

How to calculate indicative weightings for the AEX index Interim Review

A practical guide to the methodology used to calculate the indicative weightings of the companies included in the AEX-index as result of the interim review of the AEX-index.

The methodology consists of two procedures:

The first procedure is to determine the number of shares of the new stocks to be included as result of the interim review. This procedure takes place after the close of market of the first trading day of August;

The second procedure is to determine the new number of shares for those stocks that remain in the index as result of the interim review. This procedure takes place after the close of markets of the first trading day of September.

The procedures are set out below and have been broken into stages that are reflected in a numerical example.

Procedure 1: After the close Markets of the first trading day of August.

This procedure is performed after the close of market on the first trading day of August. The only importance of this procedure is to determine the final number of shares of the companies being included in the index after the close of market on the first trading day of September.

Stage 1: Calculate the free-float adjusted market capitalisation of each company that will be included in the AEX-index as result of the interim review by multiplying the current number of shares listed by the company by the last known share price, and then multiplying the result by the free-float percentage.

Stage 2: Add together all the free-float adjusted market capitalisations calculated in stage one to obtain the total free-float market adjusted market capitalisation of the 25 constituent companies of the AEX-index being included in the index after the interim review.

Stage 3: Divide the free-float adjusted market capitalization of each company in the AEX-index (stage 1) by the total free float adjusted market capitalisation (stage 2). The results are the percentage weightings of each company.

Stage 4: If, following stage 3, a constituent company has a percentage weighting of more than 15%, its percentage weighting is capped at 15%. The excess percentage weighting will be distributed among the other companies in the index, according to their relative weightings.

- Stage 5:** Repeat stage 4 until none of the companies has a percentage weighting of more than 15%.
- Stage 6:** Calculate the market value of the AEX-index basket by multiplying the current level of the index by 100.
- Stage 7:** Calculate the value for each new constituent to be added to the AEX-index by multiplying these companies' percentage weightings after stage 5 by the market value of the AEX-index basket (stage 6).
- Stage 8:** Calculate the indicative, unrounded number of shares for each company to be added to the AEX-index as from the close of markets of the first trading day in September by dividing the value of the constituent company in the AEX index basket (stage 7) by the last known price of the company's share (as used in stage 1).
- Stage 9:** Round off the number of shares as determined in stage 8. The rounded number of shares should be within a range of 5% of the unrounded number of shares. If rounding off to a whole number of shares that may prove impossible, Euronext Indices B.V. will round off the number to the most appropriate decimal (eg 0.5).

Numerical example showing the calculation of the final number of shares for the newly to be included companies

Companies	Number of listed shares	Share closing price	Free Float percentages	Free Float adjusted market cap (in € million)	Real % Weighting	First Adjustment	Impact	Second Adjustment	Impact	Value of Company In index	Unrounded Number of Shares in index	Rounded Number of Shares
Company 1	1,636,544,530	9.720	1.00	15,907.21	5.23%	5.23%	5.48%	5.48%	5.52%			
Company 2	1,191,887,562	9.720	0.75	8,688.86	2.86%	2.86%	2.99%	2.99%	3.02%			
Company 3	286,147,260	52.770	0.75	11,324.99	3.72%	3.72%	3.90%	3.90%	3.93%			
Company 4	748,826,347	63.910	0.75	35,893.12	11.79%	11.79%	12.37%	12.37%	12.46%			
Company 5	431,283,135	19.120	0.75	6,184.60	2.03%	2.03%	2.13%	2.13%	2.15%			
Company 6	67,252,184	57.780	0.75	2,914.37	0.96%	0.96%	1.00%	1.00%	1.01%			
Company 7	182,069,631	8.210	1.00	1,494.79	0.49%	0.49%	0.52%	0.52%	0.52%			
Company 8	181,425,000	37.530	0.75	5,106.66	1.68%	1.68%	1.76%	1.76%	1.77%			
Company 9	2,201,599,674	16.270	0.50	17,910.01	5.89%	5.89%	6.17%	6.17%	6.22%			
Company 10	489,974,593	36.910	0.75	13,563.72	4.46%	4.46%	4.67%	4.67%	4.71%			
Company 11	2,444,458,525	24.575	0.75	45,054.43	14.80%	14.80%	15.53%	15.00%	15.00%			
Company 12	1,802,902,513	11.735	0.75	15,867.80	5.21%	5.21%	5.47%	5.47%	5.51%			
Company 13	1,082,919,674	24.580	1.00	26,618.17	8.75%	8.75%	9.17%	9.17%	9.24%			
Company 14	2,081,560,000	27.705	1.00	57,669.62	18.95%	15.00%	15.00%	15.00%	15.00%			
Company 15	161,825,843	27.220	1.00	4,404.90	1.45%	1.45%	1.52%	1.52%	1.53%			
Company 16	659,435,746	11.790	1.00	7,774.75	2.55%	2.55%	2.68%	2.68%	2.70%			
Company 17	143,386,500	25.910	0.50	1,857.57	0.61%	0.61%	0.64%	0.64%	0.64%			
Company 18	379,224,255	25.440	0.75	7,235.60	2.38%	2.38%	2.49%	2.49%	2.51%			
Company 19	121,804,920	23.860	0.50	1,453.13	0.48%	0.48%	0.50%	0.50%	0.50%			
Company 20	81,772,493	172.000	0.75	10,548.65	3.47%	3.47%	3.64%	3.64%	3.66%			
Company 21	68,089,360	6.180	1.00	420.79	0.14%	0.14%	0.15%	0.15%	0.15%			
Company 22	63700803	58.69	1.00	3,738.60	1.23%	1.23%	1.29%	1.29%	1.30%			
Companies to be included												
Company A	93,966,901	25.190	0.750	1,775.27	0.58%	0.58%	0.61%	0.61%	0.62%	246.55	9.79	10.00
Company B	101,101,056	11.160	0.750	846.22	0.28%	0.28%	0.29%	0.29%	0.29%	117.52	10.53	11.00
Company C	91,236,673	0.870	1.000	79.38	0.03%	0.03%	0.03%	0.03%	0.03%	11.02	12.67	13.00
Companies to be removed												
Company 26	70,420,898	45.980										

Procedure 2: After the close Markets of the first trading day of September.

This procedure is performed after the close of market on the first trading day of September. The importance of this second procedure is to determine the new number of shares of the companies that will remain in the AEX-index as result of the interim review.

- Stage 1:** Calculate the value for each company included in the AEX-index as at the close of markets on the first trading day of September, by multiplying the current number of shares by the close price for each company;
- Stage 2:** Calculate the value of the AEX-index basket based on the value of those stocks which remain in the AEX-index;
- Stage 3:** Determine the percentage weighting for each of the companies that remain in the index by dividing the value of each constituent that remain in the AEX-index by the total value of the companies that remain in the AEX-index;
- Stage 4:** Calculate the total value of the companies newly added to the AEX-index by multiplying their closing prices of the first trading day of September by the number of shares announced by NYSE Euronext after the close of markets on the first trading day of August;
- Stage 5:** Extract the total value of the companies to be included from the value of the index basket as at the close of market of the first trading day of September. The result is the value to represent the total value of the companies that remain in the index;
- Stage 6:** For each company that remains in the index, calculate the new value of the company in the new index basket by multiplying the percentage weighting calculated in stage 3 by the remaining value of the index basket calculated in stage 5;
- Stage 7:** Calculate the indicative, unrounded number of shares for the companies that will remain in the index by dividing the value of each company calculated in stage 6 by the last known price of the company.

Following stage 7, the number of share of the companies that remain in the AEX-index is rounded off to a whole number that is within a range of 5% of the unrounded number of shares. If rounding off to a whole number of shares that may prove impossible, NYSE Euronext will round off the number off to the most appropriate decimal (eg 0.5).

The companies to be included in the index will be included with the number of shares as announced by NYSE Euronext after the close of markets of the first trading day of August.

Following the interim review, the impact of the new composition of the AEX-index and the new weighting in shares never result in a change of more than €1.00 (0.01 index points) in the value of the AEX-index.

