Bolsa Mexicana

MARKETABILITY INDEX

1. INTRODUCTION

Marketability Index is an indicator of the Mexican Stock Market that measure the trading level of each stock series. The basic elements for the creation of this index are the turnover, the number of trades, and representative. The Marketability Index is calculated on a monthly basis.

2. CALCULATION METHODOLOGY

2.1 Basic Variables

Turnover:

- Local Companies*: The amount in pesos resulting from the product of Volume and Price of each trade for each stock series in a period of six months.
- Global Companies: The amount in pesos resulting from the product of Volume and Price of each day for each stock series in a period of twelve months.

Number of trades: The sum of the trades realized for each stock series, in a six month period.

Representative Turnover: The median of the turnover for each stock series in a period of six months for local companies, twelve months for global companies.

2.2 Procedure to calculate the Marketability Scores.

Once the variables above have been obtained for each stock series, the following procedure is applied:

1. In order to determine the median of each stock series, all registered trades are ordered by turnover in ascending or descending order. The value on the central part of this ordering corresponds to the median.

2. An equation involving logarithmic functions is applied in order to reduce the gap (keep positions) between the issuers with “big turnover and a large number of trades” and those with “small turnover and a small number of trades”.

3. The equation used to determine the place of each stock series in order of importance is as follows:

a. An equation involving logarithmic functions is applied for each stock series, assigning a value between 0 and 10, which represents the marketability score of each stock series. A score of 10 can be obtained only if an issuer has the maximum values for the three basic variables.

b. The greater the score of a stock series, the greater its marketability and vice versa.

4. The application of logarithmic functions in order to obtain the Marketability Scores has a purpose to reduce the gap (keeping positions) between the issuers with “big turnover and a large number of trades” and those with “small turnover and a small number of trades”.

The equation that is applied in order to determine the score of each of the stock series in function of its operative importance is the following:

$$Score_L = 10 * \left[\left[\left(\frac{ln\left(\frac{Ii}{Imin}\right)*f_1}{ln\left(\frac{Imax}{Imin}\right)} + \frac{ln\left(\frac{Oi}{Omin}\right)*f_2}{ln\left(\frac{Omax}{Omin}\right)} + \frac{ln\left(\frac{IOi}{IOmin}\right)*f_3}{ln\left(\frac{IOmax}{IOmin}\right)}\right)\right]\right]$$ (For local companies)

$$Score_G = 10 * \left[\left[\left(\frac{ln\left(\frac{Ii}{Imin}\right)*f_1}{ln\left(\frac{Imax}{Imin}\right)} + \frac{ln\left(\frac{Oi}{Omin}\right)*f_2}{ln\left(\frac{Omax}{Omin}\right)}\right)\right]\right]$$ (For global companies)

Where:

I_i = Turnover of the last 6 months for the i-th issuer for local companies, twelve months for global companies

I_{max} = The maximum of the turnovers of the last 6 months among all issuers for local companies, twelve months for global companies

I_{min} = The minimum of the turnovers of the last 6 months among all issuers for local companies, twelve months for global companies

O_i = Accumulated number of trades of the last 6 months for the i-th issuer

O_{max} =The maximum of the accumulated number of trades of the last 6 months among all issuers

O_{min} = The minimum of the accumulated number of trades of the last 6 months among all issuers

IO_i = Representative Turnover of the i-th issuer (median of the turnover) of the last 6 months for local companies, twelve months for global companies before the calculation

IO_{max} = The maximum of the representative turnovers among all the issuers (median of the turnover) of the last 6 months for local companies, twelve months for global companies before the calculation

IO_{min} = The minimum of the representative turnovers among all the issuers (median of the turnover) of the last 6 months for local companies, twelve months for global companies before the calculation

The values of the *f* factor are the following:

- For local companies listed on the Mexico Stock Exchange:

  f1 = 0.6 factor related with the turnover

  f2 = 0.3 factor related with the number of trades

  f3 = 0.1 factor related with the representative turnover.

- For global companies not listed on the Mexico Stock Exchange:

  f1 = 0.7 factor related with the turnover

  f2 = 0.3 factor related with the number of trades

3. Marketability Tiers

Marketability Scores are segmented in four categories: high, medium, low and minimal.

The highest ranked stocks up to and including stocks ranked at the 25th percentile by count are considered High Marketability.

Stocks ranking between 25% and 50% (not including stocks at the 25th percentile but including stocks at the 50th percentile) are considered Medium Marketability.

Stocks ranking between 50% and 75% (not including stocks at the 50th percentile but including stocks at the 75th percentile) are considered Low Marketability.

The remaining stocks ranking beyond the 75 percentile are considered Minimal Marketability.