

MSCI Free Float Data Methodology

MSCI Methodology for the Free Float Data

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1 RULES FOR FREE FLOAT CLASSIFICATION

1.1: DEFINING AND ESTIMATING FREE FLOAT

MSCI defines the free float of a security as the proportion of shares outstanding that is deemed to be available for purchase in the public equity markets by international investors. In practice, limitations on the investment opportunities available to international institutional investors include:

Free float and other non-free float shareholdings: Stakes held by private or public shareholders whose investment objectives or other characteristics suggest that those holdings are not likely to be available in the market. In practice, disclosure requirements generally do not permit a clear determination of these investment objectives. Therefore, MSCI primarily classifies shareholdings as free float or non-free float based on a categorization of investor types into strategic and non-strategic, respectively. For further information on the categories of investor types please refer to Section 1.2 Classification of Shareholder types.

Limits on share ownership for foreign investors: Limits on the proportion of a security's share capital that is authorized for purchase by non-domestic investors are also referred to as Foreign Ownership Limits (FOL). Where they exist, these foreign share-ownership limits are set either by law, government regulations, company by-laws or other authoritative statements. For a security that is subject to a FOL, MSCI will additionally take into consideration the proportion of shares still available to foreign investors relative to the applicable foreign ownership limit (referred to as "foreign room"). For further information, refer to Section 1.3 Foreign Ownership Limits and Foreign Room.

MSCI's estimation of free float is based solely on publicly available shareholder information. For each security, all available shareholdings are considered where public data is available, regardless of the size of the shareholding. MSCI may consult with analysts, other industry experts and official company contacts, particularly where disclosure standards or data quality make the estimation of free float difficult.

The free float number of shares of a security is estimated as its total number of shares outstanding less shareholdings classified as non-free float.



Non-free float shareholdings (%) = Number of shares of a security classified as non-free float divided by the total number of shares of the security.

Free float (%) = 100% minus non-free float shareholdings (%)

Example: Calculation of free float		
	Company A	Company B
Total number of shares outstanding	10,000,000	10,000,000
Market capitalization	USD 100 Billon	USD 50 Billion
Number of shares classified as non- free float	4,322,000	8,760,000
Free float number of shares	5,678,000	1,240,000
Non-free float shareholding (%)	43.22%	87.60%
Free float (%)	56.78%	12.40%
Free float adjusted market capitalization	USD 57 Billion	USD 6 Billion

1.2: CLASSIFICATION OF SHAREHOLDER TYPES

STRATEGIC SHAREHOLDER TYPES (NON-FREE FLOAT)		
Banks	Shareholdings by banks are considered as strategic, excluding shareholdings held in trust on behalf of third parties that are deemed to be non-strategic. For example, shareholding by trust banks in Japan are considered non-strategic.	
Companies	Shares owned by companies. This includes treasury shares owned by the company itself. ¹	

¹For most countries, treasury shares are included in the determination of the total shares outstanding, and therefore MSCI includes them in the calculation of free float. In countries like United Kingdom, USA, Canada where treasury shares are excluded from the determination of the total shares outstanding, they are accordingly not included in the calculation of free float.



Employees	Shares of the employing companies, held by both officers and non-officers, which are held in a variety of ways including plans sponsored by the employer for the purpose of retirement and savings plans, incentive compensation programs and other deferred and employee pension funds.
Governments	Shareholdings owned by governments and affiliated entities are generally classified as non-free float.
Principal officers and board members	Shares owned by the company's principal officers or members of the company's board of directors, including shares owned by individuals or families that are related to or closely affiliated with the company's principal officers, members of the company's board of directors, or founding members deemed to be insiders.
Private Equity and Venture Capital	Shareholdings owned by private equity firms and venture capital funds are generally classified as non-free float.

NON-STRATEGIC SHAREHOLDER TYPES (FREE FLOAT)				
Hedge Funds	Shares owned in hedge funds unless the fund's management is deemed to exert influence over the management of the company.			
Individuals	Shares owned by individuals, excluding shares owned by individuals or families that are related to or closely affiliated with the company's principal officers or members of the company's board of directors or founding members deemed to be insiders, and, also excluding those shareholdings held by individuals, the significant size of which suggests that they are strategic in nature.			
Insurance companies	In principle, all stakes held by insurance companies are part of free float. For exceptions to this general principle, please refer to the additional discussion on insurance companies presented below.			
Investment funds, mutual funds, and unit trusts	Shares owned through investment funds, mutual funds, and unit trusts, including shares owned through indexed funds.			



Pension funds	Shares owned by employee pension funds, excluding shares of the employing company, its subsidiaries, or affiliates.
Security brokers	Non-strategic interests held by broker-dealers (e.g., trades in the process of settlement, holdings in the process of being transferred, as part of underwriting activity, etc.), unless held within the same group or the nature of holding is deemed strategic.
Social security funds	Shares owned by social security funds unless the fund's management is deemed to exert influence over the management of a company.

1.3: FOREIGN OWNERSHIP LIMITS AND FOREIGN ROOM

Limits on the proportion of a security's share capital that is authorized for purchase by non-domestic investors are also referred to as Foreign Ownership Limits (FOL). For the determination of the FOLs, the following guidelines are used:

- For companies that impose ownership restrictions for non-European Union investors, such restrictions are included in the calculation of the FOL.
- Regulatory requirements governing the ownership of shares by foreign investors in the country where the security is included.
- In countries where companies can issue Depositary Receipts (DRs) such as ADRs or GDRs as an exception to the outstanding foreign ownership restrictions, the FOL calculation includes the percentage represented by the depositary receipts. MSCI defines the percentage represented by DRs as the number of shares represented by DRs issued at the time of initial offering of the DRs adjusted for subsequent corporate events divided by the total number of shares outstanding.
- Similarly, if a company exceptionally permits certain foreign shareholders to own more shares than the maximum stated in the company's by-laws and the exception is publicly disclosed, this is considered in the calculation of the FOL.



- When a company's foreign ownership restriction is defined as a proportion
 of the company's total share capital and the company has multiple-listed
 share classes with no specific limit set for any one class, MSCI applies the
 company's FOL equally to each of the company's listed share classes.
- When a company's foreign ownership restriction is defined as a proportion
 of the company's total share capital and the company has multiple share
 classes but only one is listed, MSCI calculates the FOL by applying the total
 shares available to foreign investors (after taking into consideration foreign
 non-free float shareholdings of non-listed shares, if any) on the listed shares
 only.

Example Calculation of Foreign Ownership Limits			
Company A	Listed	Unlisted	Total
Number of shares outstanding	500	500	1,000
Foreign non-free float shareholdings	-	100	100
Foreign Ownership Limit applied to the company	-	=40%	-
Foreign Ownership Limit (FOL) applied	= ((0.40*1,000) - 100)/500		
to listed shares	=0.60		

For a security that is subject to a FOL, MSCI will additionally calculate the proportion of shares still available to foreign investors relative to the applicable foreign ownership limit (referred to as "foreign room").

Foreign Room = (FOL - shares owned by foreigners)/FOL

Example Calculation of Foreign Room	
Foreign Ownership Limit (FOL) applied to the company	40%
Foreign shareholdings	20%
Foreign Room (40%-20%)/40% => 50%	



The table below provides a list of countries for which MSCI monitors Foreign Room.

Markets	Country Name
Developed Markets (DM)	AUSTRALIA
Developed Markets (DM)	JAPAN
	CHINA
	INDIA
	INDONESIA
	KOREA
	PHILIPPINES
Emerging Markets (EM)	QATAR
	SAUDI ARABIA
	TAIWAN
	THAILAND
	UNITED ARAB EMIRATES
Frontier Markets (FM)	TUNISIA
	VIETNAM
Standalone Markets	ZIMBABWE

Other than countries mentioned above, MSCI also monitors Foreign Room for telecommunication companies in Canada, airlines companies in Europe and USA for which the Foreign Room information is available from public sources.

For further information on Foreign Room refer to Appendix II.



2 MAINTENANCE OF FREE FLOAT

2.1: UNIVERSE

All publicly listed companies reporting a shareholding structure in their publicly available filings are eligible for free float assignment.

2.2: PERIODIC MAINTENANCE

Free Float, Foreign Ownership Limits and Foreign Room data is updated monthly. The product file is delivered within five business days post the last month end date.

MSCI sources company shareholding information from third party vendors as well as from publicly available information made available by the companies to calculate free float.



3 FREE FLOAT CORRECTION POLICY

Any corrections to data will be updated and reflected in the product as early as practicable.

If the change in free float adjusted market capitalization resulting from the correction represent at least USD 1 billion for listed securities, an announcement is made by MSCI with the revised free float. If the change in free float does not meet the above-mentioned thresholds, no announcement is made by MSCI.

MSCI reserves the right to handle specific cases differently if more appropriate.



APPENDICES



APPENDIX I: SHAREHOLDER CLASSIFICATION

MSCI considers information based on all publicly available sources. Free float will be estimated only if sufficient information is publicly available to accurately estimate the security's free float at the time of listing.

For corporate actions, if the shares are issued to institutional or other nonstrategic investors, they are considered as free float, and if issued to strategic investors, they are considered as non-free float. If certain corporate actions do not impact the free float of the securities, the distribution of new shares is assumed to be carried out on a pro rata basis to all existing shareholders. In general, after completion of certain corporate actions, MSCI will update float only once public disclosures of the complete post-event shareholder structure in relevant filings have been made available.

If the categories defined in section 1.2 do not appropriately capture the nature of a specific shareholding, its classification as free float or non-free float will be determined after a more extensive analysis.

The following guidelines will be applied in analyzing the special cases set forth below:

SHAREHOLDER TYPES

- Government agencies and government-related investment funds: Shareholdings of government agencies and government-related investment funds are classified based on an analysis of the objective of the investment and the extent of government involvement in managing the companies.
- Insurance companies: Shareholdings by insurance companies are considered as non-free float, when analysis shows that these holdings are unlikely to be made available as free float in the market. This analysis typically looks at the nature of the insurance business in each country, a company's business practices with its group-related or other companies, and the regulatory environment in the country, including fiscal incentives. These factors, individually or combined, could restrict the insurance company's shareholdings from being made freely available in the stock market. Therefore, the treatment of stakes held by insurance companies may differ from country to country. Because of the structure of equity ownership and the importance



- of financial alliances for the control of companies in some countries, insurance companies' stakes in other companies may be treated as strategic.
- Nominees or trustees: Shareholdings registered in the name of a nominee or trustee is classified as strategic or non-strategic based on an analysis of who the ultimate beneficial owner of the shares is, according to the shareholder types described above.
- Sovereign Wealth Funds (SWF): Holdings by SWF in securities classified in the
 domicile country of such funds are treated as non-free float. For securities not
 classified in the domicile country, stakes of SWFs of above 7% are treated as
 non-free float. Existing SWFs' stakes in securities not classified in the domicile
 country that are currently treated as non-free float will continue to be treated as
 such until the holdings fall below 5%.

OTHER CATEGORIES

- Board Representation: An existing non-strategic shareholder enters into a shareholder agreement with a company and places one of its employees as a member to the board of directors. In such a scenario the holder will be reclassified from non-strategic to strategic. If, as per the shareholder agreement with the company, the holder has only nominated a current member to the board of directors, such stakes will continue to be treated as nonstrategic.
- Depositary Receipts ("DR"): Shares that are deposited to back the issuance of DRs, such as ADRs and GDRs, are classified as non-strategic, unless it is established that a specific stake held in DRs is strategic in nature. Number of shares updated for DRs are based on the maximum DRs that could be issued by dividing the number of shares of the underlying share class by the DR ratio (ratio between the common shares and the DRs). The free float is also derived based on the structure for the underlying shares.
- Direct listing: In case of a direct listing, no new shares are created, instead the
 company sells shares directly to the public without getting help from
 intermediaries. In such instances if there is paucity of information of selling
 shareholders particularly where disclosure standards or data quality make the
 estimation of free float difficult, free float is considered zero.
- Lock-up periods: Any shares that are subject to lock-up periods will be
 considered as non-free float during the lock-up period. At the end of the lockup period, these shares will be classified as strategic or non-strategic based
 on the nature of the shareholder. For shareholders where the classification
 cannot be determined due to lack of information on expiration of the lock up



period, if there are no subsequent disclosures, MSCI would retain these non-free float holdings for one year from the date of listing.

• Loyalty incentives: In a public offering, special incentives are sometimes provided to retail investors and are subject to a minimum holding period. These shares will not be considered as part of the free float during the minimum holding period if the incentives are deemed to be material. Example: a conditional share bonus in a ratio of 1 to 5 (or an equivalent price discount of 1/6th), or more, will be considered as material.

Country Specifics

• China listed A shares

MSCI takes into consideration restricted shares while determining free float for securities listed on Shanghai or Shenzhen stock exchanges. For cases where total restricted shares are not captured in the shareholding structure, MSCI considers the balancing portion of restricted shares as non-free float.

• France, Germany, Italy, Japan

Shareholdings by insurance companies in France, Germany, Italy, and Japan are treated as strategic, where stakes are above 2%.

United States Listed securities

For securities listed in the United States, the regulatory reporting requirement attempts to classify shareholders into active and passive by mandating them to make certain form filings. MSCI takes into consideration the form filing of the holder to determine the strategic/non-strategic classification in the calculation of the free float. The investors classified as active as per regulatory requirement will be classified as strategic by MSCI.



APPENDIX II: FOREIGN OWNERSHIP LIMIT AND FOREIGN ROOM

Country Specifics

- India: MSCI considers FOL based on data published by Central Depository Services Limited's (CDSL) and National Securities Depository Limited's (NSDL). For securities that are not covered by the list provided by the CDSL/NSDL, FOL will be determined based on publicly available data. MSCI considers the lower of Foreign Portfolio Investment (FPI) (wherever applicable) and Foreign Direct Investment (FDI) headroom to determine final Foreign Room for Indian securities. FOL would be equal to the limit as per the 'Automatic Route' except:
- The cases where a higher limit is approved under the 'Government Route' or
- \circ $\;$ The cases where a lower limit is approved by the company's Board of Directors and its General Body
- **Philippines**: MSCI uses both the listed and unlisted share classes (if available).
- **Qatar and UAE**: MSCI computes the Foreign Room based on the limits and holdings applicable to GCC and foreign holders.
- Saudi Arabia: MSCI does not include foreign strategic ownership.



Generic example:

	Common Listed	Voting preferred Unlisted	Non- Voting preferred Unlisted	Total Voting Shares	Total Shares
Number of shares outstanding	1000	500	500	1500	2000
FOL applied to the company	0.4				
FOL applied to listed shares	0.6			=(0.4*1500)/1000	=(0.4*2000)/1000
		•		0.6	0.8
Maximum number of shares allowed to foreigners				=0.4*1500	=0.4*2000
	•			600	800
Shared held by foreigners	480			480	480
Foreign Room	20%			=(600-480)/600	=(800-480)/800
				20.00%	40.00%



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