Example 1: Revolving Loan Agreement

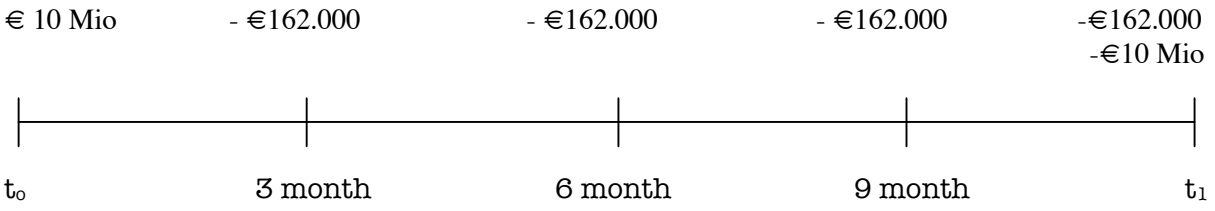
Since the implementation of Basle II capital adequacy regulations, the major part of bank loans is of short term nature and requires some kind of collateral.

Generally the revolving loan agreement constitutes a committed line of credit with a tenor of one year. Only prime rate customers would be granted a revolving credit on a maturity specification „until further notice“. The borrower has to pay a commitment fee, regardless of the utilization of the line. The characteristic of the revolving structure is that the commitment can be utilized several times within the tenor, if the tranches drawn are repaid in the meantime in due course. Additionally a maximum drawing period can be determined.

The interest is usually to be paid quarterly which entails a difference between the nominal (or simple) interest and the effective interest rate, which the bank has to specify upon in its term sheet.

The difference can be calculated as followes:

The nominal interest is set at 3 month EURIBOR + 2% (i.e. currently 6,3%) on a total committed line of € 10 Mio. EURIBOR is assumed to be unchanged over the maximum drawing period of 1 year and interest is payable quarterly. The facility is fully drawn in t_o and entirely repaid in t_1.



The effective interest thus amounts to 6,48%. The term sheet of the revolving facility would have to contain the following basic structural elements:

Facility Type:	Committed Revolving Loan Facility
Tenor:	1 year
Maximum Drawing Period:	1 year
Committment Fee:	25 bp p.a. on the undrawn amount
Interest Rate:	EURIBOR + 2% EURIBOR is to be determined according to the ECB´s rate published daily at 11:00 am
Interest Period:	3 months (30/360)
Effective Interest Rate:	6,48% (subject to market changes)
Collateral:	Pledge on all receivables of the obligor
Covenants:	Minimum equity
Contractual Details:	Pari passu, negative pledge

In the above example the total cost of the loan equals the interest rate paid. In case that the loan is not fully drawn, the commitment fee of 1/4 % of the line has to be added for the undrawn portion. Generally banks use a 360 days year for the purpose of calculating the effective interest.

Additionally every facility would usually involve some kind of collateral. In this case, the term sheet needs to specify the type of collateral. Generally the bank would envisage to obtain a pledge on the receivables of the obligor such that it is assigned the proceeds of the receivables and that it has recourse to the obligor. The risk of default of the pledged accounts receivable remains with the obligor. In addition to the loan agreement, a legally binding pledge agreement has to be concluded between the obligor and the financing bank. The bank would have to review the invoices of the

borrower and determine a certain value up to which the receivables are credited. The bank can also oblige the borrower to take out a credit risk insurance. The assessment of the invoices requires a great deal of administrative work, thus the bank may charge an additional administrative fee.

In many cases, the lending bank also requires the borrower to stick to certain covenants, such as the maintenance of a minimum level of equity. Usually the interest rate of the loan is bound to a specific level of risk. Equally the lender may request a ceratin level of EBIT (earnings before interest and taxes) or might determine a certain leverage ratio.

Finally the main contractural details should be outlined in the term sheet. The most important clauses in an international loan agreement are explained in the section „Contractural Clauses“ of this web-site.

Example 2: Leveraged Restructuring – Debt for Equity Swaps

The swap is a type of leveraged recapitalization, where equity is exchanged for debt such that the company´s value is increased. The financial situation of the company is illustrated in the following table.

Table 1 debt equity swap

in €	Before	After	Change
EBIT	1.000	1.000	0
Debt (BV)	2.000	5.000	3.000
Debt (MV)	2.000	4.600	2.600
Cost of Debt			
Before tax	8%	10%	2%
After tax	6%	7,5%	1,5%
Tax Rate	25%	25%	0%
Interest	€ 160	€ 460	€ 300
Earnings after tax	€ 630	€ 405	-€ 225
Cost of equity	12,5%	14,3%	1,8%
Equity multiplier	6,4x	5,6x	-0,8x
Equity value	€ 4.032	€ 2.268	-€ 1.236
Total company value	€ 6.032	€ 6.868	€ 836 = 14%
Cost of Capital	10,3%	9,7%	-0,6%

The company pays 25% corporate tax and swaps € 3.000 equity for new debt. Before the transaction the company had € 2.000 in debt at a before tax cost of 8% and € 4.032 in equity –based on a price/earnings ratio of 6,4 times after-tax earnings of € 630. The total value of the company´s securities were thus € 6.032 and the weighted average cost of capital (WACC) was about 10,3%.

The WACC is equal to the sum of the component after tax costs of debt and equity, each multiplied by the amount of each as a proportion of total capital:

10,3% = 0,06 (2.000/6032) + 0,125 (4.032/6.032)

After the swap, the cost of debt rises to an assumed level of 10%, since the debt/total value ratio rises from 33% to 67% and the equity multiplier falls to 5,6x due to the higher financial risk. Since debt is now a larger portion of total assets, the WACC decreases to 9,7%.

9,7% = 0,075 (4.600/6.868) + 0,143 (2.268/6.868)

The benefit recorded is due to the tax benefits from the larger debt portion.

Example 3: Term Loan and different Amortization Schedules

A term loan has a final maturity that exceeds one year and it can be drawn only once. In many cases, the term loan is determined for a specific purpose. Interest is collected throughout the lifetime of the loan and some or all interest payments may collide with the principal payment dates. The predetermined principal payment amounts and the designated dates constitute the amortization schedule for the loan. The particular type of amortization schedule is established after consideration is given to the particular type of business and its financial requirements. Most amortization schedules consist of a number of equal principal payments. These principal payments are made at designated dates with either an equal or a baloon payment at the final maturity of the loan. In contrast, the straight line amortization schedule ensures that payments are made in consecutively equal amounts within a regularly designated calender cycle.

The straight line amortization schedule with baloon is the same as the straight line method with one exception: the final instalment is not equal to the previous instalment amounts. The baloon instalment usually results because the total number of instalments and the principal of the loan cannot be equally divided or because the rounding of each instalment amount creates an unequal last payment.

If the amortizations differ in terms of payment cycles and/or payment amounts, the schedule is defined as a variable amortization schedule. The variable type of schedule can have a variety of principal instalment amounts. These principal instalment amounts may or may not follow a particular cycle, or they may be consecutively equal amounts with or without a baloon payment, which are scheduled against noncyclical payment dates.

Figure 3-1 Straight Line and Variable Amortization Schedules

Straight Line Amortization Schedule, Loan = € 100 Mio (5 consecutive equal instalments)

Instalment Date	Instalment Amount
03-31-2007	€ 20 Mio
06-30-2007	€ 20 Mio
03-31-2008	€ 20 Mio
06-30-2008	€ 20 Mio
03-31-2009	€ 20 Mio

Straight Line with Baloon Amortization Schedule, Loan = € 100 Mio (5 consecutively equal instalments plus baloon payment)

Instalment Date	Instalment Amount
03-31-2007	€ 16 Mio
06-30-2007	€ 16 Mio
03-31-2008	€ 16 Mio
06-30-2008	€ 16 Mio
03-31-2009	€ 16 Mio
06-30-2009	€ 20 Mio

Variable Amortization Schedule, Loan = € 100 Mio (5 consecutive equal instalments in varying amounts)

Instalment Date	Instalment Amount
03-31-2007	€ 20 Mio
06-30-2007	€ 10 Mio
03-31-2008	€ 25 Mio
06-30-2008	€ 20 Mio
03-31-2009	€ 25 Mio

Loan = € 100 Mio (5 consecutively equal instalments at variable intervals)

Instalment Date	**Instalment Amount**
02-01-2007	€ 20 Mio
06-30-2007	€ 20 Mio
09-01-2007	€ 20 Mio
03-31-2008	€ 20 Mio
05-01-2009	€ 20 Mio