Supplemental Listing Document

If you are in any doubt about this document, you should consult your stockbroker or other registered dealer in securities, bank manager, solicitor, accountant or other professional adviser. The Singapore Exchange Securities Trading Limited (the "**SGX-ST**") assumes no responsibility for the correctness of any of the statements made or opinions or reports expressed in this document. Admission to the Official List of the SGX-ST is not to be taken as an indication of the merits of Macquarie Bank Limited, the Index (defined below) or the Warrants.

Non-collateralised warrants
39,000,000 European Style Index Put Warrants relating to the S&P 500® Index issued by

Macquarie Bank Limited
(ABN 46 008 583 542)
(Incorporated under the laws of Australia)

Issue Price: SGD 0.203 per Warrant

This document is published for the purpose of obtaining a listing of all the above warrants (the "**Warrants**") to be issued by Macquarie Bank Limited (the "**Issuer**", "**Macquarie Bank**", "**we**" or "**us**") and is supplemental to and should be read in conjunction with a base listing document published on 6 June 2024 as amended by the addendum dated 1 November 2024 (the "**Base Listing Document**") for the purpose of giving information with regard to the Issuer and the Warrants. Information relating to the S&P 500® Index (the "**Index**") is contained in this document.

This document does not constitute or form part of any offer, or invitation, to subscribe for or to sell, or solicitation of any offer to subscribe for or to purchase, Warrants or other securities of the Issuer, nor is it calculated to invite, nor does it permit the making of, offers by the public to subscribe for or purchase for cash or other consideration Warrants or other securities of the Issuer. Restrictions have been imposed on offers and sales of the Warrants and on distributions of documents relating thereto in Singapore, the U.S., the United Kingdom, Hong Kong and Australia (see Base Listing Document).

Investors are warned that the price of the Warrants may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment. Prospective purchasers should therefore ensure that they understand the nature of the Warrants and carefully study the risk factors set out in this document before they invest in the Warrants.

The Warrants constitute direct, general and unsecured contractual obligations of the Issuer and of no other person, including those in respect of deposits, but excluding any debts for the time being preferred by law and any subordinated obligations and if you purchase the Warrants you are relying upon the creditworthiness of the Issuer and have no rights under the Warrants against the Index Sponsor (as defined below) or any companies constituting the Index.

The Issuer is regulated as an authorised deposit taking institution by the Australian Prudential Regulation Authority ("APRA"). The Issuer, acting through its Singapore branch is authorised and licensed by the Monetary Authority of Singapore to carry on wholesale banking business in Singapore pursuant to the Banking Act 1970 of Singapore and therefore is subject to the supervision of the Monetary Authority of Singapore.

03 March 2025

Application has been made to the SGX-ST for permission to deal in and for quotation of the Warrants and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Warrants. It is expected that dealings in the Warrants will commence on 04 March 2025.

Warrants are complex instruments and are not suitable for inexperienced investors. Investors should also have sufficient financial resources and liquidity to bear all of the risks of an investment in the Warrants. Prospective purchasers should not invest in Warrants which are complex financial instruments unless they have the expertise (either alone or with a financial adviser) to evaluate how the Warrants will perform under changing conditions, the resulting effects on the value of the Warrants and the impact this investment will have on the potential investor's overall investment portfolio.

Subject as set out below, the Issuer accepts full responsibility for the accuracy of the information contained in this document and the Base Listing Document in relation to itself and the Warrants. To the best of the knowledge and belief of the Issuer (which has taken all reasonable care to ensure that such is the case), the information contained in this document and the Base Listing Document for which it accepts responsibility (subject as set out below in respect of the information contained herein with regard to the Index) is in accordance with the facts and is not limited by anything likely to affect the import of such information. The information with regard to the Index as set out herein is extracted from publicly available information. The Issuer accepts responsibility for accurately reproducing such extracts but accept no further or other responsibility in respect of such information.

Neither the delivery of this document nor any sale made hereunder shall create any implication that there has been no change in the affairs of the Issuer, and its subsidiaries and affiliates since the date hereof. No person has been authorised to give any information or to make any representations other than those contained in this document in connection with the offering of the Warrants, and, if given or made, such information or representations must not be relied upon as having been authorised by the Issuer.

This document does not constitute an offer or invitation by or on behalf of the Issuer to purchase or subscribe for any of the Warrants. The distribution of this document and the offering of the Warrants may, in certain jurisdictions, be restricted by law. The Issuer requires persons into whose possession this document comes to inform themselves of and observe all such restrictions.

The Warrants have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**"). Warrants, or interests therein, may not at any time be offered, sold, resold or delivered within the U.S. or to, or for the account or benefit of, U.S. persons and any offer, sale, resale or delivery made within the U.S. or to, or for the account or benefit of, a U.S. person will not be recognised. A further description of certain restrictions on offering and sale of the Warrants and distribution of this document is given in the section headed "Sales Restrictions" in the Base Listing Document.

As of the Launch Date, Index is a "qualified index" and hence the Warrants are not subject to U.S. withholding tax under Section 871(m) of the Internal Revenue Code of the United States.

The SGX-ST has made no assessment of, nor taken any responsibility for, the financial soundness of the Issuer or the merits of investing in the Warrants, nor have they verified the accuracy or the truthfulness of statements made or opinions expressed in this document.

The Issuer or its affiliates may repurchase Warrants at any time and any Warrant which is repurchased may be offered from time to time in one or more transactions in the over-the-counter market or otherwise at prevailing market prices or in negotiated transactions, at the discretion of the Issuer. Investors should not therefore make any assumption as to the number of Warrants in issue at any time.

References in this document to the "**Conditions**" shall mean references to the Terms and Conditions of the European Style Index Put Warrants contained in the Base Listing Document. Terms not defined herein shall have the meanings ascribed thereto in the Conditions.

TERMS AND CONDITIONS OF THE WARRANTS

*The following are the terms and conditions of the Warrants and should be read in conjunction with, and are qualified by reference to, the other information set out in this document and the base listing document dated 6 June 2024 as amended by the addendum dated 1 November 2024 (the "**Base Listing Document**").*

The Conditions are set out in the section headed "Terms and Conditions of the European Style Index Put Warrants" in the Base Listing Document. For the purposes of the Conditions, the following terms shall have the following meanings:

Warrants:	39,000,000 European Style Index Put Warrants relating to the Index
Index:	The S&P 500® Index (Reuters Instrument Code: .SPX)
Index Sponsor:	S&P Dow Jones Indices LLC
Conversion Ratio (Number of units per Warrant):	0.000222 (i.e. every 4,500 Warrants initially relate to 1 index unit)
Reference Level[1] and Source:	5,985.000 (out of the money) (Reuters/Bloomberg)
Strike Level:	5,750.000 (subject to adjustment as provided in Condition 6 of the Warrants)
Gearing[1]:	8.8x
Premium[1]:	15.3%
Volatility[1]:	Implied: 65% Historical: 18%
Launch Date:	26 February 2025
Closing Date:	03 March 2025
Dealing Commencement Date:	04 March 2025
Last Trading Date:	The 5th Business Day immediately preceding the Expiry Date, currently being 13 June 2025
Expiry Date:	20 June 2025 or if the Valuation Date falls after 20 June 2025, the Expiry Date shall be the Business Day following the Valuation Date (subject to adjustment of the Valuation Date upon the occurrence

[1] These figures are calculated as at, and based on information available to the Issuer on or about, the date of the termsheet in respect of the Warrants. The Issuer is not obliged, and undertakes no responsibility to any person, to update or inform any person of any changes to the figures after the date of the termsheet in respect of the Warrants.

	of Market Disruption Event(s) as set out in the Conditions of the Warrants)
Board Lot:	100 Warrants
Valuation Date:	20 June 2025 or if such day is not the day on which the June 2025 futures contracts over the Index expire on the Chicago Mercantile Exchange Inc., the day on which such futures contracts will expire on the Chicago Mercantile Exchange Inc. or its successor or assign
Settlement Currency:	Singapore dollars
Reference Currency:	United States dollars
Exercise:	Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by whether the Cash Settlement Amount (less any Exercise Expenses) is positive. If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date). The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) of the Warrants. In the event the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date) and Warrantholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.
Cash Settlement Amount:	In respect of each Warrant, is the amount equal to: [(Strike Level - Closing Level) x Conversion Ratio] x Exchange Rate Where the Exchange Rate is the prevailing rate of exchange between the United States dollar to Singapore dollar as at or around 10:00 a.m. (New York time) on the Valuation Date as shown on Reuters provided that if the Reuters service ceases to display such information, such page as displays such information on such other services as may be selected by the Issuer
Closing Level:	The Special Opening Quotation ("**SOQ**") for the Index as published on the Bloomberg page "SPXSET <INDEX>" on the Valuation Date, where such SOQ will also be used for determining the final settlement price for the futures contracts over the Index expiring on the Valuation Date

Exercise Expenses:	Warrantholders will be required to pay all charges (including any taxes if applicable) which are incurred in respect of the exercise of the Warrants.
Relevant Stock Exchange:	New York Stock Exchange (the "**NYSE**") and NASDAQ Stock Market ("**NASDAQ**")
Clearing System:	The Central Depository (Pte) Limited ("**CDP**")
Fees and Charges:	Normal transaction and brokerage fees shall apply to the trading of the Warrants on the SGX-ST.

The Conditions set out in the section headed "Terms and Conditions of the European Style Index Put Warrants" in the Base Listing Document are set out below. This section is qualified in its entirety by reference to the detailed information appearing elsewhere in this document which shall, to the extent so specified or to the extent inconsistent with the relevant Conditions set out below, replace or modify the relevant Conditions for the purpose of the Warrants.

TERMS AND CONDITIONS OF THE EUROPEAN STYLE INDEX PUT WARRANTS

1. Form, Status, Transfer and Title

(a) *Form*. The Warrants (which expression shall, unless the context otherwise requires, include any further warrants issued pursuant to Condition 10) are issued subject to and with the benefit of:

(i) a master instrument by way of deed poll (the "**Master Instrument**") dated 15 July 2022, made by Macquarie Bank Limited (the "**Issuer**"); and

(ii) a master warrant agent agreement (the "**Warrant Agent Agreement**") dated 26 November 2004 and such other Warrant Agent Agreement as may be in force from time to time, made between the Issuer and the Warrant Agent for the Warrants.

Copies of the Master Instrument and the Warrant Agent Agreement are available for inspection at the specified office of the Warrant Agent.

The Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Master Instrument and the Warrant Agent Agreement.

(b) *Status*. The Warrants constitute direct, general and unsecured contractual obligations of the Issuer and rank, and will rank, equally among themselves and *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer (save for statutorily preferred exceptions). The Warrants provide for cash settlement on exercise.

(c) *Transfer*. The Warrants are represented by a global warrant certificate ("**Global Warrant**") which will be deposited with The Central Depository (Pte) Limited ("**CDP**"). Warrants in definitive form will not be issued. Transfers of Warrants may be effected only in Board Lots or integral multiples thereof. All transactions in (including transfers of) Warrants, in the open market or otherwise, must be effected through a securities account with CDP. Title will pass upon registration of the transfer in the records maintained by CDP.

(d) *Title*. Each person who is for the time being shown in the records maintained by CDP as entitled to a particular number of Warrants shall be treated by the Issuer and the Warrant Agent as the holder and absolute owner of such number of Warrants, notwithstanding any notice to the contrary. The expression "**Warrantholder**" shall be construed accordingly.

2. Warrant Rights and Exercise Expenses

(a) *Warrant Rights*. Every Warrant entitles each Warrantholder, upon due exercise and on compliance with Condition 4, to payment by the Issuer of the Cash Settlement Amount (if any) in the manner set out in Condition 4.

(b) *Exercise Expenses*. Warrantholders will be required to pay all charges (including any taxes if applicable) which are incurred in respect of the exercise of the Warrants (the "**Exercise Expenses**"). An amount equivalent to the Exercise Expenses will be deducted by the Issuer from the Cash Settlement Amount in accordance with Condition 4. Notwithstanding the foregoing, the Warrantholders shall account to the Issuer on demand for any Exercise Expenses to the extent that they were not or could not be deducted from the Cash Settlement Amount prior to the date of payment of the Cash Settlement Amount to the Warrantholders in accordance with Condition 4.

3. Expiry Date

Unless automatically exercised in accordance with Condition 4(b), the Warrants shall be deemed to expire at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date (as defined below) falls after the Expiry Date, the Expiry Date shall be the Business Day (as defined below) following the Valuation Date).

4. Exercise of Warrants

(a) *Exercise*. Warrants may only be exercised on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date) in accordance with Condition 4(b).

(b) *Automatic Exercise*. Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by the Closing Level of the Index. If the Strike Level is greater than the Closing Level of the Index and the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date). The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) below. In the event the Strike Level is less than or equal to the Closing Level of the Index and the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date) and Warrantholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.

(c) *Settlement*. In respect of Warrants which are exercised automatically in accordance with Condition 4(b), the Issuer will pay to the relevant Warrantholder the Cash Settlement Amount (if any) in the Settlement Currency. The aggregate Cash Settlement Amount (less any Exercise Expenses) shall be despatched as soon as practicable and no later than five Business Days following the Valuation Date by way of crossed cheque or other payment in immediately available funds drawn in favour of the Warrantholder only (or, in the case of joint Warrantholders, the first-named

Warrantholder) appearing in the records maintained by CDP. Any payment made pursuant to this Condition 4(c) shall be delivered at the risk and expense of the Warrantholder and posted to the Warrantholder's address appearing in the records maintained by CDP (or, in the case of joint Warrantholders, to the address of the first-named Warrantholder appearing in the records maintained by CDP). If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

If the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event (as defined below) has occurred, then that Valuation Date shall be postponed until the first succeeding Index Business Day (as defined below) on which there is no Market Disruption Event, unless there is a Market Disruption Event on each of the five Index Business Days immediately following the original date that, but for the Market Disruption Event, would have been a Valuation Date. In that case:

(i) that fifth Index Business Day shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and

(ii) the Issuer shall determine the Closing Level on the basis of its good faith estimate of the Closing Level that would have prevailed on that fifth Index Business Day but for the Market Disruption Event.

For the avoidance of doubt, if the Closing Level references the final settlement price for settling a futures contract and the final settlement price is not available on the scheduled Valuation Date, the Issuer may postpone the Valuation Date further until the publication of the relevant final settlement price.

"**Market Disruption Event**" means the occurrence or existence, on a Valuation Date, of any of:

(A) the suspension or limitation of the trading of a material number of securities/commodities from time to time comprising the Index; or

(B) the suspension or limitation of the trading of securities/commodities (1) on the SGX-ST or the relevant stock exchange on which the Shares related to the Warrants are traded ("**Relevant Stock Exchange**") (as specified in the relevant Supplemental Listing Document) or (2) generally; or

(C) the suspension or limitation of the trading of (1) options or futures relating to (i) the Index or (ii) any exchange-traded fund over the Index on any options or futures exchanges or (2) options or futures generally on any options and/or futures exchanges on which options or futures relating to the Index are traded; or

(D) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount.

For the purposes of this definition, (aa) the limitation on the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any exchange, and (bb) a limitation imposed on trading (including but not limited to unforeseen circumstances such as by reason of the movements in price exceeding the levels permitted by any relevant exchange or any act of God, war, riot, public disorder, explosion, terrorism or otherwise) on the relevant exchange will constitute a Market Disruption Event.

"Valuation Date" means, with respect to the exercise of Warrants, and subject as provided above in relation to a Market Disruption Event, the date or dates specified in the relevant Supplemental Listing Document.

(d) *CDP not liable*. CDP shall not be liable to any Warrantholder with respect to any action taken or omitted to be taken by the Issuer or the Warrant Agent in connection with the exercise of the Warrants or otherwise pursuant to or in connection with these Conditions.

(e) *Business Day*. In these Conditions, a "**Business Day**" shall be a day on which the SGX-ST is open for dealings in Singapore during its normal trading hours and banks are open for business in Singapore and an "**Index Business Day**" shall be a day on which the Index is published by the Index Sponsor or, as the case may be, the Successor Index Sponsor and where the Index closes at the normal trading hours.

5. Warrant Agent

(a) *Warrant Agent*. The Issuer reserves the right, subject to the appointment of a successor, at any time to vary or terminate the appointment of the Warrant Agent and to appoint another Warrant Agent provided that it will at all times maintain a Warrant Agent which, so long as the Warrants are listed on the SGX-ST, shall be in Singapore. Notice of any such termination or appointment and of any change in the specified office of the Warrant Agent will be given to the Warrantholders in accordance with Condition 9.

(b) *Agent of Issuer*. The Warrant Agent will be acting as agent of the Issuer and will not assume any obligation or duty to or any relationship of agency or trust for the Warrantholders. All determinations and calculations by the Warrant Agent under these Conditions shall (save in the case of manifest error) be final and binding on the Issuer and the Warrantholders.

6. Adjustments to the Index

(a) *Successor Sponsor Calculates and Reports Index*. If the Index is (i) not calculated and announced by the Index Sponsor but is calculated and published by a successor to the Index Sponsor (the "**Successor Index Sponsor**") acceptable to the Issuer or (ii) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Sponsor or that successor index, as the case may be.

(b) *Modification and Cessation of Calculation of Index*. If:

(i) on or prior to a Valuation Date the Index Sponsor or (if applicable) the Successor Index Sponsor makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the

Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stocks, contracts or commodities and other routine events); or

(ii) on a Valuation Date the Index Sponsor or (if applicable) the Successor Index Sponsor fails to calculate and publish the Index,

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer (A) in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities/commodities that comprised the Index immediately prior to that change or failure (other than those securities that have since ceased to be listed on the relevant exchange); or (B) by reference to the price of the options or futures relating to (i) the Index or (ii) any exchange-traded fund over the Index.

(c) *Notice of Determinations*. All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of determination in accordance with Condition 9. For the avoidance of doubt, no notice will be given if the Issuer determines that adjustments will not be made.

7. Purchases

The Issuer or its related corporations may at any time purchase Warrants at any price in the open market or by tender or by private treaty. Any Warrants so purchased may be held or resold or surrendered for cancellation.

8. Meetings of Warrantholders; Modification

(a) *Meetings of Warrantholders*. The Warrant Agent Agreement contains provisions for convening meetings of the Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Warrant Agent Agreement) of a modification of the provisions of the Warrants or of the Warrant Agent Agreement.

At least 21 days' notice (exclusive of the day on which the notice is given and of the day on which the meeting is held) specifying the date, time and place of the meeting shall be given to the Warrantholders.

Such a meeting may be convened by the Issuer or by Warrantholders holding not less than ten per cent. of the Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Warrantholders whatever the number of Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warrantholders shall be binding on all the Warrantholders whether or not they are present at the meeting. Resolutions can be passed in writing if passed unanimously.

(b) *Modification*. The Issuer may, without the consent of the Warrantholders, effect (i) any modification of the provisions of the Warrants or the Master Instrument which is not materially prejudicial to the interests of the Warrantholders or (ii) any modification of the provisions of the Warrants or the Master Instrument which is of a formal, minor or technical nature, which is made to correct an obvious error or which is necessary in order to comply with mandatory provisions of Singapore law. Any such modification shall be binding on the Warrantholders and shall be notified to them by the Warrant Agent before the date such modification becomes effective or as soon as practicable thereafter in accordance with Condition 9.

9. Notices

(a) *Documents*. All cheques and other documents required or permitted by these Conditions to be sent to a Warrantholder or to which a Warrantholder is entitled or which the Issuer shall have agreed to deliver to a Warrantholder may be delivered by hand or sent by post addressed to the Warrantholder at his address appearing in the records maintained by CDP or, in the case of joint Warrantholders, addressed to the joint holder first named at his address appearing in the records maintained by CDP, and airmail post shall be used if that address is not in Singapore. All documents delivered or sent in accordance with this paragraph shall be delivered or sent at the risk of the relevant Warrantholder.

(b) *Notices.* All notices to Warrantholders will be validly given if published in English on the web-site of the SGX-ST. Such notices shall be deemed to have been given on the date of the first such publication. If publication on the web-site of the SGX-ST is not practicable, notice will be given in such other manner as the Issuer may determine. The Issuer shall, at least one month prior to the expiry of any Warrant, give notice of the date of expiry of such Warrant in the manner prescribed above, provided that if the tenure of the Warrant is less than one month, the Issuer shall publish the expiry notice as soon as practicable after the listing of the Warrant.

10. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Warrantholders, to create and issue further warrants so as to form a single series with the Warrants.

11. Early Termination for Illegality and Force Majeure, etc.

(a) *Illegality and Force Majeure, etc.* If the Issuer determines that, for reasons beyond its control, the performance of its obligations under the Warrants has become illegal or impractical in whole or in part for any reason, or the Issuer determines that, for reasons beyond its control, it is no longer legal or practical for it to maintain its hedging arrangements with respect to the Warrants for any reason, the Issuer may at its discretion and without obligation terminate the Warrants early by giving notice to the Warrantholders in accordance with Condition 9.

Should any one or more of the provisions contained in the Conditions be or become invalid, the validity of the remaining provisions shall not in any way be affected thereby.

(b) *Termination.* If the Issuer terminates the Warrants early, then the Issuer will, if and to the extent permitted by applicable law, pay an amount to each Warrantholder in respect of each Warrant held by such holder equal to the fair market value of a Warrant notwithstanding such illegality or impracticality less the cost to the Issuer of unwinding any underlying related hedging arrangements, all as determined by the Issuer in its sole and absolute discretion. Payment will be made in such manner as shall be notified to the Warrantholders in accordance with Condition 9.

12. Governing Law

The Warrants, the Instrument and the Warrant Agent Agreement will be governed by and construed in accordance with Singapore law. The Issuer and each Warrantholder (by its purchase of the Warrants) shall be deemed to have submitted for all purposes in connection with the Warrants, the Instrument and the Warrant Agent Agreement to the non-exclusive jurisdiction of the courts of Singapore.

13. Prescription

Claims against the Issuer for payment of any amount in respect of the Warrants will become void unless made within six years of the Expiry Date and, thereafter, any sums payable in respect of such Warrants shall be forfeited and shall revert to the Issuer.

14. Contracts (Rights of Third Parties) Act 2001 of Singapore

Unless otherwise provided in the Global Warrant, the Master Instrument and the Warrant Agent Agreement, a person who is not a party to any contracts made pursuant to the Global Warrant, the Master Instrument and the Warrant Agent Agreement has no rights under the Contracts (Rights of Third Parties) Act 2001 of Singapore to enforce any terms of such contracts. Except as expressly provided herein, the consent of any third party is not required for any subsequent agreement by the parties hereto to amend or vary (including any release or compromise of any liability) or terminate such contracts.

SUMMARY OF THE ISSUE

The following is a summary of the issue and should be read in conjunction with, and is qualified by reference to, the other information set out in this document and the Base Listing Document. Terms used in this Summary are defined in the Conditions.

Issuer:	Macquarie Bank Limited
Index:	The S&P 500® Index
The Warrants:	European Style Index Put Warrants relating to the Index
Number:	39,000,000 Warrants
Form:	The Warrants will be issued subject to, and with the benefit of, an instrument by way of deed poll dated 15 July 2022 (the "**Master Instrument**") and executed by the Issuer and a master warrant agent agreement dated 26 November 2004 (the "**Warrant Agent Agreement**") and made between the Issuer and the Warrant Agent.
Conversion Ratio (Number of units per Warrant):	0.000222 (i.e. every 4,500 Warrants initially relate to 1 index unit)
Cash Settlement Amount:	In respect of each Warrant, is the amount equal to: [(Strike Level - Closing Level) x Conversion Ratio] x Exchange Rate Where the Exchange Rate is the prevailing rate of exchange between the United States dollar to Singapore dollar as at or around 10:00 a.m. (New York time) on the Valuation Date as shown on Reuters provided that if the Reuters service ceases to display such information, such page as displays such information on such other services as may be selected by the Issuer
Denominations:	Warrants are represented by a global warrant in respect of all the Warrants.
Exercise:	Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by whether the Cash Settlement Amount (less any Exercise Expenses) is positive. If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 12:00 noon (Singapore time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date). The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) of the Warrants. In the event the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 12:00 noon (Singapore

	time) on the Expiry Date (or if the Valuation Date falls after the Expiry Date, the Expiry Date shall be the Business Day following the Valuation Date) and Warrantholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.
Trading Currency:	Singapore dollars
Transfers of Warrants:	Warrants may only be transferred in Board Lots (or integral multiples thereof). All transfers in Warrants, in the open market or otherwise, must be effected through a securities account with CDP. Title will pass upon registration of the transfer in the records of CDP.
Listing:	Application has been made to the SGX-ST for permission to deal in and for quotation of the Warrants and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Warrants. Issue of the Warrants is conditional on such listing being granted. It is expected that dealings in the Warrants on the SGX-ST will commence on or about 04 March 2025.
Governing Law:	The laws of Singapore
Warrant Agent:	Macquarie Capital Securities (Singapore) Pte. Limited
Further Issues:	Further issues which will form a single series with the Warrants will be permitted.

The above summary is qualified in its entirety by reference to the detailed information appearing elsewhere in this document and the Base Listing Document.

RISK FACTORS

The following risk factors are relevant to the Warrants:

(a) investment in Warrants involves substantial risks including market risk, liquidity risk, and the risk that the Issuer will be unable to satisfy its obligations under the Warrants. Investors should ensure that they understand the nature of all these risks before making a decision to invest in the Warrants. You should consider carefully whether Warrants are suitable for you in light of your experience, objectives, financial position and other relevant circumstances. Warrants are not suitable for inexperienced investors;

(b) the Warrants constitute direct, general and unsecured contractual obligations of the Issuer and no other person and will rank pari passu with the Issuer's other unsecured contractual obligations and with the Issuer's unsecured and unsubordinated debt other than indebtedness preferred by mandatory provisions of law. The Warrants are not secured by any collateral. Section 13A(3) of the Banking Act of 1959 of Australia provides that, in the event of the Issuer becoming unable to meet its obligations or suspends payments, the assets of the Issuer in Australia are to be available to satisfy specified liabilities in priority to all other liabilities of the Issuer (including the obligations of the Issuer under the Warrants). The specified liabilities include first, certain obligations of the Issuer to APRA in respect of amounts payable by APRA to holders of protected accounts and any administration costs incurred by APRA. Then as the next priority, other liabilities of the Issuer in Australia in relation to protected accounts that account-holders keep with the Issuer. Following this any debts that the Issuer owes to the Reserve Bank of Australia and any liabilities under an industry support contract (certified under section 11CB of the Banking Act) and then, any other liabilities, in order of their priority. If you purchase the Warrants you are relying upon the creditworthiness of the Issuer and have no rights under the Warrants against any other person. In particular, it should be noted that the Issuer issues a large number of financial instruments, including Warrants, on a global basis and, at any given time, the financial instruments outstanding may be substantial. If you purchase the Warrants you are relying upon the creditworthiness of the Issuer and have no rights under the Warrants against the sponsor of the underlying indices or any companies or trusts forming part of any indices to which the Warrants relate. The Issuer is not a fiduciary of Warrantholders (as defined in the Conditions) and has substantially no obligation to a Warrantholder other than to pay amounts in accordance with the terms thereof as set forth herein and in the Base Listing Document. The Issuer does not in any respect underwrite or guarantee the performance of any Warrant. Any profit or loss realised by a Warrantholder in respect of a Warrant upon exercise or otherwise due to changes in the value of such Warrant, or the indices underlying the Warrants, is solely for the account of such Warrantholder. In addition, the Issuer shall have the absolute discretion to put in place any hedging transaction or arrangement which it deems appropriate in connection with any Warrant or the applicable underlying indices. A reduction in the rating, if any, accorded to outstanding debt securities of the Issuer by any one of its rating agencies could result in a reduction in the trading value of the Warrants;

(c) the price of the Warrants may fall in value as rapidly as it may rise and Warrantholders may sustain a total loss of their investment. The risk of losing all or any part of the purchase price of a Warrant upon the expiry of the Warrants means that, in order to recover and realise a return on investment, investors in Warrants must generally anticipate correctly the direction, timing and magnitude of any change in the units of the underlying Index. Changes in the price of the level of the underlying Index and the relevant futures contracts can be unpredictable, sudden and large and such changes may result in the index or futures contracts moving in a direction which will negatively impact upon the return on an investment. In the case of Warrants relating to a share Index, certain events relating to such units of the Index or the Index components may cause adverse movements in the value and level of the underlying Index as a result of which, the Warrantholders may, in certain circumstances, sustain a total loss of their investment if the Closing Level of the underlying Index on the valuation date is equal to or higher than the exercise level;

(d) due to their nature, the Warrants can be volatile instruments and may be subject to considerable fluctuations in value. The price of the Warrants may fall in value as rapidly as it may rise due to, including but not limited to, variations in the frequency and magnitude of the changes in the level of the underlying index, dividends, interest rate, volatility, foreign exchange rates, the time remaining to expiry and the creditworthiness of the Issuer. Given only the futures contracts over the Index (but not the constituents of the Index) are trading during SGX-ST trading hours, the price of the Warrants will be directly affected by the price of such futures contracts (which may deviate from the last published index level);

(e) before exercising or selling the Warrants, the holders of Warrants should carefully consider, among other things, (i) the trading price of the Warrants; (ii) the value and volatility of the Index; (iii) the time remaining to expiration; (iv) the probable range of Cash Settlement Amounts; (v) any change(s) in interim interest rates and dividend yields; (vi) any change(s) in currency exchange rates; (vii) the depth of the market or liquidity of the Index; (viii) any related transaction costs; and (ix) the creditworthiness of the Issuer;

(f) fluctuations in the level of the underlying Index will affect the price of the Warrants but not necessarily in the same magnitude and direction, therefore, prospective investors intending to purchase Warrants to hedge their market risk associated with investing in the underlying Index should recognize the complexities of utilizing the Warrants in this manner;

(g) the settlement amount of Warrants at any time prior to the expiry of the Warrants may be less than the trading price of such Warrants at that time. The difference between the trading price and the settlement amount as the case may be, will reflect, among other things, a “time value” for the Warrants. The “time value” of the Warrants will depend partly upon the length of the period remaining to the expiry date of the Warrants and expectations concerning the value of the underlying Index or the components of the underlying Index;

(h) investors should note that an investment in the Warrants involves valuation risks in relation to the underlying asset. The value of the underlying asset may vary over time and may increase or decrease by reference to various factors, which may include changes in computation or composition, macro economic factors and market trends. Certain events relating to any indices underlying the Warrants require or permit the Issuer to make certain adjustments or amendments to the Conditions. However, the Issuer is not required to make an adjustment for every event that affects the underlying asset. If an event occurs that does not require the Issuer to adjust the Conversion Ratio or any other part of the Conditions, the market price of the Warrants and the return upon the exercise of the Warrants may be affected;

(i) as indicated in the Conditions, a Warrantholder must tender a specified number of Warrants at any one time in order to exercise. Thus, Warrantholders with fewer than the specified minimum number of Warrants in a particular series will either have to sell their Warrants or purchase additional Warrants, incurring transactions costs in each case, in order to realise their investment;

(j) unless otherwise specified in the Conditions, in the case of any exercise of the Warrants, there may be a time lag between the date on which the Warrants are exercised and the time the applicable settlement amount relating to such an event is determined. Any such delay between the time of exercise and the determination of the settlement amount will be specified in the Conditions. However such delay could be significantly longer, particularly in the case of a delay in the exercise of the Warrants arising from, a determination by the Issuer that a Market Disruption Event has occurred at any relevant time or that adjustments are required in accordance with the Conditions. That applicable settlement amount, may change significantly during any such period, and such movement or movements could decrease or modify the settlement amount of the Warrants;

(k) if, whilst any of the Warrants remain unexercised, trading in the shares or securities relating to or constituting the Index is suspended, trading of options or futures relating to the Index on any options or futures exchanges is suspended, or options or futures generally on any options and/or futures exchanges on which options relating to the Index are traded is suspended, or if the Index for whatever reason is not calculated, trading in the Warrants may be suspended for a similar period;

(l) in the case of the Warrants, certain events relating to indices permit the Issuer to make certain determinations in respect of the indices;

(m) a level for the Index (as defined in the Conditions) may be published by the Index Sponsor (as defined in the Conditions) at a time when one or more shares comprised in the Index are not trading. If this occurs on a Valuation Date (as defined in the Conditions) and there is no Market Disruption Event under the terms of the relevant Warrants then the value of such shares may not be included in the closing level of the Index. In addition, certain events relating to the Index (including a material change in the formula or the method of calculating the Index or a failure to publish the Index) permits the Issuer to determine the level of the Index on the basis of the formula or method last in effect prior to such change of formula;

(n) the Warrants are only exercisable on their expiry date and may not be exercised by Warrantholders prior to such expiry date. Accordingly, if on such expiry date the Cash Settlement Amount (where applicable) is zero or negative, a Warrantholder will lose the value of his investment;

(o) investors should note that there may be an exchange rate risk in the case of the Warrants where the Cash Settlement Amount may be converted from a foreign currency into Singapore dollars. Exchange rates between currencies are determined by forces of supply and demand in the foreign exchange markets. These forces are, in turn, affected by factors such as international balances of payments and other economic and financial conditions, government intervention in currency markets and currency trading speculation. Fluctuations in foreign exchange rates, foreign political and economic developments, and the imposition of exchange controls or other foreign governmental laws or restrictions applicable to such investments may affect the foreign currency market price and the exchange rate-adjusted equivalent price of the Warrants. Fluctuations in the exchange rate of any one currency may be offset by fluctuations in the exchange rate of other relevant currencies;

(p) investors should note that it is not possible to predict the price at which the Warrants will trade in the secondary market or whether such market will be liquid or illiquid. A decrease in the liquidity of the Warrants or the futures, derivatives or other security related to the Warrants may cause, in turn, an increase in the volatility associated with the price of such issue of

Warrants. The Issuer may, but is not obligated to, at any time, purchase Warrants at any price in the open market or by tender or private agreement. Any Warrants so purchased may be held or resold or surrendered for cancellation. As the Warrants are only exercisable on the expiry date, an investor will not be able to exercise his warrants to realize value in the event that the relevant issue becomes illiquid;

(q) in the event of any delisting of the Warrants from the SGX-ST (other than at expiry), the Issuer will use all reasonable efforts to list the Warrants on another exchange. If the Warrants are not listed or traded on any exchange, pricing information for the Warrants may be difficult to obtain and the liquidity of the Warrants may be adversely affected;

(r) two or more risk factors may simultaneously have an effect on the value of a Warrant such that the effect of any individual risk factor may not be predicted. No assurance can be given as to the effect any combination of risk factors may have on the value of a Warrant;

(s) in the ordinary course of their business, including without limitation in connection with the Issuer or its appointed designated market maker's market making activities, the Issuer and any of its respective subsidiaries and affiliates may effect transactions for their own account or for the account of their customers and hold long or short positions in the underlying units and/or indices or related derivatives. In addition, in connection with the offering of any Warrants, the Issuer and any of its respective subsidiaries and affiliates may enter into one or more hedging transactions with respect to the underlying units and/or indices or related derivatives. In connection with such hedging or market-making activities or with respect to proprietary or other trading activities by the Issuer and any of its respective subsidiaries and its affiliates, the Issuer and any of its respective subsidiaries and affiliates may enter into transactions in the underlying units and/or indices or related derivatives which may affect the market price, liquidity or value of the Warrants and which may affect the interests of Warrantholders;

(t) if the Issuer determines in good faith that the performance of its obligations under the Conditions has become unlawful or impractical in whole or in part, the Issuer may at its sole and absolute discretion and without obligation, terminate the Warrants prior to the expiry date, in which event the Issuer to the extent permitted by any relevant applicable law, will pay to each Warrantholder an amount as determined by the Issuer, in its sole and absolute discretion, in accordance with the Conditions. If the Issuer terminates the Warrants prior to the expiry date, the Issuer will, if and to the extent permitted by any relevant applicable law, pay each Warrantholder an amount to be determined by the Issuer, in its sole and absolute discretion, to be the fair market value of the Warrants immediately prior to such termination or otherwise determined as specified in the Conditions, notwithstanding the illegality or impracticality;

(u) the Issuer may enter into discount, commission or fee arrangements with brokers and/or any of its affiliates with respect to the primary or secondary market in the Warrants and such arrangement may present certain conflicts of interest for the brokers. The arrangements may or may not result in the benefit to investors in Warrants buying and selling Warrants through nominated brokers. Investors in the Warrants should note that any brokers with whom the Issuer has a commission arrangement does not, and cannot be expected to deal, exclusively in the Warrants, therefore any broker and/or its subsidiaries or affiliates may from time to time engage in transactions involving the shares in the underlying Index and/or structured products of other issuers over the same shares in the same underlying Index as the Warrants for their proprietary accounts and/or accounts of their clients. The fact that the same broker may deal simultaneously for different clients in competing products in the market place may affect the value of the Warrants and present certain conflicts of interests;

(v) third party individuals may comment on the Warrants on social media or other platforms from time to time. None of these third party individuals, whether sponsored by the Issuer or not, is an agent of the Issuer and such commentary is not the Issuer's advice or recommendation to invest in the Warrants. The Issuer is not responsible for any statements or comments made by such third party individuals. To the extent a fee is paid by the Issuer, such fee arrangement may present potential conflicts of interest for the individual;

(w) changes in Singapore tax law and/or policy may adversely affect Warrantholders. Warrantholders who are in any doubt as to the effects of any such changes should consult their stockbrokers, bank managers, accountants, solicitors or other professional advisers;

(x) as the Warrants are represented by a global warrant certificate which will be deposited with the CDP:

   (i) investors should note that no definitive certificate will be issued in relation to the Warrants;

   (ii) there will be no register of Warrantholders and each person who is for the time being shown in the records maintained by CDP as entitled to a particular number of Warrants by way of interest (to the extent of such number) in the global warrant certificate in respect of those Warrants represented thereby shall be treated as the holder of such number of Warrants;

   (iii) investors will need to rely on any statements received from their brokers/custodians as evidence of their interest in the Warrants; and

   (iv) notices to such Warrantholders will be published on the web-site of the SGX-ST. Investors will need to check the web-site of the SGX-ST regularly and/or rely on their brokers/custodians to obtain such notices; and

(y) the value of the Warrants depends upon, amongst other things, the ability of Issuer to fulfil its obligations under the terms which, in turn is primarily dependent on the financial prospects of the Issuer; and

(z) Foreign Account Tax Compliance withholding may affect payments on the Warrants.

Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986 ("FATCA") impose a new reporting regime and, potentially, a 30% withholding tax with respect to (i) certain payments from sources within the U.S., (ii) "foreign passthru payments" made to certain non-U.S. financial institutions that do not comply with this new reporting regime, and (iii) payments to certain investors that do not provide identification information with respect to interests issued by a participating non-U.S. financial institution.

"Passthru payments" means any withholdable payment and any "foreign passthru payment," which is currently not defined. The current proposed FATCA regulations ("**Proposed Regulations**") state that the Internal Revenue Service and the U.S. Treasury have determined, that withholding on "foreign passthru payments" is not required, pending further guidance and analysis. The Proposed Regulations provide that such withholding will not be effective before the date that is two years after the publication of final regulations defining the term “foreign pass-thru payment”.

While the Warrants are in dematerialised form and held within the clearing systems, in all but the most remote circumstances, it is not expected that FATCA will affect the amount of any payment received by the clearing systems. However, FATCA may affect payments made to custodians or intermediaries in the subsequent payment chain leading to the ultimate investor if any such custodian or intermediary generally is unable to receive payments free of FATCA withholding. It also may affect payment to any ultimate investor that is a financial institution that is not entitled to receive payments free of withholding under FATCA, or an ultimate investor that fails to provide its broker (or other custodian or intermediary from which it receives payment) with any information, forms, other documentation or consents that may be necessary for the payments to be made free of FATCA withholding. Investors should choose the custodians or intermediaries with care (to ensure each is compliant with FATCA or other laws or agreements related to FATCA) and provide each custodian or intermediary with any information, forms, other documentation or consents that may be necessary for such custodian or intermediary to make a payment free of FATCA withholding. An Issuer’s obligations under the Warrants are discharged once it has paid the clearing systems and an Issuer has therefore no responsibility for any amount thereafter transmitted through the clearing systems and custodians or intermediaries.

(aa) U.S. backup withholding and information reporting.

Because the Index is a U.S. index, any income generated from the Warrants may be considered U.S. source income. If the Warrants generate U.S. source income, a Warrantholder (whether they are U.S. or non-U.S.) may be subject to U.S. backup withholding under the U.S. Internal Revenue Code of 1986 (“**Code**”) with respect to certain amounts paid to such Warrantholder, unless the Warrantholder provides a correct U.S. taxpayer identification number, establishes proof of an applicable exemption prescribed by the Code, or otherwise complies with applicable requirements of the backup withholding rules under the Code.

Macro-economic risks

(ab) Macquarie Bank’s and the MBL Group’s business and results of operation have been and may, in the future, be adversely affected by financial markets, global credit and other economic and geopolitical challenges generally.

Macquarie Bank and/or its controlled entities’ (the “**MBL Group**”) businesses operate in or depend on the operation of global markets, including through exposures in securities, loans, derivatives and other activities and it is impacted by various factors it cannot control. In particular, uncertainty and volatility in global credit markets, liquidity constraints, increased funding costs, the level and volatility of interest rates, constrained access to funding, uncertainty concerning government shutdowns and debt ceilings, fluctuations or other significant changes in both equity and capital market activity, supply chain disruptions and labour shortages have adversely affected and may continue to adversely affect transaction flow in a range of industry sectors. These factors could also adversely affect the MBL Group’s access to, and costs of funding and in turn may negatively impact its liquidity and competitive position. Recent stress in the global banking sector, including bank failures, has heightened the risk of volatility in global financial markets.

Additionally, global markets may be adversely affected by the current or anticipated impact of climate change, extreme weather events or natural disasters, the emergence or continuation of widespread health emergencies or pandemics, cyberattacks or campaigns, military conflicts, including the Russia-Ukraine conflict, the Israeli-Palestinian conflict and escalating hostilities throughout the Middle East, terrorism or other geopolitical events such as rising tensions between the U.S. and China and concerns about a potential conflict involving Taiwan. The dynamic and constantly evolving sanctions environment, including the volume and nature of sanctions imposed during the Russia-Ukraine conflict, continues to drive heightened sanctions compliance risk and complexity in applying control frameworks across the market. The Russia-Ukraine conflict and the conflict in the Middle East have caused, and may continue to cause, supply shocks in energy, food and other commodities markets, disruption to global shipping lanes and supply chains, increased inflation, cybersecurity risks, increased volatility in commodity, currency and other financial markets, risk of recession in Europe and heightened geopolitical tensions. Moreover, hostile actions by the various parties in conflict, and any further measures taken by the U.S. or its allies, could continue to have negative impacts on regional and global energy, commodities and financial markets and macroeconomic conditions generally, adversely impacting the MBL Group and its customers, clients and employees.

Actions taken by central banks, including changes to official interest rate targets, balance sheet management and government-sponsored lending facilities are beyond the MBL Group’s control and difficult to predict. Sudden changes in monetary policy, for example in response to high inflation, could lead to financial market volatility and are likely to affect market interest rates and the value of financial instruments and other assets and liabilities, and can impact the MBL Group’s customers.

The MBL Group’s trading income may be adversely affected during times of subdued market conditions and client activity. Increased market volatility can lead to trading losses or cause the MBL Group to reduce the size of its trading activities in order to limit its risk exposure. Market conditions, as well as declines in asset values, may cause the MBL Group’s clients to transfer their assets out of the MBL Group’s funds or other products or their brokerage accounts and result in reduced net revenues.

The MBL Group’s returns from asset sales may also decrease if economic conditions deteriorate. In addition, if financial markets decline, revenues from the MBL Group’s products are likely to decrease. In addition, increases in volatility increase the level of the MBL Group’s risk weighted assets and increase the MBL Group’s capital requirements. Increased capital requirements may require the MBL Group to raise additional capital at a time, and on terms, which may be less favourable than the MBL Group would otherwise achieve during stable market conditions.

Sudden declines and significant volatility in the prices of assets may substantially curtail or eliminate the trading markets for certain assets, which may make it very difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces the MBL Group's ability to limit losses in such positions and difficulty in valuing assets may negatively affect the MBL Group's capital, liquidity or leverage ratios, increase funding costs and generally require the MBL Group to maintain additional capital.

Concerns about, or a default by, one or more institutions or by a sovereign could lead to market-wide liquidity problems, losses or defaults by other institutions, financial instruments losing their value and liquidity, and interruptions to capital markets that may further affect the MBL Group. Negative perceptions about the soundness of a financial institution can result in counterparties seeking to limit their exposure and depositors withdrawing their deposits, which can happen more quickly than in the past due to the rapid dissemination of negative information through social media channels and other advances in technology, further weakening the institution. Recent bank failures in the U.S. and Europe have heightened these concerns. The commercial soundness of many financial institutions may be closely interrelated as a result of credit, trading, clearing or other relationships among financial institutions. This risk is sometimes referred to as “systemic risk” and may adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms, hedge funds and exchanges that Macquarie Bank interacts with on a daily basis. If any of the MBL Group's counterpart financial institutions fail, the MBL Group's financial exposures to that institution may lose some or all of their value. Any of these events would have a serious adverse effect on the MBL Group's liquidity, profitability and value.

(ac) Macquarie Bank's and the MBL Group's ability to operate their businesses could be impaired if their liquidity is constrained.

Liquidity is essential to Macquarie Bank's and the MBL Group's business. Financial institutions have failed in the past due to lack of liquidity. Inadequate liquidity, or even the perception that Macquarie Bank's and the MBL Group's liquidity is inadequate, would pose a serious risk to their ability to operate. Macquarie Bank's and the MBL Group's liquidity may be impacted at any given time as a result of various factors, including deposit losses, market disruptions, macroeconomic shocks, increases to liquidity and regulatory capital requirements due to legal and regulatory changes, restrictive central bank actions such as quantitative tightening that may reduce monetary supply and increase interest rates, the insolvency of a major market participant or systemically important financial institution, any idiosyncratic event impacting Macquarie Bank's or the MBL Group's reputation and/or business, any other unexpected cash outflows or higher-than-anticipated funding needs. The uncertainties surrounding these factors could undermine confidence in Macquarie Bank and the MBL Group, or the financial system as a whole.

Factors beyond Macquarie Bank's and the MBL Group's control, such as periods of market stress, a fall in investor confidence or financial market illiquidity may increase their funding costs and reduce their access to conventional funding sources. Additionally, from time to time, regulations that impose increased liquidity requirements on financial institutions may be adopted. These regulations may require the Bank and the MBL Group to hold larger amounts of highly liquid assets and/or constrain the Bank's and the MBL Group's ability to raise funding or deploy capital. Further, Macquarie Bank's and the MBL Group's ability to liquidate assets may be impaired if there is not generally a liquid market for such assets, as well as in circumstances where other market participants are seeking to sell similar otherwise generally liquid assets at the same time, as is likely to occur in a liquidity or other market crisis or in response to changes in law or regulation.

Macquarie Bank and the MBL Group may need to raise funding from alternative sources if their access to stable and lower cost sources of funding, such as customer deposits and the equity and debt capital markets, is reduced. Those alternative sources of funding could be more expensive or also limited in availability. Macquarie Bank's and the MBL Group's funding costs could also be negatively affected by actions that they may take in order to satisfy their mandated liquidity coverage and net stable funding ratios or other regulatory requirements.

If Macquarie Bank and the MBL Group fail to effectively manage their liquidity, this could constrain their ability to fund or invest in their businesses, and thereby adversely affect their business, results of operations, prospects, financial performance or financial condition.

(ad) Failure of Macquarie Bank or the MBL Group to maintain their credit ratings and those of their subsidiaries could adversely affect their cost of funds, liquidity, competitive position and access to capital markets.

The credit ratings assigned to Macquarie Bank or the MBL Group and certain of their subsidiaries by rating agencies are based on their evaluation of a number of factors, including the MBL Group's ability to maintain a stable and diverse earnings stream, strong capital ratios, strong credit quality and risk management controls, funding stability and security, disciplined liquidity management and its key operating environments, including the availability of systemic support in Australia. In addition, a credit rating downgrade could be driven by the occurrence of one or more of the other risks identified in this section or by other events that are not related to the MBL Group where there has been no deterioration in its business, such as changes to the ratings methodology or criteria.

If these MBL Group entities fail to maintain their current credit ratings, this could (i) adversely affect Macquarie Bank's or the MBL Group's cost of funds, liquidity, competitive position, the willingness of counterparties to transact with the MBL Group and its ability to access capital markets or (ii) trigger Macquarie Bank's or the MBL Group's obligations under certain bilateral provisions in some of their trading and collateralised financing contracts. Under these provisions, counterparties could be permitted to terminate contracts with the MBL Group or require it to post collateral. Termination of Macquarie Bank's or a MBL Group entity's trading and collateralised financing contracts could cause them to sustain losses and impair their liquidity by requiring them to find other sources of financing or to make significant cash payments or securities movements.

(ae) Changes and increased volatility in currency exchange rates may adversely impact the MBL Group's financial results and its financial and regulatory capital positions.

While the MBL Group's consolidated financial statements are presented in Australian Dollars, a significant portion of the MBL Group's operating income is derived, and operating expenses are incurred, from its offshore business activities, which are conducted in a broad range of currencies. Changes in the rate at which the Australian Dollar is translated from other currencies can impact the MBL Group's financial statements and the economics of its business.

Although the MBL Group seeks to carefully manage its exposure to foreign currencies, in part through matching of assets and liabilities in local currencies and through the use of foreign exchange forward contracts to hedge its exposure, the MBL Group is still exposed to exchange risk. The risk becomes more acute during periods of significant currency volatility. Insofar as the MBL Group is unable to hedge or has not completely hedged its exposure to currencies other than the Australian Dollar, the MBL Group's reported profit and foreign currency translation reserve would be affected.

In addition, because the MBL Group's regulatory capital position is assessed in Australian Dollars, its capital ratios may be adversely impacted by a depreciating Australian Dollar, which increases the capital requirement for assets denominated in currencies other than Australian Dollars.

(af) Macquarie Bank's and the MBL Group's businesses are subject to the risk of loss associated with price volatility in the equity markets and other markets in which they operate.

Macquarie Bank and the MBL Group are exposed to changes in the value of financial instruments and other financial assets that are carried at fair market value, as well as changes to the level of their advisory and other fees, due to changes in interest rates, exchange rates, equity and commodity prices and credit spreads and other market risks. These changes may result from changes in economic conditions, monetary and fiscal policies, market liquidity, availability and cost of capital, international and regional political events, acts of war or terrorism, corporate, political or other scandals that reduce investor confidence in capital markets, natural disasters or pandemics or a combination of these or other factors.

Macquarie Bank and the MBL Group trade in foreign exchange, interest rate, commodity, bullion, energy, securities and other markets and are an active price maker in the derivatives market. Certain financial instruments that Macquarie Bank and/or the MBL Group hold and contracts to which they are a party are complex and these complex structured products often do not have readily available markets to access in times of liquidity stress. Additionally, a number of the markets Macquarie Bank and the MBL Group trade in, and in particular the energy markets, have or may experience increased levels of volatility as a result of uncertainty and supply chain disruptions related to ongoing developments, such as the Russia-Ukraine conflict, the conflict in the Middle East and rising interest rates.

In addition, reductions in equity market prices or increases in interest rates may reduce the value of Macquarie Bank's and the MBL Group's clients' portfolios, which in turn may reduce the fees they earn for managing assets in certain parts of their business. Increases in interest rates or attractive prices for other investments could cause Macquarie Bank's and the MBL Group's clients to transfer their assets out of their funds or other products.

Interest rate benchmarks around the world (for example, the London Inter-Bank Offered Rate ("**LIBOR**") have been subject to regulatory scrutiny and are subject to change. See also "Risk Factors – Legal and Regulatory Risks – The MBL Group may not manage risks associated with the replacement of interest rate benchmarks effectively".

Interest rate risk arises from a variety of sources including mismatches between the repricing periods of assets and liabilities. As a result of these mismatches, movements in interest rates can affect earnings or the value of the MBL Group. See also "Risk Factors – Inflation has had, and could continue to have, a negative effect on Macquarie Bank's or the MBL Group's business, results of operations and financial condition".

(ag) Macquarie Bank's and the MBL Group's businesses are subject to risks including trading losses, risks associated with market volatility and the risks associated with their physical commodities activities.

Macquarie Bank's and the MBL Group's commodities business primarily involves transacting with their clients to help them manage risks associated with their commodity exposures and Macquarie Bank and the MBL Group may also enter into commodity transactions on their own behalf. These transactions often involve Macquarie Bank and the MBL Group taking on exposure to price movements in the underlying commodities. Macquarie Bank and the MBL Group employ a variety of techniques and processes to manage these risks, including hedging, but, they may not fully hedge their risk and their risk management techniques may not be as effective as they intend for a variety of reasons, including unforeseen events occurring outside their risk modelling. For example, some products may have limited market liquidity and access to derivative markets may become constrained during periods of volatile commodity market conditions, increasing the cost of hedging instruments. Macquarie Bank's and the MBL Group's counterparty risk may also be elevated at times of high volatility because their counterparties may be more likely to be under financial stress, increasing their exposure to potential losses as a result of those counterparties defaulting or failing to perform their obligations. See also "Risk Factors – Counterparty credit risk – Failure of third parties to honour their commitments in connection with Macquarie Bank's and the MBL Group's trading, lending and other activities may adversely impact their business".

While most of Macquarie Bank's and the MBL Group's commodities markets activities involve financial exposures, from time to time they will also have physical positions, which expose them to the risks of owning and/or transporting commodities, some of which may be hazardous. Commodities involved in Macquarie Bank's and the MBL Group's intermediation activities and investments are also subject to the risk of unforeseen or catastrophic events, which are likely to be outside of their control. These risks may include accidents and failures with transportation and storage infrastructure, determinations made by exchanges, extreme weather events or other natural disasters, leaks, spills or release of hazardous substances, disruptions to global supply chains and shipping operations, changes to local legislation and regulation, government action (for example, energy price caps or emergency measures) or hostile geopolitical events (including the ongoing Russia-Ukraine conflict and conflict in the Middle East and any potential conflict as a result of rising tensions between China and Taiwan and the U.S.). The occurrence of any of such events may prevent Macquarie Bank and the

MBL Group from performing under their agreements with clients, may impair their operations or financial results and may result in litigation, regulatory action, negative publicity or other reputational harm. Also, while Macquarie Bank and the MBL Group seek to insure against potential risks, insurance may be uneconomic to obtain, the insurance that they have may not be adequate to cover all their losses or they may not be able to obtain insurance to cover some of these risks. There may also be substantial costs in complying with extensive and evolving laws and regulations relating to Macquarie Bank's and the MBL Group's commodities and risk management related activities and investments including energy and climate change laws and regulations worldwide. Increasingly complex sanctions regimes implemented by countries globally have increased risk and uncertainty in some areas of the commodities sector, by prohibiting the continuation of, or requiring significant restructuring of, large and complex transactions and potentially affecting planned exit strategies. See also "Risk Factors – The MBL Group is subject to the risk of loss as a result of not complying with laws governing financial crime, including sanctions".

(ah) Funding constraints of investors may impact Macquarie Bank's and/or the MBL Group's income.

Macquarie Bank and the MBL Group generate a portion of their income from the sale of assets to third parties. If buyers are unable to obtain financing to purchase assets that Macquarie Bank and/or the MBL Group currently hold or purchase with the intention to sell in the future, Macquarie Bank and/or the MBL Group may be required to hold investment assets for longer than they intended or sell these assets at lower prices than they historically would have expected to achieve, which may lower their rate of return on these investments and require funding for periods longer than they have anticipated.

(ai) Inflation has had, and could continue to have, a negative effect on Macquarie Bank's or the MBL Group's business, results of operations and financial condition.

Inflationary pressures have affected economies, financial markets and market participants worldwide. Central bank responses to inflationary pressures have resulted in higher market interest rates and aggressive balance sheet policy, which has contributed and may continue to contribute to elevated financial and capital market volatility and significant changes to asset values. Macquarie Bank and the MBL Group expect elevated levels of inflation may result in higher labour costs and other operating costs, thus putting pressure on Macquarie Bank's and the MBL Group's expenses. Central bank actions in response to elevated inflation may lead to slow economic growth and increase the risk of recession, which could adversely affect Macquarie Bank's and the MBL Group's clients, businesses and results of operations.

(aj) The MBL Group's businesses could suffer losses due to climate change.

The MBL Group's businesses could also suffer losses due to climate change. Climate change is systemic in nature and is a significant long-term driver of both financial and non-financial risks. Climate change related impacts include physical risks from changing climatic conditions which could result from increased frequency and/or severity of adverse weather events. Such disasters could disrupt the MBL Group's operations or the operations of customers or third parties on which the MBL Group rely. Over the longer term, these events could impact the ability of the MBL Group's clients or customers to repay their obligations, reduce the value of collateral, negatively impact asset values and result in other effects. Additionally, climate change could result in transition risks such as changes to laws and regulations, technology development and disruptions and changes in consumer and market preferences towards low carbon goods and services. These factors could restrict the scope of the MBL Group's existing businesses, limit the MBL Group's ability to pursue certain business activities and offer certain products and services, amplify credit and market risks, negatively impact asset values, result in litigation, regulatory scrutiny and/or action, negative publicity or other reputational harm and/or otherwise adversely impact the MBL Group, its business or its customers.

Climate risks can also arise from the inconsistencies and conflicts in the manner in which climate policy and financial regulation is implemented in the regions where the MBL Group operates, including initiatives to apply and enforce policy and regulation with extraterritorial effect. Legislative or regulatory uncertainties and changes are also likely to result in higher regulatory, compliance, credit, reputation and other risks and costs.

The MBL Group’s ability to meet its climate-related goals, targets and commitments, including its goal to achieve net zero emissions in its own business operations across Scope 1 and 2 by FY2025 and its goal to align its financing activity with the global goal of net zero emissions by 2050, is subject to risks and uncertainties, many of which are outside of the MBL Group’s control, such as technology advances, public policies and challenges related to capturing, verifying, analysing and disclosing emissions and climate-related data. Failure to effectively manage these risks could adversely affect the MBL Group's business, prospects, reputation, financial performance or financial condition.

Legal and regulatory risks

(ak) Many of Macquarie Bank’s and the MBL Group’s businesses are highly regulated and they could be adversely affected by temporary and permanent changes in law, regulations and regulatory policy.

The MBL Group operates various kinds of businesses across multiple jurisdictions or sectors which are regulated by more than one regulator. Additionally, some members of the Macquarie Group own or manage assets and businesses that are regulated. The MBL Group’s businesses include an “authorised deposit-taking institution” (“**ADI**”) in Australia (regulated by APRA), a credit institution in Ireland (regulated by the Central Bank of Ireland), bank branches in the United Kingdom, the Dubai International Finance Centre and Singapore and representative offices in the U.S., South Africa, Brazil and Switzerland. The regulations vary from country to country but generally are designed to protect depositors and the banking system as a whole, not holders of Macquarie Bank’s securities or creditors. In addition, as a diversified financial institution, many of the MBL Group’s businesses are subject to financial services regulation other than prudential banking regulation, as well as laws, regulations and oversight specific to the industries applicable to the MBL Group’s businesses and assets. Failure to comply with any laws or regulations which the MBL Group is subject to could adversely affect its business, prospects, reputation or financial condition.

Regulatory agencies and governments frequently review and revise banking and financial services laws, security and competition laws, fiscal laws and other laws, regulations and policies, including fiscal policies. Changes to laws, regulations or policies, including changes in interpretation or implementation of laws, regulations or policies, could substantially affect Macquarie Bank and the MBL Group or their businesses, the products and services Macquarie Bank and the MBL Group offer or the value of their assets, or have unintended consequences or impacts across Macquarie Bank’s and the MBL Group’s business. These may include imposing more stringent liquidity requirements and capital adequacy, increasing tax burdens generally or on financial institutions or transactions, limiting the types of financial services and products that can be offered and/or increasing the ability of other providers to offer competing financial services and products, as well as changes to prudential regulatory requirements. Global economic conditions and increased scrutiny of the governance, culture, remuneration and accountability in the banking sector have led to increased supervision and regulation, as well as changes in regulation in the markets in which Macquarie Bank and the MBL Group operate and may lead to further significant changes of this kind. Health, safety, environmental and social laws and regulations can also change rapidly and significantly. The occurrence of any adverse health, safety, environmental or social event, or any changes, additions to, or more rigorous enforcement of, health, safety, environmental and social standards could have a significant impact on operations and/or result in material expenditures.

In some countries in which the MBL Group does business or may in the future do business, in particular in emerging markets, the laws and regulations are uncertain and evolving, and it may be difficult for the MBL Group to determine the requirements of local laws in every market. The MBL Group's inability to remain in compliance with local laws in a particular market could have a significant and negative effect not only on its businesses in that market but also on its reputation generally.

In addition, regulation is becoming increasingly extensive and complex and in many instances requires the MBL Group to make complex judgments, which increases the risk of non-compliance. Some areas of regulatory change involve multiple jurisdictions seeking to adopt a coordinated approach or certain jurisdictions seeking to expand the territorial reach of their regulation. The nature and impact of future changes are unpredictable, beyond Macquarie Bank's and the MBL Group's control and may result in potentially conflicting requirements, resulting in additional legal and compliance expenses and changes to their business practices that adversely affect their profitability.

APRA may introduce new prudential regulations or modify existing regulations, including those that apply to Macquarie Bank as an ADI. Any such event could result in changes to the organisational structure of the MBL Group and/or the Macquarie Group and adversely affect the MBL Group. Macquarie Bank and its subsidiaries are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Macquarie Bank. Restrictions or regulatory action of that kind could impede access to funds that Macquarie Bank needs to make payments on its obligations, including debt obligations, or dividend payments.

(al) The MBL Group is subject to the risk of loss as a result of not complying with laws governing financial crime, including sanctions.

The MBL Group is subject in its operations worldwide to laws and regulations relating to corrupt and illegal payments, counter-terrorism financing, anti-bribery and corruption and adherence to anti-money laundering obligations, as well as laws, sanctions and economic trade restrictions relating to doing business with certain individuals, groups and countries. The geographical diversity of its operations, employees, clients and customers, as well as the vendors and other third parties that it deals with, increases the risk that it may be found in violation of financial crime related laws. Emerging financial crime risk typologies could also limit the MBL Group's ability to track the movement of funds thereby heightening the risk of the MBL Group breaching financial crime related laws, sanctions or bribery and corruption laws. The MBL Group's ability to comply with relevant laws is dependent on its detection and reporting capabilities, control processes and oversight accountability. Additionally, the current sanctions environment remains dynamic and constantly evolving. Increasingly complex sanctions and disclosure regimes, which often differ or are not aligned across countries, could adversely affect the MBL Group's business activities and investments, as well as expose it to compliance risk and reputational harm.

A failure to comply with these requirements and expectations, even if inadvertent, or resolve any identified deficiencies could subject the MBL Group to significant penalties, revocation, suspension, restriction or variation of conditions of operating licenses, adverse reputational consequences, a breach of the MBL Group's contractual arrangements, litigation by third parties (including potentially class actions) or limitations on its ability to do business.

(am) Macquarie Bank and the MBL Group may be adversely affected by increased governmental and regulatory scrutiny or negative publicity.

Governmental scrutiny from regulators, legislative bodies and law enforcement agencies with respect to matters relating to the financial services sector generally, and Macquarie Bank's business operations, capital, liquidity, financial and non-financial risk management and other matters, has increased dramatically in recent years. The political and public sentiment regarding financial institutions has resulted in a significant amount of adverse press coverage, as well as adverse statements or charges by regulators or other government officials, and in some cases, to increased regulatory scrutiny, enforcement actions and litigation. Responding to and addressing such matters, regardless of the ultimate outcome, is time-consuming, expensive, can adversely affect investor confidence and can divert the time and effort of the MBL Group's staff (including senior management) from their business.

Investigations, inquiries, penalties and fines sought by regulatory authorities have increased substantially over the last several years, with regulators exercising their enhanced enforcement powers in commencing enforcement actions or with advancing or supporting legislation targeted at the financial services industry. If the MBL Group is subject to adverse regulatory findings, the financial penalties could have a material adverse effect on its results of operations. Adverse publicity, governmental scrutiny and legal and enforcement proceedings can also have a negative impact on the MBL Group's reputation with clients and on the morale and performance of its employees.

(an) Litigation and regulatory actions may adversely impact Macquarie Bank and the MBL Group's results of operations.

Macquarie Bank and the MBL Group may, from time to time, be subject to material litigation and regulatory actions, for example, as a result of inappropriate documentation of contractual relationships, class actions or regulatory breaches, which, if they crystallise, may adversely impact upon their results of operations and financial condition in future periods or their reputation. Macquarie Bank and the MBL Group entities regularly obtain legal advice and make provisions, as deemed necessary. There is a risk that any losses may be larger than anticipated or provided for or that additional litigation, regulatory actions or other contingent liabilities may arise. Furthermore, even where monetary damages may be relatively small, an adverse finding in a regulatory or litigation matter could harm Macquarie Bank's and the MBL Group's reputation or brand, thereby adversely affecting their business.

(ao) The MBL Group may not manage risks associated with the replacement of interest rate benchmarks effectively.

LIBOR and other interest rate benchmarks (collectively, the "**IBORs**") have been the subject of ongoing national and international regulatory scrutiny and reform. The LIBOR administrator ceased publication of non-USD LIBOR and one-week and two-months USD LIBOR on a permanent or representative basis on 31 December 2021, and ceased publication of all other USD LIBOR tenors on 1 July 2023. The transition away from and discontinuance of established benchmark rates and the adoption of alternative reference rates ("**ARR**") by the market may pose a number of risks for the MBL Group, its clients, and the financial services industry more widely. These include, but are not limited to:

- Conduct risks – where, by undertaking actions to transition away from using the IBORs, the MBL Group faces conduct risks which may lead to client complaints, regulatory sanctions or reputational impact.

- Legal and execution risks – relating to documentation changes required for new ARR products and for the transition of legacy contracts to ARRs.

- Financial risks and pricing risks – any changes in the pricing mechanisms of financial instruments linked to IBOR or ARRs which could impact the valuations of these instruments.

- Operational risks – due to the potential need for the MBL Group, its clients and the market to adapt information technology systems, operational processes and controls to accommodate one or more ARRs for a large volume of trades.

Any of these factors may have a material adverse effect on the MBL Group's business, results of operations, financial condition and prospects.

Counterparty credit risk

(ap) Failure of third parties to honour their commitments in connection with Macquarie Bank's and the MBL Group's trading, lending and other activities may adversely impact their business.

Macquarie Bank and the MBL Group are exposed to potential losses as a result of an individual, counterparty or issuer being unable or unwilling to honour its contractual obligations. Macquarie Bank and the MBL Group are also exposed to potential concentration risk arising from individual exposures or other concentrations including to industries or countries. Macquarie Bank and the MBL Group assume counterparty risk in connection with their lending, trading, derivatives and other businesses where they rely on the ability of third parties to satisfy their financial obligations to them in full and on a timely basis. Macquarie Bank's and the MBL Group's recovery of the value of the resulting credit exposure may be adversely affected by a number of factors, including declines in the financial condition of the counterparty, the value of collateral they hold and the market value of counterparty obligations they hold. Changes in sanctions laws may affect the credit condition of their counterparties, with those whose businesses were developed around the ability to trade in or utilise now-sanctioned commodities more likely to have been negatively affected. A period of low or negative economic growth, changes in market conditions or stressed or volatile markets and/or a rise in unemployment could also adversely impact the ability of Macquarie Bank's and the MBL Group's consumer and/or commercial borrowers or counterparties to meet their financial obligations and negatively impact Macquarie Bank's and the MBL Group's credit portfolio. Consumers have been and may continue to be negatively impacted by inflation, resulting in drawdowns of savings or increases in household debt. Higher interest rates, which have increased debt servicing costs for some businesses and households, may adversely impact credit quality, particularly in a period of low or negative economic growth. If the macroeconomic environment worsens, Macquarie Bank's and the MBL Group's credit portfolio and allowance for credit losses could be adversely impacted. Please refer to Note 33 of the Macquarie Bank 2024 Financial Report for details on the concentration of credit risk by significant geographical locations and counterparty types.

Macquarie Bank and the MBL Group are also subject to the risk that their rights against third parties may not be enforceable in all circumstances. Macquarie Bank's and the MBL Group's inability to enforce their rights may result in losses.

(aq) Macquarie Bank and the MBL Group may experience impairments in their loans, investments and other assets.

Macquarie Bank and its subsidiaries recorded A$49 million of credit and other impairment charges for the financial year ended 31 March 2024, including A$34 million for net credit impairment reversals, and A$15 million for net other impairment reversals on interests in associates and joint ventures, intangible assets and other non-financial assets. Credit and other impairments may be required in future periods depending upon the credit quality of Macquarie Bank's counterparties or if the market value of assets similar to those held were to decline. Credit and other impairment charges may also vary following a change to the inputs or forward-looking information used in the determination of expected credit losses. Please refer to Note 12 of the Macquarie Bank 2024 Financial Report for further information on the determination of expected credit losses.

Sudden declines and significant volatility in the prices of assets may substantially curtail or eliminate the trading markets for certain assets, which may make it very difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces Macquarie Bank's and the MBL Group's ability to limit losses in such positions and the difficulty in valuing assets may negatively affect their capital, liquidity or leverage ratios, increase their funding costs and generally require them to maintain additional capital.

Operational risks

(ar) Macquarie Bank's and the MBL Group's ability to retain and attract qualified employees is critical to the success of their business and the failure to do so may materially adversely affect their performance.

Macquarie Bank and the MBL Group's employees are their most important resource, and their performance largely depends on the talents and efforts of highly skilled individuals. Macquarie Bank's and the MBL Group's continued ability to compete effectively in their businesses and to expand into new business areas and geographic regions depends on their ability to retain and motivate their existing employees and attract new employees. Competition from within the financial services industry and from businesses outside the financial services industry, such as professional service firms, hedge funds, private equity funds and venture capital funds, for qualified employees has historically been intense. Remuneration costs required to attract and retain employees may increase and the competitive market for talent may further intensify. Recent employment conditions have made the competition to hire and retain qualified employees more challenging and costly. Attrition rates may also be impacted by factors such as changes in worker expectations, concerns and preferences, including an increased demand for remote work options and other flexibility in the post-COVID-19 environment.

In order to attract and retain qualified employees, Macquarie Bank and the MBL Group must compensate such employees at or above market levels. Typically, those levels have caused employee remuneration to be the MBL Group's greatest expense as its performance-based remuneration has historically been cash and equity based and highly variable. Recent market events have resulted in increased regulatory and public scrutiny of corporate remuneration policies and the establishment of criteria against which industry remuneration policies may be assessed. As a regulated entity, Macquarie Bank may be subject to limitations on remuneration practices (which may or may not affect its competitors). These limitations may require Macquarie Bank and the MBL Group to further alter their remuneration practices in ways that could adversely affect their ability to attract and retain qualified and talented employees.

Current and future laws (including laws relating to immigration and outsourcing) may restrict Macquarie Bank's and the MBL Group's ability to move responsibilities or personnel from one jurisdiction to another. This may impact Macquarie Bank's and the MBL Group's ability to take advantage of business and growth opportunities or potential efficiencies.

(as) Macquarie Bank and the MBL Group may incur financial loss, adverse regulatory consequences or reputational damage due to inadequate or failure in internal or external operational systems and infrastructures, people and processes.

Macquarie Bank and the MBL Group's businesses depend on their ability to process and monitor, on a daily basis, a very large number of transactions, many of which are highly complex, across numerous and diverse markets in many currencies. While Macquarie Bank and the MBL Group employ a range of risk monitoring and risk mitigation techniques, those techniques and the judgments that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. As such, Macquarie Bank and the MBL Group may, in the course of their activities, incur losses. There can be no assurance that the risk management processes and strategies that Macquarie Bank and the MBL Group have developed will adequately anticipate or be effective in addressing market stress or unforeseen circumstances. For a further discussion of Macquarie Bank's and the MBL Group's risk management policies and procedures, please refer to Note 33 of the Macquarie Bank 2024 Financial Report.

Macquarie Bank and the MBL Group also face the risk of operational failure, termination or capacity constraints of any of the counterparties, clearing agents, exchanges, clearing houses or other financial intermediaries Macquarie Bank and the MBL Group use to facilitate their securities or derivatives transactions, and as Macquarie Bank’s and the MBL Group’s interconnectivity with their clients and counterparties grows, the risk to Macquarie Bank and the MBL Group of failures in their clients’ and counterparties’ systems also grows. Any such failure, termination or constraint could adversely affect Macquarie Bank’s and the MBL Group’s ability to effect or settle transactions, service their clients, manage their exposure to risk, meet their obligations to counterparties or expand their businesses or result in financial loss or liability to their clients and counterparties, impairment of their liquidity, disruption of their businesses, regulatory intervention or reputational damage.

As Macquarie Bank’s and the MBL Group’s client base, business activities and geographical reach expands, developing and maintaining their operational systems and infrastructure becomes increasingly challenging. Macquarie Bank and the MBL Group must continuously update these systems to support their operations and growth, which may entail significant costs and risks of successful integration. Macquarie Bank’s and the MBL Group’s financial, accounting, data processing or technology assets may fail to operate properly or be disrupted as a result of events that are wholly or partially beyond their control, such as a malicious cyber-attack or a disruption event at a third-party supplier.

The MBL Group’s businesses manage a large volume of sensitive data and rely on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in their data management systems and technology, and in those managed, processed and stored by third parties on behalf of the MBL Group. Inadequate data governance, management and control across the data lifecycle, which include the capture, processing, retention, publication, use, archiving and disposal of data, could lead to poor decision making in the provision of credit as well as affecting the MBL Group’s data management regulatory obligations, all of which may cause the MBL Group to incur losses or lead to regulatory actions.

Macquarie Bank and the MBL Group are subject to laws, rules and regulations in a number of jurisdictions regarding compliance with their privacy policies and the disclosure, collection, use, sharing and safeguarding of personally identifiable information of certain parties, such as their employees, customers, suppliers, counterparties and other third parties, the violation of which could result in litigation, regulatory fines and enforcement actions. Furthermore, a breach, failure or other disruption of Macquarie Bank’s and the MBL Group’s data management systems and technology, or those of their third-party service providers, could lead to the unauthorised or unintended release, misuse, loss or destruction of personal or confidential data about their customers, employees or other third parties in their possession. A purported or actual unauthorised access or unauthorised disclosure of personal or confidential data could materially damage Macquarie Bank’s and the MBL Group’s reputation and expose Macquarie Bank and the MBL Group to liability for violations of privacy and data protection laws.

Macquarie Bank and the MBL Group are exposed to the risk of loss resulting from the failure of their internal or external processes and systems, such as from the disruption or failure of their IT systems, or from external suppliers and service providers including public and private cloud-based technology platforms. Such operational risks may include theft and fraud, failure to effectively implement employment practices and inadequate workplace safety, improper business practices, mishandling of client moneys or assets, client suitability and servicing risks, product complexity and pricing and valuation risk or improper recording, evaluating or accounting for transactions or breaches of their internal policies and regulations. There is increasing regulatory and public scrutiny concerning the appropriate management of data and the resilience of outsourced and offshore activities and their associated risks. If Macquarie Bank and the MBL Group fail to manage these risks appropriately, they may incur financial losses and/or regulatory intervention and penalties and damage to their reputation which may impact their ability to attract and retain clients who may or may not be directly affected.

Macquarie Bank and the MBL Group are also exposed to the risk of loss and adverse impact to external stakeholders, resulting from their business activities, including the actions or inactions of their employees, contractors and external service providers operating in markets globally. Conduct risks can arise from human errors, lack of reasonable care and diligence exercised or intentional malfeasance, fraud and other misconduct, including the misuse of client information in connection with insider trading or for other purposes, even if promptly discovered and remediated, can result in reputational damage and material losses and liabilities for Macquarie Bank and the MBL Group.

Whilst Macquarie Bank and the MBL Group have a range of controls and processes to minimise their conduct risk exposure and identify and manage employee behaviours in line with their risk management policies, it is not always possible to deter or prevent employee misconduct. The precautions Macquarie Bank and the MBL Group take to prevent and detect this activity may not be effective in all cases, which could result in financial losses, regulatory intervention and reputational damage.

(at) A cyber-attack, information or security breach, or a technology disruption event of Macquarie Bank or the MBL Group or of a third-party supplier could adversely affect Macquarie Bank's or the MBL Group's ability to conduct their business, manage their exposure to risk or expand their businesses. This may result in the disclosure or misuse of confidential or proprietary information and an increase in Macquarie Bank's or the MBL Group's costs to maintain and update their operational and security controls and infrastructure.

The MBL Group's businesses depend on the security and efficacy of its data management systems and technology, as well as those of third parties with whom it interacts or on whom it relies. To access the MBL Group's network, products and services, its customers and other third parties may use personal mobile devices or computing devices that are outside of its network environment and are subject to their own cybersecurity risks. While the MBL Group seeks to operate in a control environment that limits the likelihood of a cyber and information security incident, and to ensure that the impact of a cyber and information security incident can be minimised by information security capability and incident response, there can be no assurances that the MBL Group's security controls will provide absolute security against a dynamic external threat environment.

Cyber and information security risks for financial institutions have increased in recent years, in part because of the proliferation of new technologies, the use of internet and telecommunications technology, the increase in remote working arrangements and the increased sophistication and activities of attackers (including hackers, organised criminals, terrorist organisations, hostile state-sponsored activity, disgruntled individuals, activists and other external parties). These risks have grown more acute due to advances in artificial intelligence, such as the use of machine learning and generative artificial intelligence, which has allowed malicious actors to develop more advanced social engineering attacks, including targeted phishing attacks. Global events and geopolitical instability may increase security threats targeted at financial institutions. Targeted social engineering attacks are becoming more sophisticated and are extremely difficult to prevent and requires the exercise of sound judgment and vigilance by the MBL Group's employees when they are targeted by such attacks. The techniques used by hackers change frequently and may not be recognised until launched or until after a breach has occurred. Additionally, the existence of cyber-attacks or security breaches at the MBL Group's suppliers may also not be disclosed to it in a timely manner.

Despite efforts to protect the integrity of the MBL Group's systems through the implementation of controls, processes, policies and other protective measures, there is no guarantee that the measures the MBL Group continues to take will provide absolute security or recoverability given that the techniques used in cyber-attacks are complex, executed rapidly, frequently evolving and as a result are difficult to prevent, detect and respond to.

Due to increasing consolidation, interdependence and complexity of financial entities and technology systems, a technology failure, cyber-attack or other information or security breach that significantly degrades, deletes or compromises the systems or data of one or more financial entities could have a material impact on counterparties or other market participants, including the MBL Group. This consolidation, interconnectivity and complexity increases the risk of operational failure, on both individual and industry-wide bases, as disparate systems need to be integrated. Any third-party technology failure, cyber-attack or other information or security breach, termination or constraint could, among other things, adversely affect the MBL Group's ability to effect transactions, service its clients, manage its exposure to risk or expand its businesses.

The MBL Group anticipates cyber-attacks will continue to occur because perpetrators are well resourced, deploying highly sophisticated techniques including artificial intelligence based attacks, which are evolving rapidly. This challenges its ability to implement effective controls measures to prevent or minimise damage that may be caused by all information security threats.

Cyber-attacks or other information or security breaches, whether directed at the MBL Group or third parties, may result in a material loss or have adverse consequences for the MBL Group, including operational disruption, financial losses, reputational damage, theft of intellectual property and customer data, violations of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in its security measures and additional compliance costs, all of which could have a material adverse impact on the MBL Group.

(au) Macquarie Bank's and the MBL Group's operations rely on their ability to maintain an appropriately staffed workforce, and on the competence, engagement, health, safety and wellbeing of employees and contractors.

Macquarie Bank's and the MBL Group's ability to operate their businesses efficiently and profitably, to offer products and services that meet the expectations of their clients and customers, and to maintain an effective risk management framework is highly dependent on their ability to staff their operations appropriately and on the competence, integrity and health, safety and wellbeing of their employees and contractors.

Macquarie Bank's and the MBL Group's operations could be impaired if the measures they take to ensure the health, safety and wellbeing of their employees and contractors are ineffective, or if any external party on which they rely fails to take appropriate and effective actions to protect the health and safety of their employees and contractors.

(av) The MBL Group could suffer losses due to hostile, catastrophic or unforeseen events, including due to environmental and social factors.

The MBL Group's businesses are subject to the risk of unforeseen, hostile or catastrophic events, many of which are outside of its control, including natural disasters, extreme weather events (such as persistent winter storms or protracted droughts), leaks, spills, explosions, release of toxic substances, fires, accidents on land or at sea, terrorist attacks, military conflict including the ongoing Russia-Ukraine conflict and conflict in the Middle East and any potential conflict as a result of rising tensions between China and Taiwan and the U.S., or other hostile or catastrophic events.

Any significant environmental change or external event (including increased frequency and severity of storms, floods and other catastrophic events such as earthquakes, persistent changes in precipitation levels, rising average global temperatures, rising sea levels, pandemics, other widespread health emergencies, civil unrest, geopolitical or terrorism events) has the potential to disrupt business activities, impact the MBL Group's operations or reputation, increase credit risk and other credit exposures, damage property and otherwise affect the value of assets held in the affected locations and the MBL Group's ability to recover amounts owing to it.

The occurrence of any such events may prevent the MBL Group from performing under its agreements with clients, may impair its operations or financial results, and may result in litigation, regulatory action, negative publicity or other reputational harm. The MBL Group may also not be able to obtain insurance to cover some of these risks and the insurance that it has may be inadequate to cover its losses. Any such long-term, adverse environmental or social consequences could prompt the MBL Group to exit certain businesses altogether. In addition, such an event or environmental change (as the case may be) could have an adverse impact on economic activity, consumer and investor confidence, or the levels of volatility in financial markets.

The MBL Group also faces increasing public scrutiny, laws and regulations related to environmental, social and governance ("**ESG**") factors, including concerns in respect of "greenwashing" practices. The MBL Group risks damage to its brand and reputation if it fails to act responsibly in a number of areas, such as diversity and inclusion, environmental stewardship, respecting the rights of Indigenous Peoples, support for local communities, corporate governance and transparency and considering ESG factors (including human rights breaches such as modern slavery) where relevant when conducting its business, including under its investment and procurement processes. The MBL Group is also subject to competing demands from different stakeholder groups with divergent views on such ESG-related factors, including by governmental and regulatory officials in various geographical markets in which it operates and invests. Failure to effectively manage these risks, including managing ESG-related expectations across varied stakeholder interests, may result in breaches of MBL Group's statutory obligations and harm to its reputation, and could adversely affect the MBL Group's business, prospects, reputation, financial performance or financial condition.

(aw) Failure of the MBL Group's insurance carriers or its failure to maintain adequate insurance cover could adversely impact its results of operations.

The MBL Group maintains insurance that it considers to be prudent for the scope and scale of its activities. If the MBL Group's insurance carriers fail to perform their obligations to the MBL Group and/or its third-party cover is insufficient for a particular matter or group of related matters, its net loss exposure could adversely impact its results of operations.

(ax) The MBL Group is subject to risks in using custodians.

Certain products the MBL Group manages depend on the services of custodians to carry out certain securities transactions. Securities held at custodians are typically segregated. In the event of the insolvency of a custodian, the MBL Group might not be able to recover equivalent unsegregated assets in full as the beneficiaries of these products will rank among the custodian's unsecured creditors. In addition, the cash held with a custodian in connection with these products will not be segregated from the custodian's own cash, and the creditors of these products will therefore rank as unsecured creditors in relation to the cash they have deposited.

(ay) Macquarie Bank may be exposed to contagion risk as it does not control the management, operations or business of entities in the Macquarie Group that are not part of the MBL Group.

Entities in the Macquarie Group that are not part of the MBL Group may establish or operate businesses separately from the businesses of the MBL Group, and are not obligated to support the businesses of the MBL Group, other than as required by APRA prudential standards. The activities of those entities may have an impact on the MBL Group.

Strategic risks

(az) Macquarie Bank's and the MBL Group's business may be adversely affected by their failure to adequately manage the risks associated with strategic opportunities and new businesses, including acquisitions, and the exiting or restructuring of existing businesses.

Macquarie Bank and other entities in the MBL Group are continually evaluating strategic opportunities and undertaking acquisitions of businesses, some of which may be material to their operations. Macquarie Bank's and/or the MBL Group's completed and prospective acquisitions and growth initiatives may cause them to become subject to unknown liabilities of the acquired or new business and additional or different regulations.

Future growth, including through acquisitions, mergers and other corporate transactions, may place significant demands on the MBL Group's legal, accounting, IT, risk management and operational infrastructure and result in increased expenses. A number of the MBL Group's recent and planned business initiatives and further expansions of existing businesses are likely to bring it into contact with new clients, new asset classes and other new products or new markets. These business activities expose the MBL Group to new and enhanced risks, including reputational concerns arising from dealing with a range of new counterparties and investors, actual or perceived conflicts of interest, regulatory scrutiny of these activities, potential political pressure, increased credit related and operational risks, including risks arising from IT systems and reputational concerns with the manner in which these businesses are being operated or conducted.

Any time Macquarie Bank and such other MBL Group entities make an acquisition, they may over-value the acquisition, they may not achieve expected synergies, they may achieve lower than expected cost savings or otherwise incur losses, they may lose customers and market share, they may face disruptions to their operations resulting from integrating the systems, processes and personnel (including in respect of risk management) of the acquired business into the MBL Group or their management's time may be diverted to facilitate the integration of the acquired business into the MBL Group. Macquarie Bank and other entities in the MBL Group may also underestimate the costs associated with outsourcing, exiting or restructuring existing businesses. Where Macquarie Bank's and/or the MBL Group's acquisitions are in foreign jurisdictions, or are in emerging or growth economies in particular, they may be exposed to heightened levels of regulatory scrutiny and political, social or economic disruption and sovereign risk in emerging and growth markets.

(ba) Macquarie Bank and the MBL Group's businesses depend on the Macquarie Group's brand and reputation.

The MBL Group believes its reputation in the financial services markets and the recognition of the Macquarie brand by its customers are important contributors to its business. Many companies in the Macquarie Group and many of the funds managed by entities owned, in whole or in part, by Macquarie Group use the Macquarie name. The MBL Group does not control those entities that are not in the MBL Group, but their actions may reflect directly on its reputation.

The MBL Group's business may be adversely affected by negative publicity or poor financial performance in relation to any of the entities using the Macquarie name, including any Macquarie-managed fund or funds that Macquarie has promoted or is associated with. Investors and lenders may associate such entities and funds with the name, brand and reputation of the MBL Group and the Macquarie Group and other Macquarie-managed funds. If funds that use the Macquarie name or are otherwise associated with Macquarie-managed infrastructure assets, such as roads, airports, utilities and water distribution facilities that people view as community assets, are perceived to be managed inappropriately, those managing entities could be subject to criticism and negative publicity, harming the reputation of Macquarie Bank and the MBL Group and the reputation of other entities that use the Macquarie name.

(bb) Competitive pressure, both in the financial services industry, as well as in the other industries in which Macquarie Bank and the MBL Group operate, could adversely impact their business.

Macquarie Bank and the MBL Group face significant competition from local and international competitors, which compete vigorously in the markets and sectors across which the MBL Group operates. Macquarie Bank and the MBL Group compete, both in Australia and internationally, with asset managers, retail and commercial banks, private banking firms, investment banking firms, brokerage firms, internet-based firms, commodity trading firms and other investment and service firms as well as businesses in adjacent industries in connection with the various funds and assets they manage and services they provide. This includes specialist competitors that may not be subject to the same capital and regulatory requirements and therefore may be able to operate more efficiently.

In addition, digital technologies and business models are changing consumer behaviour and the competitive environment. The use of digital channels by customers to conduct their banking continues to rise and emerging competitors are increasingly utilising new technologies and seeking to disrupt existing business models, including in relation to digital payment services and open data banking, that challenge, and could potentially disrupt, traditional financial services. Macquarie Bank and the MBL Group face competition from established providers of financial services as well as from businesses developed by non-financial services companies. Macquarie Bank and the MBL Group believe that they will continue to experience pricing pressures in the future as some of their competitors seek to obtain or increase market share.

The widespread adoption and rapid evolution of new technologies, including process automation, machine learning and artificial intelligence, analytic capabilities, self-service digital trading platforms and automated trading markets, internet services and digital assets, such as central bank digital currencies, cryptocurrencies (including stablecoins), tokens and other cryptoassets, clearing and settlement processes could have a substantial impact on the financial services industry. As such new technologies evolve and mature, the MBL Group's businesses and results of operations could therefore be adversely impacted.

Any consolidation in the global financial services industry may create stronger competitors with broader ranges of product and service offerings, increased access to capital, and greater efficiency and pricing power which may enhance the competitive position of the MBL Group's competitors. In addition to mergers and acquisitions pursued for commercial reasons, consolidation may also occur as a result of bank regulators encouraging or directing stronger institutions to acquire weaker institutions to preserve stability. The effect of competitive market conditions, especially in the MBL Group's main markets, products and services, may lead to an erosion in its market share or margins.

(bc) Conflicts of interest could limit the MBL Group’s current and future business opportunities.

As the MBL Group expands its businesses and its client base, it increasingly has to address potential or perceived conflicts of interest, including situations where its services to a particular client conflict with, or are perceived to conflict with, its own proprietary investments or other interests or with the interests of another client, as well as situations where one or more of its businesses have access to material non-public information that may not be shared with other businesses within the Macquarie Group. While the MBL Group believes it has adequate procedures and controls in place to address conflicts of interest, including those designed to prevent the improper sharing of information among its businesses, appropriately dealing with conflicts of interest is complex and difficult, and its reputation could be damaged and the willingness of clients or counterparties to enter into transactions may be adversely affected if Macquarie Bank fails, or appears to fail, to deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to claims by and liabilities to clients, litigation or enforcement actions.

Tax

(bd) Macquarie Bank’s and the MBL Group’s business operations expose them to potential tax liabilities that could have an adverse impact on their results of operation and reputation.

Macquarie Bank and MBL Group are exposed to costs and risks arising from the manner in which the Australian and international tax regimes may be applied, enforced and/or amended, both in terms of their own tax compliance and the tax aspects of transactions on which they work with clients and other third parties. Macquarie Bank’s and the MBL Group’s international, multi-jurisdictional platform increases their tax risks. Any actual or alleged failure to comply with or any change in the implementation, interpretation, application or enforcement of applicable tax laws and regulations could adversely affect Macquarie Bank’s or the MBL Group’s reputation and affected business areas, significantly increase their effective tax rate or tax liability and expose them to legal, regulatory and other actions.

Accounting standards

(be) Changes in accounting standards, policies, interpretations, estimates, assumptions and judgments that could have a material impact on the financial results of Macquarie Bank and the MBL Group.

Macquarie Bank's and the MBL Group's accounting policies are fundamental to how they record and report their financial position and results of operations. These policies require the use of estimates, assumptions and judgements that affect the reported value of Macquarie Bank's and the MBL Group's assets or liabilities and results of operations. Management is required to determine estimates and apply subjective and complex assumptions and judgements about matters that are inherently uncertain. Changes in those estimates, assumptions and judgements are accounted for prospectively as a change in accounting estimate unless it is determined that either (i) the determination thereof was in error or (ii) the accounting policy which sets out the application of those estimates, assumptions and judgements has changed, in which case the previous reported financial information is represented.

Accounting standard setting bodies issue new accounting standards and interpretations in response to outreach activities, evolving interpretations, application of accounting principles as well as changes in market developments. In addition, changes in interpretations by accounting standard setting bodies; regulators; and Macquarie Bank's and the MBL Group's independent external auditor may also arise from time to time. These changes may be difficult to predict in terms of the nature of such changes and the timing thereof. The application of new requirements and interpretations may impact how Macquarie Bank and the MBL Group prepares and reports their financial statements. In some cases, Macquarie Bank and the MBL Group may be required to apply a new or revised standard or change in interpretation retrospectively, resulting in a requirement to represent their previously reported financial information.

INFORMATION RELATING TO THE INDEX

All information contained in this document regarding the Index is derived from publicly available information which appears on the website of S&P Dow Jones Indices LLC at http://us.spindices.com/indices/equity/sp-500. The Issuer has not independently verified any of such information.

<u>Description of the Index</u>

Created in 1957, the S&P 500® was the first U.S. market-cap-weighted stock market index. The S&P 500® includes 500 of the top companies in leading industries of the U.S. economy and covers approximately 80% of available market capitalization.

The S&P 500® is managed and compiled by S&P Dow Jones Indices LLC (the "**Index Sponsor**").

<u>Constituent Stocks</u>

The constituent stocks are grouped under Information Technology, Financials, Health Care, Consumer Discretionary, Consumer Staples, Industrials, Energy, Utilities, Real Estate, Materials, and Communications Services, and the top ten constituents by index weight are as follows (effective 31 January 2025):

Constituent	Symbol	GICS® Sector
Apple Inc.	AAPL	Information Technology
Microsoft Corp	MSFT	Information Technology
Amazon.com Inc	AMZN	Consumer Discretionary
Alphabet Inc A	GOOGL	Communication Services
Berkshire Hathaway B	BRK.B	Financials
Alphabet Inc C	GOOG	Communication Services
Nvidia Corp	NVDA	Information Technology
Broadcom Inc	AVGO	Information Technology
Meta Platforms, Inc. Class A	META	Communication Services
Tesla, Inc	TSLA	Consumer Discretionary

The "S&P U.S. Indices Methodology" may be found in Appendix I of this document.

<u>Disclaimer of the Index Sponsor</u>

The S&P 500 Index is a product of S&P Dow Jones Indices LLC ("SPDJI"), and has been licensed for use by Macquarie Bank Limited ("MBL"). Standard & Poor's®, S&P® and S&P 500® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by MBL. MBL's warrants are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, any of their respective affiliates (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices makes no representation or warranty, express or implied, to the owners of the MBL's warrants or any member of the public regarding the advisability of investing in securities generally or in MBL's warrants particularly or the ability of the S&P 500 Index to track general market performance. S&P Dow Jones Indices' only relationship to MBL with respect to the S&P 500 Index is the licensing of the Index and certain trademarks, service marks and/or trade names of S&P Dow Jones Indices or its licensors. The S&P 500 Index is determined, composed and calculated by S&P Dow Jones Indices without regard to MBL or MBL's warrants. S&P Dow Jones Indices have no obligation to take the needs of MBL or the owners of MBL's warrants into consideration in determining, composing or calculating the S&P 500 Index. S&P Dow Jones Indices is not responsible for and has not participated in the determination of the prices, and amount of MBL's warrants or the timing of the issuance or sale of MBL's warrants or in the determination or calculation of the equation by which MBL's warrants is to be converted into cash, surrendered or redeemed, as the case may be. S&P Dow Jones Indices has no obligation or liability in connection with the administration, marketing or trading of MBL's warrants. There is no assurance that investment products based on the S&P 500 Index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to MBL's warrants currently being issued by MBL, but which may be similar to and competitive with MBL's warrants. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the S&P 500 Index.

S&P DOW JONES INDICES DOES NOT GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS AND/OR THE COMPLETENESS OF THE S&P 500 INDEX OR ANY DATA RELATED THERETO OR ANY COMMUNICATION, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATION (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. S&P DOW JONES INDICES SHALL NOT BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS, OR DELAYS THEREIN. S&P DOW JONES INDICES MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE OR AS TO RESULTS TO BE OBTAINED BY MBL, OWNERS OF THE MBL'S WARRANTS, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE S&P 500 INDEX OR WITH RESPECT TO ANY DATA RELATED THERETO. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL S&P DOW JONES INDICES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBLITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE. THERE ARE NO THIRD PARTY BENEFICIARIES OF ANY AGREEMENTS OR ARRANGEMENTS BETWEEN S&P DOW JONES INDICES AND MBL, OTHER THAN THE LICENSORS OF S&P DOW JONES INDICES.

INFORMATION RELATING TO THE DESIGNATED MARKET MAKER

Macquarie Capital Securities (Singapore) Pte. Limited ("**MCSSP**") has been appointed the designated market maker ("**DMM**") for the Warrants. The DMM will provide competitive buy and sell quotes for the Warrants continuously during the trading hours of the SGX-ST on the following basis:

(a)	Maximum bid and offer spread	:	10 times the minimum permitted price movement in the Warrants in accordance with the rules of the SGX-ST or SGD 0.20, whichever is the greater
(b)	Minimum quantity subject to bid and offer spread	:	10,000 Warrants
(c)	Last Trading Day for Market Making	:	The date falling five Business Days immediately preceding the Expiry Date

Quotations will/may however not be provided by the DMM in the following circumstances:

(a) during the pre-market opening and five minutes following the opening of the SGX-ST on any trading day;

(b) if the Warrant is valueless (where the Issuer's bid price is below the minimum bid size for such securities as prescribed by the SGX-ST);

(c) when trading in the shares or securities relating to or constituting the Index is suspended or limited in a material way for any reason (including price quote limits activated by the relevant exchange or otherwise), for the avoidance of doubt, the DMM is not obliged to provide quotations for the Warrants at any time when the shares or securities relating to or constituting the Index are not traded for any reason during the last trading session of NYSE or NASDAQ;

(d) when trading in the Warrants is suspended or limited in a material way for any reason including, but without limitation, as a result of trading in the shares or securities relating to or constituting the Index being suspended, trading of options or futures relating to the Index on any options or futures exchanges being suspended, or options or futures generally on any options and/or futures exchanges on which options relating to the Index are traded being suspended, or if the Index for whatever reason is not calculated;

(e) market disruption events, including, without limitation, any suspension of or limitation imposed on trading (including but not limited to unforeseen circumstances such as by reason of movements in price exceeding limits permitted by the SGX-ST or any act of God, war, riot, public disorder, explosion, terrorism or otherwise) in shares or securities relating to or constituting the Index, options or futures relating to the Index on any options or futures exchanges or options or futures generally on any options and/or futures exchanges on which options relating to the Index are traded;

(f) when the Issuer or DMM faces technical problems affecting the ability of the DMM to provide the bid and offer prices;

(g) when the ability of the Issuer to source a hedge or unwind an existing hedge, as determined by the Issuer in good faith, is materially affected by the prevailing market conditions. The Issuer will inform the SGX-ST of its inability to do so as soon as practicable;

(h) in cases where the Issuer has no Warrants to sell, then the DMM will only provide bid quotations. The DMM may provide intermittent offer quotations when it has inventory of the Warrants;

(i) when the stock market experiences exceptional price movements and volatility; and

(j) when it is a public holiday in Singapore and the SGX-ST, NYSE, NASDAQ or the CME is not open for dealings.

History and Business

MCSSP holds a Capital Markets Services License issued by the Monetary Authority of Singapore and is a trading member of SGX-ST as well as a Clearing Member of the CDP. Under the Capital Markets Services License, MCSSP is permitted to deal in securities and provide custodial services as well as act as an exempt financial adviser. Its principal activities are those relating to the provision of stock and share broking services, prescribed under the rules and regulations of the SGX-ST, and related securities research services. MCSSP is a wholly owned subsidiary of Macquarie Group Holdings (Singapore) Pte. Limited and its ultimate holding company is Macquarie Group Limited.

SUPPLEMENTAL INFORMATION RELATING TO THE ISSUER

The Macquarie Bank Limited 2025 Interim Financial Report for the half year ended 30 September 2024 is released. Copies of the Macquarie Bank Limited 2025 Interim Financial Report can be obtained at the office of Macquarie Capital Securities (Singapore) Pte. Limited at 9 Straits View #21-07 Marina One West Tower Singapore 018937, and viewed at www.macquarie.com.au.

For more information on the Issuer, please see www.macquarie.com.

Queries regarding the Warrants may be directed to 1800 288 2880 (Toll Free) or +65 6601 0289 (International) or info@warrants.com.sg.

SALE

General

No action has been or will be taken by the Issuer that would permit a public offering of the Warrants or possession or distribution of any offering material in relation to the Warrants in any jurisdiction where action for that purpose is required. No offers, sales or deliveries of any Warrants, or distribution of any offering material relating to the Warrants may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and will not impose any obligation on the Issuer. In the event that the Issuer contemplates a placing, placing fees may be payable in connection with the issue and the Issuer may at its discretion allow discounts to placees.

European Economic Area

Please note that in relation to EEA states, additional selling restrictions may apply in respect of any specific EEA state.

The Warrants are not offered, sold or otherwise made available and will not be offered, sold, or otherwise made available under this document to any retail investor in the European Economic Area. Consequently no key information document required by Regulation (EU) No 1286/2014 (the "**PRIIPs Regulation**") for offering or selling the Warrants or otherwise making them available to retail investors in the European Economic Area has been prepared and therefore offering or selling the Warrants or otherwise making them available to any retail investor in the European Economic Area may be unlawful under the PRIIPS Regulation. For the purposes of this provision:

(a) the expression “**retail investor**” means a person who is one (or more) of the following:

  (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, “**MiFID II**”); or

  (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the Insurance Distribution Directive), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

  (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended and superseded the “**Prospectus Regulation**”); and

(b) the expression “**offer**” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Warrants to be offered so as to enable an investor to decide to purchase or subscribe the Warrants.

United Kingdom

Each dealer has represented and agreed, and each further dealer appointed in respect of the Warrants will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Warrants which are the subject of the offering contemplated by document to any retail investor in the United Kingdom. Consequently no key information document required by the PRIIPs Regulation as it by virtue of the European Union (Withdrawal) Act 2018 (the “EUWA”) forms part of domestic law (the “UK PRIIPs Regulation”) for offering or selling the Warrants or otherwise making them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the Warrants or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation.

For the purposes of this provision:

(a) the expression “retail investor” means a person who is one (or more) of the following:

(i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of EUWA; or

(ii) a customer within the meaning of the provisions of the Financial Services and Markets Act, as amended (the “**FSMA**”) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or

(iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA; and

(b) the expression an “offer” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Warrants to be offered so as to enable an investor to decide to purchase or subscribe for the Warrants.

Each dealer has represented and agreed, and each further dealer appointed in respect of the Warrants will be required to represent and agree, that:

(a) in respect of Warrants having a maturity of less than one year: (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and (ii) it has not offered or sold and will not offer or sell any Warrants other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Warrants would otherwise constitute a contravention of Section 19 of the FSMA, by us;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of the Warrants in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Warrants in, from or otherwise involving the United Kingdom.

United States of America

The Warrants have not been, and will not be, registered under the Securities Act. Subject to certain exceptions, Warrants, or interests therein, may not at any time be offered, sold, resold or delivered, directly or indirectly, in the U.S. or to, or for the account or benefit of, any U.S. person or to others for offering, sale or resale in the U.S. or to any such U.S. person. Offers and sales of Warrants, or interests therein, in the U.S. or to U.S. persons would constitute a violation of U.S. securities laws unless made in compliance with registration requirements of the Securities Act or pursuant to an exemption therefrom. As used herein, “**U.S.**” means the United States of America (including the States and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction; and “**U.S. person**” means any citizen or resident of the U.S., including any corporation, partnership or other entity created or organised in or under the laws of the U.S. or of any political subdivision thereof, any estate or trust the income of which is subject to U.S. income taxation regardless of its source, and any other “**U.S. person**” as such term is defined in Regulation S under the Securities Act.

Singapore

This document has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Warrants may not be circulated or distributed, nor may Warrants be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than pursuant to, and in accordance with the conditions of, any applicable provision of the Securities and Futures Act 2001 of Singapore.

Hong Kong

Each distributor, purchaser or subscriber of the Warrants has represented and agreed that it has not issued or had in its possession for the purposes of issue, and will not issue, or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Warrants, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Warrants which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

Commonwealth of Australia

This document is not a prospectus, product disclosure statement or any other disclosure document for the purposes of the Corporations Act 2001 (Cth) (the “**Act**”). This document has not been, and will not be, lodged with the Australian Securities and Investments Commission, ASX Limited or any other government agency in Australia. Each Warrantholder will be required to represent and agree that, unless the applicable final terms otherwise provides, it:

(a) has not offered or invited applications, and will not make any offer, or invite applications, for the issue, sale or purchase of any Warrant in Australia (including an offer or invitation which is received by a person in Australia); and

(b) has not distributed or published, and will not distribute or publish, this document, any addendum to the Base Listing Document and this document or any other offering material or advertisement relating to any Warrant in Australia,

Unless:

(a) the offeree or invitee is a “wholesale client”, “sophisticated investor” or “professional investor” (as defined in the Act);

(b) the minimum aggregate consideration payable by each offeree or invitee is at least A$500,000 (or its equivalent in other currencies but disregarding moneys lent by the offeror or its associates); or

(c) the offer or invitation otherwise does not require disclosure to investors in accordance with Part 6D.2 or Chapter 7 of the Act.

Section 708(19) of the Act provides that an offer of debentures for issue or sale does not need disclosure to investors under Part 6D.2 of the Act if the issuer is an Australian ADI. As at the date of this document, the Issuer is an ADI.

SUPPLEMENTAL GENERAL INFORMATION

The information set out herein is supplemental to, and should be read in conjunction with, the information set out on page 127 of the Base Listing Document.

1. Settlement of trades done on a normal "ready basis" on the SGX-ST generally takes place on the second Business Day following the transaction. Dealing in the Warrants will take place in Board Lots in Singapore dollars. For further details on the transfer of Warrants and their exercise, please refer to the section headed "Summary of the Issue" above.

2. It is not the current intention of the Issuer to apply for a listing of the Warrants on any stock exchange other than the SGX-ST.

3. Macquarie Bank is an indirect subsidiary of MGL. Macquarie Group is a large diversified Australian-based financial institution with a long and successful history. Like any financial institution, Macquarie Group has been subject to lawsuits.

   As appropriate, the Macquarie Group makes provision for and recognises contingent liabilities in respect of actual and potential claims and proceedings that have not been determined. An assessment of likely losses is made on a case-by-case basis for the purposes of Macquarie Group's consolidated financial statements and specific provisions that Macquarie Group considers appropriate are made, as described in the Notes to Macquarie Group's consolidated financial statements for the year ended 31 March 2024.

   There are no, nor have there been, any governmental, legal or arbitration proceedings (including any proceedings which are pending or threatened of which Macquarie Bank or the Macquarie Group is aware) in the 12 month period prior to the date of this document which may have or have had a significant effect on the financial position or profitability of Macquarie Bank.

4. To the best of the Issuer's knowledge, there has been no adverse change, material in the context of the issue of the Warrants, in the financial position of the Issuer since 30 September 2024.

5. The following contracts, relating to the issue of the Warrants, have been or will be entered into by the Issuer and may be material to the issue of the Warrants:

   (a) the Master Instrument; and

   (b) the Warrant Agent Agreement.

   None of the directors of the Issuer has any direct or indirect interest in any of the above contracts.

6. The Issuer has appropriate risk management capabilities to manage the issue of the Warrants.

7. Copies of the following documents may be inspected during usual business hours on any weekday (Saturdays, Sundays and holidays excepted) at the office of Macquarie Capital Securities (Singapore) Pte. Limited at 9 Straits View, #21-07 Marina One West Tower, Singapore 018937, until the expiry of the Warrants:

   (a) the Constitution of the Issuer;

(b) 2023 and 2024 Annual Reports of the Issuer and the 2025 Interim Financial Report for the half-year ended 30 September 2024 of the Issuer;

(c) the Master Instrument;

(d) the Warrant Agent Agreement; and

(e) the Base Listing Document.

APPENDIX I

REPRODUCTION OF
“S&P U.S. INDICES METHODOLOGY”

S&P Dow Jones Indices

A Division of S&P Global

S&P U.S. Indices
Methodology

February 2025

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Introduction

Index Objective

The S&P U.S. Indices are a family of equity indices designed to measure the market performance of U.S. domiciled stocks trading on U.S. exchanges. The family is composed of a wide range of indices based on size, sector, and style. The indices are weighted by float-adjusted market capitalization (FMC). In addition, equal weighted and capped market capitalization weighted indices are also available as detailed below.

Highlights and Index Family

FMC Weighted Indices:

S&P Total Market Index. The index measures the performance of the broad U.S. market and includes all eligible U.S. common equities.

S&P 500. The index measures the performance of the large-cap segment of the U.S. market. Considered to be a proxy of the U.S. equity market, the index is composed of 500 constituent companies.

S&P MidCap 400. The index measures the performance of the mid-cap segment of the U.S. market. The index is composed of 400 constituent companies.

S&P SmallCap 600. The index measures the performance of the small-cap segment of the U.S. market. The index is composed of 600 constituent companies.

S&P Composite Indices. The indices include the S&P Composite 1500, S&P 900, and S&P 1000. The S&P Composite 1500 is a combination of the S&P 500, S&P MidCap 400, and S&P SmallCap 600 and measures the performance of all three market size segments. The S&P 900 is a combination of the S&P 500 and S&P MidCap 400 and measures the performance of the mid- and large-cap market size segments. The S&P 1000 is a combination of the S&P MidCap 400 and S&P SmallCap 600 and measures the performance of the mid- and small-cap market size segments.

S&P Completion Index. The index is a sub-index of the S&P Total Market Index and measures the performance of all constituents in the S&P Total Market Index that are not also constituents of the S&P 500. The Index is constituted at the company level, not at the share line level. If one company listing is in the S&P 500, all other company listings are excluded from the S&P Completion Index.

S&P 500 Top 10 Index. The index measures the performance of 10 of the largest, by FMC, companies in the S&P 500.

S&P 500 Top 20 Index. The index measures the performance of 20 of the largest, by FMC, companies in the S&P 500.

S&P 500 Top 50. The index measures the performance of 50 of the largest, by FMC, companies in the S&P 500.

S&P 100. The index measures the performance of 100 companies selected from the S&P 500. Generally, the largest companies in the S&P 500 that have listed options are selected for index inclusion. Sector balance is also considered in the selection of companies for the S&P 100.

For additional details on the following indices, see Appendix B:

S&P Composite 1500 / S&P TMI (Spliced as of EOD Dec-18-2015) Index. The index is a replica of the S&P Total Market Index and follows the S&P Total Market Index methodology with the exception that for index history prior to December 18, 2015, the index was a replica of the S&P Composite 1500 and followed that index's methodology.

S&P 500 Ex-Sector Indices. The indices measure the performance of all companies in the S&P 500, excluding those companies in one or more defined sector(s). Company classifications are based on the Global Industry Classification Standard (GICS®).

S&P 500 Ex-Financials, Real Estate, Utilities and Transportation Index. The index measures the performance of all companies in the S&P 500, excluding those belonging to the Financials sector, Real Estate sector, Utilities sector or Transportation industry group. Company classifications are based on GICS.

S&P 500 Communication Services & Information Technology Index. The index[1] measures the performance of companies in the S&P 500 classified as part of the Communication Services and Information Technology sectors. Company classifications are based on GICS.

S&P 500 Retail Composite Index. The index measures the performance of companies in the S&P 500 classified as part of the Consumer Discretionary Distribution & Retail and Consumer Staples Distribution & Retail industry groups. Company classifications are based on GICS.

For more information on GICS, please refer to S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology.

Equal Weight Indices:

S&P Equal Weight U.S. Indices. The indices include the S&P 500 Top 50 Equal Weight Index, S&P 100 Equal Weight Index, S&P 500 Equal Weight Index, S&P 500 Equal Weight Sector Indices, S&P MidCap 400 Equal Weight Index, S&P MidCap 400 Equal Weight Sector Indices, S&P SmallCap 600 Equal Weight Index, S&P SmallCap 600 Equal Weight Sector Indices, S&P Composite 1500 Equal Weight Index, and S&P Composite 1500 Equal Weight Sector Indices. Index composition for these indices is the same as that of their respective underlying index. Each company is equally weighted as of the respective rebalance reference date, rather than weighted by float-adjusted market capitalization. Unless otherwise noted in *Index Construction*, index constituents for the Equal Weight Sector Indices are drawn from their respective parent indices and selected for index inclusion based on their GICS classification.

Capped Market Capitalization Weighted Indices:

S&P Capped Market Capitalization Weighted U.S. Indices. The indices include the Select Sector Indices, S&P Select Sector Capped 20% Indices, S&P Select Sector Daily Capped 25/20 Indices, S&P Select Sector 15/60 Capped Indices, S&P 500 Capped 35/20 Indices, S&P MidCap 400 Capped Sector Indices, and S&P SmallCap 600 Capped Sector Indices. Index constituents are drawn from their respective underlying index (i.e., the S&P 500, S&P MidCap 400 or S&P SmallCap 600) and selected for index inclusion based on their GICS classification. Instead of weighting by float-adjusted market capitalization, the indices employ a capped market capitalization weighting scheme and specific capping methodology.

[1] S&P Dow Jones has created back calculated history for the index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 and 45 under this new structure effective September 24, 2018.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	GICS Methodology

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria

Securities must meet the following eligibility factors to be considered eligible for index consideration. As applicable, the evaluation date for determining whether all eligibility criteria are met for the S&P Composite 1500 is the open of trading two business days prior to the announcement date.

Eligibility Factors

Domicile. Must be a U.S.-domiciled company.

For more information on domiciles, please refer to the Domiciles section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Security Filing Type. The company issuing the security satisfies the U.S. Securities Exchange Act's periodic reporting obligations by filing certain required forms for domestic issuers, such as but not limited to: Form 10-K annual reports, Form 10-Q quarterly reports, and Form 8-K current reports.

Exchange Listing. Must have a listing on one of the following U.S. exchanges:

- NYSE
- NYSE Arca
- NYSE American
- Nasdaq Global Select Market
- Nasdaq Global Market
- Nasdaq Capital Market
- Cboe BZX
- Cboe BYX
- Cboe EDGA
- Cboe EDGX

Ineligible exchanges include:

- Over-the-counter (OTC) Markets including Pink Open Market

Organizational Structure and Share type. The issuing company must have the following organizational structure and share type:

- Corporations (including equity and mortgage REITs)
- Common stock (i.e., shares)

Ineligible organizational structures and share types include, but are not limited to the following:

- Business development companies (BDCs)
- Limited partnerships (LPs)
- Master limited partnerships (MLPs)
- Limited liability companies (LLCs)
- Closed-end funds
- ETFs
- ETNs
- Royalty trusts
- Special purpose acquisition companies (SPAC)
- Preferred stock
- Convertible preferred stock
- Unit trusts
- Equity warrants
- Convertible bonds
- Investment trusts
- Rights
- American Depositary Receipts (ADRs)

Tracking Stocks. Eligibility is index dependent:

- **S&P Total Market Index.** Tracking stocks are eligible.
- **S&P Composite 1500 & Component Indices.** Tracking stocks are ineligible.

Multiple Share Classes. S&P DJI includes all publicly listed multiple share class lines separately in FMC weighted indices, subject to the eligibility requirements for each index. Index membership eligibility for a company with multiple share class lines is based on the total market capitalization (TMC) at the company level. Each publicly listed share class is evaluated separately to determine index inclusion, with the weight of each line reflecting only that line's FMC, not the combined FMC of all company share class lines. For example, one listed share class line may be included in an S&P Composite 1500 component index while a second listed share class line of the same company is excluded. Unlisted share class lines are not combined with any listed share class lines, but unlisted share class lines are included when calculating company TMC.

For companies that issue a second publicly traded share class to index share class holders, the newly issued share class line is considered for inclusion provided 1) the event is mandatory, and 2) the market capitalization of the distributed class is not considered to be de minimis.

For S&P 1500 constituents, multiple share class lines not currently in the index must satisfy the liquidity and FMC requirements defined in *Eligibility Criteria* (but not the market capitalization criteria, which is only considered at the company level). Any excluded listed secondary lines are reviewed annually in September for potential index inclusion. Multiple share class line deletions from the S&P Composite 1500 are at the discretion of the Index Committee, and, as a result, a multiple share class line may continue to be included in an index even if the share class line subsequently fails to meet the addition criteria.

Market Capitalization. Eligibility differs by index:

- **S&P Total Market Index.** No minimum market capitalization requirement.
- **S&P Composite 1500.** Requires total company level market capitalizations of:
  - **S&P 500:** US$ 20.5 billion or more
  - **S&P MidCap 400:** US$ 7.4 billion to US$ 20.5 billion
  - **S&P SmallCap 600:** US$ 1.1 billion to US$ 7.4 billion.

The minimum market capitalization guidelines are designed to capture the three-month average cumulative total company level market capitalization of the S&P Total Market Index ("TMI") universe at approximately the following cumulative percentiles:

  - **S&P 500:** 85th percentile
  - **S&P MidCap 400:** 85th-93rd percentile
  - **S&P SmallCap 600:** 93rd-99th percentile

- The market capitalization guideline ranges are expressed in dollar ranges. The ranges are reviewed at the beginning of each calendar quarter and updated as needed to ensure the ranges reflect current market conditions. At the quarterly review, if the new market capitalization ranges for any of the Composite 1500 indices deviate by 10% or more from the current range, the index committee will consider a market capitalization range update for all the underlying indices. Updates, if needed, are announced with immediate effect.
- Companies passing the total company level market capitalization criteria are also required to have a security level float-adjusted market capitalization (FMC) that is at least 50% of the respective index's total company level minimum market capitalization threshold.

Investable Weight Factor (IWF). S&P TMI and S&P Composite 1500 constituents must have an IWF of at least 0.10 as of the rebalancing effective date.

Please refer to S&P Dow Jones Indices' Float Adjustment Methodology more information on IWFs.

Liquidity. A float-adjusted liquidity ratio (FALR), defined as the annual dollar value traded divided by the float-adjusted market capitalization (FMC), is used to measure liquidity. Using composite pricing and all publicly reported U.S. consolidated volume, annual dollar value traded is defined as the average closing price multiplied by the historical volume over the 365 calendar days prior to the evaluation date. This is reduced to the available trading period for IPOs, spin-offs or public companies considered to be U.S. domiciled for index purposes that do not have 365 calendar days of trading history on a U.S. exchange. In these cases, the dollar value traded available as of the evaluation date is annualized. Eligibility differs depending on the index:

- **S&P Total Market Index**
  - Liquidity requirements are reviewed during the quarterly rebalancings.
  - The price (corporate action adjusted) as of the evaluation date, and the shares outstanding and IWF as of the rebalancing effective date are used to calculate the FMC.
  - The evaluation date is five weeks prior to the rebalancing effective date.
  - FALR must be greater than or equal to 0.1.
  - Current constituents have no minimum requirement.
- **S&P Composite 1500**
  - The price, shares outstanding, and IWF as of the evaluation date are used to calculate the FMC.
  - The evaluation date is the open of trading two business days prior to the announcement date.
  - The stock should trade a minimum of 250,000 shares in each of the six months leading up to the evaluation date.
  - FALR must be greater than or equal to 0.75 at the time of addition to the Composite 1500.
  - Current constituents have no minimum requirement.

Financial Viability. Eligibility differs depending on the index:

- **S&P Total Market Index.** There is no financial viability requirement for index eligibility.
- **S&P Composite 1500.** The sum of the most recent four consecutive quarters' Generally Accepted Accounting Principles (GAAP) earnings (net income excluding discontinued operations) should be positive as should the most recent quarter. For equity real estate investment trusts (REITs), financial viability is based on GAAP earnings and/or Funds From Operations (FFO), if reported. FFO is a measure commonly used in equity REIT analysis.

Initial Public Offerings (IPOs). Eligibility differs depending on the index:

- **S&P Total Market Index.** Eligible IPOs are added to the index at the next rebalancing, subject to the reference date (defined in *Index Maintenance*). Certain large IPOs may be eligible for S&P TMI **fast track entry**, subject to the following conditions:
  - Only newly public IPOs and IPO direct placement listings are considered eligible for fast track entry. Formerly bankrupt companies that switch from an Over-the-Counter Exchange ("OTC") or a non-covered exchange to an S&P Dow Jones Indices covered exchange are not eligible for fast track entry.
  - Fast track traditional IPO additions must meet a minimum FMC threshold of US$ 2 billion, calculated using the shares offered (excluding over-allotment options) and the closing price on the first day of trading on an eligible exchange. The threshold level is reviewed from time to time and updated as needed to assure consistency with market conditions.
  - Fast track direct placement listing IPO additions must meet a minimum FMC threshold of US$ 2 billion, calculated using the shares available to the public as determined by its

investable weight factor, and the closing price on the first day of trading on an eligible exchange.

  - In addition, an IPO will need to meet all other applicable index eligibility rules except for the liquidity requirement. If all necessary public information is available, S&P Dow Jones Indices verifies that the fast track conditions have been met. Once S&P Dow Jones Indices announces that the IPO is eligible for fast track addition, it is added to the index with five business days lead time. At the discretion of the Index Committee, fast track IPO additions eligible to be added during a quarterly rebalancing freeze period may instead be added on the rebalancing effective date.

- **S&P Composite 1500.**
  - IPOs should be traded on an eligible exchange for at least 12 months before being considered for addition to an index. There is no IPO fast track entry allowed for S&P Composite 1500 candidates.
  - For former SPACs, S&P Dow Jones Indices considers the de-SPAC transaction to be an event equivalent to an IPO, and 12 months of trading post the de-SPAC event are required before a former SPAC can be considered for S&P Composite 1500 indices.
  - Spin-offs or in-specie distributions from existing constituents are not required to have 12 months of trading prior to their inclusion in the S&P Composite 1500.

Please note that companies that migrate from an ineligible exchange, emerge from bankruptcy, are newly designated to be domiciled in the U.S. for index purposes by S&P Dow Jones Indices, or convert from an ineligible share or organizational type to an eligible type do not need to trade on an eligible U.S. exchange for 12 months before being considered for addition to a S&P Composite 1500 index.

Rule Exceptions. Exceptions to the above criteria include:

- **Non-S&P Composite 1500 Companies that Acquire S&P Composite 1500 Index Constituents.** Non-S&P Composite 1500 companies that acquire S&P Composite 1500 index constituents, but do not fully meet all of the eligibility criteria, may still be added to an S&P Composite 1500 index at the discretion of the Index Committee if the merger consideration includes the acquiring company issuing stock to target company shareholders, and the Committee determines that the addition could mitigate turnover and enhance the representativeness of the index as a market benchmark.
- **S&P Composite 1500 Migrations.** Current S&P Composite 1500 constituents can be migrated from one S&P Composite 1500 component index (S&P 500, S&P MidCap 400, or S&P SmallCap 600) to another provided they meet the total company level market capitalization eligibility criteria for the new index. Migrations from one S&P Composite 1500 index to another do not need to meet the financial viability, liquidity, or 50% of the respective index’s total company level minimum market capitalization threshold criteria.
- **Spin-offs from Current S&P Composite 1500 Index Constituents.** Companies that are spun-off from current S&P Composite 1500 constituents do not need to meet the outside addition criteria, but they should be considered U.S. domiciled for index purposes. For spin-offs, index membership eligibility is determined using when-issued prices, if available. At the discretion of the Index Committee, a spin-off company may be retained in the parent stock’s index if the Committee determines it has a total market capitalization representative of the parent index. If the spin-off company’s estimated market capitalization is below the minimum defined in the outside addition criteria but there are other constituent companies in the parent index that have a significantly lower total market capitalization than the spin-off company, the Committee may decide to retain the spin-off company in the parent index. Prior to their spin-off, these companies were part of the parent index and keeping them in the S&P Composite 1500 and the parent index, where appropriate, mitigates turnover.
- **Berkshire Hathaway Inc.** Due to turnover and liquidity concerns, S&P 100 & 500 constituent Berkshire Hathaway Inc. (NYSE:BRK.B) is an exception to the Multiple Share Classes rules as

detailed in *S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology*. S&P Dow Jones Indices will continue to consolidate the share count for this company under the B share class line.

S&P Dow Jones Indices believes turnover in index membership should be avoided when possible. At times a stock may appear to temporarily violate one or more of the addition criteria. However, the eligibility criteria are for addition to an index, not for continued membership. As a result, an index constituent that appears to violate criteria for addition to that index is not deleted unless ongoing conditions warrant an index change. When a stock is removed from an index, S&P Dow Jones Indices explains the basis for the removal.

Index Construction

S&P Total Market Index

Index Construction. At each annual reconstitution, select all eligible securities and form the index.

At each quarterly rebalancing, securities that have undergone a change in the past quarter are eligible to be added to the index subject to a reference date that is five weeks prior to the rebalancing effective date. These securities include:

- Initial Public Offerings (IPOs) (including direct offerings)
- New listings on eligible exchanges
- Securities that moved to an eligible exchange
- Securities that emerged from Bankruptcy Status
- Companies whose domicile has changed to the U.S. as determined by S&P Dow Jones Indices
- Companies converting from an ineligible organization type to an eligible organization type
- Securities converting from an ineligible share type to an eligible share type
- Former SPACs that transition to an operating company via a de-SPAC transaction

Current index constituents are not evaluated for continued inclusion during the quarterly rebalances. A stock previously excluded due to failing the IWF or liquidity criteria is not reviewed again until the subsequent annual reconstitution.

Weighting. At each reconstitution, the index FMC weights constituents.

S&P 500, S&P MidCap 400 and S&P SmallCap 600

Index Universe. Index constituents are selected from the S&P Total Market Index

Constituent Selection. Constituent selection is at the discretion of the Index Committee and is based on the eligibility criteria. The indices have a fixed constituent company count of 500, 400, and 600, respectively. Sector balance, as measured by a comparison of each GICS sector's weight in an index with its weight in the S&P Total Market Index, in the relevant market capitalization range, is also considered in the selection of companies for the indices.

Weighting. Each index FMC weights constituents.

S&P Composite Indices

Index Construction. Each index is constructed by combining the respective underlying index constituents as follows:

- **S&P Composite 1500.** combines all constituents of the S&P 500, S&P MidCap 400, and S&P SmallCap 600.
- **S&P 900.** combines all constituents of the S&P 500 and S&P MidCap 400.
- **S&P 1000.** combines all constituents of the S&P MidCap 400 and S&P SmallCap 600.

Weighting. Each index FMC weights constituents.

S&P 100

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. Constituent selection is at the discretion of the Index Committee. Generally, the largest companies in the S&P 500 that have listed options are selected for index inclusion. Sector balance is also considered in the selection of companies for the S&P 100.

Weighting. The index FMC weights constituents.

S&P 500 Top 50

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. At each annual reconstitution, the index selects the largest 50, by FMC, companies in the S&P 500 for index inclusion, subject to a selection buffer. Select constituents as follows:

1. Rank eligible companies by FMC, automatically selecting companies ranked in the top 45 for index inclusion.
2. Select current constituent companies ranked in the top 55, in rank order, until the 50 company target count is reached.
3. If at this point the target count is still not satisfied, select the highest-ranking non-constituent(s) until the target company count is met.

Weighting. At each reconstitution, the index FMC weights constituents.

S&P 500 Top 10

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. At each annual reconstitution, the index selects the 10 largest, by FMC, companies in the S&P 500 for index inclusion, subject to a selection buffer. Select constituents as follows:

1. Rank eligible companies by FMC, automatically selecting companies ranked in the top 9 for index inclusion.
2. Select current constituent companies ranked in the top 11, in rank order, until the 10-company target count is reached.
3. If at this point the target count is still not satisfied, select the highest-ranking non-constituent(s) until the target company count is met.

Weighting. At each reconstitution, the index FMC weights constituents .

S&P 500 Top 20

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. At each annual reconstitution, the index selects the 20 largest, by FMC, companies in the S&P 500 for index inclusion, subject to a selection buffer. Select constituents as follows:

1. Rank eligible companies by FMC, automatically selecting companies ranked in the top 18 for index inclusion.
2. Select current constituent companies ranked in the top 22, in rank order, until the 20 company target count is reached.
3. If at this point the target count is still not satisfied, select the highest-ranking non-constituent(s) until the target company count is met.

Weighting. At each reconstitution, the index FMC weights constituents.

S&P Completion Index

Index Universe. Index constituents are drawn from the S&P Total Market Index.

Constituent Selection. All constituents of the S&P Total Market Index excluding constituents of the S&P 500 are selected and form the index.

Weighting. The index is weighted by FMC.

Select Sector Indices

Index Construction. Companies in the S&P 500 are classified based on GICS. Each index is made up of all stocks in the GICS sector unless otherwise noted in the table below.

Select Sector Index[2]	GICS Sector Classification
Communication Services Select Sector Index	Communications Services (GICS Code 50)[3]
Consumer Discretionary Select Sector Index	Consumer Discretionary (GICS Code 25)
Consumer Staples Select Sector Index	Consumer Staples (GICS Code 30)
Energy Select Sector Index	Energy (GICS Code 10)
Financial Select Sector Index	Financials (GICS Code 40)
Health Care Select Sector Index	Health Care (GICS Code 35)
Industrials Select Sector Index	Industrials (GICS Code 20)
Materials Select Sector Index	Materials (GICS Code 15)
Real Estate Select Sector Index	Real Estate (GICS Code 60)
Technology Select Sector Index	Information Technology (GICS Code 45)
Utilities Select Sector Index	Utilities (GICS Code 55)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

The methodology for capped indices follows an identical approach to market cap weighted indices except that the indices apply an additional weight factor, or "AWF", to adjust the float-adjusted market capitalization to a value such that the index weight constraints are satisfied.

Please note that any intra-quarter addition will be added to the relevant Select Sector Index with an AWF of 1.

For more information on AWF, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Weighting. Each index is capped market capitalization weighted. For capping purposes, the indices rebalance quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is FMC weighted.
3. If any company has an FMC weight greater than 24%, the cap all companies' weight at 23%, which allows for a 2% buffer.

[2] GICS sub-industry indices calculate for the Energy Select Sector Index. Constituents' weight adjustment factors flow through from the underlying index.
[3] S&P Dow Jones Indices created back calculated history for the Communication Services Select Sector Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

4. The sum of the companies with weights greater than 4.8% cannot exceed 50% of the total index weight. These caps are set to allow for a buffer below the 5% limit.
5. If the rule in Step 4 is breached, set the weight of companies greater than 4.8% equal to:

$$W_i^{Capped} = \max\left(\frac{45\% \times W_i}{\sum_i^N W_i}, 4.5\%\right)$$

   where:

   N = total number of companies with index weights over 4.8%, after checking the single company cap

   W_i = index weight of the N companies with individual company weights over 4.8%, after checking the single company cap

   Set 4.5% and 45% caps to allow for a buffer below the 5% limit
6. Proportionally redistribute the excess weight from Steps 3 to 5 to companies with an initial weight less than 4.8%, setting a 4.5% upper bound on the companies' index weight.
7. Assign index share amounts to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

For more information on the index calculation, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at the natural FMC weight.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Secondary Reweighting Check. If, on the second to last business day of March, June, September, or December, a company's weight exceeds 24%, or the sum of the companies with weights greater than 4.8% exceeds 50%, the capping breach triggers a secondary reweighting with an effective date as of after the close of the last business day of the month. The secondary reweighting uses capped index weights as of the second to last business days of March, June, September, or December, utilizing the current AWFs and membership, shares outstanding, and IWFs as of the reweighting effective date.

Index Calculations

Approaches

The indices are calculated by means of the divisor methodology used in all S&P Dow Jones Indices' equity indices.

Please refer to the Capitalization Weighted Indices section, Equal Weighted Indices section, and Capped Market Capitalization Weighted Indices sections in S&P Dow Jones Indices' Index Mathematics Methodology for more information on the index calculation methodology for float-adjusted market capitalization weighted indices, equal weighted indices, and capped market capitalization weighted indices, respectively.

Shares Outstanding

The shares counted for index calculation are shares outstanding and are essentially "basic shares" as defined by The Financial Accounting Standards Board (FASB) in Generally Accepted Accounting Principles (GAAP). This count is float-adjusted to reflect only available shares.

For float adjustment methodology, please see S&P Dow Jones Indices' Float Adjustment Methodology.

Index Maintenance

Timing of Changes

Quarterly Update. Share counts are updated to the latest publicly available filings on a quarterly basis. IWF changes are only made at the quarterly review if the change represents at least 5% of total current shares outstanding and is related to a single corporate action as described in the *Equity Indices Policies and Practices* methodology.

S&P Total Market Index. The index is reconstituted annually, after the close of the third Friday in September. The index also rebalances quarterly on the third Friday of each calendar quarter as detailed in the index construction section. For both the annual reconstitution and quarterly rebalancing, the reference date to meet the eligibility criteria is five weeks prior to the effective date.

S&P 1500 Composite Indices. Changes to index composition are made on an as-needed basis. There is no scheduled reconstitution. Rather, changes in response to corporate actions and market developments can be made at any time. Index additions and deletions are announced with at least three business days advance notice. Less than three business days' notice may be given at the discretion of the Index Committee.

Announcements are available to the public via our Web site, *www.spglobal.com/spdji/*, before or at the same time they are available to clients or the affected companies.

S&P Completion Index. A company is immediately added to the S&P Completion Index if it is dropped from the S&P 500 for a reason other than acquisition, delisting from a major exchange, change in domicile, or bankruptcy. Likewise, all companies added to the S&P 500 are immediately removed from the S&P Completion Index. Please note the S&P Completion Index is constituted at the company level, not at the share line level. If one company listing is in the S&P 500, all other company listings are excluded from the S&P Completion Index.

S&P 500 Top 50, S&P 500 Top 10 Index, and S&P 500 Top 20 Index. The index is reconstituted annually, after the close of the third Friday in June, using a reference date of the last business day of May. Share counts are updated quarterly and reflected in the index weights, in line with S&P 500 share counts. Constituents that are dropped from the S&P 500 are concurrently dropped from the index and are not replaced until the next annual reconstitution.

S&P Equal Weight U.S. Indices. The indices are rebalanced after the market close on the third Friday of the quarter-ending month with weights set to 1/N for each company in the index where N equals the number of companies in the index at rebalancing. At each quarterly rebalancing, companies are equal weighted using closing prices as of the Wednesday prior to the second Friday of the quarter-ending month as the reference price. For those companies having multiple share class lines in the index, each share class line is assigned a weight that is proportional to its FMC as of the Wednesday prior to the second Friday pricing reference date. Since index shares are assigned based on prices one week prior to the rebalancing, the actual weight of each company at the rebalancing differs from the target equal weights due to market movements.

S&P Capped Market Cap Weighted U.S. Indices. The indices are rebalanced for reweighting purposes quarterly after the close of business on the third Friday of March, June, September, and December. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December respectively.

Sector Index Reclassifications. A sector index constituent may move from one GICS sub-index to another when a GICS reclassification is made. For any sector index, the company is deleted from the relevant GICS index and added to the other at the time this reclassification occurs for the underlying index.

Deletions

Deletions occur as follows:

- A company is deleted from the index if it is involved in a merger, acquisition, or significant restructuring such that it no longer meets the eligibility criteria:
  - A company delisted as a result of a merger, acquisition or other corporate action is removed at a time announced by S&P Dow Jones Indices, normally at the close of the last day of trading or expiration of a tender offer. Constituents that are halted from trading may be kept in the index until trading resumes, at the discretion of the Index Committee. If a stock is moved to the pink sheets or the bulletin board, the stock is removed.
- A company that substantially violates one or more of the eligibility criteria for the S&P Composite 1500 may be deleted from the respective component index at the Index Committee's discretion.

Any company that is removed from an S&P Composite 1500 component index (including discretionary and bankruptcy/exchange delistings) must wait a minimum of one year from its index removal date before being screened for the eligibility criteria.

Share and IWF Updates

For information on standard treatment of share and IWF updates, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Corporate Actions & Rebalancing Guidelines

Except for the S&P Equal Weight U.S. Indices, for information on corporate actions and rebalancing guidelines, please refer to the Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P Equal Weight U.S. Indices. For information on corporate actions and rebalancing guidelines for these indices, please refer to the Equal Weighted Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Other Adjustments

In cases where there is no achievable market price for a stock being deleted, it can be removed at a zero or minimal price at the Index Committee's discretion.

Currency of Calculation and Additional Index Return Series

The indices calculate in U.S. dollars. In addition, the S&P 500 JPY (TTM), S&P 500 Top 10 Index (TTM) (JPY), and S&P 500 Top 20 Select Index (TTM) (JPY) calculate in Japanese Yen using TTM (Telegraphic Transfer Midrate) foreign exchange rates from the Bank of Tokyo Mitsubishi, with index values published on the calculation date using TTM rates of *T+1*.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the *S&P DJI Methodology & Regulatory Status Database*.

For more information on these types of indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at www.spglobal.com/spdji/.

Base Dates and History Availability

Index history availability, base dates, and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Total Market Index	03/27/2006	12/31/2004	05/31/2005	1200
S&P Completion Index	03/27/2006	12/31/2004	05/31/2005	1200
S&P 500	03/04/1957	01/03/1928	1941-1943	10
S&P MidCap 400	06/19/1991	07/01/1991	06/28/1991	100
S&P SmallCap 600	10/28/1994	12/30/1994	12/31/1993	100
S&P 900	06/19/1991	07/01/1991	06/30/1995	1000
S&P 1000	10/28/1994	12/30/2004	12/30/1994	1000
S&P Composite 1500	05/18/1995	12/30/2004	12/30/1994	100
S&P 100	06/15/1983	09/11/1989	12/29/2000	686.45
S&P 500 Equal Weight Index	01/08/2003	12/31/1970	12/29/1989	353.4
S&P 500 Equal Weight Communication Services Plus Index	08/06/2018	12/17/1999	12/17/1999	100
S&P 500 Equal Weight Consumer Discretionary Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Consumer Staples Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Energy Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Energy Plus Index	11/15/2021	12/29/1989	12/29/1989	100
S&P 500 Equal Weight Financials Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Health Care Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Industrials Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Information Technology Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Materials Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Real Estate Index	06/08/2015	03/18/2005	03/18/2005	1000
S&P 500 Equal Weight Communication Services Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Utilities Index	06/20/2006	12/29/1989	12/29/1989	353.4
S&P 500 Equal Weight Utilities Plus Index	06/20/2006	12/29/1989	12/29/1989	100
S&P MidCap 400 Equal Weight Index	08/23/2010	07/01/1991	07/01/1991	100
S&P SmallCap 600 Equal Weight Index	08/23/2010	12/30/1994	12/30/1994	100
S&P 500 Top 50 Equal Weight Index	04/09/2024	06/30/2005	06/30/2005	1000
S&P 100 Equal Weight Index	08/25/2009	12/29/2000	12/29/2000	1000
S&P Composite 1500 Equal Weight Index	03/04/2019	12/30/1994	12/30/1994	100
S&P 500 Top 50	11/30/2015	12/31/1970	06/30/2005	1000
S&P 500 Top 10 Index	07/14/2023	06/30/2005	06/30/2005	1000
S&P 500 Top 20 Index	08/01/2024	06/30/2005	06/30/2005	1000
S&P Select Sector Capped 20% Indices[A]	11/30/2009	12/17/1999	12/17/1999	100
S&P Communication Services Select Sector Daily Capped 25/20 Index	07/23/2018	12/17/1999	12/17/1999	100
S&P 500 Capped 35/20 Sector Indices	07/06/2016	12/17/1999	12/17/1999	100
S&P 500 Capped 35/20 Communication Services Index	04/30/2018	12/21/2007	12/21/2007	100
S&P MidCap 400 Capped Sector Indices	02/22/2016	12/30/1994	12/30/1994	100
S&P SmallCap 600 Capped Sector Indices	03/08/2010	12/30/1994	12/30/1994	100
S&P 900 Banks (Industry) 7/4 Capped Index (USD)	03/02/2018	12/16/2011	12/16/2011	100
S&P 500 Communication Services & Information Technology Index	09/19/2018	12/29/2017	12/29/2017	100
S&P 500 3% Capped Index	04/19/2024	12/17/1999	12/17/1999	1000
S&P 500 JPY Hedged Index (Korea Calendar)	09/20/2024	12/30/2014	12/30/2014	1000

[A] The S&P Select Sector Capped 20% Real Estate Index launched 09/19/2016 and has a base date of 09/19/2003 with a base value of 100. The S&P Select Sector Capped 20% Communication Services Index launched 06/25/2018 and has a base date of 12/21/2007 with a base value of 100.

Select Sector Indices. Launch dates and launch values for the indices are shown in the following table.

Index (Price Return)	Launch Date	Launch Value
Consumer Discretionary Select Sector	12/16/1998[A]	245.12
Communication Services Select Sector	04/30/2018	234.41
Consumer Staples Select Sector	12/16/1998[A]	260.64
Energy Select Sector	12/16/1998[A]	235.88
Financial Select Sector	12/16/1998[A]	220.20
Health Care Select Sector	12/16/1998[A]	239.74
Industrials Select Sector	12/16/1998[A]	226.56
Materials Select Sector	12/16/1998[A]	207.17
Real Estate Select Sector	08/17/2015[B]	146.86
Technology Select Sector	12/16/1998[A]	300.86
Utilities Select Sector	12/16/1998[A]	290.60

[A] S&P Dow Jones Indices initiated calculation of the Select Sector Indices as of January 28, 2011. Prior to that date, the indices were calculated by affiliates of the New York Stock Exchange. The total return versions were launch on 1/28/2011 with a launch value of 1000.

[B] The total return version was launched on 08/17/2015 with a launch value of 163.96.

Index Data

Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (".SDL").

For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

For more information on the calculation of return types, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Dividend Points Indices

For information on Dividend Points Indices, including the index calculation methodology, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Index Governance

Index Committee

An Index Committee maintains the indices. All committee members are full-time professional members of S&P Dow Jones Indices' staff. The committee meets monthly. At each meeting, the Index Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to its daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews this methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Policy

Announcements

Announcements of additions and deletions for the S&P 500, S&P MidCap 400, and S&P SmallCap 600 are made at 05:15 PM Eastern Time. Press releases are posted on the Web site, *www.spglobal.com/spdji/*, and are released to major news services.

Holiday Schedule

Except for the indices listed below, the indices calculate when the U.S. equity market is open.

- **S&P 500 JPY (TTM), S&P 500 Top 10 Index (TTM) (JPY), and S&P 500 Top 20 Select Index (TTM) (JPY).** The indices calculate when the Japanese equity market is open.
- **S&P 500 (Global Calendar) (JPY).** The index calculates Monday through Friday throughout the entire calendar year.

A complete holiday schedule for the year is available on the S&P Dow Jones Indices' Web site at www.spglobal.com/spdji/.

Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Real-Time Calculation

Real-time indices are not restated.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Contact Information

For questions regarding an index, please contact: index_services@spglobal.com.

Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at www.spglobal.com/spdji/, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media. S&P Dow Jones Indices' Web site also provides an archive of recent index announcements and press releases, as well as a monthly release giving total returns for S&P Dow Jones Indices' headline indices.

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the *S&P DJI Methodology & Regulatory Status Database* for a complete list of indices covered by this document.

Index	BBG	RIC
S&P 500	SPX	.SPX
S&P MidCap 400	MID	.MID
S&P SmallCap 600	SML	.SML
S&P Composite 1500	SPR	.SPSUP
S&P 900	SPLGMID	.SPLGMID
S&P 1000	SPK	.SPMIDSM
S&P 100	OEX	.SPOEX
S&P 500 Equal Weight Index	SPW	.SPXEW
S&P 500 Equal Weight Index TR	SPXEWTR	.SPXEWTR
S&P 500 Equal Weight Index NTR	SPXEWNTR	.SPXEWNTR
S&P 500 Equal Weight Communication Services Plus Index	SPXEW4UP	--
S&P 500 Equal Weight Communication Services Plus Index TR	SPXEW4UT	--
S&P 500 Equal Weight Communication Services Plus Index NTR	SPXEW4UN	--
S&P 500 Equal Weight Consumer Discretionary Index	S25	.SPXEW25
S&P 500 Equal Weight Consumer Discretionary Index TR	SPXEWCD	.SPXEW25TR
S&P 500 Equal Weight Consumer Staples Index	S30	.SPXEW30
S&P 500 Equal Weight Consumer Staples Index TR	SPXEWCS	.SPXEW30TR
S&P 500 Equal Weight Energy Index	S10	.SPXEW10
S&P 500 Equal Weight Energy Index TR	SPXEWEN	.SPXEW10TR
S&P 500 Equal Weight Energy Plus Index	SPXEWEUP	.SPXEWEUP
S&P 500 Equal Weight Energy Plus Index TR	SPXEWEUT	.SPXEWEUT
S&P 500 Equal Weight Financials Index	S40	.SPXEW40
S&P 500 Equal Weight Financials Index TR	SPXEWFN	.SPXEW40TR
S&P 500 Equal Weight Health Care Index	S35	.SPXEW35
S&P 500 Equal Weight Health Care Index TR	SPXEWHC	.SPXEW35TR
S&P 500 Equal Weight Industrials Index	S20	.SPXEW20
S&P 500 Equal Weight Industrials Index TR	SPXEWIN	.SPXEW20TR
S&P 500 Equal Weight Information Technology Index	S45	.SPXEW45
S&P 500 Equal Weight Information Technology Index TR	SPXEWIT	.SPXEW45TR
S&P 500 Equal Weight Materials Index	S15	.SPXEW15
S&P 500 Equal Weight Materials Index TR	SPXEWMA	.SPXEW15TR
S&P 500 Equal Weight Real Estate Index	SPXEREUP	.SPXEREUP
S&P 500 Equal Weight Real Estate Index TR	SPXEREUT	.SPXEREUT
S&P 500 Equal Weight Communication Services Index	S50	.SPXEW50
S&P 500 Equal Weight Communication Services Index TR	SPXEWTS	.SPXEW50TR
S&P 500 Equal Weight Utilities Index	S55	.SPXEW55
S&P 500 Equal Weight Utilities Index TR	SPXEWUT	.SPXEW55TR
S&P 500 Equal Weight Utilities Plus Index	SPXEWC	.SPXEWC
S&P 500 Equal Weight Utilities Plus Index TR	SPXEWCTR	.SPXEWCTR
S&P MidCap 400 Equal Weight Index	MIDEWI	.MIDEWI
S&P SmallCap 600 Equal Weight Index	SMLEWI	.SMLEWI
S&P 500 Top 50 Equal Weight Index	SP5T5EUP	.SP5T5EUP
S&P 100 Equal Weight Index	SPOEXEUP	.SPOEXEUP
S&P Composite 1500 Equal Weight Index	SPRCEWUP	--

Index	BBG	RIC
S&P Total Market Index	SPTMI	.SPTMI
S&P Completion Index	SPCMI	.SPCMI
Communication Services Select Sector TR	IXCTR	.IXCTR
Communication Services Select Sector NTR	IXCNTR	.IXCNTR
Consumer Discretionary Select Sector Index	IXY	.IXY
Consumer Staples Select Sector Index	IXR	.IXR
Energy Select Sector Index	IXE	.IXE
Financial Select Sector Index	IXM	.IXM
Health Care Select Sector Index	IXV	.IXV
Industrial Select Sector Index	IXI	.IXI2
Materials Select Sector Index	IXB	.IXB2
Real Estate Select Sector Index	IXRE	.IXRE
Technology Select Sector Index	IXT	.IXT
Utilities Select Sector Index	IXU	.IXU
S&P 500 Ex-Communication Services TR[4]	SPXXCMUT	.SPXXCMUT
S&P 500 Ex-Communication Services NTR[4]	SPXXCMUN	.SPXXCMUN
S&P 500 Ex-Consumer Discretionary	SPXXCDP	--
S&P 500 Ex-Consumer Discretionary TR	SPXXCDT	--
S&P 500 Ex-Consumer Staples	SPXXCSP	--
S&P 500 Ex-Consumer Staples TR	SPXXCST	--
S&P 500 Ex-Energy	SPXXEGP	--
S&P 500 Ex-Energy TR	SPXXEGT	--
S&P 500 Ex-Financials	SPXXFISP	--
S&P 500 Ex-Financials TR	SPXXFIST	--
S&P 500 Ex-Financials & Real Estate	SPXXFINP	--
S&P 500 Ex-Financials & Real Estate TR	SPXXFINT	--
S&P 500 Ex-Health Care	SPXXHCP	--
S&P 500 Ex-Health Care TR	SPXXHCT	--
S&P 500 Ex-Industrials	SPXXINDP	--
S&P 500 Ex-Industrials TR	SPXXINDT	--
S&P 500 Ex-Information Technology TR[4]	SPXXTSUT	.SPXXTSUT
S&P 500 Ex-Information Technology NTR[4]	SPXXTSUN	.SPXXTSUN
S&P 500 Ex-Information Technology & Communication Services	SPXXTTSP	--
S&P 500 Ex-Information Technology & Communication Services TR	SPXXTTST	--
S&P 500 Ex-Materials	SPXXMP	--
S&P 500 Ex-Materials TR	SPXXMT	--
S&P 500 Ex-Real Estate	SPXXRETP	--
S&P 500 Ex-Real Estate TR	SPXXRETT	--
S&P 500 Ex-Utilities	SPXXUTIP	--
S&P 500 Ex-Utilities TR	SPXXUTIT	--
S&P 500 Capped 35/20 Communication Services Index NTR	SPSVCN	.SPSVCN
S&P 900 Banks (Industry) 7/4 Capped Index (USD) TR	SP9BKCUT	.SP9BKCUT
S&P 900 Banks (Industry) 7/4 Capped Index (USD) NTR	SP9BKCUN	.SP9BKCUN
S&P 500 Communication Services & Information Technology Index	SPX450UP	--
S&P 500 Communication Services & Information Technology Index TR	SPX450UT	--
S&P 500 Communication Services & Information Technology Index NTR	SPX450UN	--
S&P 500 Sectors Equal Allocation Index (USD)	SPXSEAUP	.SPXSEAUP
S&P 500 Sectors Equal Allocation Index (USD) TR	SPXSEAUT	.SPXSEAUT
S&P 500 Sectors Equal Allocation Index (USD) NTR	SPXSEAUN	.SPXSEAUN
S&P 500 3% Capped Index (USD)	SPXCW3UP	--
S&P 500 3% Capped Index (USD) TR	SPXCW3UT	--
S&P 500 3% Capped Index (USD) NTR	SPXCW3UN	--
S&P 500 Top 10 25% Capped Index (USD)	SP5T1CUP	.SP5T1CUP
S&P 500 Top 10 25% Capped Index (USD) TR	SP5T1CUT	.SP5T1CUT
S&P 500 Top 10 25% Capped Index (USD) NTR	SP5T1CUN	.SP5T1CUN
S&P 500 Equal Weight Index (3 PM UK Time) (GBP)[5]	SPXEW3GP	.SPXEW3GP
S&P 500 Equal Weight Index (12 PM UK FX) (Global Calendar) (GBP)	SPXEWLGP	.SPXEWLGP
S&P 500 Equal Weight GBP Hedged Index (12 PM UK FX) (Global Calendar)	SPXLEHGP	.SPXLEHGP

[4] S&P Dow Jones Indices has created back calculated history for the S&P 500 Ex-Communication Services and S&P 500 Ex-Information Technology indices based on the securities in the headline S&P 500 that would have hypothetically been classified under the GICS structure effective September 24, 2018.

[5] For history prior to 09/30/2020, the index used 4:00 PM London WMR exchange rates. Indices with a specified FX snap time may use the standard 4:00 PM London WMR exchange rate prior to data availability.

Index Alert

Complete data for index replication (including share counts, tickers and data on index levels and returns) are available through S&P Dow Jones Indices' fee-based service, *SPICE* (*www.spice-indices.com*).

Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices, www.spglobal.com/spdji/en/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at *www.spglobal.com/spdji/.*

Appendix A

Historical Market Capitalization Guidelines

Market capitalization guidelines since July 18, 2007, for the component indices of the S&P Composite 1500 are as follows:

Effective Date (After Close)[6]	Market Capitalization Guidelines (US$)		
	S&P 500	**S&P MidCap 400**	**S&P SmallCap 600**
01/02/2025	At least $20.5 billion	$7.4 billion to $20.5 billion	$1.1 billion to $7.4 billion
04/01/2024	At least $18.0 billion	$6.7 billion to $18.0 billion	$1.0 billion to $6.7 billion
01/02/2024	At least $15.8 billion	$5.8 billion to $15.8 billion	$900 million to $5.8 billion
07/05/2023	At least $14.5 billion	$5.2 billion to $14.5 billion	$850 million to $5.2 billion
01/04/2023	At least $12.7 billion	$4.6 billion to $12.7 billion	$750 million to $4.6 billion
03/04/2022	At least $14.6 billion	$3.7 billion to $14.6 billion	$850 million to $3.7 billion
06/03/2021	At least $13.1 billion	$3.6 billion to $13.1 billion	$850 million to $3.6 billion
03/17/2021	At least $11.8 billion	$3.3 billion to $11.8 billion	$750 million to $3.3 billion
12/08/2020	At least $9.8 billion	$3.2 billion to $9.8 billion	$700 million to $3.2 billion
02/20/2019	At least $8.2 billion	$2.4 billion to $8.2 billion	$600 million to $2.4 billion
03/10/2017	At least $6.1 billion	$1.6 billion to $6.8 billion	$450 million to $2.1 billion
07/16/2014	At least $5.3 billion	$1.4 billion to $5.9 billion	$400 million to $1.8 billion
06/19/2013	At least $4.6 billion	$1.2 billion to $5.1 billion	$350 million to $1.6 billion
02/16/2011	At least $4.0 billion	$1.0 billion to $4.4 billion	$300 million to $1.4 billion
12/09/2009	At least $3.5 billion	$850 million to $3.8 billion	$250 million to $1.2 billion
12/18/2008	At least $3.0 billion	$750 million to $3.3 billion	$200 million to $1.0 billion
09/25/2008	At least $4.0 billion	$1.0 billion to $4.5 billion	$250 million to $1.5 billion
07/18/2007	At least $5.0 billion	$1.5 billion to $5.5 billion	$300 million to $2.0 billion

[6] Effective May 1, 2019, security level FMC must be at least 50% of the respective index's full company level minimum market capitalization threshold.

Appendix B

Index Construction and Weighting Information for Certain Derived Indices

S&P Select Sector Capped 20% Indices

Index Construction. Companies in the S&P 500 are classified based on the GICS. Each index is made up of all stocks in the respective GICS sector unless otherwise noted in the table below.

S&P Select Sector Capped 20% Index	GICS Sector Classification
S&P Select Sector Capped 20% Communication Services Index	Communications Services (GICS Code 50)[7]
S&P Select Sector Capped 20% Consumer Discretionary Index	Consumer Discretionary (GICS Code 25)
S&P Select Sector Capped 20% Consumer Staples Index	Consumer Staples (GICS Code 30)
S&P Select Sector Capped 20% Energy Index	Energy (GICS Code 10)
S&P Select Sector Capped 20% Financials Index	Financials (GICS Code 40)
S&P Select Sector Capped 20% Health Care Index	Health Care (GICS Code 35)
S&P Select Sector Capped 20% Industrials Index	Industrials (GICS Code 20)
S&P Select Sector Capped 20% Materials Index	Materials (GICS Code 15)
S&P Select Sector Capped 20% Real Estate Index	Real Estate (GICS Code 60)
S&P Select Sector Capped 20% Technology Index	Information Technology (GICS Code 45)
S&P Select Sector Capped 20% Utilities Index	Utilities (GICS Code 55)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Please note that any intra-quarter addition will be added to the relevant S&P Select Sector Capped 20% Index with the largest AWF currently represented in that index.

Weighting. Each index is capped market capitalization weighted. For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC.
3. If any company has a weight greater than 19%, that company has its weight capped at 19%. The cap is set to 19% to allow for a 1% buffer. As the reference date is one week prior to the rebalancing effective date, the buffer mitigates the possibility of any company exceeding 20% on the rebalancing effective date.
4. All excess weight is proportionally redistributed to all uncapped companies within the relevant S&P Select Sector Capped 20% Index.
5. After this redistribution, if the weight of any other company breaches 19%, the process is repeated iteratively until no companies breach the 19% weight cap.
6. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual

[7] S&P Dow Jones Indices has created back calculated history for the S&P Select Sector Capped 20% Communication Services Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P Select Sector Capped 20% Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P Select Sector Daily Capped 25/20 Indices

Index Construction. Companies in the S&P 500 are classified based on GICS. Each index is made up of all stocks in the respective GICS sector unless otherwise noted in the table below.

S&P Select Sector Daily Capped 25/20 Index	GICS Classification
S&P Communication Services Select Sector Daily Capped 25/20 Index[8]	Communications Services (GICS Code 50)
S&P Consumer Discretionary Select Sector Daily Capped 25/20 Index	Consumer Discretionary (GICS Code 25)
S&P Consumer Staples Select Sector Daily Capped 25/20 Index	Consumer Staples (GICS Code 30)
S&P Energy Select Sector Daily Capped 25/20 Index	Energy (GICS Code 10)
S&P Financials Select Sector Daily Capped 25/20 Index	Financials (GICS Code 40)
S&P Health Care Select Sector Daily Capped 25/20 Index	Health Care (GICS Code 35)
S&P Industrials Select Sector Daily Capped 25/20 Index	Industrials (GICS Code 20)
S&P Materials Select Sector Daily Capped 25/20 Index	Materials (GICS Code 15)
S&P Real Estate Select Sector Daily Capped 25/20 Index	Real Estate (GICS Code 60)
S&P Technology Select Sector Daily Capped 25/20 Index	Information Technology (GICS Code 45)
S&P Utilities Select Sector Daily Capped 25/20 Index	Utilities (GICS Code 55)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index composition is the same as the relevant GICS sector of the S&P 500. Constituent changes are incorporated in the S&P Select Sector Daily Capped 25/20 Indices as and when they are made in the relevant GICS sector of the S&P 500. Any addition not coinciding with a reweighting effective date will be added to the relevant Select Sector Daily Capped 25/20 Index with an AWF of 1.

Weighting. Each index is capped market capitalization weighted. For capping purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December. Indices are also reviewed daily based on each company's capped market capitalization weight. Daily capping is only performed when either the largest index closing weight exceeds 25% or the second largest index closing weight exceeds 20%. The quarterly capping reference date is the Wednesday prior to the second Friday of March, June, September, and December with changes effective after the close of the following Friday.

When daily capping is necessary S&P DJI announces the changes in pro-forma files disseminated after the close of the business day on which the daily weight caps are exceeded with a reference date as of after the close of that same business day, and changes are effective after the close of the next trading day. While capping is reviewed daily, the index may be capped less frequently. If daily capping is necessary during a regularly occurring quarterly capping window the impacted index is capped per the normal daily capping procedure with the changes effective after the close of the next trading day. However, the previously assigned AWFs from the quarterly reference date are still implemented, effective after the close of the third Friday of March, June, September, and December, to account for any applicable quarterly share and IWF updates.

If on the second to last business day prior to the quarterly rebalancing implementation, using that day's closing price (adjusted for any applicable corporate actions) and the newly assigned quarterly shares, IWF, and AWFs as of the rebalancing effective date the index breaches the daily capping requirements the index recaps using that day's closing price. The new AWFs replace the originally assigned AWFs, with the new AWFs still effective after the close of the third Friday of March, June, September, and December. Any index requiring daily capping is not assessed on the next business day as the previously performed capping is effective at that day's closing. Both the quarterly and daily capping process are performed according to the following procedures:

[8] S&P Dow Jones Indices has created back calculated history for the S&P Communication Services Select Sector Daily Capped 25/20 Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

1. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the rebalancing effective date, each company is weighted by FMC. Modifications are made as defined below.
2. If the company with the largest weight exceeds 23%, the company's FMC weight is capped at 23%, which allows for a 2% buffer.
3. All excess weight is proportionally redistributed to all remaining uncapped companies within the relevant index.
4. If the company with the second largest weight exceeds 19%, the company's FMC weight is capped at 19%, which allows for a 1% buffer.
5. All excess weight is proportionally redistributed to all remaining uncapped companies within the relevant index.
6. After this redistribution, steps 2 through 5 are repeated iteratively until the weight of the largest company does not exceed 23% and the weight of the second largest company does not exceed 19%.
7. The sum of the companies with weights greater than 4.8% cannot exceed 50% of the total index weight.
8. If the rule in step 7 is breached, all companies are ranked in descending order of their FMC weights. The first company's weight that breaches the 50% limit is reduced to 4.5%.
9. This excess weight is proportionally redistributed to all companies with weights below 4.5%. This is repeated iteratively until step 7 is satisfied.
10. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices on the reference date, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P Select Sector Daily Capped 25/20 Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P Select Sector 15/60 Capped Indices

Index Construction. Companies in the S&P 500 are classified based on GICS. Each index is made up of all stocks in the respective GICS sector unless otherwise noted in the table below.

S&P Select Sector Capped 15/60 Index	GICS Classification
S&P Communication Services Select Sector 15/60 Capped Index[9]	Communications Services (GICS Code 50)
S&P Consumer Discretionary Select Sector 15/60 Capped Index	Consumer Discretionary (GICS Code 25)
S&P Consumer Staples Select Sector 15/60 Capped Index	Consumer Staples (GICS Code 30)
S&P Energy Select Sector 15/60 Capped Index	Energy (GICS Code 10)
S&P Financials Select Sector 15/60 Capped Index	Financials (GICS Code 40)
S&P Health Care Select Sector 15/60 Capped Index	Health Care (GICS Code 35)
S&P Industrials Select Sector 15/60 Capped Index	Industrials (GICS Code 20)
S&P Materials Select Sector 15/60 Capped Index	Materials (GICS Code 15)
S&P Real Estate Select Sector 15/60 Capped Index	Real Estate (GICS Code 60)
S&P Technology Select Sector 15/60 Capped Index	Information Technology (GICS Code 45)
S&P Utilities Select Sector 15/60 Capped Index	Utilities (GICS Code 55)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index composition is the same as the relevant GICS sector of the S&P 500. Constituent changes are incorporated in the S&P Select Sector 15/60 Capped Indices as and when they are made in the relevant GICS sector of the S&P 500. Any addition not coinciding with a reweighting effective date will be added to the relevant S&P Select Sector 15/60 Capped Index with an AWF of 1.

Weighting. Each index is capped market capitalization weighted. For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC.
3. If the largest company's index weight exceeds 14%, the company's FMC weight is capped at 14%, which allows for a 1% buffer.
4. All excess weight is proportionally redistributed to all remaining uncapped companies within the relevant index.
5. After this redistribution, steps 3 and 4 are repeated iteratively until the weight of any company does not exceed 14%.
6. The sum of the weights of the largest five companies cannot exceed 55% of the total index weight. This allows for a 5% buffer.
7. If more than five companies are capped at 14% after step 5, the largest five companies are selected based on FMC.
8. If the rule in step 6 is breached, the cumulative weight of the largest five companies is reduced to 55%, maintaining the relative proportions among the largest five companies.
9. All excess weight is proportionally redistributed to all remaining companies within the relevant index (rest of the index).

[9] S&P Dow Jones Indices has created back calculated history for the S&P Communication Services Select Sector 15/60 Capped Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

10. The weight of any company in the rest of the index cannot exceed the weight of the fifth largest company from step 8.
11. If the rule in step 10 is breached, the weight of the largest company in the rest of the index is capped at the weight of the fifth largest company from step 8.
12. All excess weight is proportionally redistributed to all remaining uncapped companies in the rest of the index.
13. After this redistribution, steps 11 and 12 are repeated iteratively until the weight of any company in the rest of the index does not exceed the weight of the fifth largest company from step 8.
14. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices on the reference date, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.
15. If no feasible solution is available after following the above steps, the index is float market capitalization weighted.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P Select Sector 15/60 Capped Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

S&P Select Sector 15/40 Plus Capped Indices

Index Construction. Companies in the S&P 500 are classified based on GICS. Each index is made up of all stocks in the respective GICS sector as noted in the table below.

S&P Select Sector Capped 15/40 Plus Index	GICS Classification
S&P Communication Services Select Sector 15/40 Plus Capped Index	Communications Services (GICS Code 50)[10]
S&P Consumer Discretionary Select Sector 15/40 Plus Capped Index	Consumer Discretionary (GICS Code 25)
S&P Consumer Staples Select Sector 15/40 Plus Capped Index	Consumer Staples (GICS Code 30)
S&P Energy Select Sector 15/40 Plus Capped Index	Energy (GICS Code 10)
S&P Financials Select Sector 15/40 Plus Capped Index	Financials (GICS Code 40)
S&P Health Care Select Sector 15/40 Plus Capped Index	Health Care (GICS Code 35)
S&P Industrials Select Sector 15/40 Plus Capped Index	Industrials (GICS Code 20)
S&P Materials Select Sector 15/40 Plus Capped Index	Materials (GICS Code 15)
S&P Real Estate Select Sector 15/40 Plus Capped Index	Real Estate (GICS Code 60)
S&P Technology Select Sector 15/40 Plus Capped Index	Information Technology (GICS Code 45)
S&P Utilities Select Sector 15/40 Plus Capped Index	Utilities (GICS Code 55)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index composition is the same as the relevant GICS sector of the S&P 500. Constituent changes are incorporated in the S&P Select Sector 15/40 Plus Capped Indices as and when they are made in the relevant GICS sector of the S&P 500. If the index's stock count falls below 25, the index will also contain supplementary companies. Any addition not coinciding with a reweighting effective date will be added to the relevant S&P Select Sector 15/40 Plus Capped Index with an AWF of 1.

At the quarterly rebalancing, in the event that fewer than 25 stocks are selected for the relevant S&P Select Sector 15/40 Plus Capped Index, the index will be supplemented with the largest company based on FMC in the S&P MidCap 400 within the eligible GICS Sector until the 25-stock minimum is reached. If intra-quarter additions to the S&P 500 in the eligible GICS Sector result in the index reaching the required minimum count, the supplementary companies will remain in the index until the next quarterly rebalancing, at which point they will be reviewed. In the event that supplementary companies are required and at least one supplementary company is a current constituent, a buffer is applied at the quarterly rebalancing such that a supplementary company being added must have an FMC greater than 1.2 times (or 20% higher than) the supplementary company it is replacing.

This buffer is evaluated on each supplementary company addition relative to the current supplementary company it is replacing. For example, the largest non-index supplementary company by FMC is evaluated against the smallest supplementary index constituent, the second largest non-index supplementary company is evaluated against the second smallest supplementary index constituent, etc. This process is repeated until no supplementary additions exceed the buffer.

Weighting. Each index is capped market capitalization weighted and must have a constituent count of at least 25 stocks. For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December, respectively. The weighting process is as follows:

1. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC.
2. If the largest company's index weight exceeds 14%, the company's FMC weight is capped at 14% (which allows for a 1% buffer), with the excess weight proportionally redistributed to the

[10] S&P Dow Jones Indices created back calculated history for the Communication Services Select Sector Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

remaining uncapped companies in the index. This process is repeated iteratively until no company's weight is greater than 14%.

3. If more than five companies are capped at 14% after step 2, the largest five companies are selected based on FMC.
4. The sum of the weights of the largest five companies cannot exceed 35% of the total index weight (which allows for a 5% buffer). If a breach occurs, the cumulative weight of the largest five companies is capped at 35% (maintaining the relative proportions among the largest five companies), with the excess weight proportionally redistributed to the remaining companies in the index.
5. No remaining company's weight can exceed the weight of the fifth largest company from step 4. If a breach occurs, the weight of the largest remaining company is capped at the weight of the fifth largest company from step 4, with the excess weight proportionally redistributed to the remaining uncapped companies. This process is repeated iteratively until no remaining company's weight exceeds the weight of the fifth largest company from step 4.
6. If, after Step 5, all the remaining companies reach the same weight as the fifth largest company without 100% of the excess weight being allocated, the residual excess weight is allocated equally among all the remaining constituents (i.e., outside of the five largest companies from step 4). All companies in the index, outside of the five largest companies, will now be equally weighted, with weights greater than the fifth largest company.
7. The weight of any of the largest five companies from step 4 cannot be smaller than the weight of the remaining companies. If this rule is breached, the company with the smallest weight among the largest five companies from step 4 is floored at the weight of the remaining companies (i.e., outside of the five largest companies).
8. All weight additions are proportionately deducted from the unfloored companies among the largest five companies. This process is repeated iteratively until the weight of any company among the five largest is not smaller than the weight of the remaining companies.
9. If, on the second to last business day of June or December a company has a weight greater than 15% or the sum of the top five companies' weights exceeds 40%, a secondary rebalancing will be triggered with the rebalancing effective date being after the close of the last business day of the month. This secondary rebalancing will use the closing prices as of the second to last business day of June or December, and membership, shares outstanding, and IWFs as of the rebalancing effective date.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P Select Sector 15/40 Plus Capped Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P 500 Consumer Select 15/60 Index

Index Universe. At each rebalancing, the index universe consists of all companies that are constituents of the S&P 500 Consumer Discretionary Select Sector Index or S&P 500 Consumer Staples Select Sector Index.

Index Construction. At each rebalancing, rank companies in the index universe in descending order by FMC, selecting the largest 50 for index inclusion, subject to the following selection buffer:

1. Automatically select the largest 45 companies.
2. Select existing constituents ranked in the top 55 until the target company count is reached.
3. If at this point the target company count is not met, select the largest non-constituents until the target company count is met.

Constituent Weightings. At each rebalancing, weight constituents according to the following:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
2. Using prices as of the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, FMC weight each constituent company.
3. If the largest company's index weight exceeds 14%, cap the company's FMC weight at 14%, which allows for a 1% buffer.
4. Proportionally redistribute any excess weight to the uncapped companies in the index.
5. After the redistribution, iteratively repeat steps 3 and 4 until no company violates the 14% cap.
6. The sum of the weights of the largest five companies cannot exceed 55% of the total index weight. This allows for a 5% buffer.
7. If more than five companies are capped at 14% after step 5, the largest five companies are selected based on FMC.
8. If the rule in step 6 is breached, cap the cumulative weight of the largest five companies at 55% while maintaining the relative weight proportions among those companies.
9. Proportionally redistribute any excess weight to the uncapped constituents.
10. The weight of the remaining constituent companies cannot exceed the weight of the smallest company from step 8.
11. If step 10 is breached, cap the weight of the largest remaining company at the weight of the smallest company from step 8.
12. Proportionally redistribute any excess weight to all remaining uncapped companies.
13. After the redistribution, iteratively repeat steps 11 and 12 until no constituent company's weight exceeds the weight of the smallest company from step 8.
14. If no feasible solution is available after following the above steps, the index is float market capitalization weighted.

For more information on index calculation, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

Multiple Share Classes. All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes in these indices, please refer to Approach A within the Multiple Share Classes section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

At times, companies may be represented in the S&P 500 Consumer Select 15/60 Index by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

Index Maintenance. All index adjustments and corporate action treatments follow the underlying indices.

Rebalancing. The index rebalances quarterly, effective after the close on the third Friday of March, June, September, and December. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December. Prices used in the weighting process are as of the reference date, while membership, shares outstanding, and IWFs are as of the rebalancing effective date. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices on the reference date, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

Additions. Except for spin-offs, there are no additions intra-rebalancing. Spin-offs follow the treatment of the underlying index.

Deletions. Constituents removed from the index universe are removed from the index simultaneously. These deletions may be caused by companies being removed from the S&P 500 or by changes to companies' GICS sector classifications.

GICS Reclassifications. Changes as a result of a constituent's GICS reclassification are made simultaneously with the classification change in the underlying index.

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

S&P 500 Capped 35/20 Indices

Index Construction. Companies in the S&P 500 are classified based GICS. Each index is made up of all stocks in the relevant GICS classification unless otherwise noted in the table below.

S&P 500 Capped 35/20 Index	GICS Classification
S&P 500 Capped 35/20 Communication Services Index	Communications Services (GICS Code 50)[11]
S&P 500 Capped 35/20 Consumer Discretionary Index	Consumer Discretionary (GICS Code 25)
S&P 500 Capped 35/20 Consumer Staples Index	Consumer Staples (GICS Code 30)
S&P 500 Capped 35/20 Energy Index	Energy (GICS Code 10)
S&P 500 Capped 35/20 Financials Index	Financials (GICS Code 40)
S&P 500 Capped 35/20 Health Care Index	Health Care (GICS Code 35)
S&P 500 Capped 35/20 Industrials Index	Industrials (GICS Code 20)
S&P 500 Capped 35/20 Information Technology Index	Information Technology (GICS Code 45)
S&P 500 Capped 35/20 Materials Index	Materials (GICS Code 15)
S&P 500 Capped 35/20 Real Estate Index	Real Estate (GICS Code 60)
S&P 500 Capped 35/20 Utilities Index	Utilities (GICS Code 55)
S&P 500 Capped 35/20 Utilities & Telecommunication Services Index	Utilities (GICS Code 55) Telecommunication Services (GICS Code 5010)
S&P 500 Capped 35/20 Banks and Diversified Financials Select Index	Regional Banks (Code: 40101015) Diversified Banks (Code: 40101010) Asset Management & Custody Banks (Code: 40203010) Consumer Finance (Code: 40202010) Investment Banking & Brokerage (Code: 40203020)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index composition is the same as the relevant GICS sector of the S&P 500. Constituent changes are incorporated in the S&P 500 Capped 35/20 Indices as and when they are made in the relevant GICS sector of the S&P 500. Please note any addition not coinciding with a reweighting effective date will be added to the relevant S&P 500 Capped 35/20 Index with the largest AWF currently represented in that index.

Weighting. Each index is capped market capitalization weighted. For capping purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December. Indices are also reviewed on the Wednesday prior to the second Friday of all other months based on each company's capped market capitalization weight. Monthly capping is only performed when either the largest index weight exceeds 35% or the second largest index weight exceeds 20%. The capping reference date is the Wednesday prior to the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the reweighting effective date. The reference date is the Wednesday prior to the second Friday of each reweighting month. While capping is reviewed monthly, the index may be capped on a less frequent basis. Both the quarterly and monthly capping are performed for each index, as necessary, based on the scenarios in the table on the following page.

Scenario	Steps
1. At least one company in the index has an FMC weight exceeding 31.5%.	1. The company with the largest weight is capped at 31.5%. All excess weight is proportionally redistributed to the remaining uncapped companies in the index. 2. If the weight of any remaining uncapped company exceeds 18%, its weight is capped at 18% and the excess weight is proportionally redistributed to all remaining uncapped companies.

[11] S&P Dow Jones Indices has created back calculated history for the S&P 500 Capped 35/20 Communication Services Index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

Scenario	Steps
	3. Step 2 is repeated until the weight of all uncapped companies does not exceed 18%.
2. The weight of more than one company exceeds 18%, but the company with the largest weight does not exceed 31.5%.	1. The company with the largest weight is capped at its FMC weight. 2. If the weight of any remaining uncapped company exceeds 18%, its weight is capped at 18% and the excess weight is proportionally redistributed to all remaining uncapped companies in the index. 3. Step 2 is repeated until the weight of all uncapped companies does not exceed 18%.

In each of the above scenarios, index share amounts are assigned to each constituent to arrive at the target weights. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing may differ from the target weights due to price movements.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P 500 Capped 35/20 Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P MidCap 400 Capped Sector Indices

Index Construction. Companies in the S&P MidCap 400 are classified based on GICS. Each index is made up of all stocks in the GICS sector unless otherwise noted in the table below.

S&P MidCap 400 Capped Sector Index	GICS Sector Classification
S&P MidCap 400 Capped Consumer Discretionary (Sector) Index	Consumer Discretionary (GICS Code 25)
S&P MidCap 400 Capped Consumer Staples (Sector) Index	Consumer Staples (GICS Code 30)
S&P MidCap 400 Capped Energy (Sector) Index	Energy (GICS Code 10)
S&P MidCap 400 Capped Financials (Sector) Index	Financials (GICS Code 40)
S&P MidCap 400 Capped Financials & Real Estate (Sector) Index	Financials (GICS Code 40) Real Estate (GICS Code 60)
S&P MidCap 400 Capped Health Care (Sector) Index	Health Care (GICS Code 35)
S&P MidCap 400 Capped Industrials (Sector) Index	Industrials (GICS Code 20)
S&P MidCap 400 Capped Information Technology (Sector) Index	Information Technology (GICS Code 45)
S&P MidCap 400 Capped Materials (Sector) Index	Materials (GICS Code 15)
S&P MidCap 400 Capped Real Estate (Sector) Index	Real Estate (GICS Code 60)
S&P MidCap 400 Capped Utilities & Communication Services (Sector) Index[12]	Utilities (GICS Code 55) Communication Services (GICS Code 50)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Please note that any intra-quarter addition will be added to the relevant S&P MidCap 400 Capped Sector Index with the largest AWF currently represented in that index.

If the largest AWF in the index is not shared by multiple index constituents, the new addition will be added to the index with index shares that are commensurate with the index shares of the stock in a hypothetical rebalancing using the closing prices on the date the addition is announced. In such cases of commensurate weighting, the index shares for all current constituents will remain constant.

Weighting. Each index is capped market capitalization weighted. For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September and December.
2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC.
3. If any company has a weight greater than 22.5%, that company has its weight capped at 22.5%. The cap is set to allow for a buffer below a 25% limit.
4. All excess weight is proportionally redistributed to all uncapped companies within the relevant index.
5. After this redistribution, if the weight of any other company breaches 22.5%, the process is repeated iteratively until no company breaches the 22.5% weight cap.
6. The sum of the companies with weight greater than 4.5% cannot exceed 45% of the total weight. These caps are set to allow for a buffer below 5% and 50% limits, respectively.
7. If the rule in step 6 is breached, all the companies are ranked in descending order of their weights and the company with the lowest weight that causes the 45% limit to be breached is identified. The weight of this company is, then, reduced to 4.5%.

[12] Please note this is a slight modification from the official GICS Sectors in that this sub-set of indices combines the Utilities and Communication Services Sectors into one.

8. This excess weight is proportionally redistributed to all companies with weights below 4.5%. Any stock that receives weight cannot breach the 4.5% cap. This process is repeated iteratively until step 6 is satisfied or until all stocks are greater than or equal to 4.5%. If the rule in step 6 is still breached and all stocks are greater than or equal to 4.5%, the company with the lowest weight that causes the 45% limit to be breached is identified. The weight of this company is, then, reduced to 4.5%.
9. This excess weight is proportionally redistributed to all companies with weights greater than 4.5%. Any stock that receives weight cannot breach the 22.5% stock cap. This process is repeated iteratively until step 6 is satisfied.
10. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

At times, an index's company count may require the capping rules to be relaxed. Please refer to the table below for an overview of the process followed, when necessary. Each subsequent row is a relaxation of the previous row's weight caps.

Number of Constituents	Single Company Weight Cap[13]	Threshold for Aggregate Company Weight Capping[14]	Aggregate Company Weight Cap[9]
12-14	25.0%	5.0%	50%
11	27.5%	5.5%	55%
9-10	30.0%	6.0%	60%
8	32.5%	6.5%	65%
7	35.0%	7.0%	70%
6	37.5%	7.5%	75%
5	40.0%	8.0%	80%
4	42.5%	8.5%	85%
3	50.0%	9.5%	95%

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P MidCap 400 Capped Sector Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

[13] Individual companies are capped at the single company weight cap.
[14] The sum of all companies with weights exceeding the threshold for aggregate company weight capping are capped at the aggregate company weight cap.

S&P SmallCap 600 Capped Sector Indices

Index Construction. Companies in the S&P SmallCap 600 are classified based on GICS. Each index is made up of all stocks in the GICS sector unless otherwise noted in the table below.

S&P SmallCap 600 Capped Sector Index	GICS Sector Classification
S&P SmallCap 600 Capped Consumer Discretionary (Sector) Index	Consumer Discretionary (GICS Code 25)
S&P SmallCap 600 Capped Consumer Staples (Sector) Index	Consumer Staples (GICS Code 30)
S&P SmallCap 600 Capped Energy (Sector) Index	Energy (GICS Code 10)
S&P SmallCap 600 Capped Financials (Sector) Index	Financials (GICS Code 40)
S&P SmallCap 600 Capped Financials & Real Estate (Sector) Index	Financials (GICS Code 40) Real Estate (GICS Code 60)
S&P SmallCap 600 Capped Health Care (Sector) Index	Health Care (GICS Code 35)
S&P SmallCap 600 Capped Industrials (Sector) Index	Industrials (GICS Code 20)
S&P SmallCap 600 Capped Information Technology (Sector) Index	Information Technology (GICS Code 45)
S&P SmallCap 600 Capped Materials (Sector) Index	Materials (GICS Code 15)
S&P SmallCap 600 Capped Real Estate (Sector) Index	Real Estate (GICS Code 60)
S&P SmallCap 600 Capped Utilities & Communication Services (Sector) Index[15]	Utilities (GICS Code 55) Communication Services (GICS Code 50)

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Please note that any intra-quarter addition will be added to the relevant S&P SmallCap 600 Capped Sector Index with the largest AWF currently represented in that index.

If the largest AWF in the index is not shared by multiple index constituents, the new addition will be added to the index with index shares that are commensurate with the index shares of the stock in a hypothetical rebalancing using the closing prices on the date the addition is announced. In such cases of commensurate weighting, the index shares for all current constituents will remain constant.

Weighting. Each index is capped market capitalization weighted. For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures:

1. The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC.
3. If any company has a weight greater than 22.5%, that company has its weight capped at 22.5%. The cap is set to allow for a buffer below a 25% limit.
4. All excess weight is proportionally redistributed to all uncapped companies within the relevant index.
5. After this redistribution, if the weight of any other company breaches 22.5%, the process is repeated iteratively until no company breaches the 22.5% weight cap.
6. The sum of the companies with weight greater than 4.5% cannot exceed 45% of the total weight. These caps are set to allow for a buffer below 5% and 50% limits, respectively.
7. If the rule in step 6 is breached, all the companies are ranked in descending order of their weights and the company with the lowest weight that causes the 45% limit to be breached is identified. The weight of this company is, then, reduced to 4.5%.

[15] Please note this is a slight modification from the official GICS Sectors in that this sub-set of indices combines the Utilities and Communication Services Sectors into one.

8. This excess weight is proportionally redistributed to all companies with weights below 4.5%. Any stock that receives weight cannot breach the 4.5% cap. This process is repeated iteratively until step 6 is satisfied or until all stocks are greater than or equal to 4.5%. If the rule in step 6 is still breached and all stocks are greater than or equal to 4.5%, the company with the lowest weight that causes the 45% limit to be breached is identified. The weight of this company is, then, reduced to 4.5%.
9. This excess weight is proportionally redistributed to all companies with weights greater than 4.5%. Any stock that receives weight cannot breach the 22.5% stock cap. This process is repeated iteratively until step 6 is satisfied.
10. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

At times, an index's company count may require the capping rules to be relaxed. Please refer to the table below for an overview of the process followed, when necessary. Each subsequent row is a relaxation of the previous row's weight caps.

Number of Constituents	Single Company Weight Cap[16]	Threshold for Aggregate Company Weight Capping[17]	Aggregate Company Weight Cap[12]
12-14	25.0%	5.0%	50%
11	27.5%	5.5%	55%
9-10	30.0%	6.0%	60%
8	32.5%	6.5%	65%
7	35.0%	7.0%	70%
6	37.5%	7.5%	75%
5	40.0%	8.0%	80%
4	42.5%	8.5%	85%
3	50.0%	9.5%	95%

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the S&P SmallCap 600 Capped Sector Indices by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

[16] Individual companies are capped at the single company weight cap.
[17] The sum of all companies with weights exceeding the threshold for aggregate company weight capping are capped at the aggregate company weight cap.

S&P 500 Ex-Sector Indices

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. All companies in the S&P 500 are classified based GICS. All companies in the S&P 500 that are classified in the defined excluded sector(s) are removed. The remaining constituents of the S&P 500 are then selected and form the ex-sector index.

Weighting. Each index is weighted by FMC.

S&P Composite 1500 / S&P TMI (Spliced as of EOD Dec-18-2015) Index

Index Construction. The index is a spliced version of two indices. Prior to December 18, 2015, the index was a replica of the S&P Composite 1500 and followed that index's methodology. Effective December 18, 2015, the index became a replica of the S&P Total Market Index (TMI) and follows the S&P TMI methodology.

Weighting. The index is weighted by FMC.

S&P 500 Ex-Financials, Real Estate, Utilities and Transportation Index

Index Universe. Index constituents are drawn from the S&P 500.

Constituent Selection. All companies in the S&P 500 are classified based on GICS. All companies in the S&P 500 that are classified in the Financials, Real Estate, and Utilities sectors, as well as those classified in the Transportation industry group are excluded. The remaining constituents of the S&P 500 are then selected and form the index.

Weighting. The index is weighted by FMC.

S&P Equal Weight U.S. Indices

Index Construction. Each index is an equal weighted version of an underlying index as detailed in the table below. Index composition is the same as the underlying index. Constituent changes are incorporated in the equal weight index, as and when they are made in the underlying index.

S&P Equal Weight U.S. Index	Underlying Index
S&P 100 Equal Weight Index	S&P 100
S&P 500 Equal Weight Index	S&P 500
S&P MidCap 400 Equal Weight Index	S&P MidCap 400
S&P SmallCap 600 Equal Weight Index	S&P SmallCap 600
S&P Composite 1500 Equal Weight Index	S&P Composite 1500
S&P 500 Top 50 Equal Weight Index	S&P 500 Top 50

When a company is added to an index in the middle of the quarter, it takes the weight of the company that it replaced. The one exception is when a company is removed from an index at a price of $0.00. In such a case, the company's replacement is added to the index at the weight using the previous day's closing value, or the most immediate prior business day that the deleted company was not valued at $0.00.

S&P 500 Equal Weight Sector Indices. Companies in the S&P 500 are classified based on GICS. Each index is made up of all stocks in the GICS sector unless otherwise noted in the table below.

S&P 500 Equal Weight Sector Index	GICS Sector Classification
S&P 500 Equal Weight Consumer Discretionary Index	Consumer Discretionary (GICS Code 25)
S&P 500 Equal Weight Consumer Staples Index	Consumer Staples (GICS Code 30)
S&P 500 Equal Weight Energy Index	Energy (GICS Code 10)
S&P 500 Equal Weight Energy Plus Index	Energy (GICS Code 10)
S&P 500 Equal Weight Financials Index	Financials (GICS Code 40)
S&P 500 Equal Weight Health Care Index	Health Care (GICS Code 35)
S&P 500 Equal Weight Industrials Index	Industrials (GICS Code 20)
S&P 500 Equal Weight Information Technology Index	Information Technology (GICS Code 45)
S&P 500 Equal Weight Materials Index	Materials (GICS Code 15)
S&P 500 Equal Weight Real Estate Index	Real Estate (GICS Code 60)
S&P 500 Equal Weight Communication Services Index	Communication Services (GICS Code 50)
S&P 500 Equal Weight Utilities Index	Utilities (GICS Code 55)
S&P 500 Equal Weight Utilities Plus Index	Utilities (GICS Code 55)
S&P 500 Equal Weight Communication Services Plus Index[18]	Communication Services (GICS Code 50)

Index composition is the same as the relevant GICS sector of the S&P 500. Constituent changes are incorporated in the S&P Equal Weight Sector Indices, as and when they are made in the relevant GICS sector of the S&P 500, except for the S&P 500 Equal Weight Plus Indices which may also contain supplementary stocks. The company maintains its modified index shares if it is moved to a new S&P 500 Equal Weight Sector Index upon reclassification. This results in a divisor adjustment to both the S&P 500 Equal Weight Sector Index the company is leaving and the S&P 500 Equal Weight Sector Index the company is joining.

At the quarterly rebalancing, in the event that fewer than 22 companies are selected for the S&P 500 Equal Weight Plus Indices, the index will be supplemented with the largest company based on FMC in the S&P MidCap 400 within the eligible GICS Sector until the 22 company minimum is reached. If intra-quarter additions to the S&P 500 in the eligible GICS Sector result in the index reaching the required minimum count, the supplementary companies will remain in the index until the next quarterly rebalance, at which point they will be reviewed. If supplementary stocks are required, and at least one supplementary stock is a current constituent, a buffer is applied at the quarterly rebalancing such that a supplementary stock being added must have an FMC greater than 1.2 times (or 20% higher than) the supplementary stock it is replacing. This buffer is evaluated on each supplementary stock addition relative to the current supplementary stock it is replacing. For example, the largest non-index supplementary stock by FMC is evaluated against the smallest supplementary index constituent, the second largest non-index supplementary stock is evaluated against the second smallest supplementary index constituent, etc. This process is repeated until no supplementary additions exceed the buffer.

Weighting. The indices are reset to equal weight quarterly after the close of business on the third Friday of March, June, September, and December. The reference date for weighting is the Wednesday prior to the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, and membership, shares outstanding, and IWFs as of the reweighting effective date.

The closing weight of any company removed from the headline S&P 500 Equal Weighted Index at the close of business on the day prior to the effective date determines the new AWF and Index Shares of the replacement company.

For more information on the index calculation methodology, please refer to the Equal Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

[18] S&P Dow Jones Indices created back calculated history for the index based on the securities in the headline S&P 500 that would have hypothetically been classified as GICS Code 50 under this new structure effective September 24, 2018.

S&P 500 Sectors Equal Allocation Index

Index Objective. The index is a weighted return index measuring the equal weighted performance of the FMC weighted S&P 500 Sector Indices (the component indices).

Component Indices. Please see the table below.

S&P 500 Sector Index	GICS Sector Classification
S&P 500 Consumer Discretionary Index	Consumer Discretionary (GICS Code 25)
S&P 500 Consumer Staples Index	Consumer Staples (GICS Code 30)
S&P 500 Energy Index	Energy (GICS Code 10)
S&P 500 Financials Index	Financials (GICS Code 40)
S&P 500 Health Care Index	Health Care (GICS Code 35)
S&P 500 Industrials Index	Industrials (GICS Code 20)
S&P 500 Information Technology Index	Information Technology (GICS Code 45)
S&P 500 Materials Index	Materials (GICS Code 15)
S&P 500 Real Estate Index[19]	Real Estate (GICS Code 60)
S&P 500 Communication Services Index	Communication Services (GICS Code 50)
S&P 500 Utilities Index	Utilities (GICS Code 55)

Index Eligibility. See *Index Construction*.

Index Construction. At each rebalancing, the index selects the component indices.

Index Weighting. At each rebalancing, the index equal weights the component indices. Each component index FMC weights its constituents.

Index Calculation. For information on the index calculation, please refer to the Weighted Return section of *S&P Dow Jones Indices' Index Mathematics Methodology*.

Reweighting. The index reweights quarterly, effective after the close of business on the third Friday of March, June, September, and December, using a reference date for weighting as of after the close on the Wednesday prior to the second Friday of the reweighting month.

Index Maintenance. Except for rebalancings, all index adjustments and corporate action treatments follow the component indices.

[19] For history prior to September 2016, the index did not include the S&P 500 Real Estate Sector Index.

S&P 900 Banks (Industry) 7/4 Capped Index (USD)

Index Objective. The index measures the performance of the constituents of the underlying index classified as part of two GICS Banks industries, defined below.

Underlying Index. S&P 900.

Index Eligibility. Constituents of the underlying index classified as part of the following GICS sub-industries are eligible:

- Diversified Banks (Code: 40101010)
- Regional Banks (Code: 40101015)

Index Construction. See Index Eligibility.

Additions. Companies added to the underlying index with an eligible GICS code or current constituents of the underlying index whose GICS code changes to that of an eligible sub-industry are added to the index simultaneously. Any addition is added at the lesser of 4% index weight or commensurate with the weight of the stock in a hypothetical rebalancing. Index shares of the addition are determined based on closing prices as of the addition announcement date. The index shares for all current constituents will remain constant.

Deletions. Constituents removed from the underlying index or whose GICS code changes to an ineligible sub-industry are removed from the index simultaneously.

Constituent Weightings. The index is weighted by FMC, subject to weight caps, if necessary. The individual weights of the largest five index companies are each capped at a maximum 7% index weight. Then, the remaining companies are each capped at a maximum 4% index weight. Weight is redistributed proportionally across all uncapped components.

Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at their natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Multiple Share Classes. All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Rebalancing. The index is rebalanced on a quarterly basis, effective after the close on the third Friday of March, June, September, and December. The reference date is the Wednesday prior to the second Friday of each rebalancing month. Prices used in the weighting process are as of the reference date, while membership, shares outstanding, and IWFs are as of the rebalancing effective date.

Index Maintenance. All index adjustments and corporate action treatments follow the underlying index.

S&P 500 in TTM Rates JPY Hedged Index

Index Objective. The index measures the performance of the underlying index hedged against currency fluctuations.

Underlying Index. S&P 500 (Index Code: 500).

Currency of Calculation. The index calculates in Japanese yen.

Exchange Rate. Index values calculate using TTM (Telegraphic Transfer Midrate) foreign exchange rates from the Bank of Tokyo Mitsubishi, with index values published on the calculation date using TTM rates of *T+1*.

Holiday Schedule. The index calculates when the Japan equity markets are open. A complete holiday schedule for the year is available at www.spglobal.com/spdji.

Rebalancing. The index rebalances monthly. The index determines the required hedged amount using the TTM rate on the most recent Japanese trading day (*T*) and the underlying index value on the preceding date (*T-1*). If there is no underlying index value on *T-1*, the calculation uses the most recent index value.

Hedging. The index daily return series calculate by interpolating between the spot price and the forward price.

For each hedge month m, there are $d = 1,2,3 ... D$ business days.

md is day d for hedge month m and $m0$ is the last business day of the hedge month $m - 1$.

F_I_{md} = The interpolated forward rate as of day d of month m.

S_m = The spot rate in U.S. dollar per Japanese yen (USD/JPY).

F_m = The forward rate in U.S. dollar per Japanese yen (USD/JPY).

HR_{md} = The hedge return (%).

SPI_E_m = The underlying index level in Japanese yen.

SPI_EH_m = the hedged index level.

$$F\_I_{md} = S_{md} + \left(\frac{D-d}{D}\right) * (F_{md} - S_{md})$$

$$HR_{md} = \frac{S_{m0}}{F_{m0}} - \frac{S_{m0}}{F\_I_{md}}$$

$$SPI\_EH_{md} = SPI\_EH_{m0} * \left(\frac{SPI\_E_{md}}{SPI\_E_{m0}} + HR_{md}\right)$$

S&P 500 Semiconductors & Semiconductor Equipment (Industry Group) 35% Capped Index (USD)

Index Objective. The index measures the performance of the constituents of the underlying index, subject to a 35% company weight cap.

Underlying Index. S&P 500 Semiconductors & Semiconductor Equipment (Industry Group). For information on the underlying index, please refer to the S&P U.S. Indices Methodology at *http://www.spglobal.com/spdji*.

Index Eligibility. At each rebalancing, constituents of the underlying are eligible for index inclusion.

Index Construction. See *Index Eligibility*.

Index Additions. Additions to the underlying are added to the index simultaneously.

Index Deletions. Constituents removed from the underlying index are removed from the index simultaneously.

Constituent Weightings. The index FMC weights constituents, subject to a single company cap of 35% of the index. Any excess weight is proportionally redistributed to the uncapped constituents.

Index Maintenance. All index adjustments and corporate action treatments follow the underlying index.

Reweighting. The index rebalances quarterly, effective after the close of the third Friday in March, June, September, and December. The reference date for prices used for the weighting process is after the close of the Wednesday prior to the second Friday of the rebalancing month.

Currency of Calculation. The index calculates in U.S. dollars.

S&P 500 3% Capped Index (USD)

Index Objective. The index measures the performance of companies in the underlying index, subject to a 3% weight cap.

Underlying Index. S&P 500 (Index Code: 500).

Index Eligibility. The index comprises the constituents of the underlying index.

Additions. Any intra-quarter addition is added to the index with the largest AWF currently represented in the index. If the largest AWF in the index is not shared by multiple index constituents, the new addition is added to the index with index shares that are commensurate with the index shares of the stock in a hypothetical rebalancing using the closing prices on the date the addition is announced. In such cases of commensurate weighting, the index shares for all current constituents remain constant.

Deletions. Constituents removed from the underlying index are removed from the index simultaneously.

Constituent Weightings. At each rebalancing, the index is capped market capitalization weighted. If any company has a weight greater than 3%, cap that company's weight at 3%. Proportionally redistribute all excess weight to all uncapped companies. After this redistribution, if the weight of any other company breaches 3%, repeat the process iteratively until no company breaches the 3% cap.

Rebalancing. The index rebalances quarterly, effective after the close on the third Friday of March, June, September, and December. The reference date is the Wednesday prior to the second Friday of each rebalancing month. Prices used in the weighting process are as of the reference date, while membership, shares outstanding, and IWFs are as of the rebalancing effective date.

Index Maintenance. All index adjustments and corporate action treatments follow the underlying index.

S&P 500 Top 10 25% Capped Index (USD)

Index Objective. The index measures the performance of companies in the underlying index, subject to a 25% single company cap.

Underlying Index. S&P 500 Top 10 (Index Code: SP5T1).

Index Eligibility. The index comprises the constituents of the underlying index.

Index Additions. Additions to the underlying index are added to the index simultaneously.

Index Deletions. Constituents removed from the underlying index are removed from the index simultaneously.

Constituent Weightings. At each rebalancing, the index FMC weights companies. If any company has a weight greater than 25%, cap that company's weight at 25%. Proportionally redistribute all excess weight to all uncapped companies within the index. After this redistribution, if the weight of any other company breaches 25%, repeat the process iteratively until no company breaches the 25% cap.

Rebalancing. The index rebalances quarterly, effective after the close on the third Friday of March, June, September, and December. The reference date is the Wednesday prior to the second Friday of each rebalancing month. Prices used in the weighting process are as of the reference date, while membership, shares outstanding, and IWFs are as of the rebalancing effective date.

Index Maintenance. All index adjustments and corporate action treatments follow the underlying index.

S&P 500 Top 20 Select Uncapped Index

Index Objective. The index measures the performance of the largest 20 companies, by FMC, in the S&P 500.

Index Universe. The index universe is the S&P 500, as of the rebalancing effective date.

Constituent Selection. At each rebalancing, the index selects the top 20 companies in the S&P 500, based on FMC, for index inclusion, using data as of the rebalancing reference date.

Weighting. The index FMC weights constituents.

Replacement Policy. The index targets 20 companies, and replaces any removed company, even if outside the normal rebalancing schedule, using a reference date for determining whether all eligibility criteria are met as of the open of trading two business days prior to the replacement announcement date.[20]

Rebalancing. The index rebalances quarterly, effective after the close of business on the third Friday of March, June, September, and December using a rebalancing reference date as of the last business day of February, May, August, and November.

[20] For history prior to 08/19/2024, the index did not apply the Replacement Policy rule.

S&P 500 Top 20 Select Index

Index Objective. The index measures the capped market capitalization weighted performance of the largest 20 companies, by FMC, in the S&P 500.

Index Universe. The index universe is the S&P 500, as of the rebalancing effective date.

Constituent Selection. At each rebalancing, the index selects the top 20 companies in the S&P 500, by FMC, for index inclusion, using data as of the rebalancing reference date.

The methodology for capped indices follows an identical approach to market capitalization weighted indices except that the indices apply an additional weight factor, or "AWF", to adjust the float-adjusted market capitalization to a value such that the index weight constraints are satisfied.

For more information on AWF, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Weighting. At each rebalancing, the index is capped market capitalization weighted, according to the following process:

1. With prices reflected on the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the rebalancing effective date, weight each company by FMC.
2. If any company's FMC weight exceeds 22.5%, cap that company's weight at 22.5%, which allows for a 2.5% buffer. The buffer is meant to mitigate against any company exceeding 25% as of the quarter-end diversification requirement date.
3. Proportionally redistribute all excess weight to all uncapped companies within the index.
4. After this redistribution, if the weight of any other company(s) then breaches 22.5%, repeat the process iteratively until no company breaches the 22.5% weight cap.
5. The sum of the companies with weights greater than 4.5% cannot exceed 48% of the total index weight. These caps are set to allow for a buffer below the 5% limit.
6. If the rule in Step 5 is breached, rank all companies with weights greater than 4.5% in descending order of weights and identify the company with the smallest weight that causes Step 5 to breach. Reduce the weight of this company either until the rule in Step 5 is satisfied or it reaches 4.5%.
7. Proportionally redistribute this excess weight to all companies with weights below 4.5%. Any company that receives weight cannot breach the 4.5% cap. Repeat this process iteratively until Step 5 is satisfied.
8. Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the index by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the reweighting reference date. If no capping is required, both share classes remain in the index at the natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Replacement Policy. The index targets 20 companies and replaces any removed company, even if outside the normal rebalancing schedule, using a reference date for determining whether all eligibility criteria are met as of the open of trading two business days prior to the replacement announcement date. Any intra-quarter addition is added with the largest AWF currently represented in the index.[21]

Rebalancing. The index rebalances quarterly after the close of business on the third Friday of March, June, September, and December, using a rebalancing reference date as of the last business day of February, May, August, and November. The reweighting reference date is the Wednesday prior to the second Friday of March, June, September, and December.

[21] For history prior to 08/19/2024, the index did not apply the Replacement Policy rule.

S&P 500 Top 20 Select 35/20 Capped Index

Index Objective. The index measures the capped market capitalization weighted performance of the largest 20 companies, by FMC, in the S&P 500.

Index Universe. The index universe is the S&P 500, as of the rebalancing effective date.

Index Construction. At each rebalancing, the index selects the top 20 companies in the S&P 500, based on FMC, for index inclusion, using data as of the rebalancing reference date.

The methodology for capped indices follows an identical approach to market capitalization weighted indices except that the indices apply an additional weight factor, or "AWF", to adjust the float-adjusted market capitalization to a value such that the index weight constraints are satisfied.

For more information on AWF, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Index Weighting. At each rebalancing, the index is capped market capitalization weighted. With prices reflected on the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the rebalancing effective date, the index FMC weights each company.

For capping purposes, apply capping for the index, as necessary, based on the scenarios in the below table:

Scenario	Steps
1. At least one company in the index has an FMC weight exceeding 31.5%.	1. Cap the company with the largest weight at 31.5%. Proportionally redistribute all excess weight to all uncapped companies within the index. 2. After this redistribution, if the weight of any remaining uncapped company exceeds 18%, cap its weight at 18% and proportionally redistribute the excess weight to all remaining uncapped companies. 3. Repeat Step 2 until the weight of all uncapped companies does not exceed 18%.
2. The weight of more than one company exceeds 18%, but the company with the largest weight does not exceed 31.5%.	1. Cap the company with the largest weight at its FMC weight. 2. If the weight of any remaining uncapped company exceeds 18%, cap its weight at 18% and proportionally redistribute the excess weight to all remaining uncapped companies. 3. Repeat Step 2 until the weight of all uncapped companies does not exceed 18%.

In each of the above scenarios, index share amounts are assigned to each constituent to arrive at the target weights. Since index shares are assigned based on prices prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

For more information on the index calculation methodology, please refer to the Capped Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

At times, companies may be represented in the index by multiple share class lines. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on its FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at the natural FMC.

For more information on the capping thresholds, please refer to the Regulatory Capping Requirements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Monthly Capping Review. In addition to the quarterly capping, indices are also reviewed on the Wednesday prior to the second Friday of all other months based on each company's capped market capitalization weight. If the largest index weight exceeds 35% or the second largest index weight exceeds 20%, then the index reapplies the capping process defined in the table above.

The reference date for monthly capping is the Wednesday prior to the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the reweighting effective date.

Replacement Policy. The index targets 20 companies and replaces any removed company, even if outside the normal rebalancing schedule, using a reference date for determining whether all eligibility criteria are met as of the open of trading two business days prior to the replacement announcement date. Any intra-quarter addition is added with the largest AWF currently represented in the index.[22]

Rebalancing. The index rebalances quarterly after the close of business on the third Friday of March, June, September, and December, using a rebalancing reference date as of the last business day of February, May, August, and November. The reweighting reference date is the Wednesday prior to the second Friday of March, June, September, and December.

[22] For history prior to 08/19/2024, the index did not apply the Replacement Policy rule.

S&P 500 JPY Hedged Index (Korea Calendar)

Index Objective. The index measures the performance of the underlying index hedged against currency fluctuations.

Underlying Index. S&P 500 (Index Code: 500).

Rebalancing. The index rebalances monthly.

Hedging. The index daily return series calculates by interpolating between the spot price and the forward price. For the most recent Korean trading day (*T*), the index determines the required hedged amount using the FX rate and the underlying index value on the preceding date (*T-1*). If there is no underlying index value on *T-1*, the calculation uses the most recent index value.

For each hedge month m, there are $d = 1,2,3 \ldots D$ business days.

md is day d for hedge month m and $m0$ is the last business day of the hedge month $m - 1$.

F_I_{md} = The interpolated forward rate as of day d of month m

S_m = The spot rate in U.S. dollar per Japanese yen (USD/JPY)

F_m = The forward rate in U.S. dollar per Japanese yen (USD/JPY)

HR_{md} = The hedge return (%)

SPI_E_m = The underlying index level in Japanese yen

SPI_EH_m = The hedged index level

$$F\_I_{md} = S_{md} + \left(\frac{D-d}{D}\right) * (F_{md} - S_{md})$$

$$HR_{md} = \frac{S_{m0}}{F_{m0}} - \frac{S_{m0}}{F\_I_{md}}$$

$$SPI\_EH_{md} = SPI\_EH_{m0} * \left(\frac{SPI\_E_{md}}{SPI\_E_{m0}} + HR_{md}\right)$$

Currency of Calculation. The index calculates in Japanese yen.

Exchange Rate. WMR Forex spot and forward rates, RIC tickers “USDJPYFIXM=WM” and “USDJPY1MFIXM=WM”, respectively, are taken daily at 4:00 PM London Time and used in the calculation of the index.

Holiday Schedule. The index calculates when the Korean equity markets are open. A complete holiday schedule for the year is available at www.spglobal.com/spdji.

S&P 500 Sectors Top 10 Equal Capped Indices

Index Objective. The indices measure the equal-weighted performance of the largest 10 companies, by FMC, in the S&P 500 Sectors indices.

Underlying Indices. Please see the table below.

S&P 500 Sectors Top 10 Equal Capped Index	Underlying Index
S&P 500 Communication Services (Sector) Top 10 Equal Capped Index	Communication Services (GICS Code 50)
S&P 500 Consumer Discretionary (Sector) Top 10 Equal Capped Index	Consumer Discretionary (GICS Code 25)
S&P 500 Consumer Staples (Sector) Top 10 Equal Capped Index	Consumer Staples (GICS Code 30)
S&P 500 Energy (Sector) Top 10 Equal Capped Index	Energy (GICS Code 10)
S&P 500 Financials (Sector) Top 10 Equal Capped Index	Financials (GICS Code 40)
S&P 500 Health Care (Sector) Top 10 Equal Capped Index	Health Care (GICS Code 35)
S&P 500 Industrials (Sector) Top 10 Equal Capped Index	Industrials (GICS Code 20)
S&P 500 Materials (Sector) Top 10 Equal Capped Index	Materials (GICS Code 15)
S&P 500 Real Estate (Sector) Top 10 Equal Capped Index	Real Estate (GICS Code 60)
S&P 500 Information Technology (Sector) Top 10 Equal Capped Index	Information Technology (GICS Code 45)
S&P 500 Utilities (Sector) Top 10 Equal Capped Index	Utilities (GICS Code 55)

Multiple Share Classes. Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach B within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Construction. At each rebalancing, the index selects the 10 largest, by FMC, companies from the S&P 500 sectors according to the above table.

Constituent Weighting. At each rebalancing, the index equal weights constituents.

Rebalancing. The index rebalances quarterly, effective after the close of business on the third Friday of March, June, September, and December using a rebalancing reference date as of the last business day of February, May, August, and November. Weights calculated as of the reference date are implemented in the indices using closing prices as of the Wednesday prior to the second Friday of March, June, September, and December.

Index Maintenance. Except for spin-offs, additions only occur during the quarterly rebalancings.

Spin-offs. Add spin-offs to all indices of which the parent is a constituent at a zero price at the market close of the day before the ex-date (with no divisor adjustment). Remove the spin-off after at least one day of regular way trading.

S&P 500 Sectors Top 5 Equal Capped Indices

Index Objective. The index measures the equal-weighted performance of the largest five companies, by FMC, in the S&P 500 Sectors indices.

Underlying Indices. Please see the table below.

S&P 500 Sectors Top 5 Equal Capped Index	Underlying Index
S&P 500 Energy (Sector) Top 5 Equal Capped Index	Energy (GICS Code 10)

Multiple Share Classes. Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach B within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Construction. At each rebalancing, the index selects the five largest, by FMC, companies from the S&P 500 sectors according to the above table.

Constituent Weighting. At each rebalancing, the index equal weights constituents.

Rebalancing. The index rebalances quarterly, effective after the close of business on the third Friday of March, June, September, and December using a rebalancing reference date as of the last business day of February, May, August, and November. Weights calculated as of the reference date are implemented in the indices using closing prices as of the Wednesday prior to the second Friday of March, June, September, and December.

Index Maintenance. Except for spin-offs, additions only occur during the quarterly rebalancings.

Spin-offs. Add spin-offs to all indices of which the parent is a constituent at a zero price at the market close of the day before the ex-date (with no divisor adjustment). Remove the spin-off after at least one day of regular way trading.

Appendix C

Methodology Changes

Methodology changes since January 1, 2015, are as follows:

Change	Effective Date (After Close)	Methodology Previous	Updated
Weighting: Select Sector Indices, S&P Select Sector Capped 20% Indices, S&P Select Sector 15/60 Capped Indices, S&P SmallCap 600 Capped Sector Indices	12/21/2024	The rebalancing reference date is the second Friday of March, June, September, and December.	The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December.
Constituent Weighting Reference Date: S&P Equal Weight U.S. Indices	12/21/2024	At each quarterly rebalancing, companies are equal weighted using closing prices as of the second Friday of the quarter-ending month as the reference price. For those companies having multiple share class lines in the index, each share class line is assigned a weight that is proportional to its FMC as of the second Friday pricing reference date.	At each quarterly rebalancing, companies are equal weighted using closing prices as of the Wednesday prior to the second Friday of the quarter-ending month as the reference price. For those companies having multiple share class lines in the index, each share class line is assigned a weight that is proportional to its FMC as of the Wednesday prior to the second Friday pricing reference date.
Constituent Weighting Reference Date: S&P Capped Market Cap Weighted U.S. Indices	12/21/2024	The rebalancing reference date is the second Friday of March, June, September, and December respectively.	The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September, and December respectively.
Weighting: S&P Select Sector Daily Capped 25/20 Indices	12/21/2024	The reference date for quarterly capping is the second Friday of March, June, September, and December with changes effective after the close of the following Friday.	The quarterly capping reference date is the Wednesday prior to the second Friday of March, June, September, and December with changes effective after the close of the following Friday.
Weighting: S&P 500 Capped 35/20 Indices	12/21/2024	Indices are also reviewed on the second Friday of all other months based on each company's capped market capitalization weight. Monthly capping is only performed when either the largest index weight exceeds 35% or the second largest index weight exceeds 20%. The reference date for capping is the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the reweighting effective date. The reference date is the second Friday of each reweighting month.	Indices are also reviewed on the Wednesday prior to the second Friday of all other months based on each company's capped market capitalization weight. Monthly capping is only performed when either the largest index weight exceeds 35% or the second largest index weight exceeds 20%. The capping reference date is the Wednesday prior to the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the reweighting effective date. The reference date is the Wednesday

Change	Effective Date (After Close)	Methodology Previous	Updated
			prior to the second Friday of each reweighting month.
Weighting: S&P MidCap 400 Capped Sector Indices	12/21/2024	The rebalancing reference date is the second Friday of March, June, September and December.	The rebalancing reference date is the Wednesday prior to the second Friday of March, June, September and December.
Weighting: S&P 500 Equal Weight Sector Indices	12/21/2024	The reference date for weighting is the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, and membership, shares outstanding, and IWFs as of the reweighting effective date.	The reference date for weighting is the Wednesday prior to the second Friday of the reweighting month and changes are effective after the close of the following Friday using prices as of the reweighting reference date, and membership, shares outstanding, and IWFs as of the reweighting effective date.
Reweighting: S&P 500 Sectors Equal Allocation Index	12/21/2024	The index reweights quarterly, effective after the close of business on the third Friday of March, June, September, and December, using a reference date for weighting as of after the close on the second Friday of the reweighting month	The index reweights quarterly, effective after the close of business on the third Friday of March, June, September, and December, using a reference date for weighting as of after the close on the Wednesday prior to the second Friday of the reweighting month
Rebalancing: S&P 900 Banks (Industry) 7/4 Capped Index (USD), S&P 500 3% Capped Index (USD), S&P 500 Top 10 25% Capped Index (USD)	12/21/2024	The reference date is the second Friday of each rebalancing month.	The reference date is the Wednesday prior to the second Friday of each rebalancing month.
Constituent Weightings: S&P 500 Capped 35/20 Indices	10/18/2024	Scenario 1 - If at least one company in the index has an FMC weight exceeding 33%: 1. The company with the largest weight is capped at 33%. All excess weight is proportionally redistributed to the remaining uncapped companies in the index. 2. If the weight of any remaining uncapped company exceeds 19%, its weight is capped at 19% and the excess weight is proportionally redistributed to all remaining uncapped companies. 3. Step 2 is repeated until the weight of all uncapped companies does not exceed 19%.	Scenario 1 - If at least one company in the index has an FMC weight exceeding 31.5%: 1. Cap the company with the largest weight at 31.5%. Proportionally redistribute all excess weight to the remaining uncapped companies in the index. 2. If the weight of any remaining uncapped company exceeds 18%, cap the company's weight at 18% and proportionally redistribute the excess weight to all remaining uncapped companies. 3. Repeat Step 2 until the weight of all uncapped companies does not exceed 18%.
		Scenario 2 - If the weight of more than one company exceeds 19%, but the company with the largest weight does not exceed 33%. 1. The company with the largest weight is capped at its FMC weight. 2. If the weight of any remaining uncapped company exceeds 19%, its weight is capped at 19%	Scenario 2 - If the weight of more than one company exceeds 18%, but the company with the largest weight does not exceed 31.5%: 1. Cap the company with the largest weight at the company's FMC weight. 2. If the weight of any remaining uncapped company exceeds 18%, cap the company's weight at

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
		and the excess weight is proportionally redistributed to all remaining uncapped companies in the index. 3. Step 2 is repeated until the weight of all uncapped companies does not exceed 19%.	18% and proportionally redistribute the excess weight to all remaining uncapped companies in the index. 3. Repeat Step 2 until the weight of all uncapped companies does not exceed 18%.
Constituent Weightings: Select Sector Indices	09/20/2024	Each index is capped market capitalization weighted. For capping purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures: 1. The rebalancing reference date is the second Friday of March, June, September, and December. 2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding and IWFs as of the rebalancing effective date, each company is weighted by FMC. Modifications are made as defined below. 3. If any company has an FMC weight greater than 24%, the company's weight is capped at 23%, which allows for a 2% buffer. This buffer is meant to mitigate against any company exceeding 25% as of the quarter-end diversification requirement date. 4. All excess weight is proportionally redistributed to all uncapped companies within the relevant index. 5. After this redistribution, if the FMC weight of any other company breaches 23%, the process is repeated iteratively until no company breaches the 23% weight cap. 6. The sum of the companies with weights greater than 4.8% cannot exceed 50% of the total index weight. These caps are set to allow for a buffer below the 5% limit. 7. If the rule in step 6 is breached, rank all companies in descending order by FMC weight, and reduce the weight of the smallest company whose weight is greater than 4.8% that causes the step 6 breach to 4.5%. This process continues iteratively until step 6 is satisfied.	Each index is capped market capitalization weighted. For capping purposes, the indices rebalance quarterly after the close of business on the third Friday of March, June, September, and December using the following procedures: 1. The rebalancing reference date is the second Friday of March, June, September, and December. 2. With prices reflected on the rebalancing reference date, adjusted for any applicable corporate actions, and membership, shares outstanding, and IWFs as of the rebalancing effective date, each company is FMC weighted. 3. If any company has an FMC weight greater than 24%, cap all companies' weights at 23%, which allows for a 2% buffer. 4. The sum of the companies with weights greater than 4.8% cannot exceed 50% of the total index weight. These caps are set to allow for a buffer below the 5% limit. 5. If the rule in Step 4 is breached, set the weight of companies greater than 4.8% equal to: $W_i^{Capped} = \max\left(\frac{45\% \times W_i}{\sum_i^N W_i}, 4.5\%\right)$ where: *N* = the total number of companies with index weights over 4.8%, after checking the single company cap. W_i = the index weight of the *N* companies with individual company weights over 4.8%, after checking the single company cap. Set 4.5% and 45% caps to allow for a buffer below the 5% limit. 6. Proportionally redistribute the excess weight from Steps 3 to 5 to companies with an initial weight less than 4.8%, setting a 4.5% upper bound on the companies' index weight.

Change	Effective Date (After Close)	Methodology Previous	Updated
		Index share amounts are assigned to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.	7. Assign index share amounts to each constituent to arrive at the weights calculated above. Since index shares are assigned based on prices one week prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements. Maximum weight capping is based on company FMC, with the weight of multiple class companies allocated proportionally to each share class line based on FMC as of the rebalancing reference date. If no capping is required, both share classes remain in the index at the natural FMC weight.
Secondary Reweighting Check: Select Sector Indices	09/20/2024	If, on the second to last business day of March, June, September, or December a company has a weight greater than 24% or the sum of the companies with weights greater than 4.8% exceeds 50%, a secondary rebalancing will be triggered with the rebalancing effective date being after the close of the last business day of the month. This secondary rebalancing will use the closing prices as of the second to last business day of March, June, September, or December, and membership, shares outstanding, and IWFs as of the rebalancing effective date.	If, on the second to last business day of March, June, September, or December, a company's weight exceeds 24%, or the sum of the companies with weights greater than 4.8% exceeds 50%, the capping breach triggers a secondary reweighting with an effective date as of after the close of the last business day of the month. The secondary reweighting uses capped index weights as of the second to last business days of March, June, September, or December, utilizing the current AWFs and membership, shares outstanding, and IWFs as of the reweighting effective date.
Measurement Date for Eligibility Criteria: S&P Composite 1500	07/17/2024	The measurement date for determining whether all eligibility criteria are met for the S&P Composite 1500 is the open of trading on the day prior to the announcement date.	The measurement date for determining whether all eligibility criteria are met for the S&P Composite 1500 is the open of trading two business days prior to the announcement date.
Multiple Share Classes: S&P Composite 1500 Indices	04/17/2023	Companies with multiple share class structures are not eligible for inclusion in the S&P Composite 1500 and its component indices. Existing constituents with multiple share class structures are grandfathered in.	All companies with multiple share class structures are considered eligible candidates for the S&P Composite 1500 Indices.
Market Capitalization: S&P Composite 1500	01/04/2023	Market Capitalization guidelines expressed in dollar ranges only.	The market capitalization guidelines are designed to capture the three-month average cumulative total company level market capitalization of the S&P Total Market Index ("TMI") universe at approximately the following cumulative percentiles: 1. S&P 500: 85th percentile 2. S&P MidCap 400: 85th-93rd percentile 3. S&P SmallCap 600: 93rd-99th percentile
FALR Liquidity Measurement: S&P Composite 1500	01/04/2023	FALR must be greater than or equal to 1.00 at the time of addition to the Composite 1500.	FALR must be greater than or equal to 0.75 at the time of addition to the Composite 1500.

Change	Effective Date (After Close)	Methodology Previous	Methodology Updated
Index Name: INDUSTRIALS	02/08/2022	INDUSTRIALS	S&P 500 Ex-Financials, Real Estate, Utilities and Transportation Index
Former SPAC Eligibility: S&P Total Market Index, S&P Completion Index, and S&P Composite 1500 Indices	02/04/2022	--	For the S&P Total Market Index (TMI) and S&P Completion Index (CI), SPACs that transition to an operating company via a de-SPAC transaction are eligible for index addition, subject to a reference date that is five weeks prior to the rebalancing effective date. For the S&P Composite 1500 and its related flow-through indices, S&P DJI considers the de-SPAC transaction to be an event equivalent to an IPO, and 12 months of trading post the de-SPAC event are required before a former SPAC can be considered for the S&P Composite 1500 indices.
Liquidity Measurement: S&P Total Market Index	12/07/2020	Using composite pricing and volume, the ratio of annual dollar value traded (defined as average closing price over the period multiplied by historical volume) to float-adjusted market capitalization should be at least 0.10.	Using composite pricing and volume, the ratio of annual dollar value traded (defined as average closing price multiplied by historical volume over the last 365 calendar days) to float-adjusted market capitalization should be at least 0.10.
Eligibility Criteria Measurement Date: S&P Composite 1500	12/07/2020	The measurement date for determining whether all eligibility criteria are met is the open of trading on the announcement date.	The measurement date for determining whether all eligibility criteria are met is the day prior to the announcement date.
Constituent Migrations: S&P Composite 1500	12/07/2020	Current S&P Composite 1500 constituents can be migrated from one S&P Composite 1500 component index (i.e., S&P 500, S&P MidCap 400, or S&P SmallCap 600) to another without meeting the financial viability or liquidity eligibility criteria if the Index Committee decides that such a move will enhance the representativeness of the index as a market benchmark.	Current S&P Composite 1500 constituents can be migrated from one S&P Composite 1500 component index (i.e., S&P 500, S&P MidCap 400, or S&P SmallCap 600) to another as long as they meet the total company level market capitalization eligibility criteria for the new index. Migrations from one S&P Composite 1500 index to another do not need to meet the financial viability, liquidity or 50% of the respective index's total company level minimum market capitalization threshold criteria.
Secondary Quarter-end Rebalancing and Reference Date Schedule: Select Sector Indices	08/31/2020	If, on the third to last business day of March, June, September, or December a company has a weight greater than 24% or the sum of the companies with weights greater than 4.8% exceeds 50%, a secondary rebalancing will be triggered with the rebalancing effective date being the opening of the last business day of the month. This secondary rebalancing will use the closing prices as of the third to last business day of March, June, September, or December, and membership, shares outstanding, and IWFs as of the rebalancing effective date.	If, on the second to last business day of March, June, September, or December a company has a weight greater than 24% or the sum of the companies with weights greater than 4.8% exceeds 50%, a secondary rebalancing will be triggered with the rebalancing effective date being after the close of the last business day of the month. This secondary rebalancing will use the closing prices as of the second to last business day of March, June, September, or December, and membership, shares outstanding, and IWFs as of the rebalancing effective date.
Treatment of Secondary Offerings: S&P Composite 1500	03/27/2020	**5% Rule.** S&P Composite 1500 constituent share changes resulting from public offerings (also known as follow-on offerings or	Please refer to the Accelerated Implementation Rule described in *S&P Dow Jones Indices' Equity*

Change	Effective Date (After Close)	Methodology Previous	Updated
		secondary offerings) that equal 5% or more of the total shares outstanding are eligible for next day implementation if they satisfy the following conditions: • Must be underwritten. • Must have a publicly available prospectus or prospectus summary filed with the SEC. • Must have a publicly available confirmation from an official source that the offering has been completed. Block trades and spot secondaries must meet the above criteria in order to be eligible for next day implementation. Next day implementation will include a review of the company's IWF using the latest publicly available ownership data. Any change in the IWF of at least five percentage points resulting from the review is implemented with the share update.	*Indices Policies & Practices Methodology*.
Market Capitalization Criteria for Index Eligibility: S&P Composite 1500	04/30/2019	Total company market capitalizations of US$ 8.2 billion or more for the S&P 500, US$ 2.4 billion to US$ 8.2 billion for the S&P MidCap 400, and US$ 600 million to US$ 2.4 billion for the S&P SmallCap 600 are required. These ranges are reviewed from time to time to assure consistency with market conditions.	Total company market capitalizations of US$ 8.2 billion or more for the S&P 500, US$ 2.4 billion to US$ 8.2 billion for the S&P MidCap 400, and US$ 600 million to US$ 2.4 billion for the S&P SmallCap 600 are required. These ranges are reviewed from time to time to assure consistency with market conditions. A company meeting the total company market capitalization criteria is also required to have a security level float-adjusted market capitalization that is at least 50% of the respective index's total company level minimum market capitalization threshold.
IPO Fast Track Eligibility	04/30/2019	--	Certain large IPOs may be eligible for fast track entry, subject to the following conditions: • Only newly public IPOs and direct placement listings will be considered eligible for fast-track entry. Formerly bankrupt companies that switch from Over-the-Counter Exchange ("OTC") or a non-covered exchange to an S&P Dow Jones Indices covered exchange are ineligible. • Fast-track IPO additions must meet a minimum float-adjusted market capitalization ("FMC") threshold of US$ 2 billion, calculated using the shares offered (excluding over-allotment options) and the closing price on the first day of trading on an eligible exchange. The threshold level is reviewed

Change	Effective Date (After Close)	Methodology Previous	Methodology Updated
			from time to time and updated as needed to assure consistency with market conditions. In addition, the IPO will need to meet all other applicable index eligibility rules except for the liquidity requirement. If all necessary public information is available, S&P Dow Jones Indices verifies that the fast-track conditions have been met. Once S&P Dow Jones Indices announces that the IPO is eligible for fast-track addition, it is added to the index with five business days lead time. At the discretion of the Index Committee, fast-track IPO additions eligible to be added during a quarterly rebalancing freeze period may instead be added on the rebalancing effective date.
Investable Weight Factors (IWFs) Criteria for Index Eligibility: S&P Composite 1500	04/30/2019	An IWF of 0.50 is required.	An IWF of at least 0.10 is required.
Secondary Rebalancing: Select Sector Indices	04/30/2019	If necessary, the reweighting process may take place more than once prior to the close on the last business day of March, June, September, or December to ensure the Select Sector Indices conform to all diversification requirements.	If, on the third to last business day of March, June, September, or December, a company has a weight greater than 24% or the sum of the companies with weights greater than 4.8% exceeds 50%, a secondary rebalancing will be triggered with the rebalancing effective date being the opening of the last business day of the month. This secondary rebalancing will use the closing prices as of the third to last business day of March, June, September, or December, and membership, shares outstanding, and IWFs as of the rebalancing effective date.
Index Eligibility: S&P 500 Capped 35/20 Utilities & Telecommunication Services Index	09/24/2018	Companies in the S&P 500 classified as Utilities (GICS Code 55) and Telecommunication Services (GICS Code 50).	Companies in the S&P 500 classified as Utilities sector (GICS Code 55) and Telecommunication Services industry group (GICS Code 5010).
Index Name: 1. S&P 500 Equal Weight Telecommunications Index 2. S&P MidCap 400 Capped Utilities & Telecom Services Index 3. S&P SmallCap 600 Capped Utilities & Telecom Services (Sector) Index	09/24/2018	The index names were: 1. S&P 500 Equal Weight Telecommunications Index 2. S&P MidCap 400 Capped Utilities & Telecom Services Index 3. S&P SmallCap 600 Capped Utilities & Telecom Services (Sector) Index	The index names are: 1. S&P 500 Equal Weight Communication Services Index 2. S&P MidCap 400 Capped Utilities & Communication Services Index 3. S&P SmallCap 600 Capped Utilities & Communication Services (Sector) Index
Index Name/Eligibility: S&P 500 Equal Weight Utilities & Telecommunications Index	09/24/2018	Companies in the S&P 500 classified as Utilities (GICS Code 55) and Telecommunication Services (GICS Code 50).	The index name is the S&P 500 Equal Weight Utilities Plus Index and contains companies in the S&P 500 classified as Utilities (GICS Code 55) with a 22 company minimum count.
Index Eligibility:	09/24/2018	Companies in the S&P 500 classified as Information Technology (GICS Code 45) and	Companies in the S&P 500 classified as Information Technology (GICS Code 45).

Change	Effective Date (After Close)	Methodology Previous	Methodology Updated
S&P Select Sector Capped 20% Technology Index		Telecommunication Services (GICS Code 50).	
Index Eligibility: Technology Select Sector Index	09/24/2018	Companies in the S&P 500 classified as Information Technology (GICS Code 45) and Telecommunication Services (GICS Code 50).	Companies in the S&P 500 classified as Information Technology (GICS Code 45).
Spin-off Market Cap Eligibility: S&P Composite 1500	06/30/2018	A spin-off company must have an estimated market capitalization that meets the minimum market capitalization addition criteria for the index to which it is being added.	If the spin-off company's estimated market capitalization is below the minimum defined in the outside addition criteria but there are other constituent companies in the parent index that have a significantly lower total market capitalization than the spin-off company, the Committee may decide to retain the spin-off company in the parent index
Rebalancing Schedule: S&P 500 Capped 35/20 Indices	06/25/2018	For reweighting purposes, the indices are rebalanced quarterly after the close of business on the third Friday of March, June, September, and December.	For reweighting purposes, the indices are rebalanced monthly after the close of business on the third Friday of the month.
Rebalancing schedule and capping frequency for Select Sector Indices	03/08/2018	The indices are rebalanced quarterly after the close on the second to last business day of March, June, September, and December. Capping is only performed when a company's modified market capitalization weight breaches the maximum allowable limits in the index methodology using closing prices from two business days prior to the last business day of the rebalancing month.	The indices are rebalanced quarterly after the close on the third Friday of March, June, September, and December. At each rebalancing, capping is performed using closing prices from the second Friday of the rebalancing month.
Capping buffer for Select Sector Indices	03/08/2018	As part of the capping process, all companies are ranked in descending order of their float-adjusted market capitalization weights. The first company that causes the 50% limit to be breached has its weight reduced to 4.6%.	As part of the capping process, all companies are ranked in descending order of their float-adjusted market capitalization weights. The first company that causes the 50% limit to be breached has its weight reduced to 4.5%.
Excess weight distribution for Select Sector Indices	03/08/2018	All excess weight is equally redistributed to all uncapped companies within the relevant Select Sector Index.	All excess weight is proportionally redistributed to all uncapped companies within the relevant Select Sector Index.
Merger related IWF change	01/19/2018	Any merger related IWF change resulting in an IWF of 0.96 or greater is rounded up to 1.00 on the merger effective date.	A merger-related IWF change, which results in an IWF of 0.96 or greater, is rounded up to 1.00 at the next annual IWF review.
Exclusion of companies with multiple share class structures from the S&P Composite 1500 and its component indices	07/31/2017	Companies with multiple share class structures are eligible for inclusion in the S&P Composite 1500 and its component indices.	Companies with multiple share class structures are not eligible for inclusion in the S&P Composite 1500 and its component indices. Existing constituents with multiple share class structures are grandfathered in.
Migrations among S&P Composite 1500 component indices	07/31/2017	--	Current S&P Composite 1500 constituents can be migrated from one S&P Composite 1500 component index (i.e., S&P 500, S&P MidCap 400, or S&P SmallCap 600) to another without meeting the financial viability, public float and/or liquidity eligibility criteria if the Index Committee decides that such a move will enhance the

Change	Effective Date (After Close)	Methodology Previous	Methodology Updated
			representativeness of the index as a market benchmark. Companies that are spun-off from current S&P Composite 1500 constituents do not need to meet the outside addition criteria.
Waiting period for index addition to the S&P Composite 1500 of previously deleted companies	07/31/2017	--	Any company that is removed from an S&P Composite 1500 index (including discretionary and bankruptcy/exchange delistings) must wait a minimum of one year from its index removal date before being reconsidered as a replacement candidate.
Elimination of the Corporate Governance Structure criterion from the Domicile criteria	07/31/2017	For index purposes, a U.S. company must have a corporate governance structure consistent with U.S. practice.	--
Primary listing for S&P Composite 1500 index eligibility	07/31/2017	Eligible securities include all U.S. common equities listed on NYSE, NYSE Arca, NYSE American (formerly NYSE MKT), NASDAQ Global Select Market, NASDAQ Select Market, NASDAQ Capital Market, Bats BZX, Bats BYX, Bats EDGA, and Bats EDGX exchanges.	Eligible securities include all U.S. common equities listed on NYSE, NYSE Arca, NYSE American, NASDAQ Global Select Market, NASDAQ Select Market, NASDAQ Capital Market, Bats BZX, Bats BYX, Bats EDGA, Bats EDGX, and IEX exchanges.
Market Capitalization Thresholds: 1. S&P 500 2. S&P MidCap 400 3. S&P SmallCap 600	03/10/2017	1. S&P 500: At least US$ 5.3 billion. 2. S&P MidCap 400: US$ 1.4 billion to US$ 5.9 billion. 3. S&P SmallCap 600: US$ 400 million to US$ 1.8 billion.	4. S&P 500: At least US$ 6.1 billion. 5. S&P MidCap 400: US$ 1.6 billion to US$ 6.8 billion. 6. S&P SmallCap 600: US$ 450 million to US$ 2.1 billion.
IPO seasoning	03/10/2017	Initial public offerings should be seasoned for six to 12 months before being considered for addition to an index.	Initial public offerings should be traded on an eligible exchange for at least 12 months before being considered for addition to an index.
Index composition for the following indices: 1. INDUSTRIALS 2. Real Estate Select Sector Index 3. S&P Select Sector Capped 20% Real Estate Index 4. S&P 500 Capped 35/20 Real Estate Index 5. S&P 500 Equal Weight Real Estate Index 6. S&P MidCap 400 Capped Financials & Real Estate (sector) Index 7. S&P SmallCap 600 Capped Financials & Real Estate (sector) Index	09/16/2016	1. The index consists of all companies in the S&P 500, excluding those belonging to the Financials sector, Utilities sector or Transportation industry group. 2. GICS Real Estate Industry Group excluding Mortgage REITs. 3. GICS Real Estate Industry Group excluding Mortgage REITs. 4. GICS Real Estate Industry Group excluding Mortgage REITs. 5. GICS Real Estate Industry Group excluding Mortgage REITs. 6. GICS Financials Sector. 7. GICS Financials Sector.	1. The index consists of all companies in the S&P 500, excluding those belonging to the Financials sector, Real Estate sector, Utilities sector or Transportation industry group. 2. GICS Real Estate Sector. 3. GICS Real Estate Sector. 4. GICS Real Estate Sector. 5. GICS Real Estate Sector. 6. GICS Financials Sector & GICS Real Estate Sector. 7. GICS Financials Sector & GICS Real Estate Sector.
Index names for the following indices: 1. S&P MidCap 400 Capped Financials (sector) Index 2. S&P SmallCap 600 Capped Financials (sector) Index 3. S&P 500 Ex-Financials 4. S&P 500 Ex-Financials TR	09/16/2016	1. S&P MidCap 400 Capped Financials (sector) Index 2. S&P SmallCap 600 Capped Financials (sector) Index 3. S&P 500 Ex-Financials 4. S&P 500 Ex-Financials TR	1. S&P MidCap 400 Capped Financials & Real Estate (sector) Index 2. S&P SmallCap 600 Capped Financials& Real Estate (sector) Index 3. S&P 500 Ex-Financials & Real Estate 4. S&P 500 Ex-Financials & Real Estate TR

Change	Effective Date (After Close)	Methodology Previous	Updated
Rebalancing Reference Date: S&P Total Market Index	09/16/2016	The rebalancing reference date is the last trading day of the month prior to the rebalancing effective date.	The rebalancing reference date is five weeks prior to the rebalancing effective date.
Eligibility of tracking stocks	07/29/2016	Tracking stocks are ineligible for the S&P U.S. Indices.	Tracking stocks are eligible for the S&P Total Market Index but are ineligible for the S&P Composite 1500 and its component indices.
Share/IWF Freeze Period	07/29/2016	A share freeze is implemented the week leading up to the rebalancing effective date.	A share/IWF freeze period is implemented during each quarterly rebalancing. The freeze period begins after the market close on the Tuesday preceding the second Friday of each rebalancing month (i.e., March, June, September, and December) and ends after the market close on the third Friday of the rebalancing month.
Treatment of voluntary exchange offers, Dutch auctions, & tender offers	07/29/2016	Changes in a company's total shares outstanding of 5% or more due to exchange offers, Dutch auctions & tender offers are made as soon as reasonably possible.	Changes in a company's total shares outstanding of 5% or more due to voluntary exchange offers, Dutch auctions & tender offers are made weekly.
Primary listing for S&P Composite 1500 index eligibility	06/17/2016	Eligible securities include all U.S. common equities listed on NYSE, NYSE Arca, NYSE MKT, NASDAQ Global Select Market, NASDAQ Select Market and NASDAQ Capital Market.	Eligible securities include all U.S. common equities listed on NYSE, NYSE Arca, NYSE MKT, NASDAQ Global Select Market, NASDAQ Select Market, NASDAQ Capital Market, Bats BZX, Bats BYX, Bats EDGA, and Bats EDGX exchanges.
Clarification of the capping rules for the S&P SmallCap 600 Capped Sector Indices	03/21/2016	In the event an index count falls to a level that renders the general capping rules unworkable, S&P Dow Jones Indices may relax the 4.5%/45% rule.	S&P Dow Jones has provided a detailed process for capping in the event an index count falls to a level that renders the general capping rules unworkable.
Multiple Share Class	09/18/2015	Companies that have more than one class of common stock outstanding are represented only once in an index. The stock price is based on one class, and the share count is based on the total shares outstanding of all classes.	There will no longer be consolidated lines in the S&P Float Market Cap (FMC) indices. Instead, all multiple share class companies that have listed share class lines will be adjusted for shares and float such that each share class line will only represent that line's shares and float. All multiple share class companies that have an unlisted class line will also be adjusted.
Clarification for recognizing next day secondary offerings in the S&P Composite 1500	01/21/2015	--	All public offerings (also known as follow-on offerings) eligible for next day share implementation must be underwritten, must have a publicly available prospectus or prospectus summary filed with the SEC, and must include a public confirmation that the offering has been completed. Block trades and spot secondaries must meet the above criteria in order to be eligible for next day implementation.

Appendix D

ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY[23]		
1.	**Name of the benchmark administrator.**	S&P Dow Jones Indices LLC.
2.	**Underlying asset class of the ESG benchmark.[24]**	N/A
3.	**Name of the S&P Dow Jones Indices benchmark or family of benchmarks.**	S&P DJI Equity Indices Benchmark Statement
4.	**Do any of the indices maintained by this methodology take into account ESG factors?**	No
Appendix latest update:		January 2021
Appendix first publication:		January 2021

[23] The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

[24] The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

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Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index's launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

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