Task

You are private equity firm looking to potentially buyout an insurance company. In the last 12 months, the company has generated $2BN in sales $900MN in COGS, $500MN in OpEx, $100MN in D&A, $200MN in NWC and $140MN in CapEx. For the next 5 years, assumes a 21% tax rate and assumes all margins remains flat. Your firm also believes it can enter and exit at 10.0x EBITDA multiple at the end of year 5. The company has existing net debt of $1BN. Fees and expenses are estimated to amount to $100MN, and there will be 3 tranches of debt : $200MN from revolver (7.5% interest), $2.5BN from bank loan (9.5% interest) and $ 1.5BN from senior notes (12.5% interest) : Calculate the firm's IRR

Assumptions

Financials

LTM Financials	
Revenue	2,000
Cogs	900
OpEx	500
D&A	100
NWC	200
CapEx	140

Entry

LTM EBITDA	600
EBITDA Multiple	10.0x
Enterprise Value	**6,000**
Existing Net Debt	1,000
Equity Value	**5,000**
Fees & Expenses	100

Capital Structure

	Amount	Interest
Revolver	200	7.5%
Bank Loan	2,500	9.5%
Senior Notes	1,500	12.5%

Operating Assumptions

Revenue Growth	10.0%
Tax Rate	21.0%

Exit

Exit Multiple	10.0x

For Reference

IRR	**22%**
MOIC	**2.7x**

Sources & Uses

Sources

	Amount	xEBITDA	%Capital
Revolver	200	0.3x	3.3%
Bank Loan	2,500	4.2x	41.0%
Senior Notes	1,500	2.5x	24.6%
Total	4,200	7.0x	68.9%
Sponsor Equity	1,900	3.2x	31.1%
Total Sources	**6,100**	**10.2x**	**100%**

Uses

	Amount	xEBITDA	%Capital
Debt Refinancing	1,000	1.7x	16.4%
Equity Payment	5,000	8.3x	82.0%
Fees & Expenses	100	0.2x	1.6%
Total Uses	**6,100**	**10.2x**	**100%**

Financials

Operating Model	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Revenue	2,000	2,200	2,420	2,662	2,928	3,221
% Growth		10.0%	10.0%	10.0%	10.0%	10.0%
COGS	900	990	1,089	1,198	1,318	1,449
% Sales	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Gross Profit	1,100	1,210	1,331	1,464	1,611	1,772
% Sales	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
OpEx	500	550	605	666	732	805
% Sales	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
EBITDA	600	660	726	799	878	966
% Sales	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
D&A	100	110	121	133	146	161
% Sales	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
EBIT	500	550	605	666	732	805
% Sales	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Interest		440	438	434	426	393
EBT		110	167	232	306	413
% Sales		5.0%	6.9%	8.7%	10.5%	12.8%
Taxes		23	35	49	64	87
% Tax Rate		21.0%	21.0%	21.0%	21.0%	21.0%
Net Income		87	132	183	242	326
% Sales		4.0%	5.4%	6.9%	8.3%	10.1%

Cash flow Items	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
D&A	100	110	121	133	146	161
% Sales	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Net Working Capital	200	220	242	266	293	322
% Sales	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Change in Net Working Capital		20	22	24	27	29
CapEx	140	154	169	186	205	225
% Sales	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%

Levered Cash Flow	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Net Income		87	132	183	242	326
D & A		110	121	133	146	161
CapEx		154	169	186	205	225
Change in NWC		20	22	24	27	29
Levered Cash Flow		**23**	**61**	**106**	**157**	**232**

Debt Schedule

	Year 0	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Revolver						
Beginning Balance		200	177	116	10	--
Interest		15	13	9	1	--
Paydown		23	61	106	10	--
Closing Balance	**200**	**177**	**116**	**10**	**--**	**--**
Bank Debt						
Beginning Balance		2,500	2,500	2,500	2,500	2,353
Interest		238	238	238	238	224
Paydown		--	--	--	147	232
Closing Balance	**2,500**	**2,500**	**2,500**	**2,500**	**2,353**	**2,121**
Senior Notes						
Beginning Balance		1,500	1,500	1,500	1,500	1,353
Interest		188	188	188	188	169
Paydown		--	--	--	147	232
Closing Balance	**1,500**	**1,500**	**1,500**	**1,500**	**1,353**	**1,121**
Total Debt						
Beginning Balance		4,200	4,177	4,116	4,010	3,707
Interest		440	438	434	426	393
Paydown		23	61	106	303	464
Closing Balance	**4,200**	**4,663**	**4,677**	**4,655**	**4,739**	**4,564**

IRR

EBITDA at Exit	966
Exit Multiple	10.0x
Enterprise Value	**9,663**
Net Debt	4,564
Sponsor Equity Value	**5,099**
Sponsor Equity at Entry	1,900
MOIC	2.7x
IRR	**22%**

Conclusion : Go with the deal

1. Returns clear the PE hurdle

IRR : 22% ; MOIC = 2.7x

This comfortably beats typical target of most PE firm which is IRR of 18 to 20 %

And it is achieved without multiple expansion, which makes returns quality stringer.

2. Conservative assumption = credible model

flat margins no heroics

Entry and exit at same 10.0x EBITDA

no aggressive revenue growth baked in

Returns are driven by cash generation + deleveraging not optimism.

3. Cash flow can handle the leverage

Ebitda stays strong and predictable

interest across all tranches is serviced every year

Debt reduces meaningfully by exit

Low risk of covenant stress or liquidity crunch

4. Business profile fits leverage

Insurance businesses are :

Non cynical

Sticky (long term customers)

predictable in cash flows

Exactly the kind of business PE firm would like to take over