

International Finance Course
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*How to Analyse, Structure and Finance direct
investments in real assets abroad with a project
finance approach*

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Financing the Deal:
Clarifications on specific matters
concerning “quasi- equity” and financial
markets

3. Capital Structure in a PF Deal: seniority

- As already clarified, each type of “finance” has a different priority level in being repaid if the company goes bankrupt or decides to liquidate (different priorities imply different risks and costs).
- If a company goes bankrupt, **senior debtholders**, who are often bondholders or banks providing credit lines, are most likely to be repaid, followed by:
 1. **junior debt holders,**
 2. **Subordinated Debt / Mezzanine (quasi-equity)**
 3. **preferred stock holders**
 4. and **common stock holders.**

In finance, seniority refers to the order of repayment in the event of bankruptcy of the issuer (cash waterfall)

3. Capital Structure in a PF Deal: seniority

- **Seniority can refer to debt or equity.**
- Each security, either debt or equity, that a company issues has a specific seniority or ranking within its own categories.
- **Senior debt** must be repaid before subordinated (or junior) debt is repaid.
- **Preferred stock holders** must be repaid (typically receiving their original invested amount) before common stock holders (but may have a limited governance)
- Debts that have the same seniority in a company's capital structure are described as being "*pari passu*".

3. Financial Structure in a PF Deal: what is Junior Debt ?

- There is risk, however, that a company is not able to pay back its junior debt due to the fact that it does not have enough money and is obligated to pay back the senior debt first.
- If a company files for bankruptcy, the courts prioritize the outstanding loans in which the company's liquidated assets are used to repay;
- any debt that has a lesser priority over other forms of debt is considered “more” junior debt (subordinated). Any debt with higher priority over other forms of debt is considered senior debt.
- **Junior Debt and subordinated debt may have the same meaning in many cases. Be careful to distinguish when subordinated debt become a “quasi-equity” instruments (i.e. provided by sponsors, with returns based on interests and payments related to cash flow available for shareholders, ect)**

3. Capital Structure in a PF Deal: quasi-equity

- "*Mezzanine*": **mezzanine capital** is any **subordinated debt** or **preferred equity** instrument that represents a claim on a company's assets which is senior only to that of the common shares.
- Mezzanine financings can be structured either as debt (typically an unsecured and subordinated contract/note) or preferred stock **and often incorporate equity linked components**
- Mezzanine capital is a **more expensive financing source** for a company than secured and senior debt, **taking the risk of first loss !**
- The **higher cost of capital** is the result of its being an **unsecured, subordinated** (or junior) **obligation** in a company's capital structure (i.e., in the event of default, the mezzanine financing is only repaid after all senior obligations have been satisfied).

3. Capital Structure in a PF Deal: quasi-equity

- If the Mezzanine capital take the **form of debt**, it is defined as **Subordinated Debt** (also known as subordinated loan, subordinated bond, subordinated debenture or junior debt)= Debt instruments with the lowest seniority before equity
- It is a **debt which ranks before equity but after other debts** in case a company falls into liquidation or bankruptcy (mezzanine lenders have subordinate status).
- Given that subordinated debts are repayable after other debts have been paid, they are **more risky** for the lender. Subordinated loans typically have a **lower credit rating**, and, therefore, a **higher yield than senior debt**.
- Launched in US during the 1970s, may also take the form of a bond issue with reimbursements after senior debt has been repaid

3. Capital Structure in a PF Deal: “quasi” equity

- Quasi-equity instruments (also called mezzanine capital) may be used by sponsors (and other investors):
 - convertible bonds/loans,
 - subordinated debt with equity kicker (warrant, option call),
 - preferred stocks

3. Capital Structure in a PF Deal: quasi-equity

- **In PF Cover Ratios**, mezzanine capital is usually included within the equity, given that it is often provided by sponsors and falls into the same kind of treatment and restrictions;
- **Why Sponsors may be interested in providing mezzanine finance ?:**
 - i. in order to **partially reduce their equity commitment** (and risk),
 - ii. In order to **reduce volatility on their own returns, given that interests may be a more certain remuneration than dividends** (if banks allow interests payments on mezzanine);
 - iii. In order to **balance governance rights objectives with different capital injection capabilities**;

3. Capital Structure in a PF Deal: quasi-equity

- iv. Tax and leverage efficiency,
- v. In order to limit the effect of the “**dividend trap**” (see page 221 of the book),

3. Subordinated Debt: the “dividend trap concept”

- **Dividend trap:** a company (SPV) is able to generate enough cash which is – however - not available for distribution to its shareholders;
- In project finance transactions, it may happen, for instance, when sponsors break the debt/equity covenant
- However, the typical case is when there is an accelerated depreciation at the beginning of the PF initiative (for instance using a rate of 20%, rather than 10% with a 15y loan)
- With a dividend trap, there is a mismatching between SPV’s cash flow and the cash flow available for shareholders, reducing the shareholders’ IRR
- Recourse to subordinated debt, especially with remuneration, can reduce this effect

3. Subordinated Debt: the “dividend trap concept”

In other words:

- If at the beginning of the project an accelerated depreciation method is used (for tax purposes for example)
- and depreciation is higher than principal repayments of the senior debt,
- there are losses on an accrual basis but not on a cash basis (or reduced net profits if compared with the cash made available).
- In such case dividend may not be distributed under many legislations (or may be distributed only within the limit of the reduced net profits accounted, which are lower than the cash available).

3. Subordinated Debt: the “dividend trap concept”

D&A in 2 years rather than 8 years as in the base case

- In the first 2 years, there are low net profits with high cash flows.
- If the net profit is lower than the free cash flow (or there is a loss on an accrual basis), we have a dividend trap situation;**
- In a dividend trap situation, **not all the free cash flow available** can be distributable to the sponsors;
- In case the dividend trap implies also a loss on an accrual basis, in many legislation no dividends may be distributed at all

	Base Case M\$	0	1	2	3	4	5	6	7	8	9
A	Revenues	0	0	270	250	300	350	364	310	322	335
B	Operation costs (Opex)	0	0	15	40	120	170	180	180	200	180
C	EBITDA (A-B)	0	0	255	210	180	180	184	130	122	155
D	Depreciations & Amortizations			165	165						
E	EBIT (C-D)	0	0	90	45	180	180	184	130	122	155
F	Interests	0	0	32	28	24	20	16	12	8	4
G	EBT (E-F)	0	0	58	17	156	160	168	118	114	151
H	Taxes	0	0	20	6	54	56	59	41	40	53
I	Net profit (G-H)	0	0	37	11	101	104	109	77	74	98
C	EBITDA	0	0	255	210	180	180	184	130	122	155
H	Taxes	0	0	20	6	54	56	59	41	40	53
J	Capex / Investments	300	400	50	0	0	0	0	0	0	0
K	Working capital	0	0	0	0	0	0	0	0	0	0
L	Cash Flow Available for Debt Service (C-H-J±K)	(300)	(400)	185	204	126	124	125	89	82	102
M	Debt - principal initial	0	216	504	473	405	338	270	203	135	68
N	Debt drawdown	216	288	36	0	0	0	0	0	0	0
O	Principal repayment			68	68	68	68	68	68	68	68
F	Interests			32	28	24	20	16	12	8	4
P	Debt Service (O+F)	0	0	100	96	92	88	84	80	76	72
Q	Debt balance, principal final (M+N-O)	216	504	473	405	338	270	203	135	68	0
R	Free Cash Flow (J+L-M-E)	(84)	(112)	121	108	34	36	41	9	7	31

3. Subordinated Debt: “Negative equity”

- A possible solution to avoid a **dividend trap** situation could be the use of **subordinated debt** by the Sponsors (with interests received rather than dividends).
- However, using it could cause a **negative equity problem**, especially if the subordinated debt is remunerative;
- Interests paid on the subordinated debt are a cost that could generate losses, especially in the first years of operation when the debt service is still high;
- **In an extreme situation, losses could also create a “negative equity value” which is not allowed in many legislation !**
- *The right match between IRR and balance sheet evaluation should lead to the optimal capital structure for a specific project*

3. Subordinated Debt: “Negative equity”

Assuming the 100% of the capital need (after debt drawdown) with a subordinated debt with 10% interest rate

Base Case M\$		0	1	2	3	4	5	6	7	8	9
A	Revenues	0	0	270	250	300	364	310	322	335	
B	Operation costs (Opex)	0	0	100	110	120	180	180	200	180	
C	EBITDA (A-B)	0	0	170	140	180	184	130	122	155	
D	Depreciations & Amortizations			165	165						
E	EBIT (C-D)	0	0	5	(25)	60	180	184	130	122	155
F	Interests	0	0	32	28	24	20	16	12	8	4
	Interests on subordinated debt			21	21	21	21	21	21	21	21
G	EBT (E-F)	0	0	(48)	(74)	135	139	147	97	93	130
H	Taxes	0	0	(17)	(26)	47	49	51	34	33	46
I	Net profit (G-H)	0	0	(31)	(48)	88	90	95	63	61	85

Be careful to the *negative equity problem*: too much mezzanine may cause higher losses at the beginning of a project with a “negative equity value” which is not allowed in many legislation (**requiring then recapitalization of liquidation**)

Losses during the first two years of operation

3. Capital Structure in a PF Deal: quasi-equity

- **Question: why banks may accept mezzanine provided by sponsors rather than equity ?:**
- Mezzanine may absorb a risk which will not be taken by sponsors in any other way, increasing the lenders' expectations of being repaid in case of default (see pag.221 and 222 of the Book)
- Remember that in a PF transaction, when calculating Cover Ratios, mezzanine capital is usually included within the equity, given that it is often provided by sponsors (and falls into the same kind of treatment and restrictions);

3. Capital Structure in a PF Deal: quasi-equity

- **May lenders underwrite mezzanine finance in the form of subordinated debt ? And why ?:** some specialised lenders (rather than commercial banks) may be attracted by risks in order to get a higher return in terms of interests and/or dividends (if they are going to take preferred stocks). **Equity-linked instruments may pay a minimum guaranteed interest plus a share of the project cash flows available for sponsors;**
- **Sponsors may be willing to allocate subordinated debt to special lenders if their expected return on investments (ROI) is higher than the cost of subordinated debt.** If this will be the case, then the resulting reduction in net profit (deriving from higher interests paid) may be more than offset by the equity saving (see page 220 and 221 of the Book)
- Please note that **in sophisticated markets there are specialised investors in mezzanine finance;**
- When specialised investors put mezzanine finance in a company, a soft-governance is usually agreed to strengthen the investors' capability to have control on the business development

3. Capital Structure in a PF Deal: quasi-equity

Table 6.20 Advantages of Mezzanine Financing—Shareholders' Position

Cost of senior debt (K_d): 8%

Cost of mezzanine debt (K_{sub}): 10%

Capital Structure 1		Capital Structure 2	
Assets	100	Assets	100
Senior debt	75	Senior debt	75
Junior debt	0	Junior debt	15
Equity	25	Equity	10
EBIT	10.00	EBIT	10.00
Interest on senior debt	6.00	Interest on senior debt	6.00
Interest on junior debt	0.00	Interest on junior debt	1.50
Earnings before taxes (EBT)	4.00	Earnings before taxes (EBT)	2.50
Taxes @ 50%	2.00	Taxes @ 50%	1.25
Net income	2.00	Net income	1.25
ROE	8.00%	ROE	12.50%

3. Capital Structure in a PF Deal: equity acceleration clause

Be careful not to make confusion between Negative Equity and the Equity Acceleration clause !

Usually, in a PF deal, there are three theoretical alternatives to pay in the equity contribution (i.e. project finance during construction):

Year	Stage Payment			Initial Payment			Final Payment		
	Debt	Equity	Payments	Debt	Equity	Payments	Debt	Equity	Payments
1	212.5	37.5	250	100	150	250	250	0	250
2	212.5	37.5	250	250	0	250	250	0	250
3	212.5	37.5	250	250	0	250	250	0	250
4	212.5	37.5	250	250	0	250	100	150	250

3. Capital Structure in a PF Deal: equity acceleration clause

Under the Equity Acceleration clause, lenders may require to sponsors to accelerate their capital injections (among other remedies) in case Debt to Equity ratios or other projects main goals (i.e. the timetable of the construction phase) are not fully satisfied;

This is an exceptional measure that can arise if the project is in default and is limited to certain events of default established in the credit agreement (ref. book chapter 6.7.1).

Financing the Deal: A PF deal within the financial markets

4. Capital Structure in a PF Deal: Financial Markets

- Project Financing projects are less suitable to be placed on large financial markets than corporate finance deals;
- This is true for both, the equity side (stock exchange markets) and the debt side (bonds markets);
- In general terms, this is because PF deals need flexibility and issues on the financial markets imply more rigidity
- For such reason, SPVs of PF deal are very rarely listed on stock exchange markets and issuer of project bonds;
- This is at least true during the construction period, when flexibility is more needed and there are greenfield risks, not easily taken by the financial markets;
- During the post-completion phase, refinancing, listing and project bond issues are more likely to happen.

4. Can the shares of a SPV be listed on a stock exchange ?

- Listing is not very likely in a PFI because:
 - i. The size of a typical Project Company is not sufficiently high to allow an efficient market for its shares (too small “free float”);
 - ii. the SPV’s ownership structure has to remain stable during the life of the project (major changes in the SPV’s ownership structure has to be approved by banks and may be considered, otherwise, events of default)
- However, purely financial partners entering the SPV may be seen in a positive way by Banks and sponsors (sharing risks and increasing the volume of potential initiatives);
- It may happen that during the life of the project the SPV’s ownership structure changes in order to take advantages from all the opportunities in the financial markets

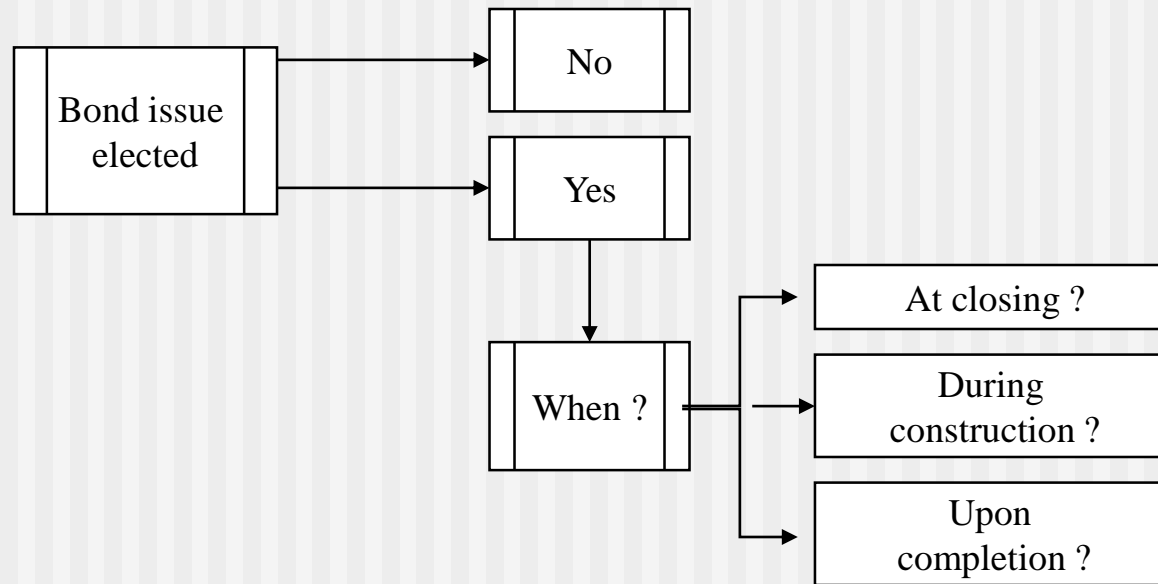
4. Can a SPV issue a project bond ?

- A project bond issue is a possible alternative way for a SPV to raise debt (only in well-defined situations);
- The theoretical advantages of a project bond issue in comparison with a syndicated loans (placed on the interbank market) are the following:
 - ✓ Lower cost (even if the project bonds are usually less liquid than corporate bonds)
 - ✓ Higher market capability (with a large number of investors, either retail or institutional);

4. Can a SPV issue a project bond ?

- However, project bonds have also some disadvantages:
 - ✓ More rigidity in case of default (or even less critics problems)
 - ✓ Less suitable for greenfield projects or for the construction phase of a greenfield project
- For such reasons, Project Bonds represents a small part of the PF international debt market (around 11%) and:
 - ✓ Are usually issues during the post completion phase;
 - ✓ Are often underwritten by institutional investors (insurance companies, debt funds, pension funds) with private placement (dedicated issues)

4. Can a SPV issue a project bond ?



In assessing the “market window”, issuers look at :

- the level and expected trends of the Relevant Treasury rates and spreads;
- the level and expected changes in host country sovereign and industrial ratings;
- transaction costs (additional closing and underwriting fees for bonds);
- practicalities (re-processing the offering documents after bank financing closing).