

## **BROKERAGE FIRMS CREDIT RATING AND ASSESSMENT PRINCIPLES**

The credit rating and assessment system study which aims to analyze the credit worthiness of the brokerage firms operating in Turkey and to calculate the upper limits that shall be allocated in their favor by Takasbank or to determine the membership types, is conducted semiannually based on June and December financial reports. Independently audited non-consolidated and/or consolidated financial statements and reports, company general information form, company master information form, protested bills' records, clients' debit balances, with respect to accounts opened for clients -information on active client accounts and total account number, market intelligence information and news in printed and visual media and independent credit rating grades are used as data.

The data used in internal credit rating and assessment study is sourced from Turkish Capital Markets Intermediaries Association, Public Disclosure Platform, Capital Markets Board, Borsa Istanbul, Central Registry Agency and independent rating agencies' websites and the assessed brokerage firm and media.

Respectively the financial data which consists of the financial items and ratios derivable from the financial tables which will be used in the credit rating model, market data or the ratios derived from market data and the non-financial data which reflects expert opinion are attributed 70%, 10% and 20% weighting.

### **FINANCIAL DATA**

The financial data is gathered from the last 3 years' financial statements provided by brokerage firms and compiled by the Capital Market Intermediaries Association.

The 3-year data is attributed 50 % weighting for the last year and in such order, 30% and 20% for the remainder. For the firms which have been in operation for just over a year, that year 's data is attributed 100% weighting, and for those operating for at least 2 years 60% and 40% weightings are attributed to last and preceding years respectively.

The financial data is examined under two main headlines, financial items and financial ratios. The shares of financial items within financial values are 30% and the ratios 70%.

The brokerage firms may be sub-grouped as below to compare and score the financial data in the rating model.

**Table 1 Employed Financial Data**

<b>Financial Items</b>	<b>Financial Ratios</b>
Net Term Profit	<b>Liquidity Ratios</b>
Shareholders' Equity	Current Ratio
Net Working Capital	Liquidity Ratio
Services Revenue	Cash Ratio
Liquid Assets	Liquid Assets/ Total Assets
	<b>Financial Structure Ratios</b>
	Shareholders' Equity/ Total Liabilities
	Financial Debt/ Shareholders' Equity
	Capital Adequacy Base/ Shareholders' Equity
	Net foreign asset position/ Shareholders' Equity
	<b>Revenue- Expense Ratios</b>
	Net Term Profit/ Services Revenue
	Net Term Profit/ Shareholders' Equity
	Net Term Profit/ Total Assets
	Services Revenue/ Operating Cost
	Services Revenue/ Gross Profit

### **Financial Items**

The sizes within the financial items are scored with respect to their significance. During scoring the brokerage sector average is calculated and each brokerage firm's value is compared with the sectorial average. During the calculation of the sectorial average, if required, the largest and smallest values can be removed from the average, not to exceed 10% of the data set, to reduce the effect of the outliers. The score is graded out of 100 for each brokerage firm, after the comparison with the sectorial average, on the condition that the sectorial average equivalent will receive 70%.

### **Financial Ratios**

The financial ratio score calculation varies according to ratios. Before calculation of the ratio scores, brokerage firms are classified into alike institution groups. The scoring, for some ratios, takes into account the brokerage firm's group average and assigns the score according to the proximity and distance while for others the score is assigned according to the proximity and distance to generally accepted benchmark values or those defined by the authorities. In scoring based on comparison to benchmark values, the score is divided into benchmark value score and internal score for some ratios. In scoring based on sectorial or group average, the general principle is that the brokerage firm, which achieves the average value, can receive maximum 70% on that ratio. The remainder of the score can increase and decrease in direct proportion to the distance and proximity from the average. If required, during the calculation of sectorial and group average, the highest and lowest values are removed from the average, not to exceed 10% of the number of data, to reduce the impact of the outliers.

## VALUES CONCERNING MARKET EFFICIENCY

The safekeeping balance resulting from brokerage firms' settlement and safekeeping transactions in the stock exchange, is a table which consists of three ratios which show the relation between data such as client debit and credit accounts or their inner relations. The ratios used during the analysis are:

**Top 10 Highest Client Safekeeping Balance/ Total Safekeeping Balance:** The brokerage firm's top 10 highest safekeeping balance clients' share in total is measured.

**Top 10 highest client debit balances/ Shareholders' Equity:** The share of top 10 clients with highest debit balance in the shareholders' equity.

**Percentage change in Accounts with Balances:** The brokerage firm's active safekeeping accounts' percentage change is monitored quarterly.

## MORALITY

Morality consists of 3 sections. The 1<sup>st</sup> section is the evaluator's non-numeric grade.

In the course of evaluator's rating; the news about the firms in press bulletin and press, news such as closure, suspension, license cancelation or issuance, news concerning the brokerage firm's shareholder or managers, market speculation about the firm, brokerage firms' default & market credibility, Takasbank's experience over time with the brokerage firm, must be taken into consideration.

Morality's 2<sup>nd</sup> section consists of the scores based on the replies to questions in Table 2.

**Table 2 Morality Questions**

1-Has the General Manager changed more than once in the last 3 years?
2-Has the paid in capital been increased in the last 3 years?
3-Has the firm been temporarily suspended in the last 3 years?
4-Does the brokerage firm has credit relation with more than 2 banks?
5-Does the brokerage firm or any of its partners has/have protested bills?
6-Is more than 70% of the total services revenue coming from a single product?

Morality's 3<sup>d</sup> section is graded according to the shareholders' equity amount during the brokerage firm's rating and assessment period. The brokerage firm's shareholders' equity receives the score it corresponds to.

## **INDEPENDENT RATING ADDITIONAL SCORE**

### **Independent Credit Rating Grade**

The independent credit ratings are obtained from the firms themselves, credit rating agencies' websites, brokerage firms' websites, annual reports or other sources on the Internet.

The brokerage firms' and the brokerage firms' domestic and overseas majority shareholders' independent credit ratings may be reflected to the internal credit rating and assessment rating in accordance with the prescribed principles.

The credit rating grades must have been assigned or reviewed in the past year to take into consideration. The unsolicited credit ratings are not taken into account.

The credit ratings of the following agencies are taken into consideration; Fitch, Moody's, Standard& Poors, Japanese JCR and DBRS (Dominion Bond Rating Services) . The credit ratings assigned by domestic agencies affiliated with the aforementioned agencies, are taken into consideration if authorized by the BRSA (BDDK) or CMB (SPK). The credit ratings assigned by the other domestic agencies are taken into consideration if they are authorized both by the BRSA (BDDK) and CMB (SPK). Nevertheless, credit ratings assigned by the domestic agencies authorized only by the BRSA (BDDK) or CMB (SPK), are taken into consideration only if a second credit rating is available from another agency.

For domestic brokerage firms and majority shareholders, long-term corporate national credit rating, otherwise international local currency credit ratings are used.

For brokerage firms' overseas majority shareholders, international credit rating agencies' corporate long-term international foreign currency credit ratings are used.

If the brokerage firm and the majority shareholder both hold independent credit ratings, former in Turkey and latter in Turkey or abroad, one of the ratings or both of them are taken into consideration in accordance with the precautionary principle.

In case of more than one credit rating, the lower one is taken into account.

In the event of a negative opinion with regards to the authenticity and reliability of the credit rating assigned by the rating agency, the rating is not taken into account.

Table 3 is used to match internal credit rating and assessment grades with independent rating grades.

**Table 3 Internal and Independent Rating Grade Matching Table**

Internal Credit Rating and Assessment Grade	Independent Credit Rating Grades	
	Moody's	Fitch, S&P's, DBRS, JCR and others
TBD-A	AAA Aa1 Aa2 Aa3	AAA AA+ AA AA-
TBD-B	A1 A2 A3 Baa1 Baa2	A+ A A- BBB+ BBB
TBD-C	Baa3 Ba1 Ba2	BBB- BB+ BB
TBD-D	Ba3 B1 B2 B3	BB- B+ B B-
TBD-E	Caa1 Caa2 Caa3 D	CCC D

If the brokerage firm's appraised internal credit rating and assessment grade is equivalent to its or the majority shareholder's independent credit rating grade, the internal credit rating and assessment grade is not modified and the internal credit rating and assessment grade appraised by the Bank is taken into account.

If the brokerage firm's appraised internal credit rating and assessment grade is higher than its or the majority shareholder's independent credit rating grade, the internal credit rating and assessment grade is downgraded in accordance with Table 4. If the brokerage firm's majority shareholder's independent credit rating shall be taken into account, 75% of the scores in Table 4 is considered.

If the brokerage firm's appraised internal credit rating and assessment grade is lower than its or the majority shareholder's independent credit rating grade and the appraised credit rating range is between TBD-B and TBD-D, extra points are added according to its or the majority shareholder's credit rating in line with Table 4. If the brokerage firm's majority shareholder's independent credit rating shall be taken into account, 75% of the scores in Table 4 are considered.

If the appraised internal credit rating and assessment grade is TBD-E, the brokerage firm's or the majority shareholder's independent credit rating grade is not taken into account and the appraised grade is not rectified.

Irrespective of the appraised internal credit rating and assessment grade, if the independent credit rating of the brokerage firm or the majority shareholder is "D (Default)", their credit lines with our Bank are cancelled and the brokerage firm's appraised grade is rectified as TBD-E.

While taking into account the majority shareholders' independent credit rating grade, the Parent's support grades, which indicate the majority shareholder's strength and intention to support the brokerage firm may be sought.

**Table 4 Increase/ Decrease scale**

	AAA Aaa	AA Aa	A A	BBB+ BBB Baa1 Baa2	BBB- BB+ BB Baa3 Ba1 Ba2	BB- B Ba3 B	CCC Caa	D D
TBD-A			0	-10	-20	-30	-40	CANCEL
TBD-B	+15	+10			-10	-20	-30	CANCEL
TBD-C	+20	+15	+10	+10		-10	-20	CANCEL
TBD-D	+25	+20	+15	+15	+10		-10	CANCEL
TBD-E	-	-	-	-	-	-		CANCEL

**(\*)** If the independent credit rating grade of the brokerage firm’s majority shareholder shall be included in the appraisal, 75% of the points in the table are considered.

**Corporate Governance Rating Grade**

The Corporate Governance Rating grades are obtained from the firms themselves, the websites of the agencies that issue the report, brokerage firms’ websites, annual reports or other sources on the Internet. Brokerage firms’ grades may be reflected in their internal credit rating and assessment grade. The grades must have been received or reviewed in the past year.

The Corporate Governance Rating Grade is added to the internal credit rating and assessment score according to Table 5, not to exceed the total upper score.

**Table 5 Corporate Governance Rating Grade**

<b>Corporate Governance Rating Grade</b>	<b>Extra Points</b>
7,00 – 8,00	1,00
8,01 – 9,00	2,00
9,01 – 10,00	3,00

**CREDIT RATING and ASSESMENT GRADE**

The internal credit rating and assessment scores are calculated by multiplying the Financial items and ratios, Market Efficiency Values and Morality Scores by the respective division weightings. The final internal credit rating and assessment score is reached by additionally taking into account the independent credit rating and corporate governance rating grades.

As a result of the study, brokerage firms are assigned one of the 5 ratings below based on their total rating scores.

Rating and Assessment		Explanation
Class	Grade	
A	TBD-A	Very strong
B	TBD-B	Strong
C	TBD-C	Sufficient
D	TBD-D	Slightly insufficient
E	TBD-E	Highly insufficient

The evaluated brokerage firms' nominal and RMD based limits are calculated by multiplying the shareholders' equity by the shareholders' equity multiple corresponding to their group determined in this study, and their upper limits are set by adding up these limits.