SYNA
Kreditupplysning & Marknadsinformation

Syna's Credit Ranking System

A brief presentation of Syna AB's credit ranking of Swedish companies.

Syna's credit ranking system

Contents

1. **About credit ranking**
   - What questions do our credit rankings answer?
   - Syna's credit rankings
   - Why did we create a credit ranking system?
   - Our ranking system
   - Why were we dissatisfied with traditional rating systems?
   - Syna's ranking system is quality-assured using ARs
   - How useful is Syna's ranking system?

2. **What types of companies do we not rank?**
   - Insolvent companies
   - Inactive companies
   - Completely new start-ups
   - Merger/demerger companies
   - Companies for which there is a lack of information
   - Companies operating on commission

3. **What is insolvency?**
   - Bankruptcy
   - Failed distraint attempt
   - Company reconstruction

4. **Frequently asked questions**
   - How up-to-date is a ranking?
   - How much will my company's ranking fall, if my company has a record of non-payment?
   - Why will some companies with a credit ranking of 5 become insolvent?

1. About credit ranking – an overview

What questions do our credit rankings answer?
We answer the question:
How much of a risk is there that the Company will become insolvent within 12 months?

We do not answer the question:
Is this a "good" company?
Keep this in mind when you see a major industrial company with millions in equity ranked as Class 4 by Syna, and a car repair shop with one employee ranked as Class 5.
If you are searching for a prospectus for your sellers, you can use Syna's ranking system to sort out companies that constitute an excessive risk.

Syna's credit rankings
Like our competitors, we group companies into various classes depending on the risk. We do this because the market expects such a division. We have five groups: 1–5, where companies with the greatest risk of insolvency are ranked 1, and those with the least risk are ranked 5. As with the old grading system in Swedish schools, we have chosen to designate a score of 3 to the group with the average or normal level of risk. With respect to the classifications and the boundaries between the classes, Syna has chosen to adapt to prevailing market standards to facilitate customers in comparing company rankings by different Credit Information Companies.

Credit class 1 represents a risk that is equal to or larger than 8.05%. Of 10,000 such companies, at least 805 will be insolvent within 12 months.

Credit class 2 represents a risk that is equal to or larger than 3.05% but smaller than 8.05%. Of 10,000 such companies, between 305 and 804 will be insolvent within 12 months.

Credit class 3 represents a risk that is equal to or larger than 0.75% but smaller than 3.05%. Of 10,000 such companies, between 75 and 304 will be insolvent within 12 months.

Credit class 4 represents a risk that is equal to or larger than 0.25% but smaller than 0.75%. Of 10,000 such companies, between 25 and 74 will be insolvent within 12 months.

Credit class 5 companies with that is less than 0.25%. Of 10,000 such companies, no more than 24 will be insolvent within 12 months.

Syna's credit ranking system

We recommend that you accustom yourself to using, at first instance, risk percentage as a tool in your credit management.

Why did we create a credit ranking system?
The volume of data that we present in our credit reports has now become so extensive that it is impossible for the human brain to give all its aspects due consideration – and the amount of data is constantly increasing. If we wish to coherently assess all of the information at our disposal, it must be done mechanically.

A useful credit ranking system:
– allows for delegating the organisation's credit decisions to more employees and thereby provide faster and cheaper processing;
– exceeds the ability of an experienced credit officer to assess a company's survival – if the comparison is made between groups of credit decisions.

An experienced administrator has trouble giving due consideration to all aspects of the available data and setting positive information against negative information. It is impossible for a human to assess the difference in risk between two companies with non-payment records, if the companies have been active for 2 and 8 years, respectively. On the other hand, the task is manageable using statistical methods.

The experienced administrator mainly surpasses our models in cases where he/she is familiar with the customer and has previously conducted business with the customer. Although the knowledge that you acquire about your customers in the course of an extensive customer relationship is invaluable, it is not available to us.

Our ranking system
When we first began work on our ranking system in 2002, our intention was to continue developing the tool until there was no other machine-based credit assessment on the Swedish market that was superior to Syna's. We achieved this goal in 2008.

The first decision we made was to reject solutions based on "templates" or "expert systems." These solutions, which are often referred to ratings, are based on subjective notions of the mutual importance of various factors, and are completely incapable of ranking individual companies. They also exaggerate the importance of negative information, which results in the group with the highest rating being too small.

We utilised scientific methods for our analyses and collaborated with statisticians at Lund University. The work took more than five years to complete and we invested tens of thousands of working hours in the project.
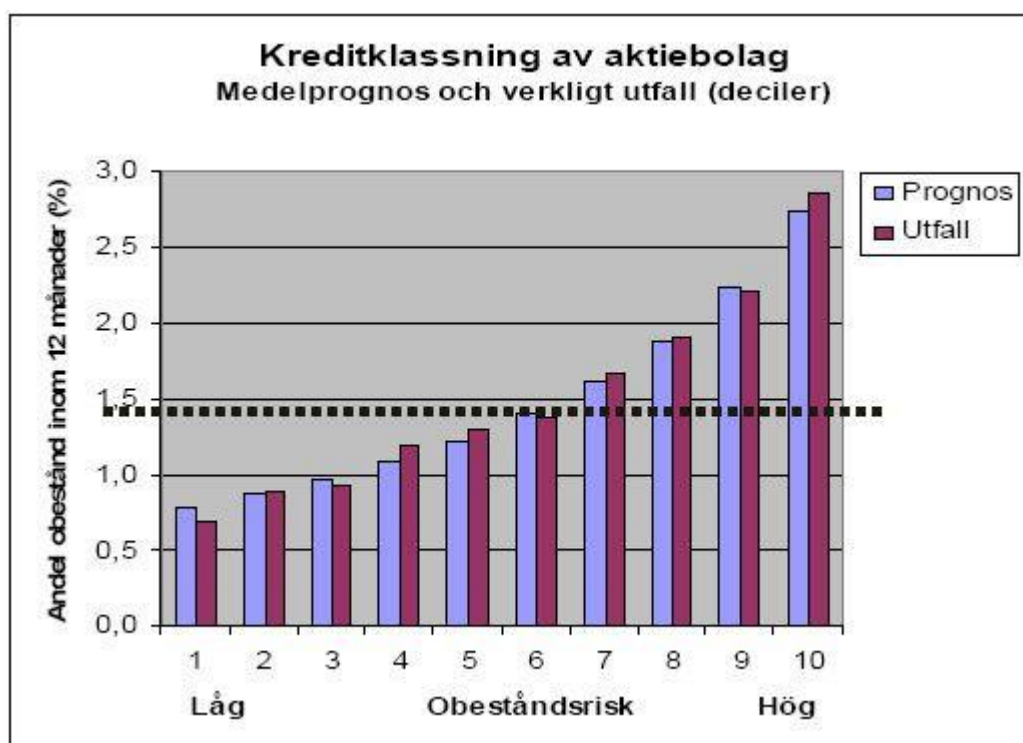
Syna's credit ranking system

Why were we dissatisfied with traditional rating systems?
Our method provides customers with more information. We assign a risk level to each individual company, instead of one and the same level to an entire grouping of companies.

Traditional "rating" systems used by nearly all credit reporting companies only state that "… within this group of 35,000 companies, 2% or 700 companies will go bankrupt within 12 months. The rating itself says nothing about which particular companies these may be.

The horizontal dotted line across the diagram shows the information obtained through a traditional rating system. The rating will necessitate both an overestimation and underestimation of the risk, as only one risk level is specified for the entire group. However, Syna's risk percentage is individually assigned to each company.

The diagram was rendered in such a way that all companies with a class 3 credit ranking are sorted in accordance with the risk percentage that Syna assigned them. The lowest risk level is shown on the left and highest on the right. We divided the companies into 10 groups of equal size. In each group, we calculated how many insolvencies would occur within the group, taking into account the risk percentage we assigned. Our ranking is shown in the blue (lighter) bars. We also measured how many insolvencies actually occurred. This is shown in the purple (darker) bars.

Syna's credit ranking system

Kreditklassning av aktiebolag
Medelprognos och verkligt utfall (deciler)

The chart shows the difference between the information derived from a "rating" system and from Syna's ranking system. The horizontal dotted line shows the information provided through a traditional rating system.

Our ranking system is quality assured using ARs

The ranking that we assign to companies can be verified using statistical methods. This allows for us to be graded for our rank ability. The parameter that is thereby derived, is a percentage and is called an "accuracy ratio" or AR parameter. It is an internationally accepted measurement of the quality of models used for the ranking of, for example, companies. In the European bank surveys that we have studied in pertaining to ranking projects, a 40–60% score in the AR parameter is considered a good result.

How good is Syna's ranking system?

Our average AR is more than 80%. Compared to an international level, this is a very high score – not only because we are good at what we do, but also because we have access to information in Sweden that is not available in other countries.

In addition to the AR parameter, a simpler verification can also be performed using two curves that show both our ranking and the insolvency outcome. Such a curve is shown below. We have sorted all of the companies in accordance with our ranking percentages, placed those of high risk on the right and those of low risk on the left. We then divided the content into hundreds, comprising the same number

of companies in each section (percentiles). For each percentile, we calculated two figures: the expected number of insolvencies in terms of the risk percentage that we assigned to the companies in that percentile (the solid black line), and the actual number of insolvencies (the dashed red line) existing in the percentile.
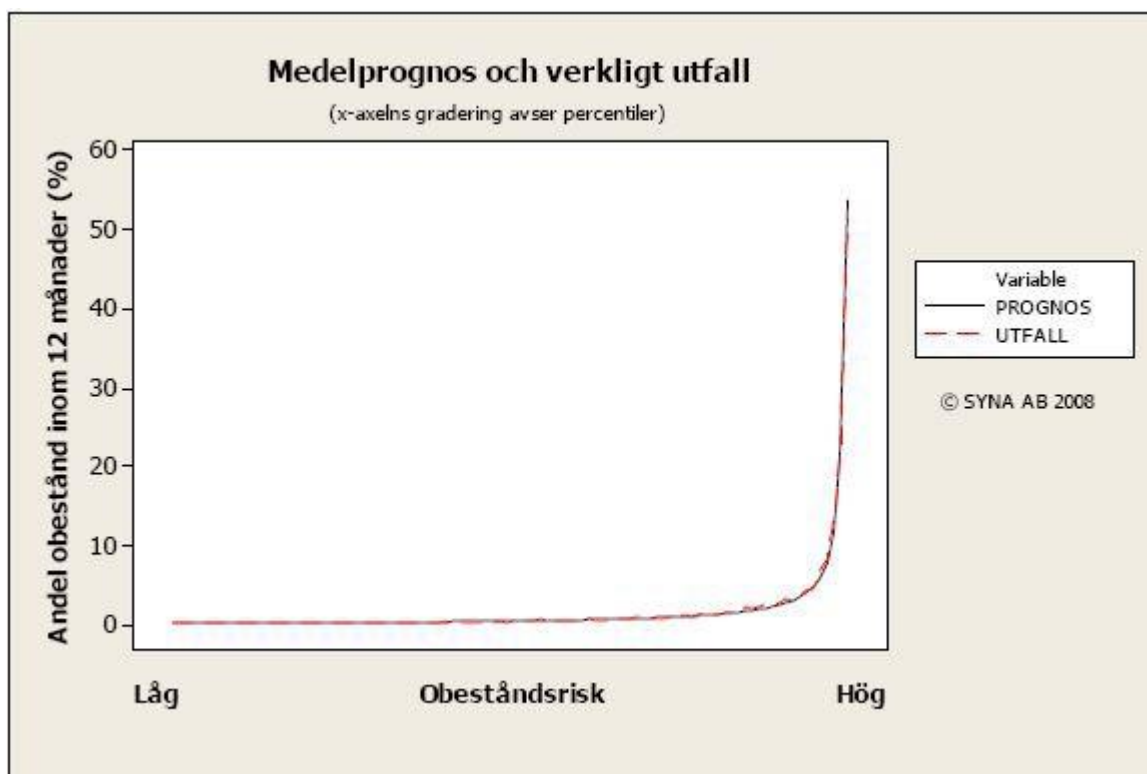
The chart shows the accuracy with which Syna distributes the total risk among Swedish companies – for both high-risk and low-risk companies.

2. What types of companies do we not rank?

Insolvent companies
Naturally, first and foremost, we do not rank companies that are already insolvent, because our entire ranking concept is precisely about indicating the risk of insolvency. If we were to rank these companies, all of them would be ranked with a 100% risk of insolvency.

Inactive companies
In addition to cases of insolvency, we endeavour to exclude all companies that are not actually active. The reason for this is that these companies are atypical. They do not behave in the same manner as active companies and are therefore difficult

to assess using our models. Typically, these companies do not request any credit and do not need to be ranked for that reason.

Examples of inactive companies may be those that have entered into liquidation. Note that this is not the same as insolvency. Another example may be a company that has zeros on most lines of its most recent financial statements, or which has explicitly stated that the company did not conduct any business during the year. A third example is known as a warehousing company – established by a company engaged in the sale of start-ups.

Completely new start-ups

Before a company has submitted its first annual report, there is a general lack important information about the company, which means that they cannot be ranked using the same models as those for other companies. Although it is still entirely possible to rank them with a high level of certainty sometime after their activities commence, they are not ranked from the onset. There are numerous companies within this category that pose a low risk. In particular, you should look into their management, if you wish to grant them credit.

Merger/demerger companies

We cannot rank companies that are being divided or merged, because we cannot obtain knowledge about the company's existing assets and operations until after the first annual report is published. Many creditworthy companies fall within this category.

Companies for which there is a lack of information

In some cases, we may lack certain information about a company that is needed for its ranking. This may be due to the annual report being illegible, in whole or in part, which prevents any ranking. Numerous creditworthy companies fall within this category.

Companies operating on commission

These companies do not publish their own annual report. Their activities are conducted on behalf of another limited liability company. The figures for the two companies are reported jointly, without the possibility of separating them.

3. What is insolvency?

A company that is insolvent cannot pay all its creditors. Insolvency is our "outcome variable" in the ranking process. When we gauge the quality of our models, we check, among other things, how well we have succeeded in predicting insolvency.

Bankruptcy

Bankruptcy is the clearest case of insolvency. It results in the company ceasing to exist and, in most cases, there will be no dividend whatsoever to suppliers. When the company "dies," it will no longer be ranked.

Failed distraint attempt

Failed distraint attempt means that the Swedish Enforcement Authority has attempted a foreclosure of the company but has not found assets to cover the debt. Keep in mind that a failed distraint attempt does not imply "foreclosure".

A limited liability company may sometimes survive a failed distraint attempt. In principle, this should not be possible, but it does occur. Consequently, we have to decide how we should relate to these companies following an attempted attachment and sale. We place them in "quarantine" for two years.

Company reconstruction

Company reconstruction entail a deadline being imposed on a company to put its affairs in order. If a company cannot pay all of its creditors, it must not pay only some of them. This is a criminal offence known as fraudulent preference to creditors. In such a situation, the company can either file for bankruptcy or seek company reconstruction if the owners still believe in the company and wish to strive to keep it as a going concern. Company reconstruction typically entail creditors being allowed to bargain for their claims.

If the proceedings are a success, the company will live on as an entity. For the first two years following the company reconstruction, we do not rank the company.

4. Frequently asked questions

How up-to-date is our ranking?

We receive data that is critical to the ranking process on a daily basis. All of the data is processed and a reclassification is triggered for any companies impacted by the information.

In addition to this event-driven reclassification, all companies are reclassified on a monthly basis in order to update all "time-critical" variables. This may pertain to, for example, the age of non-payment records. This is a necessary execution, because the majority of Sweden's companies are not impacted by any other event-driven reclassification than the submission of financial statements once a year.

All rankings are thus as up-to-date as they need to be with regard to the information on which the ranking is based.

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How much will my company's ranking fall, if my company has a record of non-payment?

This question cannot be answered, as there will be different answers for all Swedish companies. In the case of a large well-established company, there will probably be no difference at all. In the case of a smaller start-up company, it will probably be critical.

The reason why we cannot answer the question is because we are yet to decide how important this factor will be. We have instead used statistical methods to investigate its actual importance in different situations. This is the major difference between our ranking system and the "rating" systems used by nearly all other credit-rating companies. The difference could be expressed as being the difference between faith and knowledge.

Why will some companies with a credit ranking of 5 become insolvent?

Firstly, we do not believe that a company has ever gone directly from a Class 5 credit ranking to bankruptcy (possibly a bankruptcy at its own request). We always capture signals during the most recent months that lead to the ranking being gradually reduced to 1, before any actual insolvency occurs.

If we were instead to invert the question by asking: "What types of companies with a ranking of 5, will become insolvent within 12 months?" the answer would be different. We have thoroughly examined such companies.

Some 33% are companies where the management was affected by illness, accidents, family tragedies and similar events – which we cannot capture using our models.

Some 33% are not really insolvent. This is a category of companies that we have chosen to call "development companies." They frequently consist of start-ups.

In 33% of the cases, it was not possible to obtain an overall picture of the situation. In some cases, we had the impression that it pertained to criminal activity. We have also found cases where the Swedish Enforcement Agency had made a mistake. They had reported insolvencies that, upon closer examination, were not actually insolvencies.