**NEEQ Market Making Calculation and Maintenance Methodology**

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**1. Introduction**

For the improvement of market operation quality and the convenience of the investors, NEEQ authorized CSI compile NEEQ Market Making (899002). The index has been published since March 18th, 2015. NEEQ Market Making represents the trend of market making stocks.

**2. Index Universe**

The index universe of NEEQ Market Making Index includes all the board listed companies satisfying the following conditions up to the review deadline:  The company’s transaction type is market making;  The float shares of company is not zero;

Not ST companies.

**3. Selection Criteria**

The NEEQ Market Making Index constituents should be under good management, not against the law, have no financial issues, no abnormal price fluctuation, and no manipulation of the market. They are selected as follows: First Step: Calculate daily average trading values and daily average total market capitalization of the last three months of every company in the universe. (New Listings will be included in from the fourth transaction day.)

Second Step: Rank all the companies in the universe by daily average trading values and daily average total market capitalization of the last three months respectively in descending order and sum up the two ranks to get the overall rank.Third Step: According to the overall rank, determine the number of index component by covering 85% total market capitalization of index universe. Allocate number of constituents for each 2nd level NEEQ industry based on the following method:No. of constituents for industry i= (Total market making number of Industry i/ Total market making number of all board listed companies)\* No. of components by 85% market cap

Forth Step: Select high ranking companies as NEEQ Market Making constituents.

**4. Index Calculation**

4.1 Base Date and Base Index

The base date of NEEQ Market Making Index is December 31, 2014. The base divisor of the index are the adjusted market-cap of all constituents as of close of the base date. The base index is 1000.

4. 2 Index Calculation

NEEQ Market Making Index is calculated using a Paasche weighted composite price index formula, the formula is: Current index= (Current adjusted market cap of constituents/ Base period)\* 1000Adjusted market cap= ∑(Price×Adjusted No. of shares×weight adjusted factor)

The weight cap of 2nd level industry is 25%; the weight cap of individual constituent is 5%.

4.3 Index Real-Time Calculation

The real time calculation of NEEQ Market Making is based on the price data issued by the trading systems of NEEQ.

(1)The opening index is calculated by the latest price obtained through market making. In case there is no deal, the opening index is then calculated by ex-closing price.

(2)The index is calculated each second till the close of trading. Price of each constituent(X) is defined on the following principle: If there is no deal the whole trading day, X equals the ex-closing price, otherwise, X equals the latest traded price.

4.4 Total Return Index

NEEQ and CSI calculates daily closing data of NEEQ Market Making total return indices to satisfy investors’ needs. The calculation of total return index takes the reinvestment income of constituents cash dividends into consideration, which enables investors to measure index performance from a different angle. Total return index is calculated using Chain algorithm. The formula is:Total return index (T)= TRI (T-1)×Adjusted Market Cap (T)/ [Closing Adjusted Market Cap (T-1) -Adjusted Cash Dividend before Tax (T)]T day represents any trading day, T-1 represents the last trading day of t day, Adjusted Market Cap= ∑(Price×Adjusted No. of Shares), Adjusted Cash Dividend before Tax=∑(Cash Dividend per Share before Tax×Adjusted No. of Shares).The difference between the total return index and the price index is on the treatment of cash dividend.

**5. Index Maintenance**When changes occur to constituent list or the share structure, or constituents' market value changes due to non-trading factors, the divisor is adjusted to keep the index comparable overtime, that is, NEEQ Market Making adopts the “Divisor Adjustment Methodology” to adjust the old divisor.

5.1 Formula of Divisor Adjustment MethodologyAdjusted Market Cap before Adjustment/ Old Divisor= Adjusted Market Cap after Adjustment/ New DivisorAdjusted Market Cap after Adjustment= Adjusted Market Cap before adjustment + Adjusted Market Cap increased or decreasedThe new divisor derived from this formula is used for later index calculation.5.2 Circumstances for Index Maintenance5.2.1 Corporate actions that may affect the price of constituentsDividend: No index adjustment is required for dividend payment and the index is allowed to fallback naturally.

Right issue and bonus issue: The index is adjusted the day before the issuance.

Adjusted Market Cap after the Adjustment= Ex-right Price × Adjusted No. of Shares + Adjusted Market Cap before the Adjustment (excluding stocks adjusted for right issue and bonus issue)

5.2.2 Share changes caused by corporate actionsShare changes when shares of constituents change (up to 5% of total shares) due to corporate actions (e.g. re-issuance, listing of right issue), the index is adjusted the day before the changes.

Adjusted Market Cap after the Adjustment = closing price ×Adjusted sharers after changes5.2.3 Constituents adjustmentIndex is adjusted before the effective day of periodical review or temporary adjustment.

**6. Constituents Periodical Review**Constituents of NEEQ Market Making are reviewed every quarter. Constituents are adjusted according to the periodical review.

6.1 Review TimeConstituents’ adjustment are implemented on the next trading day after the close of the second Friday in March, June, September and December each year.

6.2 Data Used for Periodical ReviewReview deadline is the date a month before the date in 6.1.

Review data includes trading data and financial data in the previous three months of review deadline (for new listings, data since its fourth trading day after listing are used).

Review data includes different transaction type in case of type change.

6.3 Long Suspension StocksWhen reviewing constituents eligibility periodically ----for constituents stocks that have already been suspended and have no resumed schedule will not be considered as candidates.6.4 Adjustment of Weight Cap Factor

The weight cap factors are adjusted every quarter as same as constituents review. The weight cap factors are calculated based on data of the fifth trading day before the effective day. NEEQ and CSI will temporarily adjust the weight cap factor when significant changes occur to constituents’ structure.

**7. Temporary Adjustment of Constituents**Necessary ongoing adjustments are made when some corporate events happened so as to maintain the representativeness and investability of index.7.1 Merger and AcquisitionTwo constituent companies merge: The stock of the resulting new company will be added to the index only if it is qualified. One constituent company and one non-constituent company merge: The stock of the resulting new company will be added to the index only if it is qualified.One non-constituent company purchases or takes over one constituent company: If the stock of the resulting new company is qualified, the new stock will be added to the index. Otherwise, these corporate events are considered at constituents’ periodical review.7.2 Spin-offIf one constituent company is split so as to form two or more companies, then whether the resulting companies is eligible for inclusion or not depends on their rankings.7.3 DelistingIf a constituent company is delisted, it will be removed from the index.

7.4 BankruptcyIf a constituent company enters bankruptcy proceedings, it will be removed from the index.

**8. Maintenance of Constituents Shares**To ensure that NEEQ Market Making can reflect trading information of related stocks, NEEQ and CSI maintains constituents shares based on the following rules:NEEQ and CSI maintains constituents shares based on announcements of listed companies.Temporary Adjustment or Regular Review according to the types of corporate events.

If the bonus issue, rights issue, stock split and stock consolidation lead to constituents shares change, the adjustment will be implemented on the ex-right day.For other corporation events, such as second offering and exercise of warrants, if the accumulated change of constituents shares is more than 5%, the adjustment will be implemented immediately. If the accumulated change of constituents shares is less than 5%, the adjustment will be implemented in the next regular review.Usually, the effective date of shares adjustment is consistent with that of indicated in the announcement of listed companies which make the shares change larger than 5%. If the announcement date of listed companies is later than the effective date, then the effective date of shares adjustment is the trading day after the announcement date. NEEQ and CSI would provide notice in the CA files after the market close of the day when we find out 5% threshold is breached.

**9. Information Distribution**NEEQ and CSI has established restrict information distribution rules to ensure the objectivity, neutrality and authority of NEEQ index:

Don’t release any relative information to public until official distribution;

Don’t be interviewed privately;

Published daily through the internet at NEEQ and CSI’s official website.

Usually, the results of constituents periodical review are disseminated a week before effective date; temporary adjustment of constituents are disseminated as early as possible; significant adjustment of index methodology and maintenance are disseminated two weeks before effective date.

**Appendix A: Definition**1. NEEQ– National Equities Exchange and Quotations.2. ST stocks –ST stocks refer to stocks that are special treated by regulators.

3. Adjusted price of ex-dividend and ex-right–The reference price issued by the exchanges on the ex-right (dividend) day which is used to remind investors that the internal value of the stocks have been diluted due to dividend or rights offering.a) DividendEx-dividend price=Closing price before ex-dividend day－Dividend per share

b) Bonus issue

Closing price before ex-bonus day=Ex-right price/ (1+Bonus issue ratio)

c) Rights issueEx-right price= (Closing price before ex-right day +Right issue price right issue ratio)/ (1+Right issue ratio)

**Appendix B：Examples for Index Calculation**

3 stocks are selected as constituent stocks. The base period is the adjusted total market cap of 3 stocks on base day. The base index is 1000 points.

* No adjustment is required. Index is calculated as usual

Base Day

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 5 | 45,000 |
| B | 8,000 | 4,000 | 9 | 36,000 |
| C | 5,000 | 5,000 | 20 | 100,000 |
|  |  |  | Total Adjusted Market Cap | 181,000 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 181,000 | 181,000 | 1000 | 1000 |

Day 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 5.1 | 45,900 |
| B | 8,000 | 4,000 | 9.05 | 36,200 |
| C | 5,000 | 5,000 | 19 | 95,000 |
|  |  |  | Total Adjusted Market Cap | 177,100 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 177,100 | 181,000 | 1000 | **978.45** |

* No index adjustment is required for dividend payment

Stock B distributes cash dividend:￥0.50/share. Today is ex-dividend day. No adjustment is required.

Day 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 5.05 | 45,450 |
| B | 8,000 | 4,000 | 9.1 | 36,400 |
| C | 5,000 | 5,000 | 19.2 | 96,000 |
|  |  |  | Total Adjusted Market Cap | 177,850 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 177,850 | 181,000 | 1000 | **982.60** |

* Bonus issue, rights issue

Stock B is to be traded ex-bonus for all shareholders at the ratio of 10 for 10 and the next day is ex-right day. Stock C is to be traded ex-right for all shareholders at the ratio of 3 for 10 at ￥18/share and it is to be suspended from trading the next day. Ex-right price for stock B is 9.1/(1+1)=￥4.55. Index adjustment is required.

Index Adjustment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Ex-right Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 5.05 | 45,450 |
| B | 16,000 | 8,000 | 4.55 | 36,400 |
| C | 5,000 | 5,000 | 19.2 | 96,000 |
|  |  |  | Total Adjusted Market Cap | 177,850 |

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap before Adjustment (Yuan) | Total Adjusted Market Cap after Adjustment (Yuan) | Old Divisor | New Divisor |
| （1） | （2） | （3） | （3）\*（2）/（1） |
| 177,850 | 177,850 | 181,000 | 181,000 |

Day 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 4.9 | 44,100 |
| B | 16,000 | 8,000 | 4.5 | 36,000 |
| C | 5,000 | 5,000 | 19.2 | 96,000 |
|  |  |  | Total Adjusted Market Cap | 176,100 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 176,100 | 181,000 | 1000 | **972.93** |

* Secondary offering, rights issue

Stock A is going to issue 1000 shares the next day. The change of total shares occupies 1%. No adjustment is required. Stock B is going to be suspended from trading the next day. The rights offering of Stock C succeeds. Stock C is to resume trading the next day which is also the ex-right date of stock C. Ex-right price for stock C is （19.2+18×0.3）/（1+0.3）＝￥18.923.

Index Adjustment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Ex-right Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 4.9 | 44,100 |
| B | 16,000 | 8,000 | 4.5 | 36,000 |
| C | 6,500 | 6,500 | 18.923 | 123,000 |
|  |  |  | Total Adjusted Market Cap | 203,100 |

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap before Adjustment (Yuan) | Total Adjusted Market Cap after Adjustment (Yuan) | Old Divisor | New Divisor |
| （1） | （2） | （3） | （3）\*（2）/（1） |
| 176,100 | 203,100 | 181,000 | 208,751 |

Day 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 100,000 | 9,000 | 4.8 | 43,200 |
| B | 16,000 | 8,000 | 4.5 | 36,000 |
| C | 6,500 | 6,500 | 19.1 | 124,150 |
|  |  |  | Total Adjusted Market Cap | 203,350 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 203,350 | 208,751 | 1000 | **974.13** |

* Secondary Offering

Stock A is going to issue 11600 shares the next day. The change of total shares occupies 12.6%. Index adjustment is required. Stock B is to be resume trading the next day.

Index Adjustment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Ex-right Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 4.8 | 103,680 |
| B | 16,000 | 8,000 | 4.5 | 36,000 |
| C | 6,500 | 6,500 | 19.1 | 124,150 |
|  |  |  | Total Adjusted Market Cap | 263,830 |

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap before Adjustment (Yuan) | Total Adjusted Market Cap after Adjustment (Yuan) | Old Divisor | New Divisor |
| （1） | （2） | （3） | （3）\*（2）/（1） |
| 203,350 | 263,830 | 208,751 | 270,837 |

Day 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 4.85 | 104,760 |
| B | 16,000 | 8,000 | 4.6 | 36,800 |
| C | 6,500 | 6,500 | 19.1 | 124,150 |
|  |  |  | Total Adjusted Market Cap | 265,710 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 265,710 | 270,837 | 1000 | **981.07** |

Day 6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 4.8 | 103,680 |
| B | 16,000 | 8,000 | 4.65 | 37,200 |
| C | 6,500 | 6,500 | 19.5 | 126,750 |
|  |  |  | Total Adjusted Market Cap | 267,630 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 267,630 | 270,837 | 1000 | **988.16** |

* Share changes

Stock C announces share change and listing of right offerings: The total shares and negotiable shares changes to 6470. No adjustment is required. The next day is the listing date of the right offerings.

Day 7

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 4.9 | 105,840 |
| B | 16,000 | 8,000 | 4.6 | 36,800 |
| C | 6,500 | 6,500 | 19.6 | 127,400 |
|  |  |  | Total Adjusted Market Cap | 270,040 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 270,040 | 270,837 | 1000 | **997.06** |

* Periodical Adjustment

Stock B is not qualified in periodical review and is going to be removed from the index. Stock D is going to be added to the index.

Index Adjustment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Ex-right Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 4.9 | 105,840 |
| C | 6,500 | 6,500 | 19.6 | 127,400 |
| D | 8,000 | 6,400 | 9.1 | 58,240 |
|  |  |  | Total Adjusted Market Cap | 291,480 |

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap before Adjustment (Yuan) | Total Adjusted Market Cap after Adjustment (Yuan) | Old Divisor | New Divisor |
| （1） | （2） | （3） | （3）\*（2）/（1） |
| 270,040 | 291,480 | 270,837 | 292,340 |

Day 8

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 5.1 | 110,160 |
| C | 6,500 | 6,500 | 20 | 130,000 |
| D | 8,000 | 6,400 | 9.5 | 60,800 |
|  |  |  | Total Adjusted Market Cap | 300,960 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | **（3）\*（1）/（2）** |
| 300,960 | 292,340 | 1000 | **1029.49** |

* Dividend Payment and Bonus Issue

Stock C distributes cash dividend ￥1/share, and is to be traded ex-bonus for all shareholders at the ratio of 10 for 10. The next day is ex-right day.

Index Adjustment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Ex-right Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 5.1 | 110,160 |
| C | 13,000 | 13,000 | 10 | 130,000 |
| D | 8,000 | 6,400 | 9.5 | 60,800 |
|  |  |  | Total Adjusted Market Cap | 300,960 |

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap before Adjustment (Yuan) | Total Adjusted Market Cap after Adjustment (Yuan) | Old Divisor | New Divisor |
| （1） | （2） | （3） | （3）\*（2）/（1） |
| 300,960 | 300,960 | 292,340 | 292,340 |

Day 9

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stock | Total Shares | Tradable Shares | Closing Price（Yuan） | Adjusted Market Cap（Yuan） |
| A | 112,600 | 21,600 | 5 | 108,000 |
| C | 13,000 | 13,000 | 9 | 117,000 |
| D | 8,000 | 6,400 | 10.5 | 67,200 |
|  |  |  | Total Adjusted Market Cap | 292,200 |

Index Calculation

|  |  |  |  |
| --- | --- | --- | --- |
| Total Adjusted Market Cap(Yuan) | Divisor | Base Index | **Closing Index** |
| （1） | （2） | （3） | （3）\*（1）/（2） |
| 292,200 | 292,340 | 1000 | **999.52** |