

Private Equity Fund of Funds & Secondaries *– Certification Quiz Questions*

Module FOF-04 – Co-Investment and PE Fund Analysis (3-Hour Case Study)

10. You are working on an analysis of a potential co-investment in Gerresheimer AG [GXI], a German life science & diagnostic tools company.

In this co-investment, the GP originally planned to allow the co-investors to contribute €1.0 billion. The GP would then contribute the remaining €1.2 billion in required Investor Equity to close the deal.

After this co-investment closes, the GP also plans to make an additional €500 million investment out of the same fund.

The GP has suddenly announced a change in plans and will allow the co-investors to contribute €1.5 billion to the co-investment. It has also cancelled its plans for the additional €500 million investment.

The “Before” and “After” images representing this change are shown below this question.

Which of the following statements most accurately describe how your view of this co-investment deal might shift following these changes?

This question has **2 correct answers** and 4 incorrect answers. You must select **BOTH** correct answers and no incorrect answers to earn a point for this question.

BEFORE:

AFTER:

	A	B	C	D	E
277					
278	Co-Investment Alignment:			Units:	
279					
280	Co-Investment Alignment:				
281			PEP Fund VII:	€ M	€ 19,500.0
282			Target % Invested:	%	95.0%
283			Target Invested Amount:	€ M	18,525.0
284			Co-Investor:	€ M	1,000.0
285			PEP Fund VII:	€ M	1,192.8
286			% of Total Investment Amount:	%	6.4%
287					
288	Pro-Forma Investment Amount:				
289			Fund VII Cost:	€ M	€ 14,625.0
290			% of Fund:	%	75.0%
291					
292			Fund VII Pro-Forma Cost:	€ M	15,817.8
293			% of Fund:	%	81.1%
294					
295			Fund VII Additional Investment:	€ M	500
296			% of Fund:	%	83.7%

	A	B	C	D	E
277					
278	Co-Investment Alignment:			Units:	
279					
280	Co-Investment Alignment:				
281			PEP Fund VII:	€ M	€ 19,500.0
282			Target % Invested:	%	95.0%
283			Target Invested Amount:	€ M	18,525.0
284			Co-Investor:	€ M	1,500.0
285			PEP Fund VII:	€ M	692.8
286			% of Total Investment Amount:	%	3.7%
287					
288	Pro-Forma Investment Amount:				
289			Fund VII Cost:	€ M	€ 14,625.0
290			% of Fund:	%	75.0%
291					
292			Fund VII Pro-Forma Cost:	€ M	15,317.8
293			% of Fund:	%	78.6%
294					
295			Fund VII Additional Investment:	€ M	-
296			% of Fund:	%	78.6%

- Your view would be more positive because the GP is allowing the LPs to contribute more, which increases their potential upside.
- Your view would be more positive because the originally planned €500 million investment would have made the fund's Invested Capital / Committed Capital too high relative to the ~95% target.
- Your view would be more negative because the GP may not have enough "skin in the game" if this deal represents less than 4% of its targeted Invested Capital.
- Your view would be more negative because, without the additional €500 million investment, there seems to be less of a "need" to bring in co-investors.
- Your view would be unchanged because the percentage shifts are all relatively minor.
- Your view would be unchanged because the greater LP participation in the deal is offset by the GP's reduced commitment.

11. In addition to the co-investment analysis itself, you have also reviewed fund-level performance data from this PE firm's current and previous funds (Funds IV – VII). The portfolio company performance data, by industry, country, sourcing type, and deal size, is shown in the images below this question.

If GXI is a €5 billion Purchase Enterprise Value, fee-free/carry-free deal, and at least several other PE firms have also been bidding on the company, how does this additional data factor into your investment recommendation?

Note that your firm targets a 2.0x TVPI and 20% Net IRR on co-investments.

This question has **3 correct answers** and 3 incorrect answers. You must select **ALL 3** correct answers and no incorrect answers to earn a point for this question.

Returns Analysis

(€ in Millions EUR)

Performance by Sector:

Sector	Cost Basis	Realised	FMV	Total	Gross MOIC	Gross IRR	Average Holding Period
Technology	€ 7,942.1	€ 5,914.8	€ 9,575.5	€ 15,490.3	2.0 x	16.3%	4.4
Industrials	14,587.3	17,873.3	12,355.8	30,229.1	2.1 x	17.0%	4.6
Healthcare	16,081.9	26,681.5	14,455.7	41,137.2	2.6 x	22.8%	4.6
Financial Services	1,551.2	1,979.6	787.7	2,767.3	1.8 x	16.6%	3.8
Retail	7,537.6	4,242.0	9,340.8	13,582.8	1.8 x	20.6%	3.1
Total	€ 47,700.0	€ 56,691.2	€ 46,515.5	€ 103,206.6	2.2 x	19.5%	4.3

Performance by Country:

Country	Cost Basis	Realised	FMV	Total	Gross MOIC	Gross IRR	Average Holding Period
Australia	€ 1,198.8	€ -	€ 2,617.8	€ 2,617.8	2.2 x	16.2%	5.2
Austria	1,657.7	1,206.7	1,778.3	2,985.0	1.8 x	12.4%	5.0
Denmark	1,275.2	277.2	500.0	777.2	0.6 x	(10.0%)	4.7
France	5,834.5	5,024.2	4,987.0	10,011.1	1.7 x	16.7%	3.5
Germany	14,566.4	29,808.9	10,335.4	40,144.3	2.8 x	21.8%	5.1
Italy	613.0	2,739.5	-	2,739.5	4.5 x	45.4%	4.0
Luxembourg	1,947.3	5,976.3	697.6	6,674.0	3.4 x	33.6%	4.3
Morocco	1,484.7	-	3,039.7	3,039.7	2.0 x	17.8%	4.4
Netherlands	2,202.5	-	3,260.7	3,260.7	1.5 x	8.0%	5.1
Singapore	1,151.8	-	1,868.8	1,868.8	1.6 x	27.4%	2.0
Spain	1,212.1	-	664.4	664.4	0.5 x	(17.7%)	3.1
Turkey	1,909.1	100.0	498.2	598.2	0.3 x	(26.8%)	3.7
UK	11,894.6	11,558.4	14,763.0	26,321.4	2.2 x	21.1%	4.2
US	752.3	-	1,504.6	1,504.6	2.0 x	58.7%	1.5
Total	€ 47,700.0	€ 56,691.2	€ 46,515.5	€ 103,206.6	2.2 x	19.5%	4.3

Performance by Sourcing Type:

Source	Cost Basis	Realised	FMV	Total	Gross MOIC	Gross IRR	Average Holding Period
Proprietary	€ 17,263.2	€ 33,487.2	€ 12,384.3	€ 45,871.4	2.7 x	21.4%	5.0
Limited Process	15,417.3	19,842.1	13,274.2	33,116.3	2.1 x	20.6%	4.1
Auction	15,019.5	3,361.9	20,857.0	24,218.9	1.6 x	15.3%	3.4
Total	€ 47,700.0	€ 56,691.2	€ 46,515.5	€ 103,206.6	2.2 x	19.5%	4.3

Performance by Deal Size - Realised:

Enterprise Value Range:	Cost Basis	Realised	FMV	Total	Gross MOIC	Gross IRR	Average Holding Period
€0 - €500 million	€ 2,414.9	€ 9,627.3	€ -	€ 9,627.3	4.0 x	28.8%	5.5
€500 - €1,000 million	4,778.1	12,112.8	-	12,112.8	2.5 x	18.9%	5.4
€1,000 - €2,000 million	7,141.6	19,935.2	-	19,935.2	2.8 x	31.2%	3.8
€2,000 - €10,000 million	5,233.4	7,475.2	-	7,475.2	1.4 x	9.9%	3.8
Total	€ 19,568.0	€ 49,150.5	€ -	€ 49,150.5	2.5 x	19.6%	5.1

- The Industry Data (Performance by Sector) makes a positive impact because Healthcare deals have exceeded your returns targets.
- The Country Data makes a positive impact because German companies have exceeded your returns targets.
- The Industry Data and Country Data make a neutral impact because Healthcare deals and German deals have done well, but their performances rely far too much on the Unrealized Values in the “FMV” column.
- The Sourcing Data makes a negative impact because it appears this is an auction deal, and they tend to produce lower returns, below the levels your firm targets.
- The Deal Size data makes a negative impact because deals in the €2 – 10 billion Purchase TEV range tend to underperform.
- It’s difficult to use this data to make conclusive statements because there are no “Net” figures, but your returns targets are linked to the TVPI and Net IRR.