



ESN

EUROPEAN
STARTUP NETWORK

Startup valuation

Agenda

- First remarks
- Pre-Money / Post-Money & dilution
- Dangers of wrong valuation
- Factors impacting valuation

Agenda

Methodologies

- Rule of thumb
- Traditional methods
- VC method
- Scorecard method (not analyzed here)
- Dave Berkus Method
- Risk Factor Summation
- Multiples & comparables

Reviewed by



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Partner



First remarks

- 1st rule : there is no rule
- Rule of thumb
- More an art than a science
- Price is not (always) the value

First remarks

- Do not compare
 - With US or other countries
 - With your friends
- More mature, more rational
 - From people/potential to metrics
- Valuations evolve all the time
- Be realistic and flexible

First remarks

- Professional (not personal) discussions
- Always too diluted for entrepreneurs and too expensive for investors
- Investment terms are as important as valuation

Dangers of wrong valuation

- Too high valuation
 - Not attract the right investors
 - Difficult for further rounds (down rounds, weak progresses)
 - Time to close is longer
 - Pressure & expectations
 - Terms

Dangers of wrong valuation

- Too low valuation
 - Too much given, not enough equity for further investors, employees
 - Founders→motivation
 - Difficulty to justify good valuation later

Pre & Post Money Valuation

- Pre-money
 - Value of your company before investors–money
- Investment
- Post money
 - Value of your company after investment

Dilution

Example

- Company worth $1M_3$ before investment (Pre)
- Investors invest $250k_3$
- Post Money valuation : $1M_3 + 250k_3 = 1,25M_3$
- Ownership after investment :
 - Founders : $1M_3 / 1.25M_3 = 80\%$
 - Investors : $0.25M_3 / 1.25M_3 = 20\%$

Dilution

Pre-seed Round or creation			Angel/Seed Round			VC Round #1		
Shareholder	Shares	Percentage	Shareholder	Shares	Percentage	Shareholder	Shares	Percentage
Uncle	50	6,25%	Uncle	50	4,86%	Uncle	50	3,24%
Founder 1	250	31,25%	Founder 1	250	24,31%	Founder 1	250	16,20%
Founder 2	250	31,25%	Founder 2	250	24,31%	Founder 2	250	16,20%
Founder 3	250	31,25%	Founder 3	250	24,31%	Founder 3	250	16,20%
Founder 4		0,00%	Founder 4	0	0,00%	Founder 4	0	0,00%
TOTAL	800	100%	Angel	229	22,22%	Angel	229	14,81%
			TOTAL	1029	100%	VC's 1	514	33,33%
						TOTAL	1543	100%
			Pre-money	700.000,00 €		Pre-money	2.000.000,00 €	
Uncle's Investment	50.000,00 €		Angel's investment	200.000,00 €		VC1's investment	1.000.000,00 €	
			Post Money valuation	900.000,00 €		Post Money valuation	3.000.000,00 €	
% uncle	6,25%		% angel	22,22%		% VC1	33,33%	
"Share price"	1.000,00 €		Share price	875,00 €		Share price	1.944,44 €	

Calculate # shares & share price =>%

Factors Impacting Valuation

Economy & market conditions

Location

Business Sector / industry

Factors Impacting Valuation

Stage of Development

Team

Market Size

Competition

Factors Impacting Valuation

- Revenue & (gross) margins
- Unit economics, metrics & traction
- Use of funds and next milestones
- Round size & competition to invest
- Further round(s) / past rounds

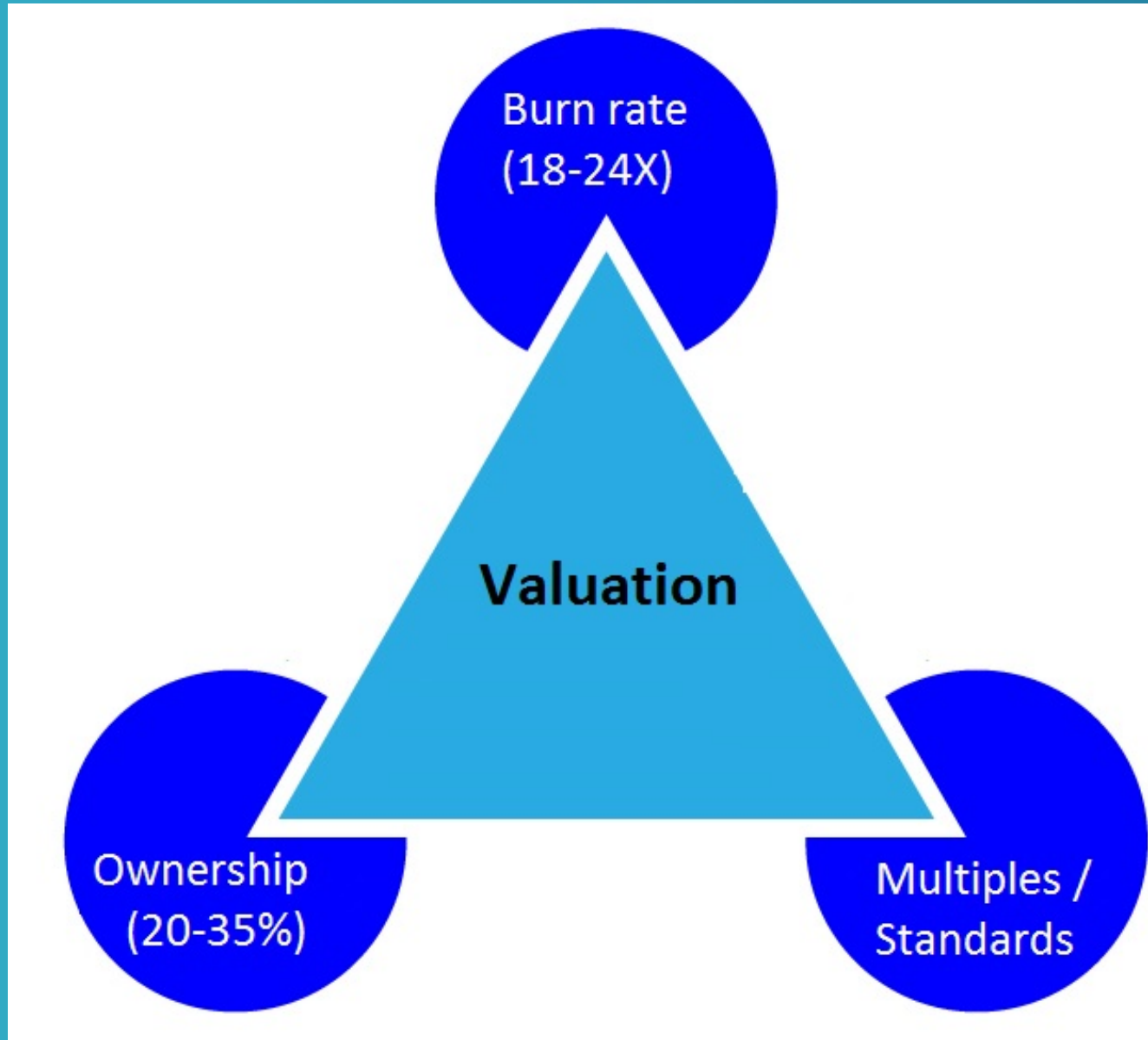
Valuation (Rule of thumb)

(Net) Burn rate for the next 18-24 months

- Achieve milestones for next round

Investors want to have 20-35% of the company to have substantial returns

Multiples regarding your industry / your company





Valuation (Rule of thumb)

Changing Lanes

Uber's share price as of June 30, according to four mutual funds

BlackRock Global Allocation Fund

\$40.02

Vanguard U.S. Growth Fund
Investor Shares

\$39.64

Hartford Growth
Opportunities Fund

\$35.67

Fidelity Contrafund

\$33.32

Source: the mutual funds

THE WALL STREET JOURNAL.

Cloudera

Three mutual funds valued the software startup at different prices on June 30, 2014.

T. Rowe Price Global Technology Fund

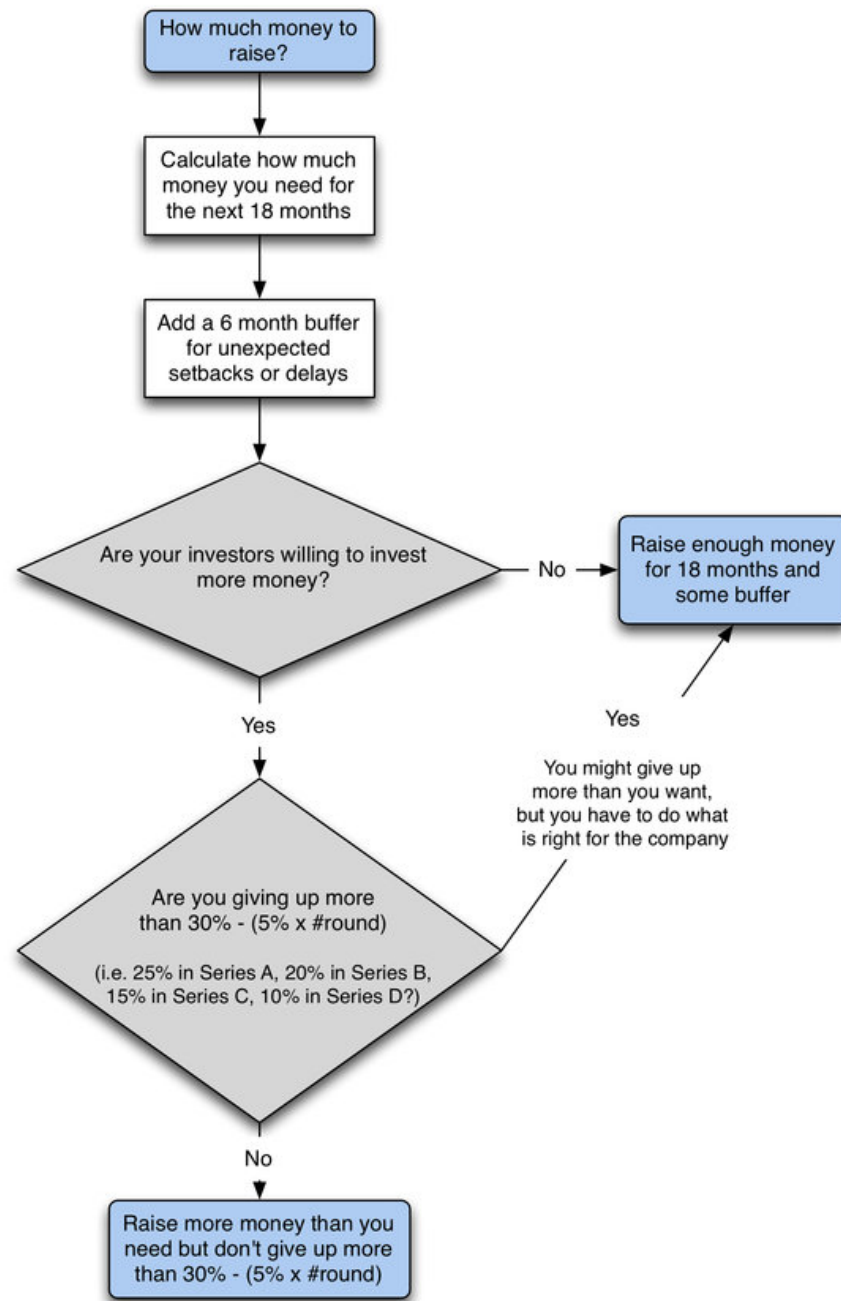
\$27.83

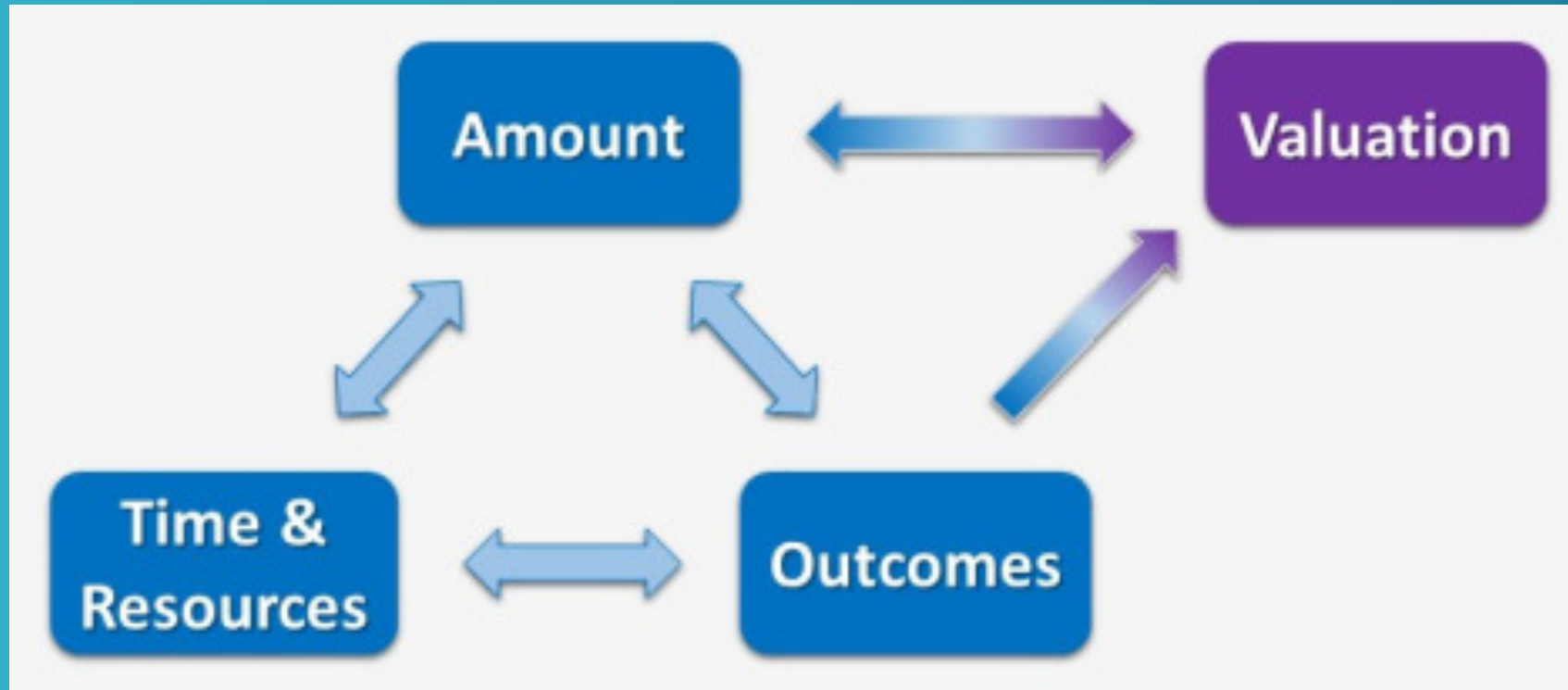
Optimum Small-Mid Cap Growth Fund

\$14.56

Hartford Growth Opportunities Fund

\$13.10





- shockwaveinnovations.com


$$\text{Valuation} \text{💵} = \frac{\left(\begin{array}{l} \text{Founder's hopes} \\ \text{and dreams} \text{☁️} \end{array} \right) \times \text{How fast it's actually growing}}{\left(\begin{array}{l} \text{Downside protection} \text{☔️} \\ \text{Investor FOMO} \end{array} \right)}$$

Traditional methods

(Past : assets) -> not for tech startups

Present : multiple

(Future : Discounted Cash Flow) -> not for early stage startups

Different methods

VC method

Scorecard method (not here->pre-revenue)

Dave Berkus Method

Risk Factor Summation

Multiples

VC method

Size of the fund

IRR to their LP's

of investments

of rounds per company

Ticket size

Time to exit

Further rounds needed (further dilution)

Ownership

VC method

What value at exit?

$$\text{Post-Money} = \text{Exit Value} / (1 + \text{IRR})^{\text{time}}$$

Example

Time : 5 years

IRR : 20%

Exit : 25M€ (+/- average exit price in Europe)

$$\text{Post Money} : 25\text{M€} / (1,2^5) = 10,047\text{M€}$$

VC method

Example

Time : 5 years

Invest 2M€ @ 10M€ (Post-money) -> 20%

Further investment : 3M€ @ 15M€

- Dilution of 20% (VC doesn't follow-on in this case)

Ownership : 16% -> 4M€ return on 2M€

IRR : 15% -> NOT OK => lower valuation

VC method

- Fund size : 50M₃
- Investments : 40M₃ (Fund - mgt fees)
- IRR (expected) : 3X on 10 years (12% IRR)
- # investments : **22**

Investments in a startup (M€)	#startups
5	5
1,5	4
1	5
0,5	8
40	22

Case 1 – 2,75X (10,65%)

Amount invested (M€)	#startups	Return	Exits (M€)
13,5	11	0	0
8	4	1	8
12	4	3	36
6,5	3	10	65
40	22		109

Portfolio

- 1) 5@0,5M + 3@1M + 2@1,5M + 1@5M
- 2) 1@0,5M + 1@1M + 1@1,5M + 1@5M
- 3) 1@0,5M + 0@1M + 1@1,5M + 2@5M
- 4) 1@0,5M + 1@1M + 0@1,5M + 1@5M

This is a theoretical case
Many VCs don't have this returns and few
have much better
Portfolio repartition is never pre-
determined

Case 2 – 3,02X (11,69%)

Amount invested (M€)	#startups	Return	Exits (M€)
13,5	11	0	0
7	4	1	7
8,5	4	4	34
11	3	10	110
40	22		151

Portfolio

1) 5@0,5M + 3@1M + 2@1,5M + 1@5M

2) 2@0,5M + 1@5M

3) 1@0,5M + 2@1,5M + 1@5M

4) 2@1M + 2@5M

This is a theoretical case

Many VCs don't have this returns and few have much better

Portfolio repartition is never pre-determined

IRR on 50M€ not 40M€

Case 3 – 2X (7,18%)

Amount invested (M€)	#startups	Return	Exits (M€)
13,5	11	0	0
2	2	1	2
7	3	1,5	10,5
7	3	3	21
5,5	2	4	22
5	1	5	25
40	22		80,5

Portfolio

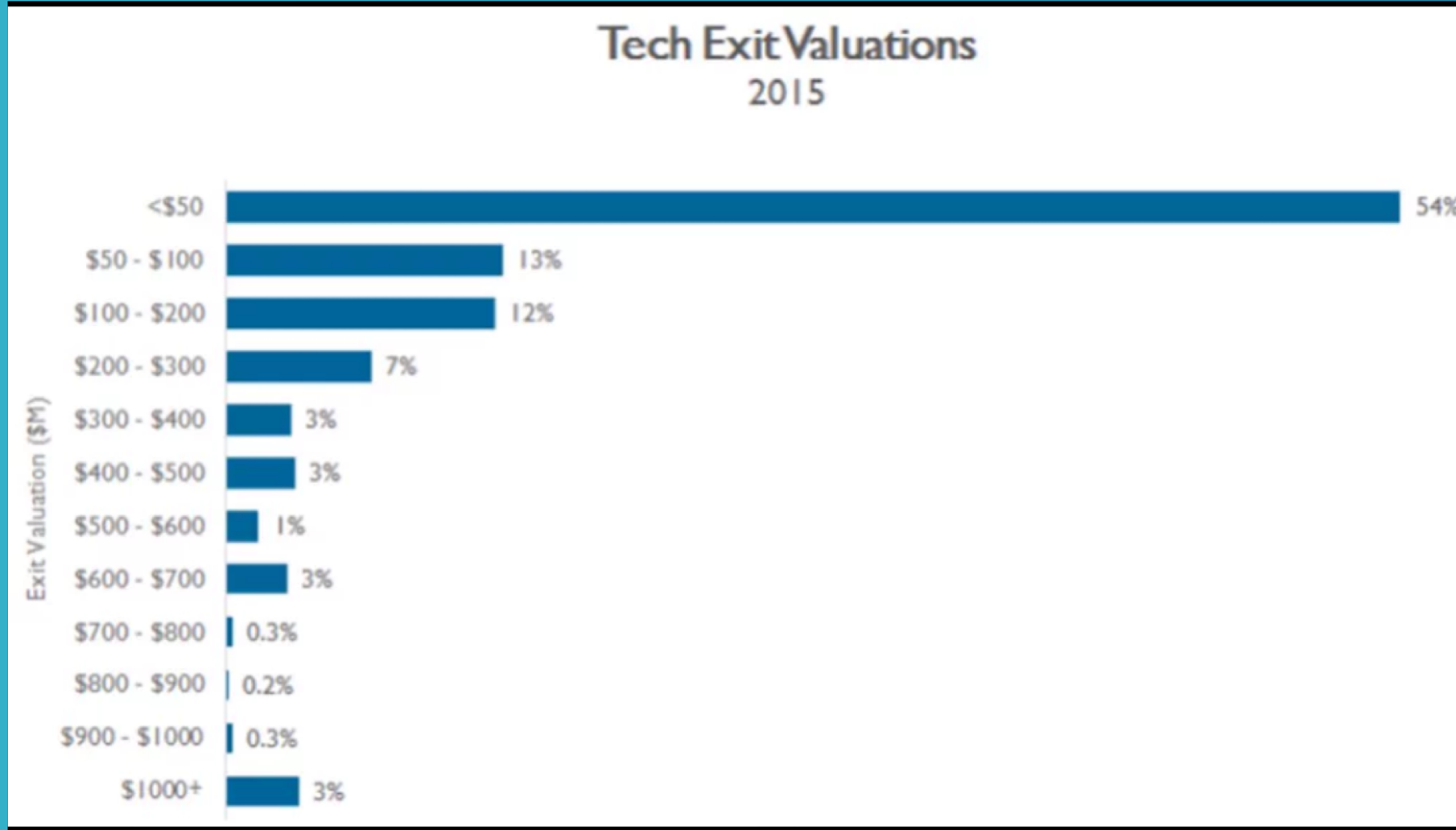
- 1) 5@0,5M + 3@1M + 2@1,5M + 1@5M 5) 1@0,5M + 1@5M
- 2) 1@0,5M + 1@1,5M 6) 1@5M
- 3) 2@1M + 1@5M
- 4) 1@0,5M + 1@1,5M + 1@5M

This is a theoretical case

Berkus Method (seed stage)

Criteria	Range
Sound idea Basic Value	0-500.000€
Prototype Reducing technology risk	0-500.000€
Quality management team Reducing execution risk	0-500.000€
Strategic relationships Reducing market risks	0-500.000€
Product roll out & sales Reducing production risks	0-500.000€

VC method



Risk Factors Summation

Criteria	Range
Management	-2 / -1 / 0 / +1 / +2
Stage of the business	-2 / -1 / 0 / +1 / +2
Legislation/ Political risk	-2 / -1 / 0 / +1 / +2
Sales & marketing risk	-2 / -1 / 0 / +1 / +2
Funding risk	-2 / -1 / 0 / +1 / +2
Competition risk	-2 / -1 / 0 / +1 / +2
Technology risk	-2 / -1 / 0 / +1 / +2
Ligitation risk	-2 / -1 / 0 / +1 / +2
International risk	-2 / -1 / 0 / +1 / +2
Reputation risk	-2 / -1 / 0 / +1 / +2
Exit	-2 / -1 / 0 / +1 / +2

Risk Factor Summation

	Score
Management	1
Stage of the business	-1
Legislation/ Political risk	2
Sales & marketing risk	-2
Funding risk	1
Competition risk	0
Technology risk	-1
Ligitation risk	1
International risk	-1
Reputation risk	1
Exit	1
Total	2
Average valuation	1M€
Unit = 250k€	500k€
Total	1,5M€

Multiples

- Multiple of few metrics like
 - Revenue
 - Growth
 - (EBITDA) -> most of the time negative
 - (P/E ratio) -> most of the time negative
 - (Price book ratio) -> no sense
 - (Dividend Yield) -> most of the time none

Shares of a public companies are more liquid then you will have a discount as a private company => lower valuation

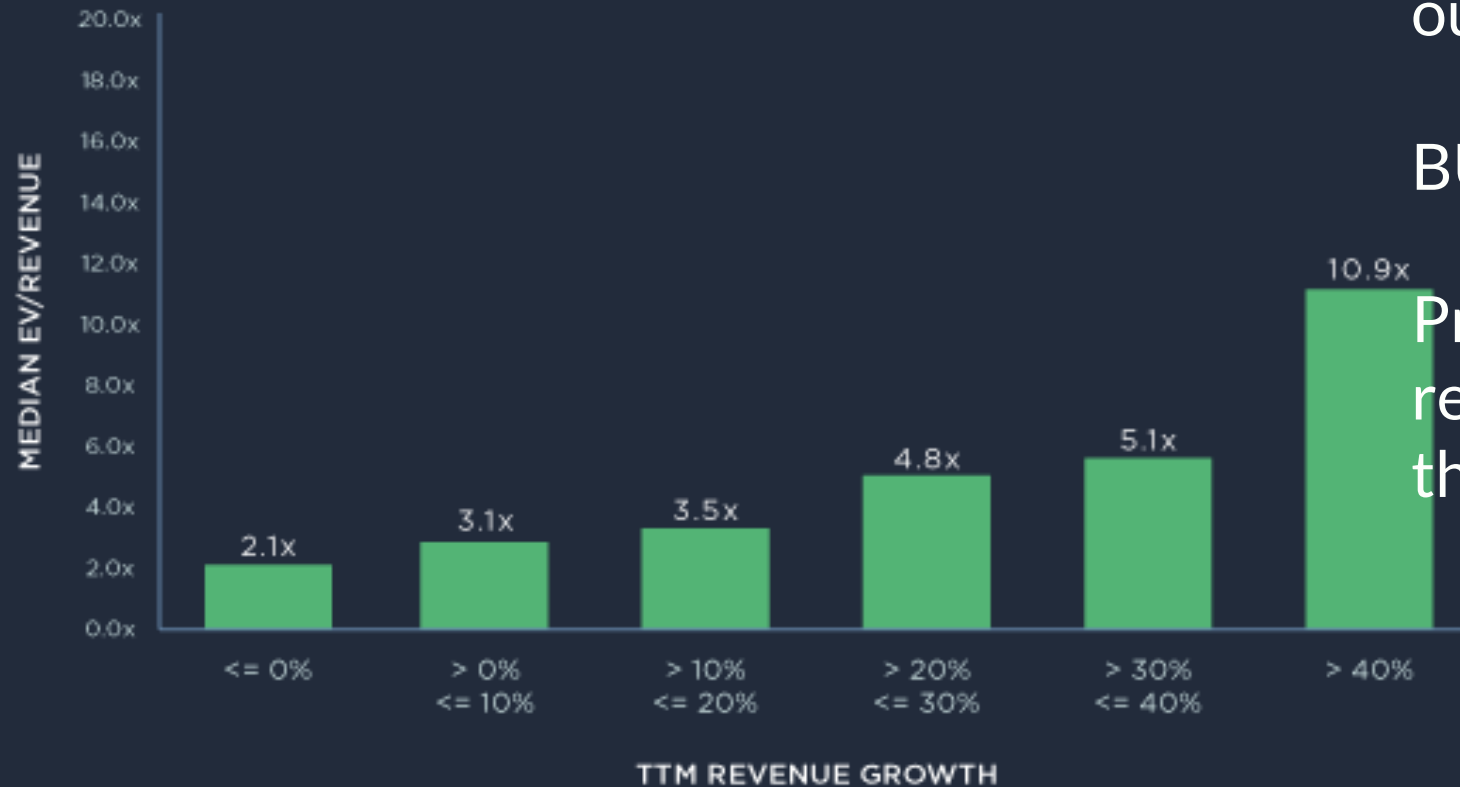
Multiples



Multiples

On-Premise Software Companies

Rev Multiples vs. Rev Growth - Q1 2014



Figures
are
outdated

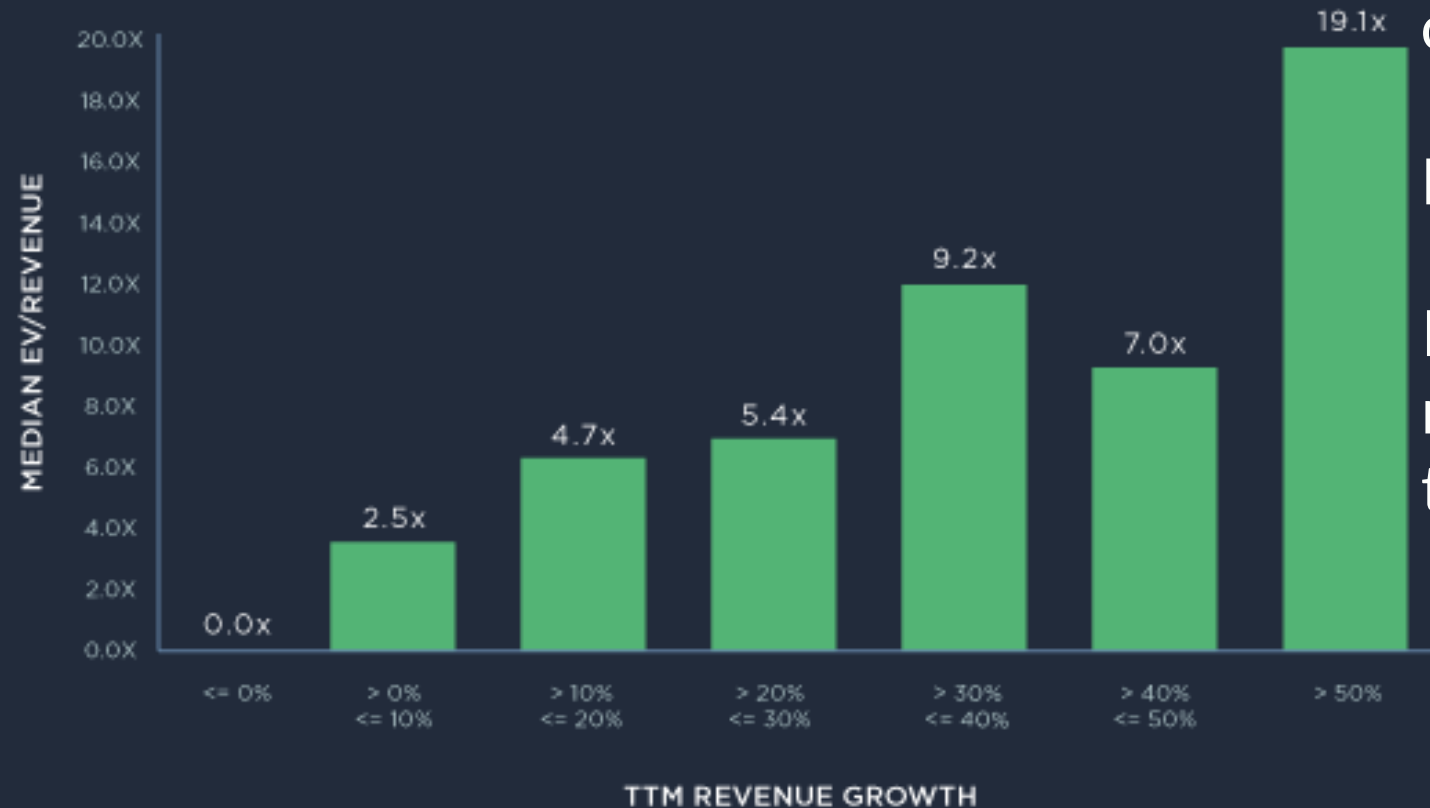
BUT

Principle
remains
the same

Multiples

SaaS/Cloud Software Companies

Rev Multiples vs. Rev Growth - Q1 2014

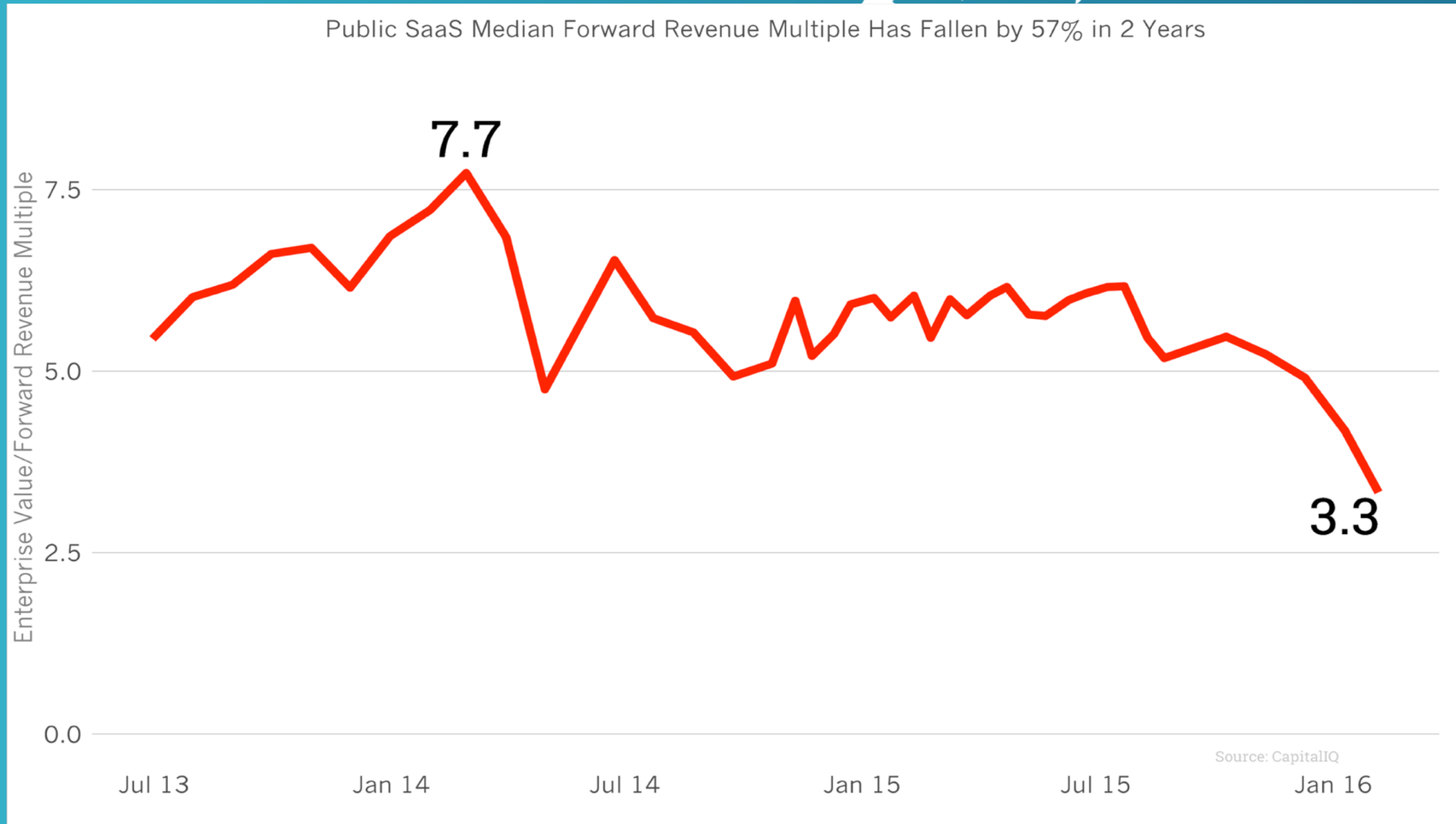


Figures
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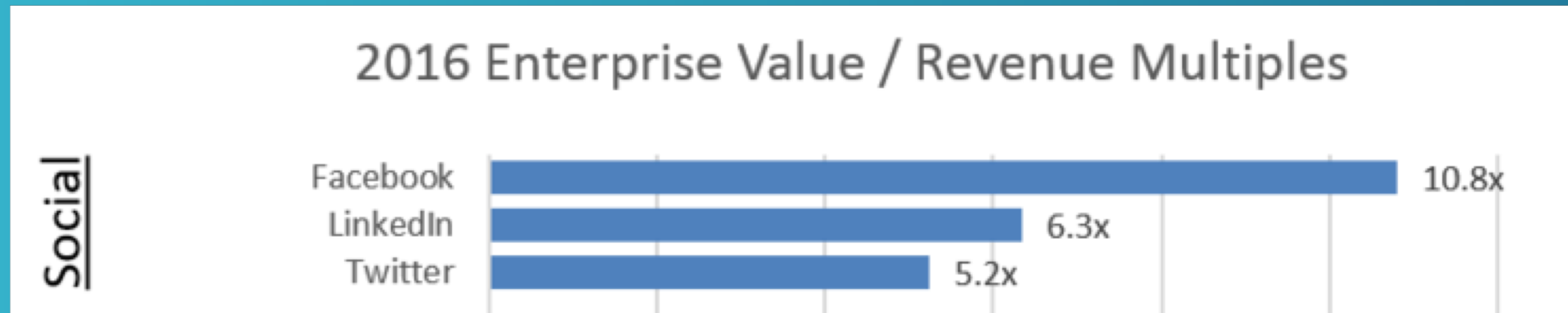
BUT

Principle
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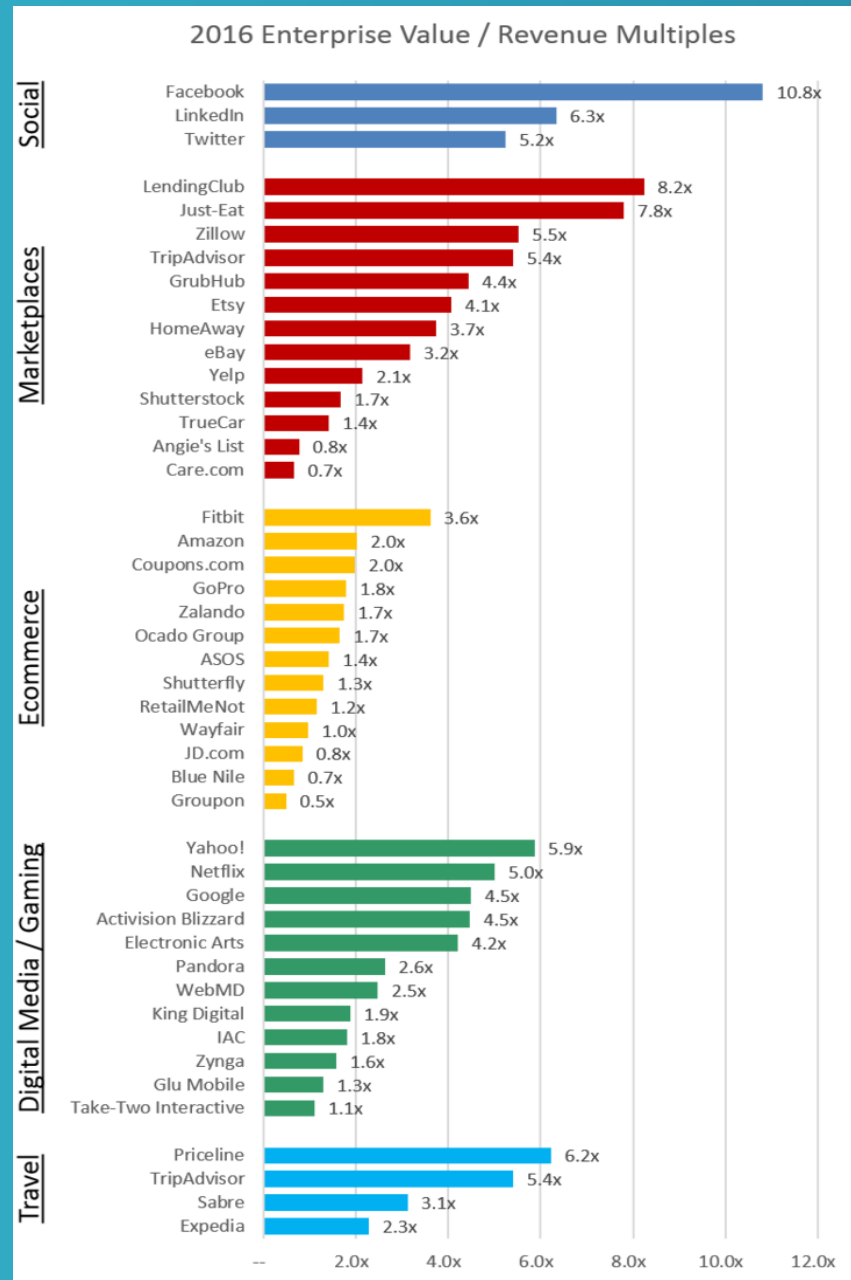
Multiples (evolution)



Multiples

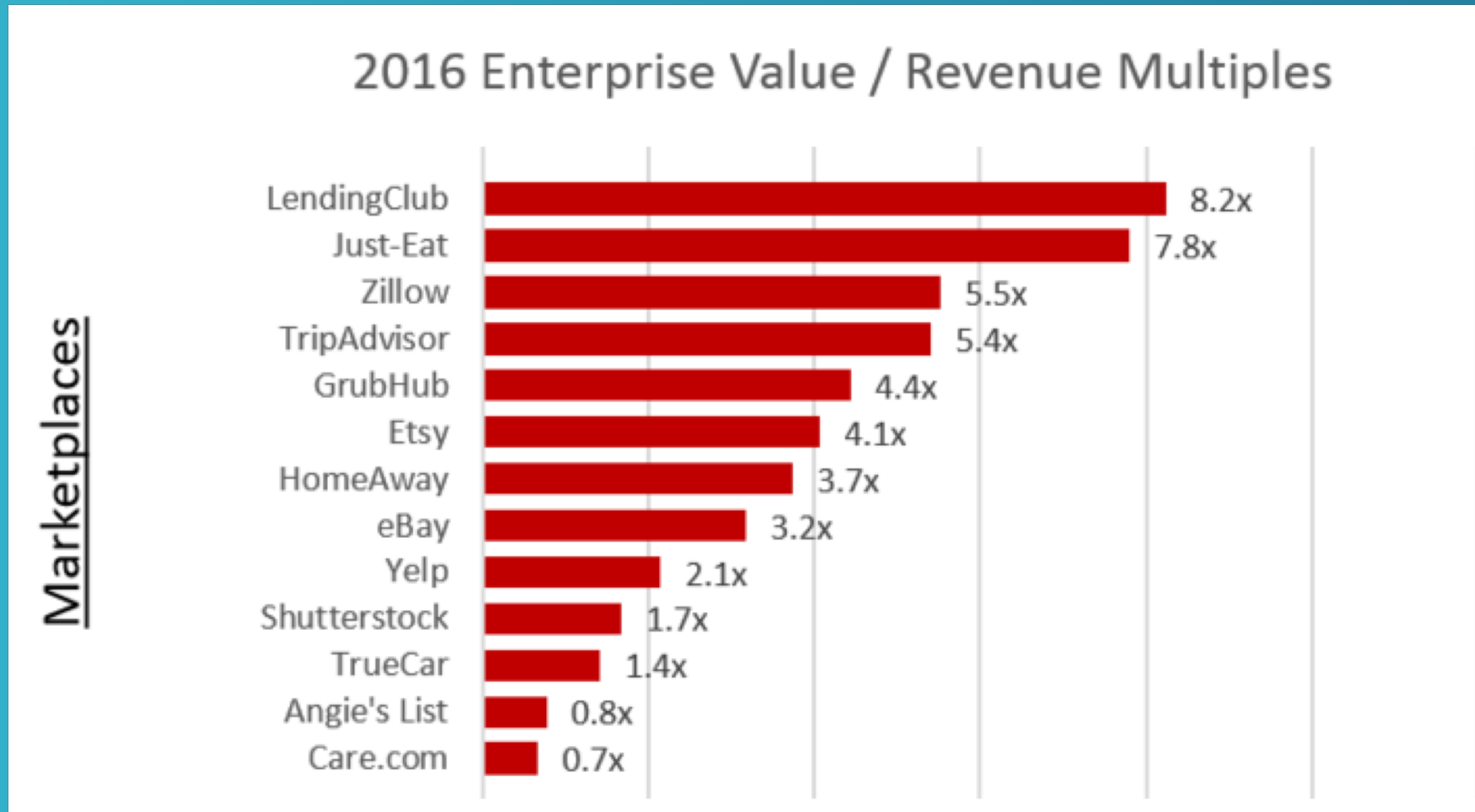


Multiples



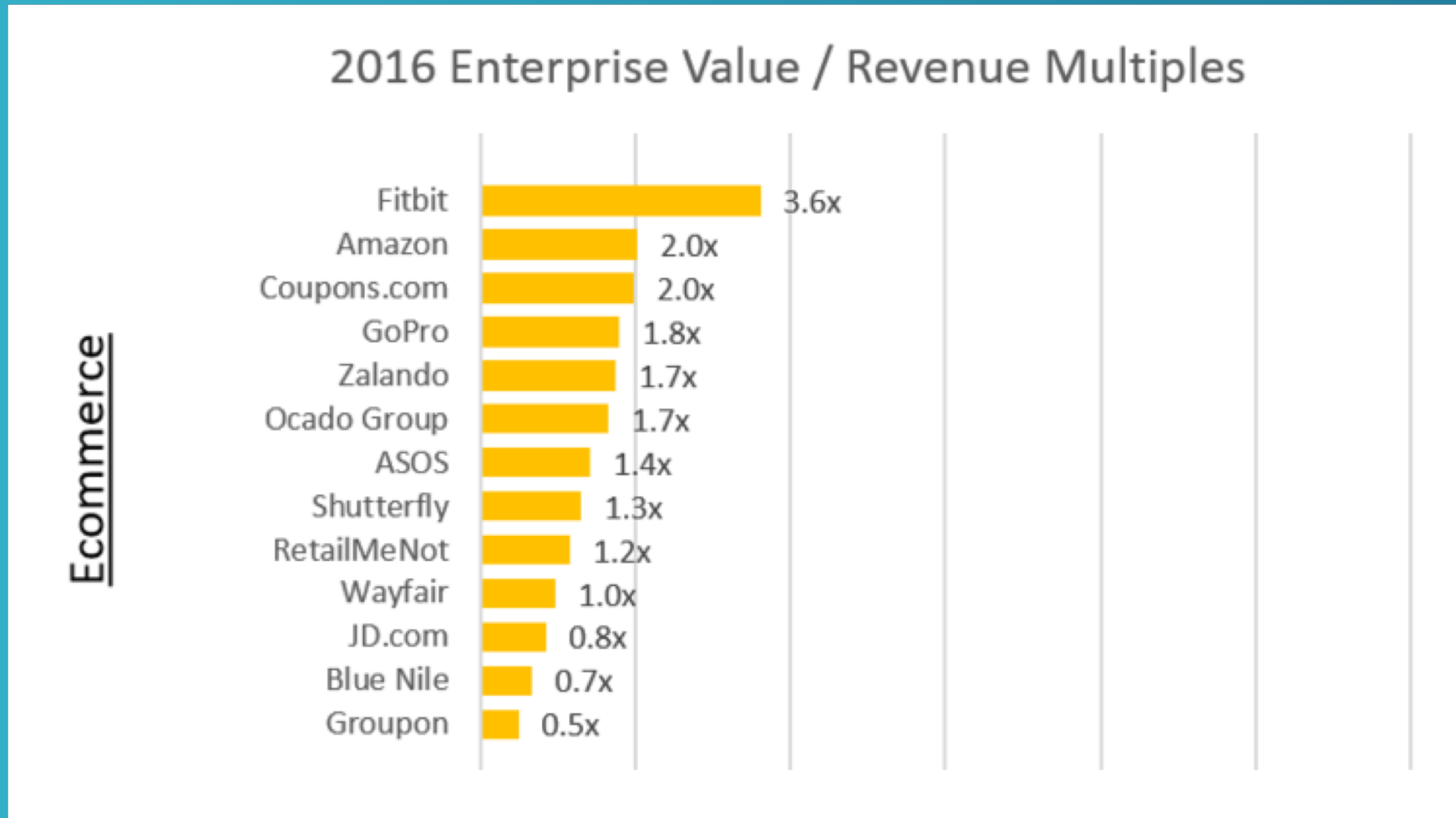
- The next slides are about US publicly traded companies
- Goal is to show difference by sectors
- Difference between private and public companies exists
- Public companies have a premium valuation
- Leader companies too

Multiples

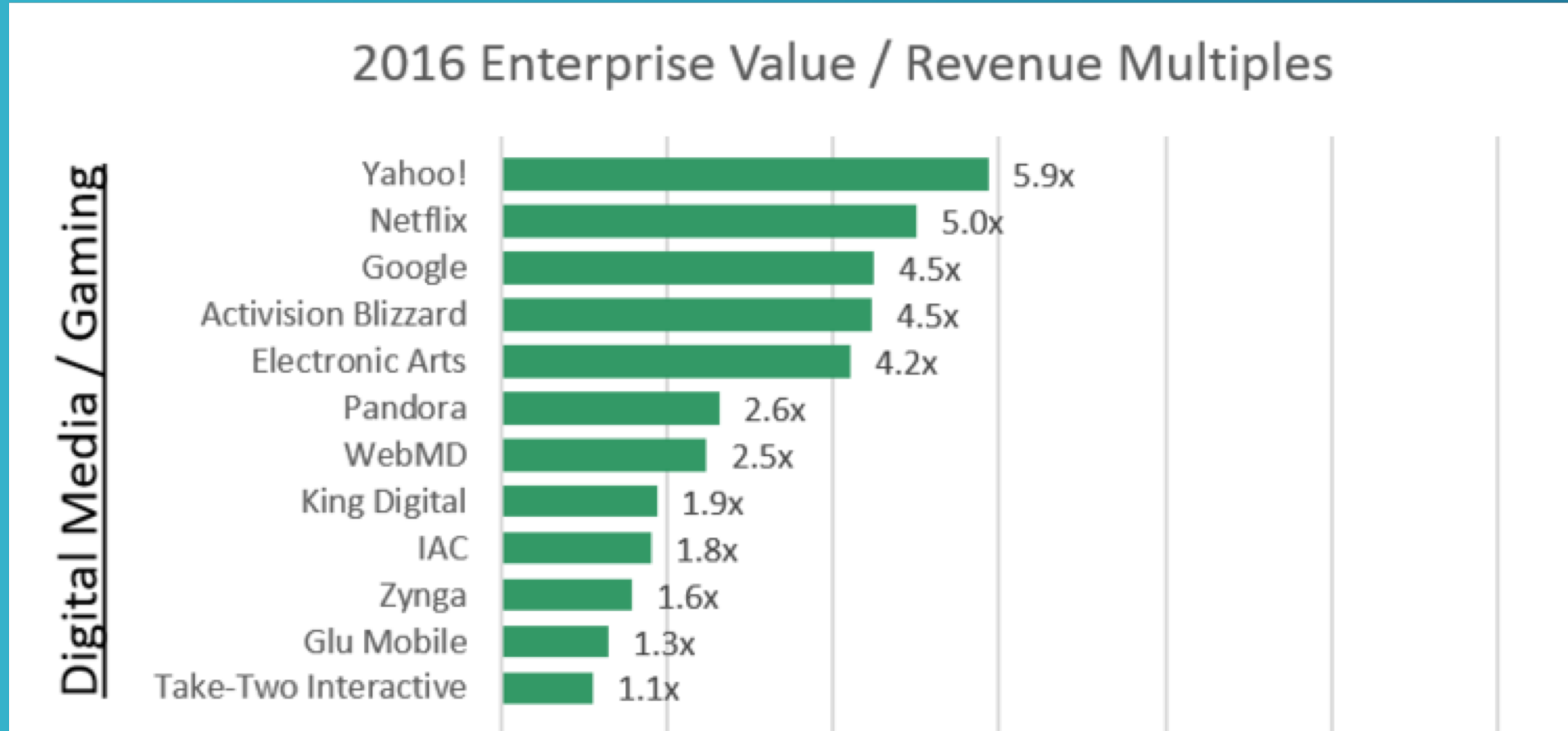


Marketplaces

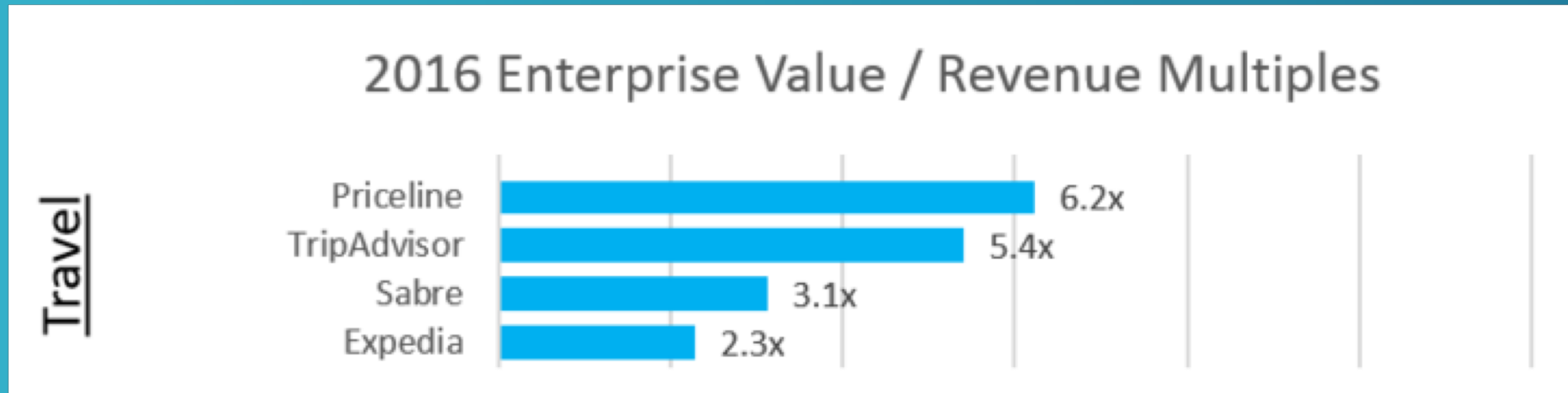
Multiples



Multiples



Multiples



One tool that can help you



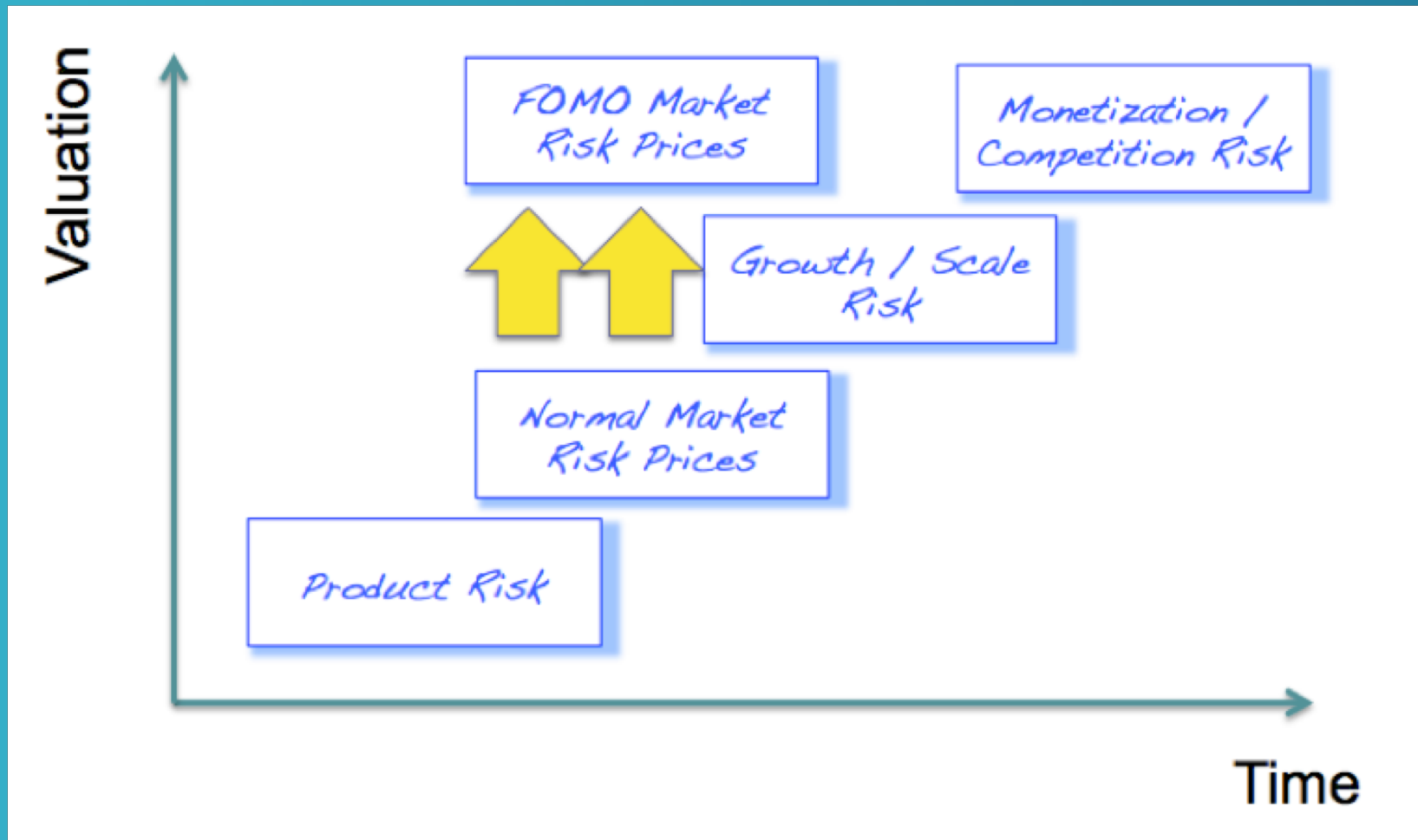
- www.seriousfunding.be

Any Questions?

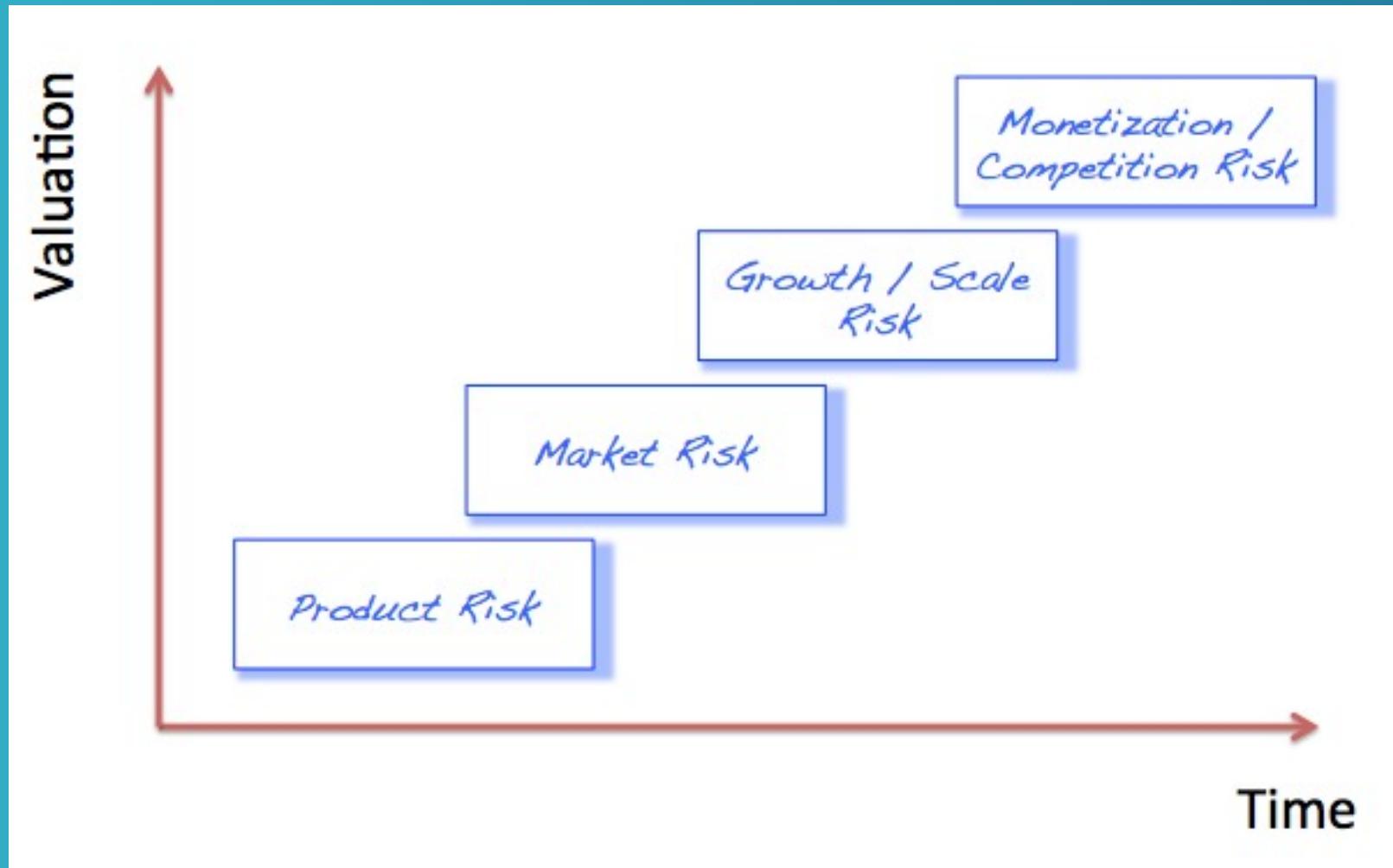
Jan Bormans

Jan.bormans@europeanstartupnetwork.eu
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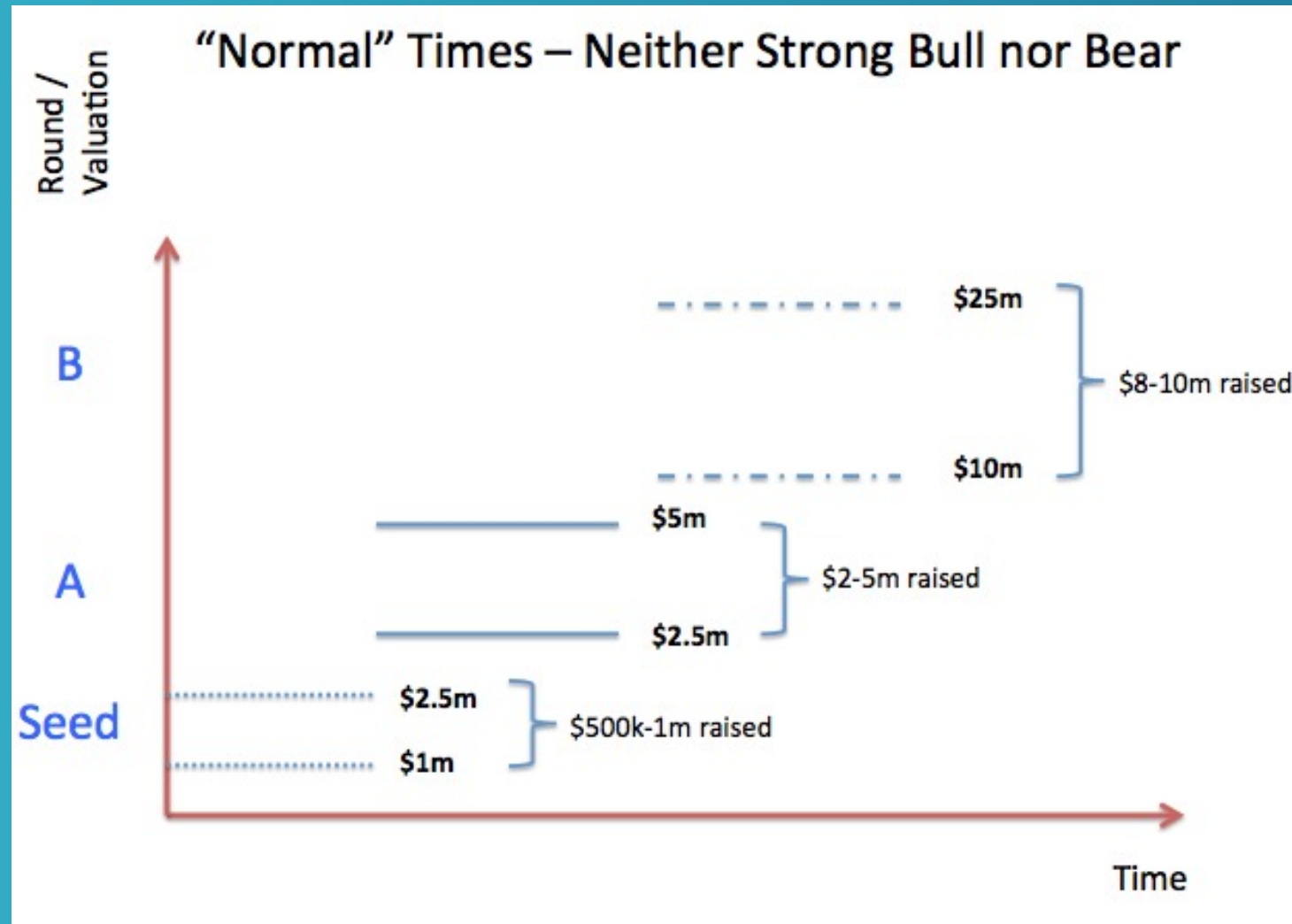
Appendix



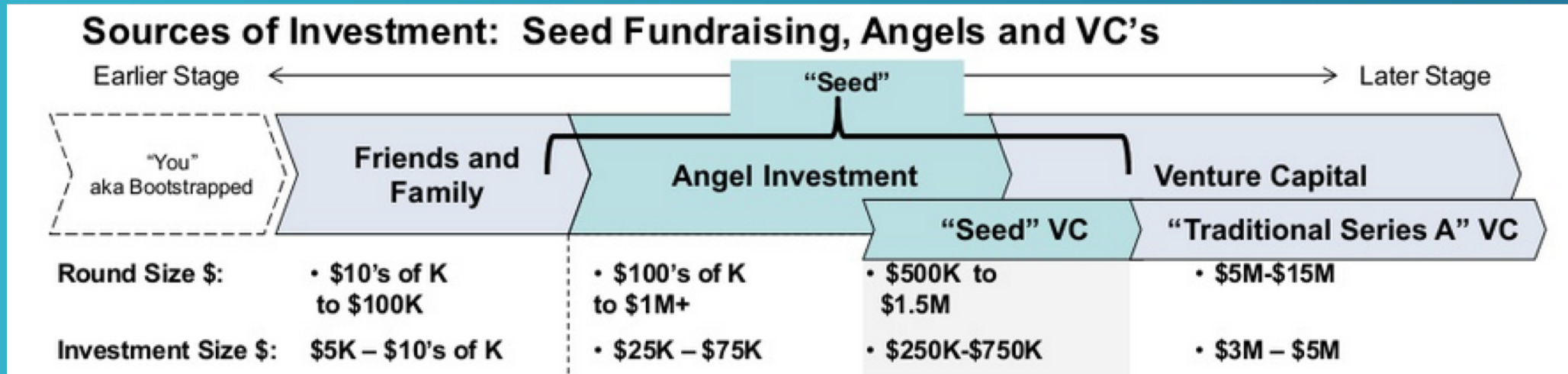
Appendix



Appendix

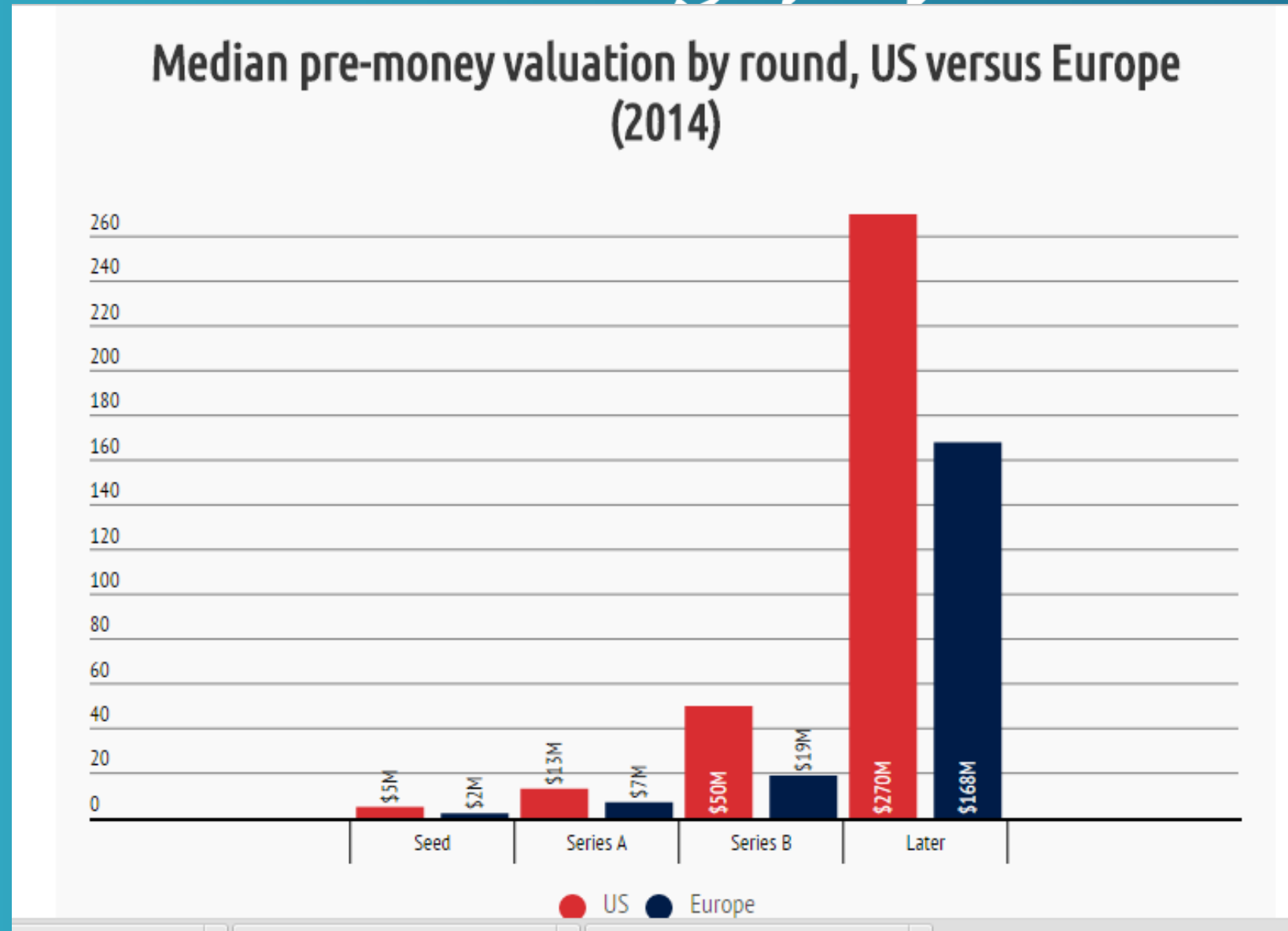


Appendix



Appendix

less
money
invested in Europe
but also less
pressure regarding
exits



Appendix

A good assessment is to look at your competitors through two Databases

The logo for CrunchBase, featuring the word "Crunch" in a dark teal color and "Base" in a lighter teal color, both in a sans-serif font.The logo for AngelList, featuring a black and white icon of a hand making a peace sign (V-sign) to the left of the word "AngelList" in a bold, black, sans-serif font.