP portfolio** - Especially in early stage tech firms
- **Sector** - Investors back what they know (so check out their portfolio).
- **Traction in large, growing markets**
- **Financial indicators** - Gross margin is a favourite
- **Entry valuation** - A black art...
- **Exit route** - Can I get out? When? How? Valuation?
- **Due diligence** - any skeletons?



Top deal killers...

- Poor quality management - leave positions vacant rather than recruit the wrong people
- Insufficient market size – the best plans address huge opportunities
- Insufficient “critical mass” to the technology - VCs will not back a one-shot wonder
- Problems with intellectual property portfolio

But....It depends heavily on the individual investor

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Debt finance

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Those aged 18+ living in England and looking for finance to start a business

Average loan size is around £2,500, but the final amount will be determined by the business plan. There is no definite limit

It is a personal loan, which means if 4 or 5 people from the same company apply for a loan, all are eligible for an individual loan up to invest in their business

Paid back within 5 years at a fixed-rate of interest (currently 6%).

Capital repayment holidays are available, but interest must be covered monthly throughout

Start-up loans are accessible to anyone who had a business in its initial phase (up to 1 year from founding)

<http://www.startuploans.co.uk/>

Corporate bankers

- When it matters most they are likely to let you down
- They are allergic to risk
- Trust is an alien concept
- ***Everything*** is negotiable
- Beware of personal guarantees
- They hate surprises
- Communication is the key!



CAMPARI : The Banker's Maxim

- **Character** - 'respectable & trustworthy'?
- **Ability** - track record, team, potential
- **Margin** - % above base rate
- **Purpose** - expansion, rescue or buying toys
- **Amount** - is this realistic, too much or too little?
- **Repayment** - can you pay the interest *and* repay the principal
- **Insurance** - if required, is there security?

Enterprise Finance Guarantee (EFG) scheme

- The government will underwrite 75% of the loan
- An additional 2% is chargeable on the loan and paid to the Department of Business, Innovation and Skills
- Loans range in size from £1,000 to £1m
- The term of the loan can be from three months to 10 years
- EFG applies to:

- New term loans
- Refinancing an existing loan
- Converting an overdraft into a fixed term loan
- Guaranteeing an overdraft
- Guaranteeing invoice financing

- Lending decisions are made by the bank who will only turn to the EFG if the usual security criteria cannot be met by the business
- Lenders will still usually require a personal guarantee!

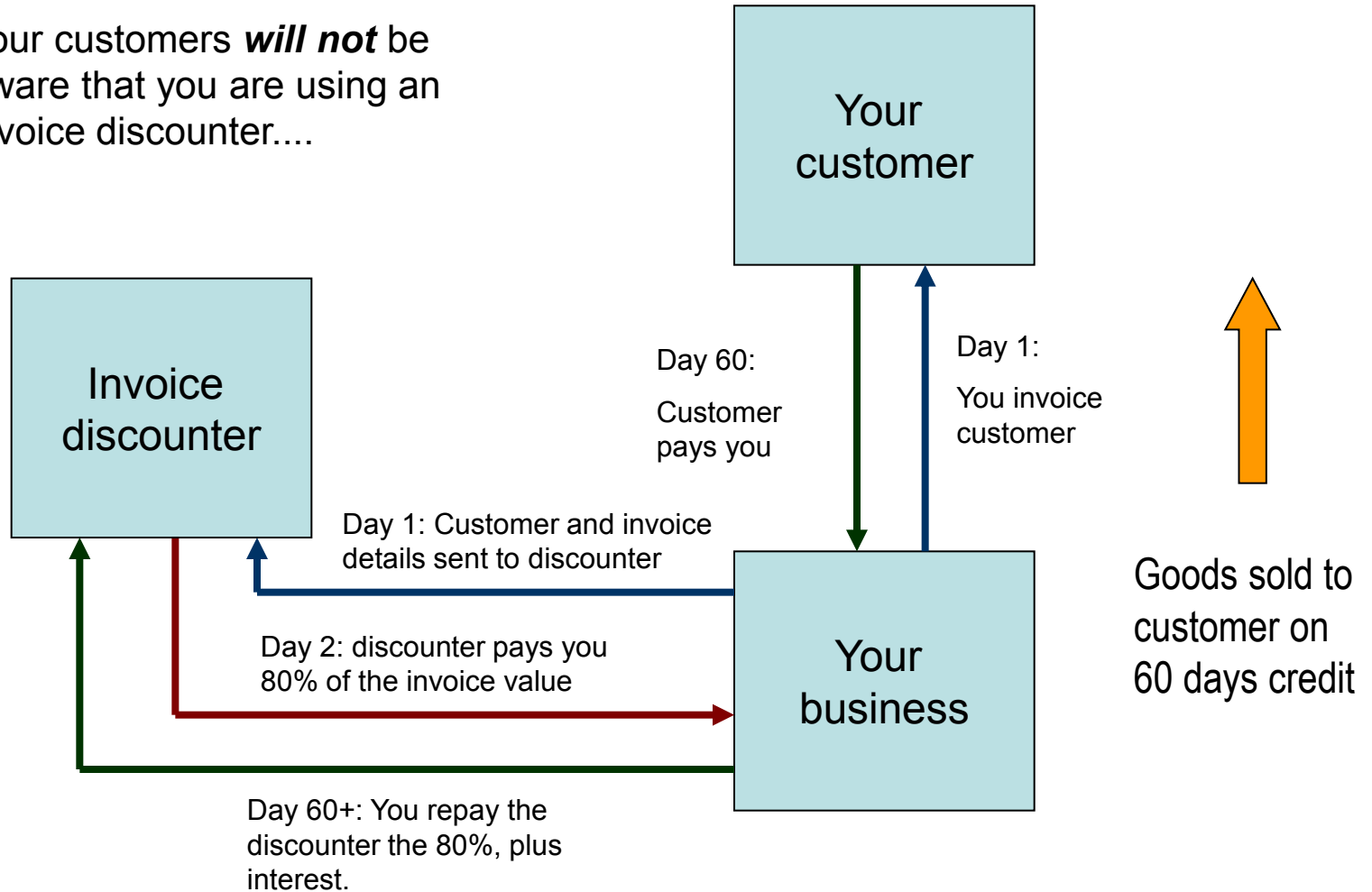


This personal guarantee *cannot* include your 'principal private residence'

Invoice Discounting



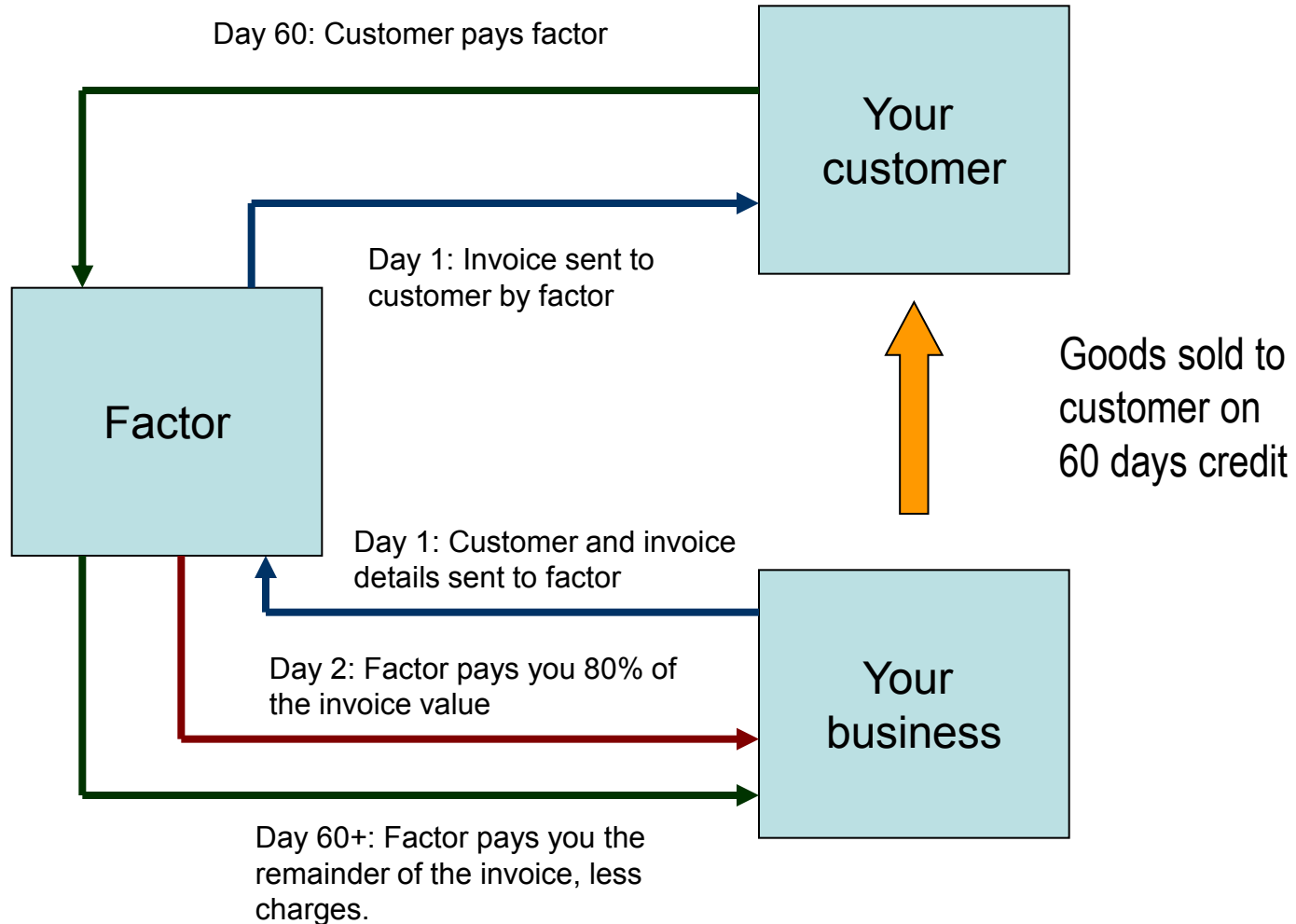
Your customers **will not** be aware that you are using an invoice discounter....



Interest rate: 1.5% to 3% above base

Credit management fee: up to 0.5% of invoice value

Factoring



Interest rate: 1.5% to 3% above base

Credit management fee: up to 2.5% of invoice value