

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

Module FOF-01 – Introduction to Private Equity Fund and Secondaries Modeling

1. A private equity firm has just raised a new \$5 billion PE fund for buyouts in the industrials sector. In the first 3 years of the fund, it invested a total of \$2 billion into portfolio companies and charged a 2% annual Management Fee based on the committed capital. Its Limited Partners have indicated that they're open to future co-investment opportunities for up to \$2 billion total, depending on pricing and performance.

Based on this description, select the **CORRECT** Name / Number pairs that properly describe the fund below.

This question has **3 correct answers** and 5 incorrect answers. You must select **ALL 3** correct answers and no incorrect answers to earn a point for this question.

- a. Committed Capital – \$5.0 billion.
 - b. Committed Capital – \$7.0 billion.
 - c. Invested Capital – \$2.3 billion.
 - d. Invested Capital – \$2.0 billion.
 - e. Called Capital – \$4.3 billion.
 - f. Called Capital – \$2.3 billion.
 - g. Co-Invested Capital – \$2.0 billion.
 - h. Co-Invested Capital – \$0.0 billion.
2. You are building a basic waterfall model for the Carried Interest (Carry) corresponding to a single portfolio company in a private equity fund (i.e., it is an “American waterfall”

structure). This waterfall has an 8% Hurdle Rate and an 80% / 20% split of the investment profits to the LPs and GP.

The PE fund paid \$100 million for this portfolio company in Year 1 and plans to sell the company for \$300 million in Year 5. For simplicity, please ignore the potential Management Fees allocated to this company.

In which of the following scenarios is the deal most likely to clear the Hurdle Rate but result in only a **PARTIAL** Catch-Up for the GP?

- a. The GP sells the portfolio company for 2.0x the initial invested capital rather than 3.0x.
 - b. The GP sells the portfolio company for 1.0x the initial invested capital.
 - c. The GP sells the portfolio company for 1.4x the initial invested capital.
 - d. Rather than investing \$100 million upfront, the GP spreads it over 2 years and contributes \$50 million per year to buy a full 100% stake in the portfolio company.
3. You have completed a private equity fund analysis and calculated the Gross Multiple of Invested Capital (MOIC), the Total Value to Paid-In Capital (TVPI), and the Distributions to Paid-In Capital (DPI).

Your co-worker asks you to explain all these metrics. Which of the answer choices below give the **CORRECT** similarities and differences?

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.

- a. The Gross MOIC and TVPI reflect both Unrealized Values and Realizations, but the DPI reflects only Realizations.
- b. The TVPI reflects the full impact of both Management Fees and Carry, but DPI ignores these and considers only Realizations and Invested Capital.

- c. The TVPI accounts for both Accrued and Realized Carry in the numerator, but the DPI deducts only Realized Carry in its numerator.
 - d. The Gross MOIC uses Total Called Capital in its denominator, while the TVPI uses Total Invested Capital instead.
 - e. The DPI can never exceed the TVPI, but it should equal the TVPI by the time the fund winds down and the last companies are sold.
 - f. If a portfolio company is sold, the DPI, TVPI, and Gross MOIC will always increase.
4. You are modeling an LP-led secondary deal in which 9 portfolio companies are expected to be sold over a ~5-year holding period.

To estimate the Investment Profit for each company, you start with the Realizations, subtract the Allocated Management Fees in the projected period, and subtract the Cost Basis for the company, including all previously Allocated Management Fees in the historical pre-deal period.

If this number is positive, you multiply it by the standard 20% to estimate the Carry. An image showing the setup and a sample formula is below this question.

Cell E25 is the total Invested Capital from before the secondary deal, and G25 is the percentage of the total Management Fees allocated to this specific company in the pre-deal period.

What are the main **FLAWS** with this approach to calculating Carry for each portfolio company?

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

	A	B	C	D	E	F	G	H	I	J	K	L	M
35													
36			Carried Interest:		<i>Units:</i>	2025-12-31	2026-12-31	2027-12-31	2028-12-31	2029-12-31	2030-12-31		
37													
51			Projected Fund-Level Cash Flows (Realizations, Net of Capital for Management Fees Allocated to Specific Portfolio Companies):										
52			CyberSentinel AI	\$ M		-	-	-	-	-	-	-	-
53			CloudVantage	\$ M		(7.5)	(7.5)	2,542.5					
54			TaxFlowPro	\$ M		1,198.2	-	-	-	-	-	-	-
55			MediSync Cloud	\$ M		(9.0)	2,391.0	-	-	-	-	-	-
56			LegalEase AI	\$ M		1,733.3	-	-	-	-	-	-	-
57			SalesPulse CRM	\$ M		(10.5)	1,081.5	-	-	-	-	-	-
58			LogiTrack Solutions	\$ M		(4.5)	(4.5)	(4.5)	(4.5)	(4.5)	(4.5)	658.5	
59			Edusmart Academy	\$ M		(9.0)	(9.0)	(9.0)	(9.0)	1,591.0			
60			Retail360 Insights	\$ M		(6.8)	(6.8)	(6.8)	(6.8)	(6.8)		1,313.3	
61			HRSyncPro	\$ M		(6.8)	(6.8)	(6.8)	(6.8)	(6.8)		1,243.3	
62			Total:	\$ M		2,877.5	3,438.0	2,515.5	1,573.0	1,573.0	3,215.0		
63													
64			Management Fee:										
65			Carried Interest Calculations (Projections):										
66			CyberSentinel AI	\$ M		-	-	-	-	-	-	-	-
67			CloudVantage		=IF(J53>0,(SUM(\$H53:J53)-\$E25+(SUMIFS(Fund_Amounts,Fund_Items,\$C\$64)*\$G25))*Carried_Interest,0)								
68			TaxFlowPro	\$ M		111.9	-	-	-	-	-	-	-
69			MediSync Cloud	\$ M		-	337.1	-	-	-	-	-	-
70			LegalEase AI	\$ M		245.1	-	-	-	-	-	-	-
71			SalesPulse CRM	\$ M		-	56.2	-	-	-	-	-	-
72			LogiTrack Solutions	\$ M		-	-	-	-	-	-	62.3	
73			Edusmart Academy	\$ M		-	-	-	-	181.2			
74			Retail360 Insights	\$ M		-	-	-	-	-		161.5	
75			HRSyncPro	\$ M		-	-	-	-	-		147.5	
76			Total:	\$ M		\$ 357.0	\$ 393.3	\$ 386.2	\$ 181.2	\$ 181.2	\$ 371.2		

- It is incorrect to factor in both the Management Fees from before the secondary deal and the Management Fees from the post-deal period.
- The formula described and shown above does not correctly account for portfolio companies that had multiple investments in the pre-deal period.
- There is no Hurdle Rate check in this formula, so it might incorrectly pay out Carry even if the IRR is below the standard ~8%.
- This formula does not handle multiple Realization events, such as sales of partial stakes after an IPO, because it doesn't subtract previously distributed Carry.