

Presented by,
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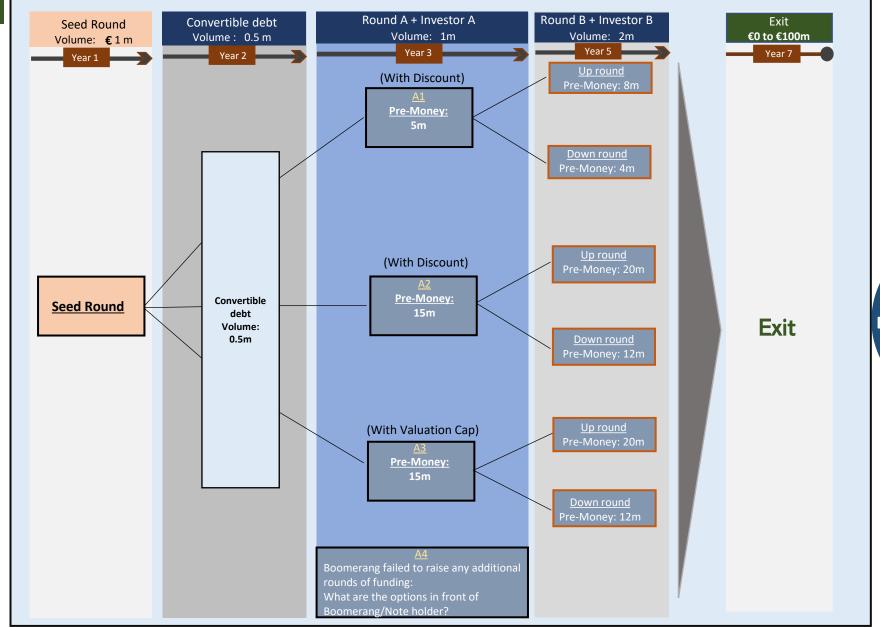


Overview



Year 1 JACK SPARROW Year 2	Jack and Sparrow founded Boomerang by investi	Jack and Sparrow founded Boomerang by investing 500k each					
MAX	Max invested in Boomerang (Convertible Note) with Investment Amount 500,000 € Interest rate 5% Discount rate(A1,A2) 20% Valuation Cap(A3) 8,000,000 Maturity 4 years Conversion At new room		-% 				
Year 3 TOM	Tom invested 1,000,000€ in round A financing of	Boomerang					
Year 5 JERRY	Jerry invested 2,000,000€in round B financing of						
Year 7		XIT					





Key goal

Discount Vs Valuation Cap

in convertible note

23/01/2021

TECHNISCHE HOCHSCHULE NÜRNBERG GEORG SIMON OHM

Seed Round: A1 + A2 + A3



Seed stage of Boomerang

A1 + A2 + A3			Seed Investment		
Year			1		
Pre - Money- Valuation					
Post - Money Valuation					
Price per Share	€ 1				
				Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)	€ 5,00,000	500000	500000		50%
Sparrow (F*)	€ 5,00,000	500000	500000		50%
Total Founder	€ 10,00,000	1000000	1000000		100%
Max (CNH*)					
Tom (Investor)					
Jerry (Investor)					
Total Investors					
Total	€ 10,00,000	1000000	1000000		100.00%

Boomerang was founded by Jack and Sparrow with an investment of €500,000 each Each secures 50% stake in Boomerang. Price per share €1

*F - Founder

Bridge Financing



Founders



Max (CNH*)

A1 + A2 + A3		Convertible deb	t Investment (B	ridge Financing)	
Year			2		
Pre - Money- Valuation				Interest rate	5%
Post - Money Valuation				Discount	20%
Price per Share					
				Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)			500000		50%
Sparrow (F*)			500000		50%
Total Founder			1000000		100%
Max (CNH*)	€5,00,000			€5,00,000	
Tom (Investor)					
Jerry (Investor)					
Total Investors					
Total	€5,00,000		1000000	€ 5,00,000	100.00%

In year 2 founders convinces Max to invest in Boomerang. Max invests € 500,000 in Boomerang as Convertible debt

Interest rate 5%

Discount rate 20%

*CNH – Convertible Note Holder



Financing Round A: A1

A1		Roui	nd A (before con	version)		A1		R	ound A (after con	version)	
Year		3				Year	3				
Pre - Money- Valuation	€50,00,000	€44,75,000	+	€5,25,000		Pre - Money- Valuation	€50,00,000	€44,75,000	+	€5,25,000	
Post - Money Valuation	€ 60,00,000					Post - Money Valuation	€ 60,00,000			Interest rate	5.00%
Price per Share	€4.5 Pi	rice per shar	e = 44,75,00	0 / 1mn. Shar	es	Price per Share	€4.5			Discount	20%
				Σ Convertible						Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)		Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)			500000		40.87%	Jack (F*)			500000		36.91%
Sparrow (F*)			500000		40.87%	Sparrow (F*)			500000		36.91%
Total Founder			1000000		81.74%	Total Founder			1000000		73.82%
Max (CNH*)				€5,25,000		Max (CNH*)		131250	131250		9.69%
Tom (Investor)	€10,00,000	223464	223464		18.26%	Tom (Investor)	€10,00,000	223464	223464		16.50%
Jerry (Investor)						Jerry (Investor)					
Total Investors	€10,00,000		223464		18.26%	Total Investors	€10,00,000		354714		26.18%
Total	€10,00,000		1223464	€5,25,000	100.00%	Total	€10,00,000		1354714		100.00%

Tom invests €1mn. at newly calculated price per share (4.5 euros)
In year 3 with new round of funding convertible note + interest gets converted (500,000 + 25000) at €4mn. valuation (20% discounted).

23/01/2021





	High growth Scenario with discount										
A2		Roui	nd A (before cor	version)		A2		F	Round A (after con	version)	
Year			3			Year			3		
Pre - Money- Valuation	€1,50,00,000	€1,44,75,000	+	€5,25,000		Pre - Money- Valuation	€1,50,00,000	€1,44,75,000	+	€5,25,000	
Post - Money Valuation	€1,60,00,000					Post - Money Valuation	€1,60,00,000			Interest rate	5.00%
Price per Share	€14.5 Pri	ice per share	= 1,44,75,00	00 / 1mn. Sha	res	Price per Share	€ 14.5			Discount	20%
				Σ Convertible						Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)		Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)			500000		46.77%	Jack (F*)			500000		44.93%
Sparrow (F*)			500000		46.77%	Sparrow (F*)			500000		44.93%
Total Founder			1000000		93.54%	Total Founder			1000000		89.86%
Max (CNH*)				€5,25,000		Max (CNH*)		43750	43750		3.93%
Tom (Investor)	€10,00,000	69085	69085		6.46%	Tom (Investor)	€10,00,000	69085	69085		6.21%
Jerry (Investor)						Jerry (Investor)					
Total Investors	€10,00,000		69085		6.46%	Total Investors			112835		10.14%
Total	€10,00,000		1069085		100.00%	Total			1112835		100.00%

In year 3 with new round of funding convertible note + interest gets converted (500,000 + 25000) at € 12 mn. valuation (20% discounted) and gets stake of 3.93% Tom invests 1mn. at newly calculated price per share (14.5 euros) and gets stake of 6.21%



Financing Round A: A3

	High growth Scenario with valuation cap										
A3		Rour	nd A (before cor	nversion)		A3		F	Round A (after conv	version)	
Year				Year			3				
Pre - Money- Valuation	€1,50,00,000	€1,44,75,000	+	€5,25,000		Pre - Money- Valuation	€1,50,00,000	₹1,44,75,000	+	₹5,25,000	
Post - Money Valuation	€1,60,00,000					Post - Money Valuation	€1,60,00,000			Interest rate	5.00%
Price per Share	€14	.5				Price per Share	€14.	.5		Valuation Cap	₹80,00,000
				Σ Convertible						Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)		Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)			500000		46.77%	Jack (F*)			500000		44.06%
Sparrow (F*)			500000		46.77%	Sparrow (F*)			500000		44.06%
Total Founder			1000000		93.54%	Total Founder			1000000		88.13%
Max (CNH*)				€5,25,000		Max (CNH*)		65625	65625		5.78%
Tom (Investor)	€10,00,000	69085	69085		6.46%	Tom (Investor)	€10,00,000	69085	69085		6.09%
Jerry (Investor)						Jerry (Investor)					
Total Investors	€10,00,000		69085		6.46%	Total Investors			134710		11.87%
Total	€10,00,000		1069085		100.00%	Total			1134710		100.00%

In year 3 with new round of funding convertible note + interest gets converted (500,000 + 25000) at €8 mn. valuation and gets stake of 5.78%

Tom invests 1mn. at newly calculated price per share (14.5 euros) and gets stake of 6.09%



Comparison between Alternative 1 + 2 + 3

		Provisions after Round A								
A1	A2	А3								
36.91%	44.93%	44.06%								
36.91%	44.93%	44.06%								
9.69%	3.93%	5.78%								
16.50%	6.21%	6.09%								
NIL										
	36.91% 9.69%	36.91% 44.93% 9.69% 3.93% 16.50% 6.21%								

Alternative A1 shows the benefit of having a discount for Max (Note holder)
Interestingly, when it comes to high valuation, having a valuation cap is beneficial for Max
Lower the valuation cap, the more beneficial for Max. Negotiation skill of investor will be tested here



Overview	Seed-Round	Bridge Financing	Round A	Round B
Up-Round-Scenario	A1 A2 A3		A1 A2 A3	A1 Up Round A2 Up Round A3 Up Round
Investments:				
Jack (Foundr)	€0.5Mio		-	-
Sparrow(Founder)	€ 0.5 Mio		-	-
Max (CNH*)	-	€0.5 Mio	-	-
Tom (Investor)	-		€1Mio	-
Jerry (Investor)	-	-	-	€2 Mio
Total Investment	€1 Mio	€0.5 Mio	€1Mio	€2 Mio
Max Conversion	-		Full Conversion	
Pre-Money-Valuation	-		€5Mio €15 Mio €15 Mio	€8Mio€20 Mio€20 Mio
Post-Money-Valuation	-		€6Mio €16 Mio €16 Mio	€10Mio €22 Mio €22 Mio
Price per share	1		€ 4.5 € 14.5	€5.9 € 18.0 € 17.6
Liquidation Preferance				1x SLP
				3x PLP



A1		Round B (Up Round)						
Year			5					
Pre - Money- Valuation	€ 80,00,000							
Post - Money Valuation	€ 1,00,00,000							
Price per Share	€ 5.9	Price per share =	€ 8 mn. / 1354714 S	hares				
	Investment	New Shares	Σ Shares	Σ Convertible loans	Company stake (%)			
Jack (F*)			500000		29.53%			
Sparrow (F*)			500000		29.53%			
Total Founder			1000000		59.05%			
Max (CNH*)			131250		7.75%			
Tom (Investor)	€0	0	223464		13.20%			
Jerry (Investor)	€ 20,00,000	338678	338678		20.00%			
Total Investors			693392		40.95%			
Total			1693392		100.00%			

In financing round B Jerry invests € 2 mn at a pre money valuation of € 8 mn Number of shares issued to Jerry = € 2 mn / € 5.9 = 338678 Share of Max drops to 7.75% from round A (9.69%)



High growth Scenario with discount								
A2			Round B (Up I	Round)				
Year			5					
Pre - Money- Valuation	€ 2,00,00,000							
Post - Money Valuation	€ 2,20,00,000							
Price per Share	€ 18	Price per share =	€20 mn. / 1112835	Shares				
	Investment	New Shares	Σ Shares	Σ Convertible loans	Company stake (%)			
Jack (F*)			500000		40.85%			
Sparrow (F*)			500000		40.85%			
Total Founder			1000000		81.69%			
Max (CNH*)			43750		3.57%			
Tom (Investor)	₹0	0	69085		5.64%			
Jerry (Investor)	€ 20,00,000	111283	111283		9.09%			
Total Investors	€ 20,00,000	111283	224118		18.31%			
Total	€ 20,00,000	111283	1224118		100.00%			

Jerry invests € 2 mn at a pre money valuation of € 20 mn Number of shares issued to Jerry = € 20 mn / € 18 = 111283 Share of Max drops to 3.57% from round A (3.93%)



High growth Scenario with valuation cap								
A3			Round B (Up	Round)				
Year			5					
Pre - Money- Valuation	€ 2,00,00,000							
Post - Money Valuation	€ 2,20,00,000							
Price per Share	€17.6	€ 17.6 Price per share = € 20 mn. / 1134710 Shares						
	Investment	New Shares	Σ Shares	Σ Convertible loans	Company stake (%)			
Jack (F*)			500000		40.06%			
Sparrow (F*)			500000		40.06%			
Total Founder			1000000		80.12%			
Max (CNH*)			65625		5.26%			
Tom (Investor)	€0	0	69085		5.53%			
Jerry (Investor)	€ 20,00,000	113471	113471		9.09%			
Total Investors	€ 20,00,000	113471	248181		19.88%			
Total	€ 20,00,000	113471	1248181		100.00%			

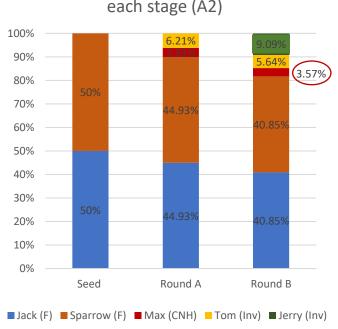
Jerry invests € 2 mn at a pre money valuation of € 20 mn Number of shares issued to Jerry = € 20 mn / € 17.6 = 113471 Share of Max drops to 5.26% from round A (5.78%)



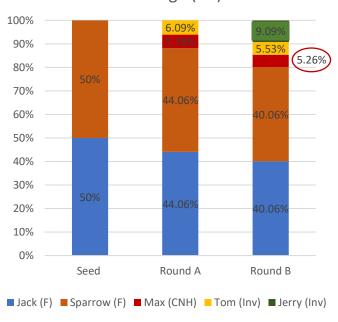
Percentage participation after each stage (A1)



Percentage participation after each stage (A2)



Percentage participation after each stage (A3)

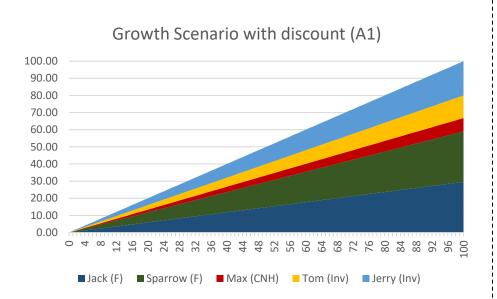


A1 – At lower valuation founders percentage share drops, the convertible debt holder is benefited from discount rate as they receive more shares.

A2 Vs A3 – At higher valuation, having valuation cap is more beneficial for convertible note holder

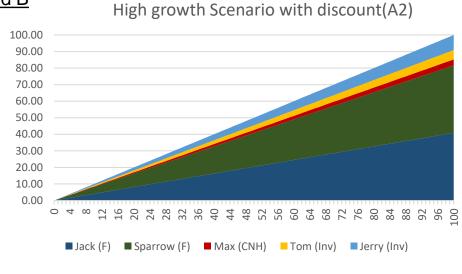


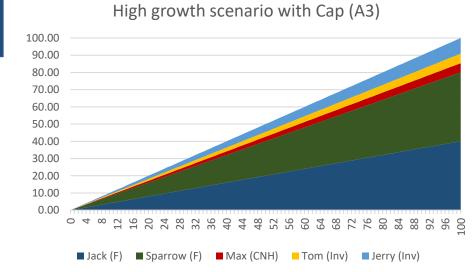
Monetary results on the basis of share holder structure in Round B



- Payment to all shareholders from €1.
- All shareholders equally benefited from the increase of the proceeds

A2 Vs A3
Max was benefited more
in A3 as he used valuation
cap.





Liquidation Preference

Exit and pro-rata distribution



A2: Up round

Calculation of conversion points:

To determine the break-even-point (BEP) you need following information:

- Maximal achievable cash-flow from the particular preferred shares (CFmax,x)
- Amount of all **existent** liquidation preferences (LPX)
- Stake of the particular investor (PSx)
- Stake of all shareholders that participate at the break-even-point on a pro rata basis (PSY)

Formula:
$$BEP = \frac{CFmax,x}{PSx / PSY}$$

BEP Max =
$$\frac{ € 0.5 \text{ Mio}}{3.57\% / (3.57\% + 40.85\% + 40.85\%)}$$
 + € 3 Mio = € 14.9 Mio
BEP Tom = $\frac{ € 1 \text{ Mio}}{5.64\% / (5.64\% + 3.57\% + 40.85\% + 40.85\%)}$ + € 2 Mio = € 18.1 Mio
BEP Jerry = $\frac{ € 2 \text{ Mio}}{9.09\%}$ = € 22.0 Mio

Max (CNH) converts his shares at a sales price of the company > €14.9 Mio., Tom at a sales price of >€18.1 Mio and Jerry at a sales price of >€22.0 Mio

Liquidation Preference

Exit and pro-rata distribution



A3: Up round

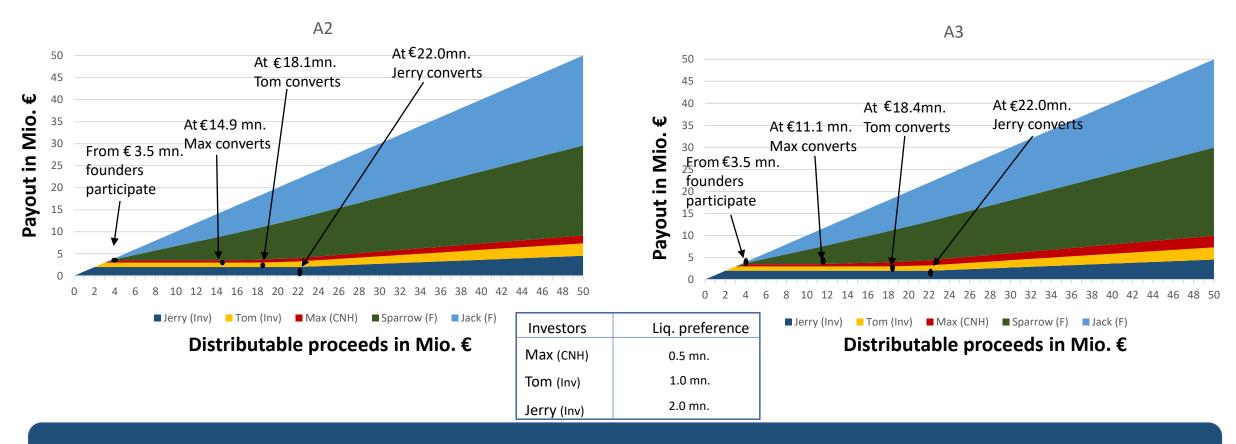
Calculation of conversion points:

BEP Max =
$$\frac{ € 0.5 \text{ Mio}}{5.26\% / (5.26\% + 40.06\% + 40.06\%)}$$
 + € 3 Mio = € 11.1 Mio
BEP Tom = $\frac{ € 1 \text{ Mio}}{5.53\% / (5.53\% + 5.26\% + 40.06\% + 40.06\%)}$ + € 2 Mio = € 18.4 Mio
BEP Jerry = $\frac{ € 2 \text{ Mio}}{9.09\%}$ = € 22.0 Mio

Max (CNH) converts his shares at a sales price of the company > €11.1 Mio., Tom at a sales price of >€ 18.4 Mio and Jerry at a sales price of > €22.0 Mio



A2 Vs A3: Up round - Monetary results in case of simple liquidation preference for all investors (LIFO) on the basis of share holder structure in Round B



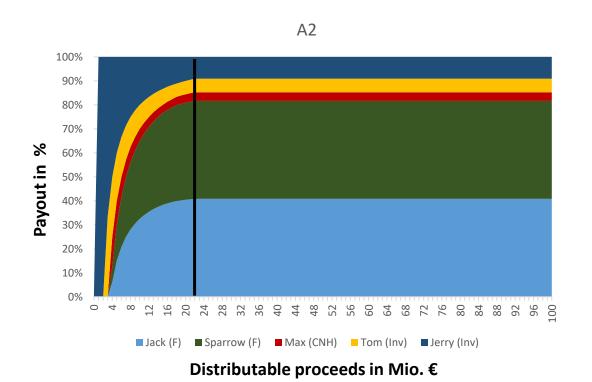
Max converts early (€ 11.1 mn.) in A3 compared to A2 (€ 14.9 mn.) and gets the benefits from exit proceeds thereon

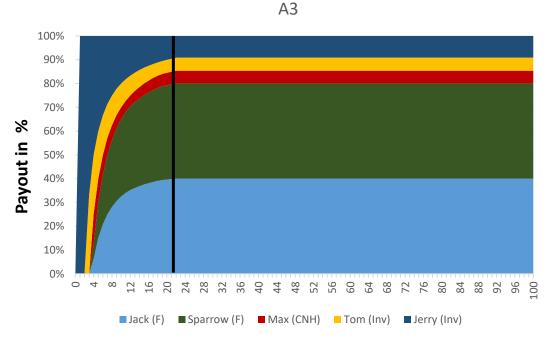
This clearly shows the benefit of usage of valuation cap compared to discount at high growth scenario

Source: Illustrations based on own calculation



A2 Vs A3: Up round -Percentage results in case of SLP for all investors (LIFO) on the basis of share holder structure in Round B





Distributable proceeds in Mio. €

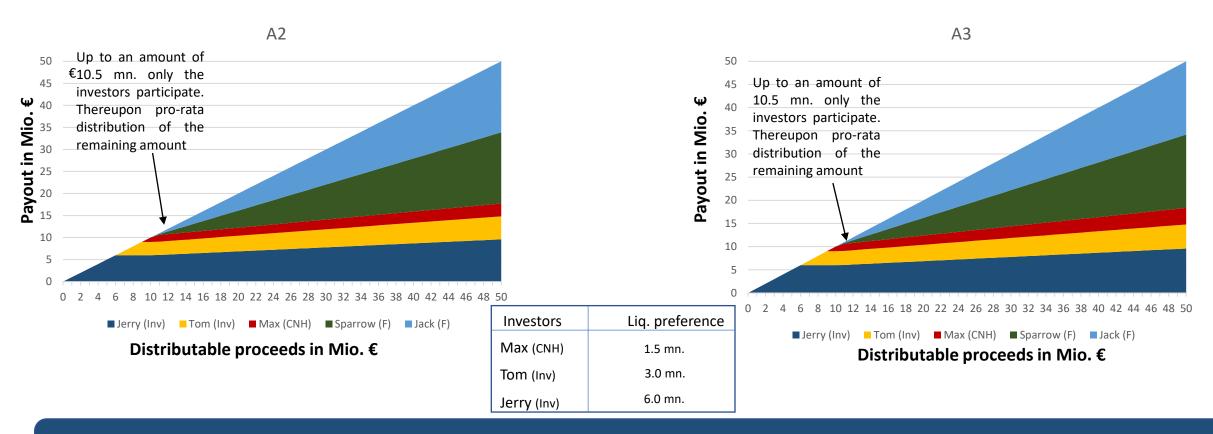
If the sales proceeds exceeds € 22 mn., all shareholders participate pro rata appropriate to their original share holdings in the company

Source: Illustrations based on own calculation



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A2 Vs A3: Up round - Monetary results in case of PLP (3x) for all investors (LIFO) on the basis of share holder structure in Round B

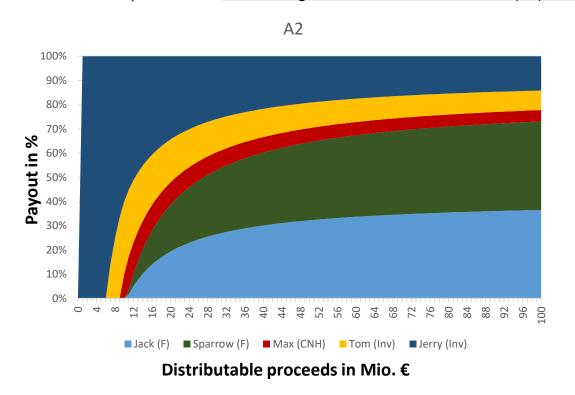


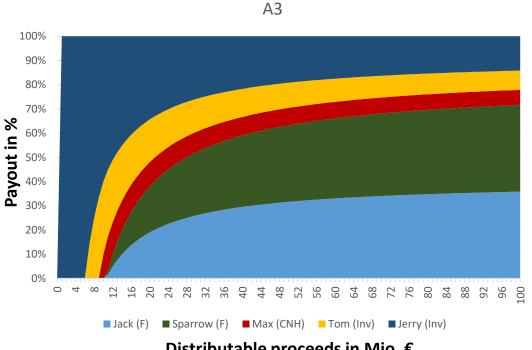
3x PLP have positive effect on Jerry (invested in last financing round)
Max is also benefited from 3x PLP. A3 is more beneficial for Max

Source: Illustrations based on own calculation



A2 Vs A3: Up round - Percentage results in case of PLP (3x) for all investors (LIFO) on the basis of share holder structure in Round B

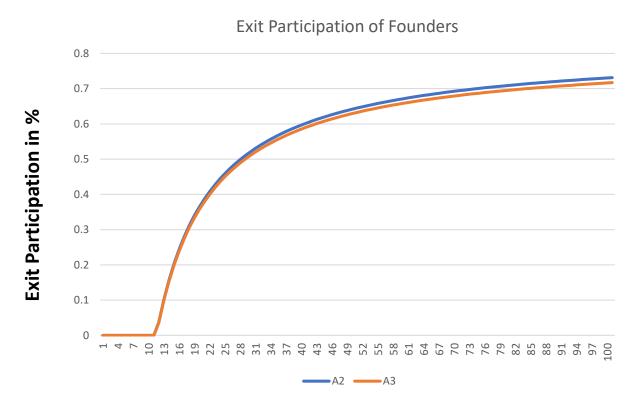




Distributable proceeds in Mio. €

PLP helps the investors for double dipping, and it leads to a disadvantage to founders compared to SLP. Investors in the later stage of financing round is more benefited by PLP





Exit Proceeds in m €

From the point of view of the founders A2 is beneficial for them, because in A3 Max gets additional money while participating in exit proceeds as he made use of his right (Valuation cap)

Source: Illustrations based on own calculation



Overview	Seed-Round	Bridge Financing	Round A	Round B
Down-Round-Scenario	A1 A2 A3		A1 A2 A3	A1 Dn Round A2 Dn Round A3 Dn Round
Investments:				
Jack (Foundr)	€0.5Mio	-	-	-
Sparrow(Founder)	€ 0.5 Mio	-	-	-
Max (CNH*)	-	€ 0.5 Mio	-	-
Tom (Investor)	-	-	€1Mio	-
Jerry (Investor)	-	-	-	€2 Mio
Total Investment	€1 Mio	€ 0.5 Mio	€1Mio	€2 Mio
Max Conversion	-		Full Conversion	
Pre-Money-Valuation	-		€5Mio €15 Mio €15 Mio	€4Mio €12 Mio €12 Mio
Post-Money-Valuation	-		€6Mio €16 Mio €16 Mio	€6Mio € 14 Mio € 14 Mio
Price per share	1		€ 4.5 € 14.5	€3.0 € 10.8 € 10.6
Anti Dilution				Full Ratchet
Liquidation Preferance				
				3x PLP



A1	Round B (Down Round, before Anti Dilution)				A1	Round B (Down Round, After Anti Dilution)					
Year	4					Year	4				
Pre - Money- Valuation	€ 40,00,000					Pre - Money- Valuation	€ 40,00,000				
Post - Money Valuation	€ 60,00,000 Rounded figure					Post - Money Valuation	€ 60,00,000				
Price per Share	₹3.0					Price per Share	₹3.0				
				Σ Convertible						Σ Convertible	
	Investment	New Shares	Σ Shares	loans	Company stake (%)		Investment	New Shares	Σ Shares	loans	Company stake (%)
Jack (F*)			500000		24.61%	Jack (F*)		-76652	423348		20.83%
Sparrow (F*)			500000		24.61%	Sparrow (F*)		-76652	423348		20.83%
Total Founder			1000000		49.21%	Total Founder			846696		41.67%
Max (CNH*)			131250		6.46%	Max (CNH*)		38089	169339		8.33%
Tom (Investor)	€0	0	223464		11.00%	Tom (Investor)	€0	115215	338678		16.67%
Jerry (Investor)	€ 20,00,000	677357	677357		33.33%	Jerry (Investor)	€ 20,00,000	677357	677357		33.33%
Total Investors	€ 20,00,000	677357	1032071		50.79%	Total Investors	€ 20,00,000	792572	1185374		58.33%
Total	€ 20,00,000	677357	2032071		100.00%	Total	€ 20,00,000	792572	2032071		100.00%

In the down round Anti dilution right helped Max and Tom to receive additional shares until the loss in value of the investment is fully met through stock transfer

New shares issued to Max = (€ 0.5 mn / € 2.952) - 131250 = 38089 ; New shares issued to Tom = (€1 mn / €2.952) – 223464 = 115215 Shares transferred by founders at 50% each



High growth Scenario with discount						
A2	Round B (Down Round)					
Year	4					
Pre - Money- Valuation	€ 1,20,00,000					
Post - Money Valuation	€ 1,40,00,000					
Price per Share	€: 10.8					
				Σ Convertible		
	Investment	New Shares	Σ Shares	loans	Company stake (%)	
Jack (F*)			500000		38.51%	
Sparrow (F*)			500000		38.51%	
Total Founder			1000000		77.02%	
Max (CNH*)			43750		3.37%)	
Tom (Investor)	€0	0	69085		5.32%	
Jerry (Investor)	€ 20,00,000	185472	185472		14.29%	
Total Investors	€ 20,00,000	185472	298307		22.98%	
Total	€ 20,00,000	185472	1298307		100.00%	

With new investment from Jerry, shares of founders and Previous investors get diluted Share of Max was diluted to 3.37% from 3.93% (round A) Share of Tom was diluted to 5.32% from 6.21% (round A)

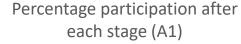
Source: Illustrations based on own calculation

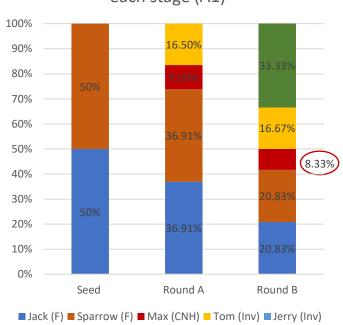


High growth Scenario with valuation cap						
A3	Round B (Down Round)					
Year	4					
Pre - Money- Valuation	€1,20,00,000					
Post - Money Valuation	€ 1,40,00,000					
Price per Share	₹10.6					
				Σ Convertible		
	Investment	New Shares	Σ Shares	loans	Company stake (%)	
Jack (F*)			500000		37.77%	
Sparrow (F*)			500000		37.77%	
Total Founder			1000000		75 <u>.5</u> 4%	
Max (CNH*)			65625		4.96%	
Tom (Investor)	€0	0	69085		5.22%	
Jerry (Investor)	€ 20,00,000	189118	189118		14.29%	
Total Investors	€ 20,00,000	189118	323828		24.46%	
Total	€ 20,00,000	189118	1323828		100.00%	

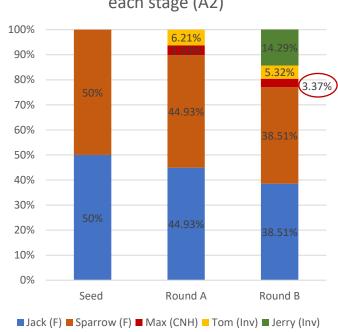
Even though Max got diluted from the new investment, he was able to gain 4.96% share. Valuation Cap helped Max to gain more shares compared to A2



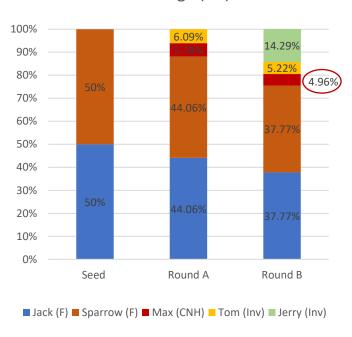




Percentage participation after each stage (A2)



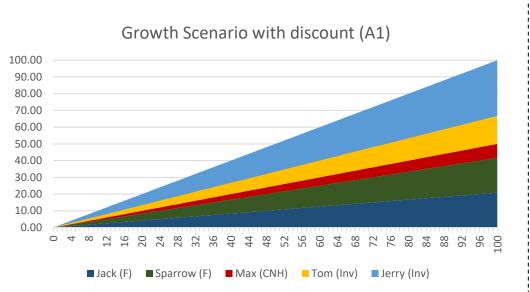
Percentage participation after each stage (A3)



A1 – Anti dilution right helped Max and Tom to regain their value of investment. A2 Vs A3 – For Max even though he got diluted, A3 is more beneficial as he used valuation cap



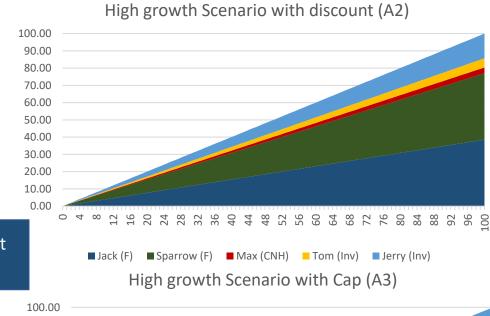
Monetary results on the basis of share holder structure in Round B



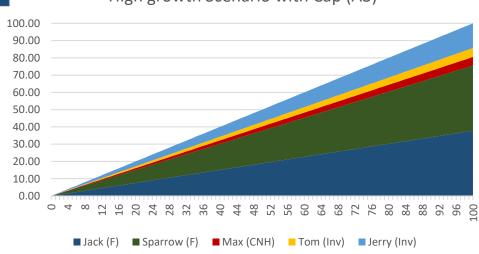
• Payment to all shareholders from €1.

Source: Illustrations based on own calculation

- All shareholders equally benefited from the increase of the proceeds
- Anti dilution right helped investors to regain their value of investment and their by to participate more during the exit proceeds



Lack of Anti dilution right benefited the founders

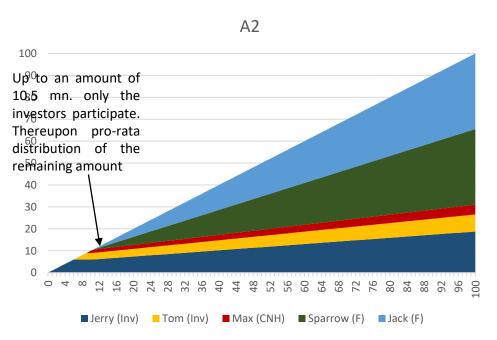


Liquidation Preference: Down-Round Scenario

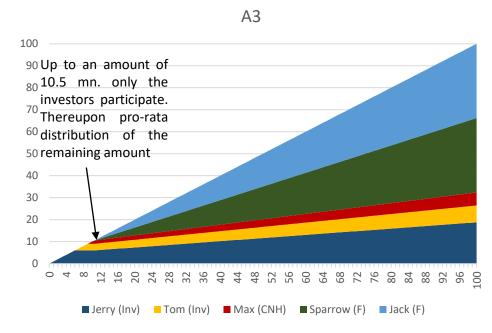
Exit and Participating liquidation preference (3x)

23/01/2021





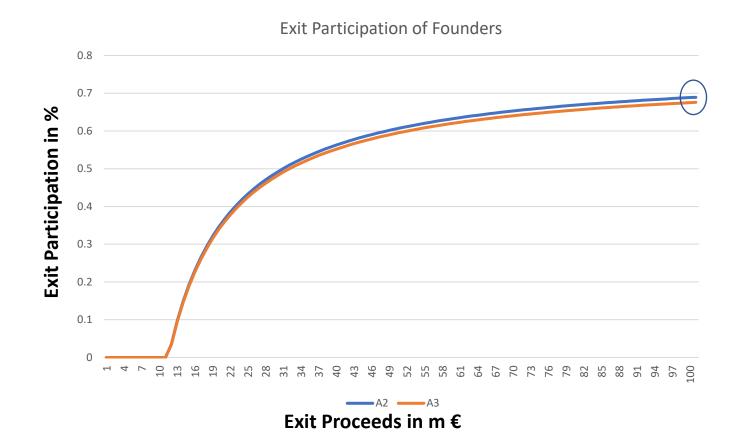
Investors	Liq. preference		
Мах (СИН)	1.5 mn.		
Tom (Inv)	3.0 mn.		
Jerry (Inv)	6.0 mn.		



A1 – Anti dilution right helped Max and Tom to regain their value of investment. A2 Vs A3 – For Max even though he got diluted, A3 is more beneficial as he used valuation cap

23/01/2021





From the point of view of the founders A2 is beneficial for them, because in A3 Max gets additional money while participating in exit proceeds as he made use of his right (Valuation cap).

In down round percentage participation of founders is low compared to upround





Option A



✓ On reaching the maturity date the convertible note holders can convert their note and interest.



Option B

Convertible debt

Ajith Rajan

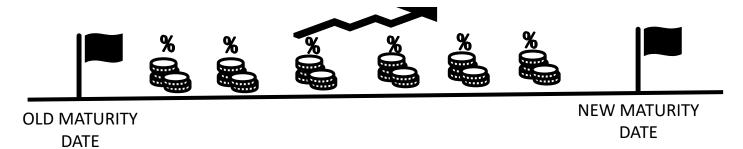


- ✓ Request payback from the notes:
- Investors will probably request payback only if the company can really afford it.
- If company can't afford to pay back the notes and the investors executes their right, Boomerang would be forced to file for bankruptcy



Option C

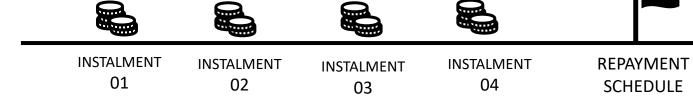
- ✓ Review maturity date on the notes:
- The maturity date of the debt can be extended based on mutual agreement
- This gives Boomerang time and a chance to accelerate growth and may be to attract a new round of financing in the near future.
- Investor can continue accumulating interest (%)





Option D

- ✓ Enter into a repayment schedule
- Boomerang can repay the debt in multiple instalments





Convertible Note



- Convertible Note is an investment with;
 - ✓ Interest rate
 - ✓ Discount
 - ✓ Valuation Cap
- Collateral for the investment is the company stock

Note is converted?



- New Round of Funding
- —O Company gets acquired
- On maturity date

Discount Vs Cap



- Discount gives an opportunity for the noteholder to get shares at lower rate (discount on valuation)
- In case of super high valuation, a valuation cap is more beneficial for note holder unless he gets huge discount

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