

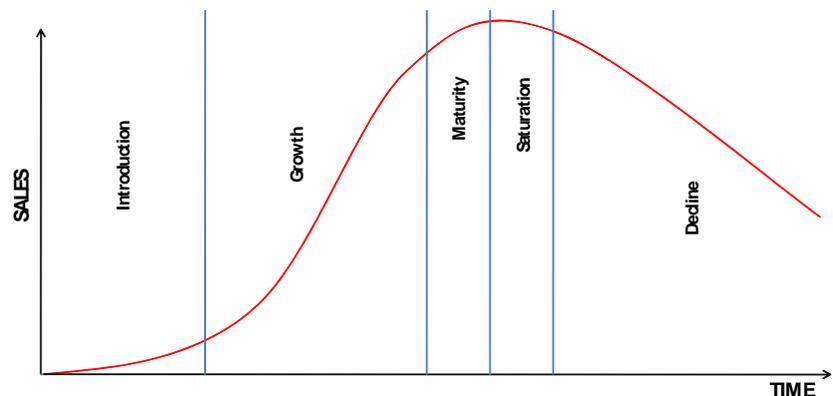
Credit Rating of Real Estate Companies

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Credit Rating - Introduction

Almost all companies borrow money. Being granted a loan or not depends on how well the company succeeds economically. This in turn depends on how long and successful the company's lifecycle is. Simplified, a lifecycle can be divided into five different stages¹:

1. Introductory phase
2. Growth phase
3. Maturity phase
4. Saturation phase
5. Declining phase



Picture 1: The business lifecycle

It is also important that the creditor forms a positive opinion of the company's management, the market development, the financing possibilities, and the securities of the company.

Credit ratings of companies are made to assess the credit worthiness and to decide how risky it is to invest in or lend money to a company. Credit ratings firms, like Moody's and Standard and Poor's (S&P's), provide investors with independent and objective assessments of the credit worthiness. Banks make internal credit ratings of the borrowers, but the

¹ "Kreditgiving till företag", Broomé, Elmér, Nylén

processes of the ratings are often “undisclosed”. The processes do not differ that much from those made by the credit rating firms and the different assessments should give approximately the same result.. Of course banks can choose to make more subjective assessments, reflecting the strategy and philosophy of the bank. Furthermore, banks may only take into account the risks that affect them, while the rating firms have to assess all the risks in the company. Many banks use the ratings of the credit rating agencies to check their own risk analyses.

How can a credit rating or the credit worthiness be described? Briefly, it is the company’s overall ability and willingness to repay its debt obligations.² It affects the price or the interest rate of the debt being issued by a company. The rating can be assigned to short-term as well as long-term debt obligations or to securities, loans and preferred stock. A credit rating made on a long-term basis is usually more indicative of the company’s credit worthiness, since it takes into consideration a longer time period with cyclical effects.

Credit risk is the probability that the borrower cannot make its interest payments and repay the loan at maturity. The assessment of this risk includes factors like financial resistance, risk for financial stress, repayment ability, the quality of the securities and credit limits. The creditor has to ask itself if the company’s credit needs are reasonable in relation to its capital structure and the loan-to-value (LTV). These factors should be tested in a sensitivity analysis.

Rating Classifications

The credit rating companies have different classifications of the rating, which ranges from high credit quality or investment grade to default or junk grade. Triple A (AAA) is the highest rating. The lowest is C or D (depending on the credit rating firm). The different classifications of Moody’s and S&P’s with the corresponding grade and risk are shown in the table in picture 2. The interpretations of the grade and risk of the ratings are found in the table in picture 3.

There are also intermediate ratings between the different levels, e.g. BBB+ or BBB-. These ratings are called “credit watch” and serve as a guideline as to whether it is likely that the rating is going to be upgraded or downgraded. If there is no sign, e.g. BBB, the credit watch is uncertain or neutral.

² Standard & Poor’s, ”Research: Ratings Criteria for U.S. REITs and REOCs”, 2004

Moody's	Standard & Poor's	Grade	Risk
Aaa	AAA	Investment	Lowest Risk
Aa	AA	Investment	Low Risk
A	A	Investment	Low Risk
Baa	BBB	Investment	Medium Risk
Ba, B	BB, B	Junk	High Risk
Caa/Ca/C	CCC/CC/C	Junk	Highest Risk
C	D	Junk	In Default

*Picture 2: Bond Rating by Moody's and Standard & Poor's*³

Rating	Interpretation of grade and risk
Aaa or AAA	The credit risk is close to zero.
Aa or AA	The investment is safe, low risk of failure.
A	The investment is safe, as long as unforeseen events in the economy or in a particular branch do not occur
Baa or BBB	The investment is medium safe. Problems may arise when the economy has deteriorated.
B and Ba or BB	The investment is speculative. The future development is hard to predict and problems often arise when the economy has deteriorated.
Caa/Ca/C or CCC/CC/C	The likelihood of bankruptcy is high.
C or D	Bankruptcy or lasting inability to meet obligations is very likely.

*Picture 3: Interpretation of grade and risk for different ratings*⁴

It is important to bear in mind that the rating firms do only give their opinion or assessment of the likelihood that a company will get into default, and not on the volatility of a security or debt issued by a company. Thus, the rating should not be seen as a buy or sell advice of a security.

³ www.standardandpoors.com and www.moodys.com

⁴ www.wikipedia.org, October 2008

Credit Ratings of Real Estate Companies⁵

For a real estate company not only does an assessment of the business strategy and an analysis of the financial statement has to be made, but also an evaluation of the property portfolio. The factors that are specific in the analysis of a real estate company are property mix, tenants' characteristics, property management, and leverage. In addition, broader issues are looked upon. The national and regional economy is studied as well as the overall ability of attaining credit, tax policies, and other regulations affecting the business of the company.

The evaluation of the company includes both quantitative and qualitative analyses. There are no target ratios regarding e.g. leverage to meet to have a certain credit rating. Consideration of factors specific for a company and its situation has to be made.

Normally two different profiles have to be evaluated in the credit rating process. One is the business position and the other is the financial profile. While the business position is a more qualitative assessment of the company, the financial profile is evaluated through quantitative means.

Financial Profile

When evaluating the financial profile, the credit rating firms look at the following factors:

- Financial policy
- Cash flow and profitability
- Liquidity
- Capital structure and leverage
- Financial flexibility
- Covenants

Financial Policy

The financial policy is a framework for the company's capital base and financial risk. Does the company act regarding to its financial policy? Is the policy sound in relation to the business of the company? The accounting quality is also something that is examined. Do the ratios from the financial statement require adjustments to be comparable to the competitors' ratios? The analysis aims at evaluating the financial policy and its appropriateness for the company, and making figures comparable to those of the competitors.

⁵ Mainly based on : Standard & Poor's, "Research: Ratings Criteria for U.S. REITs and REOCs", 2004 and Moody's "Credit Evaluation of Real Estate Investment Trusts (REITs) and Real Estate Operating Companies (REOCs)", 1998, when other references are used it is mentioned in the footnotes

Cash Flow and Profitability

Cash flow is essential to the survival of a company and determines if the company is a success or a failure. The cash sources and cash needs are put up against each other to see their relative balance and their development over time.

Cash inflows depend on the quality of the real estate portfolio, rental income, tenant quality, lease expirations, prospects for rental growth, borrowing, asset sales, equity issuance and occupancy rates. Examples of cash outflows are debt service, asset acquisition and property refurbishments and renovations. Dividends are also cash outflows. Retained earnings, i.e. paying lower or no dividends, have positive effects. They strengthen the shareholders' position since cash for debt repayment is available, the long-term growth is supported, and the cost of capital is lowered. The problem is that shareholders often want to receive dividends in order to enhance their returns. Thus, there might be conflict of interests.

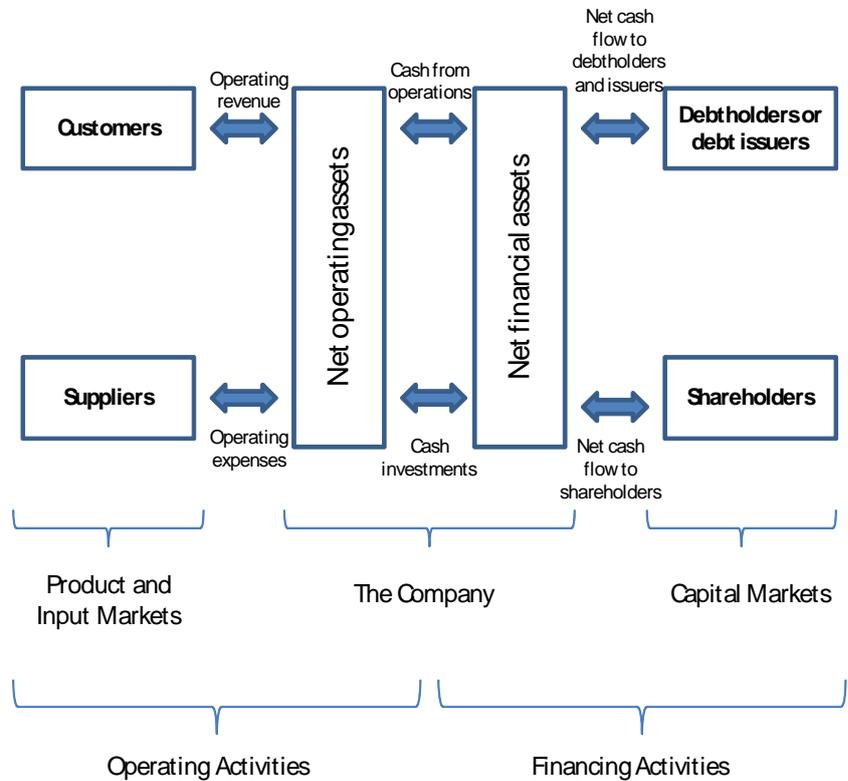
Net operating income (NOI) and funds from operations (FFO) are two of the major measures of a real estate company's profitability. However, one should be careful when using them. For example FFO is not an indication of the cash flow of a company. There are different accounting policies when it comes to e.g. property repairs and improvements. Some capitalize them and others immediately expense them. Also deferred financing costs, tenant allowances, straight-lining rents, and leasing costs have to be considered when calculating a measure that accurately reflects cash flow.

Cash or funds available for distribution (CAD or FAD) can give a better picture of the cash generated in the company, because these measures incorporate all maintenance costs, including non revenue-enhancing capital expenditures. Some properties are more likely to require investments than others, especially those with deferred maintenance and maintenance intensive properties, like hotels and office buildings. It is also important to distinguish costs that generate new revenues and costs that simply maintain an existing revenue level when assessing the strength of the company in regards to cash flow. In Sweden, the rents of residential apartments are regulated, which means that the rents can only be raised if the renovation increases the standard of the apartment. Repairs and maintenance do not give the property owner the right to raise the rent. Thus, a company can invest in the properties without being able to increase the income.

Companies with higher returns in capital and strong operating margins have greater ability to generate equity internally and

resist difficulties. Nevertheless, the risk related to this has to be assessed. For example, bigger investments might provide higher returns, but they also tend to be more risky.

The cash flows of a company can be summed up by the following figure (picture 4).



Picture 4: Cash flows in a company⁶

A run through of the different flows to sum up the scheme in picture 4: Net operating assets generate operating revenue. This is done by selling goods or services to the customers of the company. By buying inputs from suppliers, net operating assets on the other hand also incur operating expenses. The cash that a company receives from its debt-holders, e.g. banks, and its shareholders is invested in financial assets. By selling debt, i.e. liquidating financial assets, the company can make cash payments to its debt-holders and shareholders. Net financing assets are debts purchased from issuers minus debt issued to debt-holders. The cash generated from operations is used to buy financial assets or to reduce financial liabilities. By reducing the net financial assets, cash investments can be made.⁷

⁶ “Financial Statement Analysis and Security Valuation”, Penman, p. 227

⁷ “Financial Statement Analysis and Security Valuation”, Penman, pp. 222-227

Liquidity

Sources of liquidity are cash balances, overdrafts, operating cash flows and unused secured credit facilities. The important relationship that has to be analysed is the one between the sources of liquidity and the company's short-term fixed obligations. The debt maturity structure is of interest in this context since bunching of maturities might be a challenge for the company. Major refinancing needs can be hard to manage, especially in a financial crisis when the liquidity of the credit market is limited.

An alternative source of liquidity is good access to the debt and equity markets. For example, properties free of or with limited mortgages can be used for secured debt financing.

Credit facilities offer financial flexibility, but companies should not depend too much on them. The risk is that short-term financing funds long-term assets. Bridge financing should only be, as the name states, a bridge between the short-term funding and the long-term financing.

The sources of liquidity can be divided into internal and external sources. The first mentioned are e.g. reduced capital expenditures, sale of assets and unencumbered assets. Examples of the second mentioned sources are issuance of commercial papers or equity, and bank credit facilities.⁸

Another concern is covenants in loan agreements that may limit the company in a situation where they are under stress. Examples of covenants are: material adverse change clauses, usage restrictions and gearing ratios, such as LTV and interest coverage ratio (ICR) covenants.

In the balance sheet one can find the current assets, which are those assets which are expected to generate cash within a year⁹:

- Cash and cash equivalents
- Short-term investments
- Receivables
- Prepaid expenses
- Inventories

A typical ratio for the ability to use current assets to pay of current liabilities is the current ratio, which is simply current assets divided by current liabilities. To measure how well the cash from operations covers the cash needed for meeting short-term liabilities, one can determine the cash flow ratio. This is

⁸ "Framework for Analyzing Corporate Liquidity Under Stress", Scott Sprinzen

⁹ "Financial Statement Analysis and Security Valuation", Penman, pp. 685-686

calculated as cash flow from operations divided by current liabilities. These are only some examples, as there are numerous other ratios to estimate the liquidity of a company.

Capital structure and leverage

The mix of debt and equity is a key factor when determining the credit quality and the company's ability to resist adverse market movements. The business profile, discussed later in this report, has implications for the appropriate capital structure, since a stable business can carry more debt.

Liquidity and volatility characteristics of real estate companies argue for limited leverage. However, real estate assets that generate stable income, like residential properties in growing cities, or well diversified property portfolios can manage higher loan-to-values (LTV) than assets that are more unstable, such as office buildings. The ICR also is more stable with more stable real estate assets. The ICR-measures can be seen as an indication of solvency as well as an indication of a company's debt capacity¹⁰.

Secured versus unsecured debt, the maturity of the debt and interest hedge, i.e. the characteristics of the debt, are all important issues to consider. The different characteristics influence the cost and flexibility of debt. For example, mortgage debt subordinates unsecured creditors. Thus, a high level of mortgage debt decreases the financial flexibility. Variable interest rates of debts can be a challenge in economically stressed times, since the return of real estate is long-term. Companies with variable interest rate debt have higher borrowing cost risk than firms with fixed rate debt. This means that companies that hedge interest rates reduce their risk¹¹. The exposure to and the effects of interest rate volatility have to be measured.

The quality of equity is also an issue to consider. Retained earnings and preferred stock are examples of different types of equity. Preferred stock has characteristics of both debt and equity. The benefit of preferred stock is the lack of fixed maturity. The risk with this type of equity is that dividends and redemption obligations will not be paid in a timely manner and that the stockholders of the preferred stock will recover in the event of company liquidation.

Growth is often financed by debt, which is exchanged with equity when the properties increase in value. This is called the financial cycle. The leverage changes over time, i.e. it is not a

¹⁰ "Financial Statement Analysis and Security Valuation", Penman, p. 687

¹¹ "Financial Statement Analysis and Security Valuation", Penman, p. 655

static figure, which means that it is important to assess the likely leverage over time.

One of the big challenges when assessing the LTV is finding the appropriate denominator. With book value, the problem is that it is reduced through depreciation, while this is not necessarily the case for the market value of the properties. On the other hand, the difficulty with market value is that it is not always easy to assess; one can only make an estimation of the actual price when the asset is sold might be higher or lower. Furthermore, since the market value depends on the property market, it can be faced with sharp and sudden shifts.

Companies with very high fluctuation in their cash flows and/or in the market value of their assets need more equity than with stable cash flows and market values. This is because the company's solvency becomes more unstable, i.e. its ability to meet its obligations. The risk of insolvency thus decreases with higher equity level.

Optimal leverage is reached when the marginal tax savings of new loans is the same as the marginal cost for financial stress for additional borrowing¹².

Financial Flexibility

The financial flexibility increases a company's options during stress. One of the key risk factors within a company is the refinancing risk. When assessing the repayment ability in the event of not being able to refinance the loan, the opportunity of sales of properties is excluded. Financial flexibility aims at minimizing the refinancing risk, i.e. the ability of the company to raise capital, generate cash or to repay debt.

The evaluation of financial flexibility focuses on analysing the relationship between the sources and uses of cash and the short-term fixed obligations of the company. The debt maturity schedule including the amortization schedule is important to take a closer look at. The more the debt maturities are spread over time, the more flexibility the company will have.

Furthermore, the assessment includes an analysis of saleable assets, the amount of encumbered properties, and the flexibility of capital expenditures and of dividend payments. The external sources of capital have to be taken into account as well. In this context the track record of the company's access to the debt and equity market is of interest. A long track record is an advantage.

¹² "Principles of Corporate Finance" Brealy, Myers, Allen, p. 504

Credit facilities can provide financial flexibility, particularly when they are large and the bank is reliable. Otherwise they can only be seen as temporary liquidity sources. Moreover, covenants can put restrictions on the usage of the credit facilities.

A company with properties with a low portion or no mortgages can be used for mortgage financing, thus being an alternative source of liquidity and financial flexibility. Therefore less secured debt strengthens the financial flexibility, since there is a liquidity reserve in the form of unencumbered properties.

Covenants

Covenants may restrict the company's possibilities of acting in the event of financial stress and might restrict the management from reaching their stated goals; thus reducing the financial flexibility. Unfortunately, it is hard to avoid covenants in a credit agreement, since it might be a prerequisite for being granted the loan.

There are two types of covenants: negative covenants and financial covenants. The first mentioned covenants are set by the creditor to govern the business of the borrower and the second mentioned are set to establish guidelines for the borrower how to operate and service the debt without risking default of the business.¹³

Business Position

The business position can be divided into four categories:

- Market position/competition
- Property portfolio features and asset quality
- Diversification and stability of operations
- Review of the management, ownership and corporate structure

Market Position

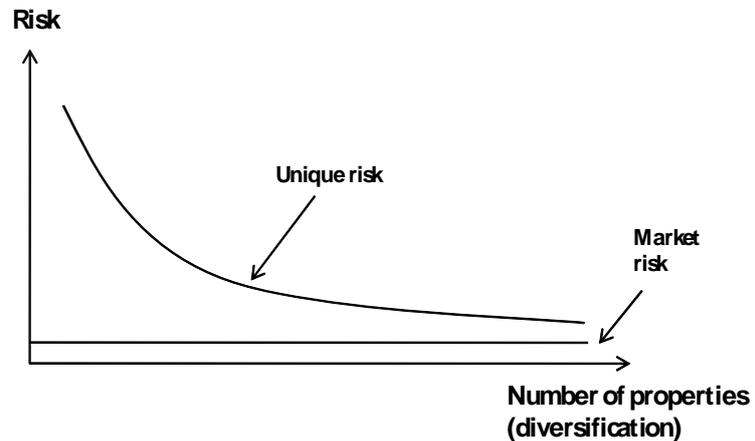
The market position is the standing within a sector with regards to market share, track record, and reputation. It shows how well the company survives a recession or a highly competitive environment. The company is ranked compared with its competitors, but also the overall size of the company is looked upon.

Property Portfolio and its Quality

The composition of the property portfolio and the asset quality are the most important issues regarding an assessment of a real estate company. Diversification of a portfolio offers great

¹³ "Fundamentals of Real Estate Investment", Jaffe, Sirmans, p. 145

benefits. The dispersion can refer to the type of the property (residential or commercial) or the geographical location. These factors influence the volatility and stability of cash flow of the portfolio. A well diversified portfolio is less risky. Picture 5 shows that the unique risk of a portfolio decreases with the number of properties. The market risk cannot be hedged through diversification.



Picture 5: Diversification and risk¹⁴

National and regional trends as well as potential environmental and regulatory liabilities also have a big impact on the property portfolio.

A distinction is often made between prime and lower-quality assets. The assessment is made up of many different factors to classify a property into one of these categories:

- Location quality within a market (primary versus secondary, central business district versus suburban versus rural location). Densely populated areas, central or close-in suburban areas of major cities are more stable.
- Property type: residential and multi-family or commercial (malls, retail, offices, storage, industrial, municipality, elderly care etc.)
- Property age, renovations performed and physical condition of the property
- Size, desirability to tenants and potential buyers and lenders (competitiveness of the property), barriers to competition
- Occupancies, lease expiration, tenant mix, market rents and regulatory trends
- Property location dynamics
- Environmental history and unique attributes (e.g. developable land)

¹⁴ "Principles of Corporate Finance", Brealy, Myers and Allén, pp. 189

- Average length of time under current management or ownership
- The risk, i.e. the stability of cash flows (to pay e.g. debt obligations) and values (e.g. refinancing possibilities)

Diversification and Stability of Operations

As mentioned above, the diversification and stability of the operations are closely related to the quality of the property portfolio. An exposure to one major asset type means that the contribution to cash flow and investments will be generated mainly by this property type, which can be a high risk if the cash flows from these assets are very volatile. Having for example a major tenant concentration puts this tenant group's credit quality and retention rates into focus.

Management, Ownership and Corporate Structure¹⁵

Regarding the management, the creditor has to assess if the right persons have the right roles in the company. Many creditors believe that the management is the foremost important factor for a company's success and survival¹⁶. If the business of the company changes or moves into a new business cycle, it might also be good to change the roles of the management in order to have the right competence where it is needed. It is also an advantage to have a management group where the managers complement each other.

What does the management structure look like? Is it self-managed or externally advised? Is it fully integrated? Self-managed and fully integrated managements are usually more cost conscious and potential conflicts of interest are minimized. Major inside ownership is viewed as a stabilizing factor, since the senior management often tends to be motivated to develop the company conservatively.

Examining the track record of companies that have existed for a long time shows how well the management succeeds, even in times of financial stress. It shows their ability to create and enhance property value and the ability to shift resources when market conditions change. Therefore, it is interesting to look at how long the senior management has been a team, and what the plan for succession looks like. If key figures in the management are close to their retirement age, it is not only important to look at the current management, but also at the future management. The succession plan is especially important if the management

¹⁵ This paragraph is also based on "The Evolving Role of Corporate Governance in Credit Rating Analysis", Standard & Poor's

¹⁶ "Kreditgivning till företag", Broomé, Elmér, Nylén, p. 60

have created key relationships with the tenants and financing sources, which have to be maintained.

The assessment of the management also includes an analysis of the investment strategies and management skills. Investment strategies, asset selection processes, administrative frameworks, and management incentives can all provide a picture of the potential future performance of the company. How will the management implement the strategies? What are the primary drivers to growth? Are they internal or external? What is the intended holding period of the properties? Which are the preferred asset types? What is the investment purpose? These are all questions to be answered.

For the management to do a good job, the quality, depth and relevance of the information made available for them play a major role. Thus, a company needs to have well functioning, reliable reporting system.

Regarding the corporate structure, the assessment focuses on the current and expected legal and functional organisational structure. The functions in the company can be either centralized or decentralized. Depending on the department, it can be an advantage or disadvantage to being centralized or decentralized. For example financial functions often benefit from centralization, since bigger financing portfolios among others tend to be better priced. On the other hand, property management is often decentralized to the locations of the different properties. The management can be adjusted to the special requirements or needs of the location and property type.

Data and Documents

When doing a credit rating of a company a lot of information and data are needed. The analysts get the information from the following sources¹⁷:

- Regulatory filings
- Consolidated financial statements
- Descriptive information about the company's business (annual report, Internet homepage)
- Ranking tables (e.g. ranking of transaction volumes for comparison)
- Other analysts' reports (not only company specific, but also e.g. industry outlooks)
- Networking (talking to people in the real estate business, other analysts, creditors)

¹⁷ Moody's "Credit Evaluation of Real Estate Investment Trusts (REITs) and Real Estate Operating Companies (REOCs)", 1998, p. 15

Many of the documents that are required for the analysis have to be updated quarterly or annually, in order to confirm or restate the rating¹⁸:

- Financial statement including description of accounting policies
- Strategic plan and financial projections
- Legal organisation chart
- Functional organisation chart (department responsibilities)
- Senior management resumes
- Summary of investment criteria and due diligence checklist
- Summary of debt structure, debt maturity schedule, major lenders
- Summary of terms of credit facilities
- Summary of joint venture and partnership systems
- Discussion of environmental, insurance, litigation issues

On the property level, the analysts need the following information¹⁹:

- Property name, location, city, state
- Development or acquisition costs
- Date of construction, acquisition and renovation
- Number of units and square footage
- Occupancy rate
- Ownership percentage
- Ownership type
- Revenue, expenses, cash flow and debt service for the past year
- Mortgage encumbrances, terms, maturity, lender
- Tenant list
- Lease rollover schedule
- Estimated capital expenses, tenant improvements and leasing costs

¹⁸ Standard & Poor's, "Research: Ratings Criteria for U.S. REITs and REOCs", 2004, pp. 4-5

¹⁹ Standard & Poor's, "Research: Ratings Criteria for U.S. REITs and REOCs", 2004, p. 5

The Bank's Assessment of a Borrower

Similar to credit rating firms, the banks rate companies that they do business with. The rating is usually more subjective than those of the credit rating firms. It depends more on the profile of the bank.

To begin with, the bank must decide if the borrower matches the bank's profile. Typical questions that the bank has to answer are: Is the borrower within the right branch? Does the company have values that the bank can stand for? Is the purpose for the use of the credit in line with sound business according to the bank? After having answered "yes" to these questions, the bank has to decide on the strategy for the cooperation with the customer. This includes making an assessment of the borrower's business, which consists of assessing the company and the credit risk. The assessment results in a rating of the company. The higher the rating is, the lower the risk of the company and thus the lower the capital cost of the loan.

To get a picture of the company, the bank looks at its goals, visions, business areas, and financial statements. This analysis should not differ too much from the assessments of the business position and the financial profile that the credit rating firms make.

Bank regulations also influence the size and the structure of loans. Formal requirements prevent the banks from doing unsound business, which in turn limits the losses. The transparency of companies through financial statements, that also follows formal requirements, makes it easy to form an opinion about the company's equity share, its liquidity and overall performance. Granting loans is a process that is regulated, but for good reasons. Some countries do not use collateral; in these countries it is even more important to assess the company correctly. Sometimes the loans have covenants, which can be seen as a sort of collateral. It is important to follow them up continuously, to detect in time when a company is in default.

Repayment Ability and Financial Resistance

The most important factor is the repayment ability, which includes assessments of how well a company can handle financial stress and how good its financial resistance is. In Sweden the law regulating the business of banks, "Bankrörelselagen", accentuates the importance of the repayment ability when banks grant loans. The repayment ability consists of the borrower's possibility to make interest

payments and amortisations and to repay the loan at maturity. Cash flow analysis can be used to consider the development of the payment ability of the company. It shows how the surplus of the operations is used to make financial payments.

The risk of financial stress means the risk that difficulties occur that complicate the liquidity, which could lead to the company not having enough money to meet its obligations towards creditors, suppliers and employees. Some companies are more affected by the business cycle than others and it is therefore important to consider the company's strength during a recession. Another cause of financial stress might be fewer sales because of increased competition, loss of customers, weakened markets, higher supplier prices, fluctuating exchange rates etc. Also new legislation might be a source of unfavourable development of the company's business. These aspects show the importance of assessing the borrower's financial resistance. A high risk of financial stress does not automatically mean that the financial resistance is weak. A company with high risk for financial stress might be good at managing this and be well prepared for a recession. Thus, it has a very good financial resistance.

Collateral

The second most important aspect is the collateral of the loan. This is also stated in the "Bankrörelselagen". If the borrower is in default, the bank wants to sell the underlying assets of the collateral. The assessment thus focuses on determining a future value of the assets as well as how quickly and at which price the assets can be sold.

Mortgages are usually more valuable than other types of securities. Studies show that the interest and principal of most secured loans are completely recovered in the event of bankruptcy.²⁰ If a loan is secured by mortgages, the bank will analyse and value the properties carefully. Thus, the rating of the rest of the company will be of less importance. Credit rating firms have to do a rating on the company as a whole, disregarding the collateral of the loan. In such a case, a bank might rate the company better than a credit rating firm. This means that mortgage backed loans can be rated higher than the company itself, especially if the security has low risk²¹.

In conclusion, the bank has to examine the type and quality of the collateral, determine the acceptable LTV and assess the degree of access to and control over the security that it exercises.

²⁰ "An Introduction to Rating Secured Loans", Steven M. Bavaria

²¹ "Potential för högre rating för väl säkerställda lån till svenska fastighetsbolag", Standard & Poor's

Settling a Credit Agreement

The process of settling a credit agreement is a combination of the borrower's and the creditor's arguments and ability to negotiate. The agreement is not solely dependent on the "hard" facts of the company, but also on "soft" factors like personal qualities, knowledge, and experience. Thus, the company analysis can differ depending on how well the borrower presents the facts of the company. Another part of the analysis is more, creditor specific. For example, the status of the company differs depending on the company being a new or an old customer of the creditor, where old customers tend to be prioritized. The status is usually higher for successful, larger companies with high market share and long history. Furthermore, as mentioned earlier, the policy of the company plays a big role. Last but not least, the creditor has to assess if the credit risk matches its policies. When analysing the financing possibilities, the creditor firstly looks at the needs today and in the future; then it assesses alternative financing possibilities. The credit process also includes assessing the securities.

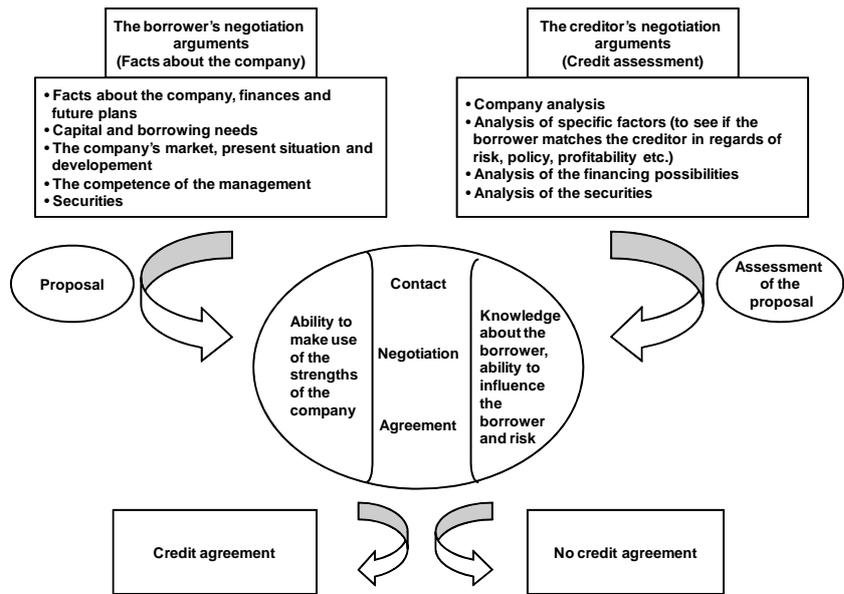
The mortgage lending process between a bank and a borrower can be summed up by dividing the process into four main steps²²:

1. Application
 - a. Description of the project, i.e. for what purpose the financing is needed, whether it is for a new building project or the acquisition of an existing property
 - b. Description of the type of loan needed: amount, repayment schedule, maturity and interest rate hedge
 - c. Financial statements for the borrower, co-borrowers and the guarantor
 - d. Information on the background, e.g. how well the borrower has paid past obligations
 - e. Pro forma financial statements of the project: Is there enough cash flow from the project to cover the debt service? Are there any possible improvements, e.g. lower costs?
 - f. Existing leases (existing property) or letters of intent (new construction)
 - g. Appraisal of the property (valuations, due diligence)
 - h. Environmental study: regulatory changes, uses of the property etc.
2. Analysis
 - a. Analysis of the property

²² "Fundamentals of Real Estate Investment", Jaffe, Sirmans, pp. 138-145

- b. Review of the appraisal to assure that the valuation is made by using generally accepted methods
 - c. Analysis of the financial statements of the project, primarily to measure if the borrower has adequate cash flow to cover its debt service through debt coverage ratio (DCR). DCR is calculated by dividing net operating income (NOI) by the debt obligations.
 - d. Review of the title to ensure that the owner of the property is the same as the borrower who is pledging it.
 - e. Review of the environmental study especially on commercial properties (lender liability issues)
 - f. Analysis of the borrower especially the financial strength
 - g. The borrower's experience of financing real estate and past performance regarding meeting their debt obligations, as well as the competence of managing the property type being pledged
 - h. Analysis of the borrower's financial statements with focus on the ability to meet debt obligations
3. Commitment
- a. Common sections include information about who the borrower and the guarantor is, the amount of the loan, the purpose of the loan, the maturity, the repayment schedule, fees (e.g. late fees, prepayment fees, upfront fee, commitment fee), the security of the loan, insurance requirements etc.
 - b. Other covenants: negative covenants and financial covenants
4. Closing
- a. Pre-closing: All documents required are delivered to the lender (conditions precedent, PC)
 - b. Closing: signing of the loan agreement and all other documents
 - c. Post-closing: the loan is paid out to the borrower

Picture 6 on the next page shows the credit process put together in one model.



Picture 6: The credit process²³

²³ "Kreditgivning till företag", Broomé, Elmér, Nylén, p. 51

Companies that tend to survive through economic downturns and financial crises²⁴

Companies that survive through economic downturns usually have some features in common:

- Low business risk, in terms of stable margins, flexible cost structures, big and stable customer base
- Low financial risk, in terms of low currency risk, low interest rate risk and low credit risk

Companies that tend to withstand a financial crisis additionally have the following features in common:

- Only a small portion of their borrowing from the capital market
- No loans from weak banks
- High liquidity
- Long debt maturity
- Low leverage

If a company, like Akelius, possesses all these features, the likelihood of withstanding any financial stress is very high. These companies also tend to be rated higher than other companies.

²⁴ “Köpkraft”, Hüttemeier, Georgzen

An example: Danske Bank's Credit Rating of Akelius Fastigheter AB²⁵

All banks that Akelius borrows money from do their rating on Akelius. Usually they do not want to show the evaluation that they have made on companies, since their rating process is undisclosed. Danske Bank has done two ratings on Akelius about which Akelius has received information, one in 2005 and one in 2008.

The main questions that were asked were:

- How can Akelius retain financial flexibility?
- Is Akelius optimally financed relative to its peers?
- What sources of capital can Akelius readily access?
- Are Akelius' financial policies consistent and coordinated?

In answering these questions Danske Bank had to understand the strategic directions and the goals of the financial planning of Akelius. In addition, the funding and liquidity needs had to be addressed. Danske Bank then gave advice on the optimal capital structure and the cost of capital to improve the rating, and provided solutions for the liability management, foreign exchange management, and the interest rate hedging.

The Financial Profile of Akelius

Capital Structure and Debt Capacity

The business risk in Akelius is low due to high exposure to residential properties. The debt capacity is thus higher than for other real estate companies with more commercial exposure. Residential properties can bear a higher leverage due to lower risk, i.e. less fluctuation in value and in cash flow. Regarding the capital structure Akelius is highly leveraged. Nevertheless, as mentioned before, real estate companies with mainly residential properties can bear a higher leverage. Akelius' debt capacity is above the average for the real estate industry in Sweden due to its stability in cash flow.

In 2005 the equity was 13 percent of the total capital. The book value of equity was 1.7 billion SEK, while it was 3 billion SEK based on the market value of the properties, which means an adjusted solidity of 22 percent. In 2008 the equity to total capital was 15 percent, with a book value of 4.2 billion SEK, while it was 8.4 billion SEK based on market values. The adjusted solidity was 25 percent.

²⁵ Based on information from Danske Markets, 2005 and 2008

The unsecured debt amounted to 16 percent of the total capital in 2005 and to 9 percent in 2008. The solidity including the unsecured debt was 37 percent in 2005 and 32 percent in 2008.

The amount of secured debt was 71 percent in 2005. The LTV including unsecured debt based on the market value of the properties was 78 percent, which shows that Akelius was highly leveraged in 2005. The corresponding figure for 2008 is 60 percent, which shows that Akelius has improved its situation remarkably.

Rating companies attach varying degrees of equity credit to certain types of capital depending on the documentation. Subordinated debt is an example of this kind of hybrid equity. The unsecured debt that Akelius has, mainly from its sister companies, is subordinated to other debt. In order to make creditors account for these loans as equity, the loans must have the following features:

- Subordinated to all other loans
- Long maturities
- No amortizations
- No possibilities for the creditor to withdraw the loan (weak covenants)

These features have to be affirmed by the auditors and the status of the loans should be stated in the balance sheet.

Financial Policy

The financial policy of Akelius is well defined according to Danske Bank. The overall goal is to minimize risk and funding cost. One of the main issues is the maturity and interest rate fixing periods, which are long, and therefore reduces the risk. Akelius' interest rate hedging is longer than for its peers and therefore has lower interest rate risk. The goal is to withstand an increase in interest rates of 5 percent for the coming 5 years. Akelius' average maturity is one of the highest among its peers, which means that Akelius has a lower refinancing risk.

The solidity should be at least 10 percent and the adjusted solidity at least 20 percent.

In 2005 the policy stated that the LTV of bank loans should be maximum 75 percent. Danske Bank finds this goal too simple, since it does not mention diversification of financing sources.

Maximum 60 percent of the properties' market value should be pledged. The funding cost can be kept low through pledging, but Akelius has to take into account how this affects the financial flexibility. Among its peers, Akelius had one of the highest percentages of assets pledged in 2005.

The funding is centralized in Akelius. According to Danske Bank this is a good strategy, since this gives favourable funding costs and good conditions for the loan.

Funding Strategies

Akelius mainly has banks as their funding source. Since April 2005 it also has a capitalisation program, Akero. Pledging properties should be used as extensively as possible. Akelius has a policy of having an overall LTV of 60 percent. This enhances the liquidity since the LTV could be raised.

The relative importance of focus can vary between companies, even within the same business area. For Akelius the most important issues are maintaining a strategic flexibility so that investment opportunities can be seized whenever they come up, and maintaining a sound credit profile.

Weighted Average Cost of Capital (WACC)

The WACC reflects the cost of financing a company by using both equity and debt.

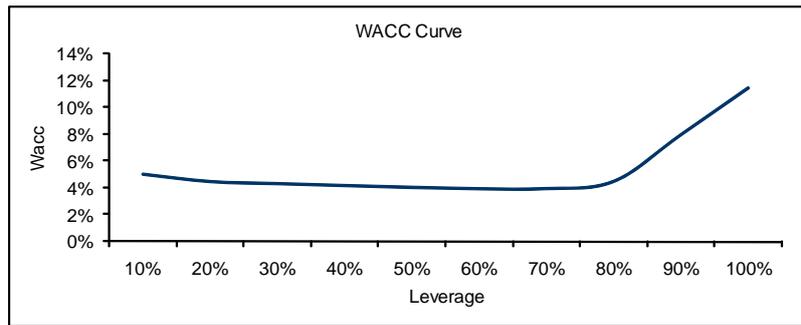
In 2005 the cost of debt of Akelius was 3.9 percent. The cost of debt is usually lower than the cost of equity and is the company's after-tax borrowing interest rate. It is dependant on the company's credit profile. Moreover, the cost of debt increases with increasing levels of LTV due to the higher risk of bankruptcy.

In the same year the cost of equity was 6.9 percent. This is the required return on equity that is determined by the CAPM (Capital Asset Pricing Model)²⁶. To the risk free rate, 3 percent, the beta times the equity premium (0.65*4.4 percent) and the liquidity premium (1 percent) are added, which gives a cost of equity of 6.9 percent.

The WACC smile is a graph that shows the WACC at different leverage levels. At low levels of LTV, the WACC decreases when the amount of debt is increased. At a certain point of LTV, around 75 percent for Akelius, the WACC increases when the leverage level is increased. Having an average LTV of 60 percent, Akelius still has some debt capacity.

Below is a graph of the WACC smile. The WACC goes down slightly in the beginning, which can be explained by the tax savings made and the fact that the price of secured debt does not change materially until high leverage.

²⁶ Will not be discussed further in this report. For more reading about the CAMP see "Principles of Corporate Finance", Brealy, Myers and Allen, pp. 214-222



Picture 7: The WACC Curve²⁷

The cost of funds is not only dependent on the leverage. The overall rating of the company is of course important. Furthermore, capital requirements of the banks, such as Basel 2, and the balance between output and demand play big roles in the pricing of debt.

The Business Profile of Akelius

Akelius is a mid-sized real estate company with a large exposure to the residential segment. The property portfolio is geographically well diversified. The business itself is undiversified, but the focus is on a stable sector with a stable profitability.

There is a pecking order which ranks different types of properties. Residential properties in regulated markets are graded as the most secure asset types. In 2008, 80 percent of the Akelius portfolio consisted of these type of properties.

Conclusion

Danske Bank concludes that the rating of Akelius would reach a BBB-/BB+ rating as a combination of a strong business risk profile and an aggressive financial risk profile.

²⁷ Danske Markets, 2005

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