# Offering Circular

# JPMORGAN CHASE & CO.

# JPMORGAN CHASE & CO.

(incorporated in the State of Delaware, United States of America)

# JPMORGAN CHASE BANK, NATIONAL ASSOCIATION

(organized under the laws of the United States of America)

U.S.\$10,000,000,000

 $in\ respect\ of\ Notes\ is sued\ by\ JPMorgan\ Chase\ \&\ Co.$ 

*U.S.*\$5,000,000,000

in respect of Notes issued by JPMorgan Chase Bank, National Association

# Note Program

Under the Note Program (the "Program") described in this Offering Circular (the "Offering Circular"), each of JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. (each, an "Issuer," and together, the "Issuers"), subject to compliance with the relevant laws, regulations and directives, may from time to time issue debt securities (the "Notes"). The aggregate principal amount of Notes issued under the Program by JPMorgan Chase & Co. may be up to U.S.\$10,000,000,000,000 (or the equivalent in other currencies) outstanding at any one time and the aggregate principal amount of Notes issued under the Program by JPMorgan Chase Bank, N.A. may be up to U.S.\$5,000,000,000 (or the equivalent in other currencies) outstanding at any one time. This Offering Circular replaces the Offering Circular dated January 22, 2016.

The Program permits Notes to be issued on an unlisted basis or to be admitted to trading on the Global Exchange Market ("GEM") operated and regulated by the Irish Stock Exchange plc (the "Irish Stock Exchange"). GEM is not considered to be a regulated market for the purposes of the Prospectus Directive (as defined below). The Program provides that Notes may be listed or admitted to trading, as the case may be, on such other or further stock exchanges or markets as may be agreed between the relevant Issuer and the relevant Dealer(s). The relevant Pricing Supplement (as defined in "Summary") in respect of the issue of any Notes will specify whether such Notes will be admitted to trading on GEM or another stock exchange or will be unlisted.

This Offering Circular constitutes Base Listing Particulars (the "Listing Particulars") where Notes are to be listed or admitted to trading on GEM. Application has been made to the Irish Stock Exchange for the approval of this document as Listing Particulars. Application may be made for Notes to be admitted to the Official List of the Irish Stock Exchange (the "Official List") and trading on GEM. Where Notes are to be admitted to trading on GEM, the term "Offering Circular" should be taken to mean Listing Particulars as such term is defined in the Irish Stock Exchange's rules relating to GEM.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), the rules of the U.S. Office of the Comptroller of the Currency (the "OCC") or the securities laws of any state in the United States. The Notes have not been approved or disapproved by the U.S. Securities and Exchange Commission (the "SEC"), any state securities commission or the OCC, nor has the SEC, any state securities commission or the OCC passed upon the accuracy or adequacy of this Offering Circular. The Notes may not be offered or sold within the United States or to or for the account of U.S. persons unless (i) in the case of Notes issued by JPMorgan Chase & Co., such Notes are registered under the Securities Act or an exemption from the registration requirements thereof is available or (ii) in the case of Notes issued by JPMorgan Chase Bank, N.A., such Notes are registered pursuant to the requirements of the OCC or an exemption from the registration requirements thereof is available. Each Series (as defined in "Summary") of Notes will be offered outside the United States to non-U.S. persons in accordance with Regulation S under the Securities Act ("Regulation S"). For a description of certain restrictions on offers and sales of Notes and on distribution of this Offering Circular, see "Subscription and Sale."

### See "Risk Factors" for a discussion of certain risks that should be considered in connection with any investment in the Notes.

Each Tranche (as defined in "Summary") of Notes which is issued by JPMorgan Chase & Co. will be sold in "offshore transactions" within the meaning of Regulation S and will be represented by beneficial interests in a permanent global note (each, a "Permanent Global Note"). Each Tranche of Notes which is issued by JPMorgan Chase Bank, N.A. will be sold in "offshore transactions" within the meaning of Regulation S and will be represented by beneficial interests in a temporary global note (each, a "Temporary Global Note") which will be exchangeable for beneficial interests in the related Permanent Global Note (together with the Temporary Global Note, the "Global Notes") not earlier than 40 days after the relevant issue date upon certification of non-U.S. beneficial ownership. Notes represented by a Temporary Global Note or Permanent Global Note will be deposited with, and registered in the name of, a nominee, common depositary or common safekeeper for Euroclear Bank SA/NV ("Euroclear") or Clearstream Banking, S.A. ("Clearstream, Luxembourg") or deposited with a custodian for, and registered in the name of a nominee of, one or more other clearing systems (an "Alternative Clearing System"), as the case may be. Beneficial interests in Global Notes will be shown on, and transfers thereof will be effected only through records maintained by, such clearing systems and their respective participants. Notes in definitive registered form will be represented by registered certificates (each, a "Certificate"), one Certificate being issued in respect of each Noteholder's entire holding of Notes of one Series. See "The Global Notes."

If Notes are stated in the applicable Pricing Supplement to be held under the new safekeeping structure ("NSS"), they are intended to be held in a manner which would allow them to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem, and such Notes will be delivered on or prior to the original issue date of the Tranche to a common safekeeper (the "Common Safekeeper") for Euroclear and Clearstream, Luxembourg. Notes which are not held under the NSS will be deposited on or prior to the original issue date of the Tranche with a common depositary on behalf of Euroclear and Clearstream, Luxembourg (the "Common Depositary").

Series of Notes issued under the Program may be rated or unrated. Where a Series of Notes is rated, such rating will be specified in the relevant Pricing Supplement. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, change or withdrawal at any time by the assigning rating agency.

The Notes are unsecured general obligations of the relevant Issuer and are not savings accounts, deposits or other obligations of such Issuer or any bank or non-bank subsidiary of such Issuer and are not insured by the U.S. Federal Deposit Insurance Corporation (the "FDIC"), the Deposit Insurance Fund or any other governmental agency or instrumentality. Subordinated Notes issued by JPMorgan Chase Bank, N.A. are subordinated to claims of depositors and are ineligible as collateral for a loan by JPMorgan Chase Bank, N.A. The obligations of each Issuer under Notes issued by it are the obligations of that Issuer and are not guaranteed by the other Issuer or by any other person.

Arranger and Dealer

J.P. Morgan

January 20, 2017

This Offering Circular does not constitute a "prospectus" for the purposes of Article 5.4 of the Prospectus Directive (as defined below), and has been prepared on the basis that no prospectus shall be required under the Prospectus Directive for any Notes to be offered and sold under it. This Offering Circular has not been approved or reviewed by any regulator which is a competent authority under the Prospectus Directive in the European Economic Area (the "EEA") or in any other jurisdiction.

This Offering Circular has been prepared on the basis that any offer of Notes in any Member State of the EEA which has implemented the Prospectus Directive (each, a "Relevant Member State") will be made pursuant to an exemption under the Prospectus Directive, as implemented in that Relevant Member State, from the requirement to publish a prospectus for offers of Notes. Accordingly, any person making or intending to make an offer in that Relevant Member State of Notes which are the subject of an offering contemplated in this Offering Circular as completed by a Pricing Supplement in relation to the offer of those Notes may only do so in circumstances in which no obligation arises for the relevant Issuer or the relevant Dealer(s) to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. None of the Issuers or the Dealer(s) have authorised, nor do they authorise, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer to publish a prospectus in the EEA or in any other jurisdiction.

Each Issuer accepts responsibility for the information contained in this Offering Circular and any applicable Pricing Supplement in relation to Notes issued by it. To the best of the knowledge of each Issuer (having taken all reasonable care to ensure that such is the case), the information contained in this Offering Circular is in accordance with the facts and does not omit anything likely to affect the import of such information.

This Offering Circular is to be read in conjunction with all the documents incorporated by reference herein (see "Documents Incorporated by Reference; Available Information") including any supplements hereto and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. References to the "Offering Circular" shall mean this Offering Circular and all documents incorporated by reference herein.

No person is or has been authorized to give any information or to make any representation other than those contained in this Offering Circular or incorporated by reference herein in connection with the issue or sale of the Notes and, if given or made, such information or representation must not be relied upon as having been authorized by either of the Issuers or any Dealer(s) or the Arranger (as defined in "Summary"). Neither the delivery of this Offering Circular nor any offer or sale made in connection herewith shall, under any circumstances, create any implication that there has been no change in the affairs of either of the Issuers, the JPMorgan Chase Group (as defined below) or the JPMorgan Chase Bank Group (as defined below) since the date hereof or the date upon which this Offering Circular has been most recently supplemented or that there has been no adverse change in the financial position of either of the Issuers, the JPMorgan Chase Group or the JPMorgan Chase Bank Group since the date hereof or the date upon which this Offering Circular has been most recently supplemented or that any other information supplied in connection with the Program is correct as of any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

Credit ratings may be assigned to a specific Series of Notes to be issued under the Program by Standard & Poor's Ratings Services, a division of McGraw Hill Financial, Inc. ("S&P"), Moody's Investors Service, Inc. ("Moody's") and Fitch Ratings, Inc. ("Fitch"), and any such ratings may be specified in the applicable Pricing Supplement. Credit ratings may be adjusted over time, and there is no assurance that credit ratings provided in the applicable Pricing Supplement will be effective after the date of that Pricing Supplement.

None of S&P, Moody's and Fitch is established in the European Union or is registered under Regulation (EC) No. 1060/2009 (the "CRA Regulation"). In general, European regulated investors are restricted from using a credit rating for regulatory purposes if such rating is not issued by a credit rating agency established in the European Union and registered under the CRA Regulation unless the credit rating is provided by a credit rating agency operating in the European Union before June 7, 2010 which has submitted an application for registration in accordance with the CRA Regulation and such registration is not refused.

A credit rating is not a recommendation to buy, sell, or hold any Notes and may be subject to suspension, change, or withdrawal at any time by the assigning rating agency.

The distribution of this Offering Circular and the offering or sale of the Notes in certain jurisdictions may be restricted by law. Persons who come to possess this Offering Circular are required by the Issuers, the Dealer(s) and the Arranger to inform themselves about and to observe any such restrictions.

This Offering Circular does not constitute an offer of, or an invitation or recommendation by or on behalf of the Issuers or the Dealer(s) to subscribe for, or purchase, any Notes. Each recipient of this Offering Circular shall be assumed to have made its own investigation and appraisal of the condition (financial or otherwise) of the relevant Issuer.

The Dealer(s) and the Arranger have not independently verified the information contained in this Offering Circular. Neither the Dealer(s) nor the Arranger makes any representation, express or implied, or accepts any responsibility, with respect to the accuracy or completeness of any of the information in this Offering Circular or any other information provided by either of the Issuers in connection with the Program. Neither this Offering Circular nor any document incorporated by reference herein is intended to provide the basis of any credit or other evaluation or should be considered as a recommendation by either of the Issuers, any of the Dealer(s) or the Arranger that any recipient of this Offering Circular or any document incorporated by reference herein should purchase the Notes. Each potential purchase of Notes should determine for itself the relevance of the information contained in this Offering Circular, and its purchase of Notes should be based upon such investigation as it deems necessary. Neither any of the Dealer(s) nor the Arranger undertakes to review the financial condition or affairs of either of the Issuers during the life of the arrangements contemplated by this Offering Circular or to advise any investor or potential investor in the Notes of any information coming to the attention of any of the Dealer(s) or the Arranger.

This Offering Circular does not describe all of the risk factors (including those relating to each investor's particular circumstances) of an investment in Notes of a particular structure, including the interest rate, exchange rate or other indices, relevant specified currencies, calculation formulae, and redemption, option and other rights associated with such Notes or where the investor's currency is other than the Specified Currency (as specified in the relevant Pricing Supplement) of issue or in which payment of such Notes will be made. The risk factors identified or incorporated by reference in this Offering Circular are provided as general information only. Investors should consult their own financial, legal, tax and other professional advisors as to the risk factors arising from an investment in an issue of Notes and should possess the appropriate resources to analyze such investment and the suitability of such investment in such investor's particular circumstances. See "Risk Factors" for a discussion of certain risks that should be considered in connection with any investment in the Notes.

In this Offering Circular, unless otherwise specified or the context otherwise requires, references to (a) "\$," "U.S.\$" and "U.S. dollars" are to United States dollars; (b) "euro" or "€" are to the currency introduced at the start of the third stage of the European Economic and Monetary Union pursuant to the Treaty establishing the European Community, as amended; (c) "sterling" and "£" are to pounds sterling; (d) "A\$" and "AUD" are to Australian dollars; (e) "rand" and "ZAR" are to South African rand; (f) "JPMorgan Chase" or "the JPMorgan Chase Group" are to JPMorgan Chase & Co. and its consolidated subsidiaries (including JPMorgan Chase Bank, N.A.); (g) "JPMorgan Chase Bank, N.A." are to JPMorgan Chase Bank, National Association; (h) "JPMorgan Chase Bank" or "the JPMorgan Chase Bank Group" are to JPMorgan Chase Bank, National Association and its consolidated subsidiaries; (i) "Prospectus Directive" are to Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in each Relevant Member State; and (j) "Relevant Member State" are to each Member State of the European Economic Area which has implemented the Prospectus Directive.

Each potential investor in any Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

(i) have sufficient knowledge and experience to make a meaningful evaluation of the relevant Notes, the merits and risks of investing in the relevant Notes and the information contained or incorporated by reference in this Offering Circular or any applicable supplement;

- (ii) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the relevant Notes and the impact such investment will have on its overall investment portfolio;
- (iii) have sufficient financial resources and liquidity to bear all of the risks of an investment in the relevant Notes, including where the currency for principal or interest payments is different from the potential investor's currency;
- (iv) understand thoroughly the terms of the relevant Notes and be familiar with the behavior of any relevant indices and financial markets; and
- (v) be able to evaluate (either alone or with the help of a financial advisor) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each potential investor should consult its legal advisors to determine whether and to what extent (1) the Notes are legal investments for it, (2) the Notes can be used as collateral for various types of borrowing and (3) other restrictions apply to its purchase or pledge of any Notes. Financial institutions should consult their legal advisors or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

In connection with the issue of any Tranche of Notes, J.P. Morgan Securities plc or other relevant Dealer(s) (if any) (the "Stabilizing Manager(s)") (or any person acting on behalf of such Stabilizing Manager(s)) may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilizing Manager(s) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche and 60 days after the date of the allotment of the relevant Tranche. Any stabilization action or over-allotment must be conducted by the relevant Stabilizing Manager(s) in accordance with all applicable laws and rules.

### No Consent Given or Responsibility Taken for Any Public Offerings in the European Economic Area

Neither of the Issuers nor the Arranger nor any Dealer consents to the use of this Offering Circular (or any supplement thereto or any Pricing Supplement) by any financial intermediary or any other person for the purpose of making a public offering of the Notes in the EEA, and neither of the Issuers nor the Arranger nor any Dealer accepts any responsibility for the content of this Offering Circular to any person with respect to the making of a public offering of the Notes by any financial intermediary or other person or for the actions of such financial intermediary or other person making such offer.

### **Cautionary Note Regarding Forward-Looking Statements**

Certain statements in this Offering Circular and the other documents referred to herein may be considered forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning. Forward-looking statements provide the Issuers' current expectations or forecasts of future events, circumstances, results or aspirations. The Issuers also may make forward-looking statements in other documents filed or furnished with the SEC, the OCC, the Irish Stock Exchange or other regulatory authorities. In addition, JPMorgan Chase's senior management may make forward-looking statements orally to analysts, investors, representatives of the media and others.

All forward-looking statements are, by their nature, subject to uncertainties, many of which are beyond the Issuers' control. The Issuers' actual future results may differ materially from those set forth in their forward-looking statements. While there is no assurance that any list of uncertainties is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

- local, regional and global business, economic and political conditions and geopolitical events;
- changes in laws and regulatory requirements, including capital and liquidity requirements affecting JPMorgan Chase's businesses, and JPMorgan Chase's ability to address those requirements;
- heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase's business practices, including dealings with retail customers;
- changes in trade, monetary and fiscal policies and laws;
- changes in income tax laws and regulations;
- securities and capital markets behavior, including changes in market liquidity and volatility;
- changes in investor sentiment or consumer spending or savings behavior;
- JPMorgan Chase's ability to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;
- changes in credit ratings assigned to the Issuers or their subsidiaries;
- damage to JPMorgan Chase's reputation;
- JPMorgan Chase's ability to deal effectively with an economic slowdown or other economic or market disruption;
- technology changes instituted by JPMorgan Chase, its counterparties or competitors;
- the success of JPMorgan Chase's business simplification initiatives and the effectiveness of its control agenda;
- JPMorgan Chase's ability to develop new products and services, and the extent to which products or services previously sold by JPMorgan Chase (including but not limited to mortgages and asset-backed securities) require it to incur liabilities or absorb losses not contemplated at their initiation or origination;
- acceptance of JPMorgan Chase's new and existing products and services by the marketplace and the ability of JPMorgan Chase to innovate and to increase market share;
- JPMorgan Chase's ability to attract and retain qualified employees;
- JPMorgan Chase's ability to control expense;
- competitive pressures;
- changes in the credit quality of JPMorgan Chase's customers and counterparties;
- adequacy of JPMorgan Chase's risk management framework, disclosure controls and procedures, and internal control over financial reporting;
- adverse judicial or regulatory proceedings;
- changes in applicable accounting policies;
- JPMorgan Chase's ability to determine accurate values of certain assets and liabilities;
- occurrence of natural or man-made disasters or calamities or conflicts and JPMorgan Chase's ability to deal
  effectively with disruptions caused by the foregoing;
- JPMorgan Chase's ability to maintain the security of its financial, accounting, technology, data processing and other operating systems and facilities;
- JPMorgan Chase's ability to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access its information or disrupt its systems; and
- the other risks and uncertainties referenced under the caption "Risk Factors" in this Offering Circular.

Any forward-looking statements made by or on behalf of either Issuer speak only as of the date they are made, and the Issuers do not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made. Potential purchasers should, however, consult any further disclosures of a forward-looking nature that JPMorgan Chase & Co. may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q or Current Reports on Form 8-K.

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### DOCUMENTS INCORPORATED BY REFERENCE; AVAILABLE INFORMATION

This Offering Circular should be read and construed in conjunction with:

- (i) the Annual Report on Form 10-K of JPMorgan Chase & Co. for the year ended December 31, 2015 (the "JPMorgan Chase & Co. 2015 Annual Report") filed with the SEC on February 23, 2016, which contains the audited Consolidated Financial Statements of JPMorgan Chase & Co. as at December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 3 under "General Information"),
- (ii) the Quarterly Report on Form 10-Q of JPMorgan Chase & Co. for the quarter ended March 31, 2016 (the "JPMorgan Chase & Co. March 2016 Form 10-Q") filed with the SEC on April 29, 2016, which contains the unaudited Consolidated Financial Statements of JPMorgan Chase & Co. as at March 31, 2016 and for the three months ended March 31, 2016 and March 31, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 4 under "General Information"),
- (iii) the Quarterly Report on Form 10-Q of JPMorgan Chase & Co. for the quarter ended June 30, 2016 (the "JPMorgan Chase & Co. June 2016 Form 10-Q") filed with the SEC on August 3, 2016, which contains the unaudited Consolidated Financial Statements of JPMorgan Chase & Co. as at June 30, 2016 and for the three months and six months ended June 30, 2016 and June 30, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 4 under "General Information"),
- (iv) the Quarterly Report on Form 10-Q of JPMorgan Chase & Co. for the quarter ended September 30, 2016 (the "JPMorgan Chase & Co. September 2016 Form 10-Q") filed with the SEC on November 1, 2016, which contains the unaudited Consolidated Financial Statements of JPMorgan Chase & Co. as at September 30, 2016 and for the three months and nine months ended September 30, 2016 and September 30, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 4 under "General Information"),
- (v) the Proxy Statement on Schedule 14A of JPMorgan Chase & Co. dated April 7, 2016 (the "JPMorgan Chase & Co. 2016 Proxy Statement") filed with the SEC on April 7, 2016,
- (vi) the Current Report on Form 8-K of JPMorgan Chase & Co. filed with the SEC on January 13, 2017 (the "JPMorgan Chase & Co. January 13, 2017 Form 8-K") containing the earnings press release of JPMorgan Chase & Co. for the quarter ended December 31, 2016,
- (vii) the Current Report on Form 8-K of JPMorgan Chase & Co. filed with the SEC on November 17, 2016 (the "JPMorgan Chase & Co. November 17, 2016 Form 8-K") concerning settlements related to a former hiring program for candidates referred by clients, potential clients and government officials in the Asia Pacific region,
- (viii) the audited Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 5 under "General Information"),
- (ix) the unaudited Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at June 30, 2016 and for the six months ended June 30, 2016 and June 30, 2015 (together with the report of PricewaterhouseCoopers LLP thereon described in item 6 under "General Information"),
- (x) the Consolidated Reports of Condition and Income for A Bank With Domestic and Foreign Offices of JPMorgan Chase Bank, N.A. for the quarters ended December 31, 2015, March 31, 2016, June 30, 2016, and September 30, 2016, filed with the U.S. Federal Financial Institutions Examinations Council (the "FFIEC"), and
- (xi) for the purpose of any issues of Notes under this Offering Circular which are to be consolidated and form a single Series with an existing Tranche or Series of Notes, the terms and conditions of the Notes as set out in the section entitled "Terms and Conditions of the Notes" contained in each of the Offering Circular dated January 22, 2016 (pages 21 to 45), the Offering Circular dated January 21, 2015 (pages 20 to 43) and the Offering Circular dated January 15, 2014 (pages 20 to 43), in each case prepared by the Issuers in connection with the Program,

each of which has been previously published and which has been filed with the Irish Stock Exchange. Such documents shall be incorporated in and form part of this Offering Circular, save that any statement contained herein or in a document incorporated by reference herein shall be modified or superseded for purposes of this Offering Circular to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated by reference herein modifies or supersedes such statement. Any such statement modified or superseded shall not, except as so modified or superseded, constitute a part of this Offering Circular. Any documents which are incorporated by reference into the documents listed above shall not constitute a part of this Offering Circular.

JPMorgan Chase & Co.'s filings with the SEC are available to the public on the website maintained by the SEC at <a href="http://www.sec.gov">http://www.sec.gov</a>. Such filings can also be inspected and printed or copied, for a fee, at the SEC's public reference room, 100 F Street N.E., Washington, D.C. 20549, U.S.A., or by contacting that office by phone: +001-202-942-8090 or e-mail: publicinfo@sec.gov. Investors may call the SEC at +001-800-732-0330 for further information on the public reference rooms. JPMorgan Chase & Co.'s SEC filings can also be viewed on JPMorgan Chase's investor relations website at <a href="http://investor.shareholder.com/jpmorganchase/">http://investor.shareholder.com/jpmorganchase/</a>. Unless specifically incorporated by reference in this Offering Circular, JPMorgan Chase & Co.'s reports filed with or furnished to the SEC shall not be deemed to be part of this Offering Circular.

JPMorgan Chase Bank, N.A.'s annual and semi-annual consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). These financial statements can be viewed on the websites of the Irish Stock Exchange (www.ise.ie), the Luxembourg Stock Exchange (www.bourse.lu) and the U.K. National Storage Mechanism (www.morningstar.co.uk/uk/nsm). In addition, JPMorgan Chase Bank, N.A. files Consolidated Reports of Condition and Income for A Bank With Domestic and Foreign Offices ("Call Reports") with the FFIEC. The non-confidential portions of the Call Reports can be viewed on the FFIEC's website at www.cdr.ffiec.gov/public. The Call Reports are prepared in accordance with regulatory instructions issued by the FFIEC and not U.S. GAAP. The Call Reports are supervisory and regulatory documents; they are not primarily accounting documents, do not conform with U.S. GAAP and do not provide a complete range of financial disclosure about JPMorgan Chase Bank, N.A. Nevertheless, the Call Reports do provide important information concerning the financial condition of JPMorgan Chase Bank, N.A. Unless specifically incorporated by reference in this Offering Circular, the Call Reports shall not be deemed to be part of this Offering Circular.

Each Issuer has respectively given an undertaking to the Dealer(s) that if at any time during the duration of the Program there is a significant new factor, mistake or material inaccuracy relating to the information contained in this Offering Circular which is capable of affecting the assessment of any Notes issued by it and the inclusion or removal of which is necessary for the purpose of allowing investors of the Notes to make an informed assessment of the assets and liabilities, financial position, profits and losses, and prospects of that Issuer and/or of the rights attaching to such Notes or there shall occur any material adverse change in the business or financial condition of, or other material adverse change affecting, JPMorgan Chase & Co. or the JPMorgan Chase Group (in respect of Notes issued by JPMorgan Chase & Co.) or JPMorgan Chase Bank, N.A. or the JPMorgan Chase Bank Group (in respect of Notes issued by JPMorgan Chase Bank, N.A.) which is not reflected in this Offering Circular, or the terms of the Program are modified or amended in a manner which would make the Offering Circular, as supplemented, inaccurate or misleading as it relates to such Issuer, such Issuer will prepare and deliver an amendment or supplement to this Offering Circular or publish a new Offering Circular for use in connection with any subsequent offering by that Issuer of Notes.

### **SUMMARY**

The following summary does not purport to be complete and is taken from, and is qualified in its entirety by, the remainder of this Offering Circular and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. Words and expressions defined in "Terms and Conditions of the Notes" below shall have the same meanings in this summary. The Issuer may agree with any Dealer that Notes may be issued in a form other than that contemplated in "Terms and Conditions of the Notes" herein, in which event, in the case of listed Notes only, a new offering circular will be made available which will describe the effect of the agreement reached in relation to such Notes.

Issuers:	JPMorgan Chase & Co. JPMorgan Chase Bank, National Association
Description:	Note Program. Up to U.S.\$10,000,000,000 (in respect of Notes issued by JPMorgan Chase & Co.) and up to U.S.\$5,000,000,000 (in respect of Notes issued by JPMorgan Chase Bank, N.A.) (or, in each case, the equivalent in other currencies at the date of issue) aggregate principal amount of Notes outstanding at any one time may be issued as of the date hereof under the Program.
Arranger:	J.P. Morgan Securities plc
Dealer(s):	J.P. Morgan Securities plc
	The Issuers may from time to time terminate the appointment of the Dealer(s) under the Program or appoint additional dealers either in respect of one or more Tranches or in respect of the whole Program. References in this Offering Circular to the "Permanent Dealers" are to J.P. Morgan Securities plc as Dealer and to such additional persons that are appointed as dealers in respect of the Program (and whose appointment has not been terminated) and to "Dealers" are to all Permanent Dealers and all persons appointed as a dealer in respect of one or more Tranches.
Issuing and Paying Agent:	The Bank of New York Mellon
Paying Agents:	The Bank of New York Mellon and The Bank of New York Mellon (Luxembourg) S.A.
Registrar:	The Bank of New York Mellon (Luxembourg) S.A.
Transfer Agents:	The Bank of New York Mellon and The Bank of New York Mellon (Luxembourg) S.A.
Currencies:	Subject to compliance with all relevant laws, regulations and directives, Notes may be issued in U.S. dollars, Australian dollars, Canadian dollars, Danish kroner, euro, Hong Kong dollars, Icelandic kronur, Japanese yen, Mexican pesos, New Zealand dollars, Norwegian kroner, Polish zloty, Singapore dollars, South African rand, Swedish kronor, Swiss francs, Turkish lira or United Kingdom sterling, or in other currencies if the relevant Issuer and the relevant Dealer(s) so agree.
Redenomination, Renominalization,	If so specified in the relevant Pricing Supplement, Notes denominated in the national currency of a Member State that subsequently participates in

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the third stage of the European Economic and Monetary Union may, following the giving of notice by the relevant Issuer to the Noteholders, the Issuing and Paying Agent, Euroclear and Clearstream, Luxembourg, be subject to redenomination (if so specified in the relevant Pricing Supplement, in accordance with Condition 6(b) under "Terms and Conditions of the Notes"), renominalization, reconventioning and/or

consolidation with other Notes then denominated in euro.

Notes will be issued in such denominations as may be specified in the relevant Pricing Supplement, subject to compliance with all applicable laws, regulations and directives.

The Notes will be issued in registered form.

Each Tranche of Notes which is issued by JPMorgan Chase & Co. will be sold in "offshore transactions" within the meaning of Regulation S and will be represented by interests in a Permanent Global Note, without interest coupons, which will be deposited with, and registered in the name of, a nominee, common depositary or common safekeeper for Euroclear or Clearstream, Luxembourg or deposited with, and registered in the name of a nominee of, an Alternative Clearing System, as the case may be. Each Tranche of Notes which is issued by JPMorgan Chase Bank, N.A. will be sold in "offshore transactions" within the meaning of Regulation S and will be represented by interests in a Temporary Global Note which will be exchangeable for beneficial interests in the related Permanent Global Note, without interest coupons, each of which will be deposited with, and registered in the name of, a nominee, common depositary or common safekeeper for Euroclear or Clearstream, Luxembourg or deposited with, and registered in the name of a nominee of, an Alternative Clearing System, as the case may be. Beneficial interests in Global Notes will be shown on, and transfers thereof will be effected only through records maintained by, such clearing systems and their respective participants. Temporary Global Notes will be exchangeable only in the manner and upon compliance with the procedures described herein, for Permanent Global Notes not earlier than 40 days after the issue date, upon certification of non-U.S. beneficial ownership. No interest will be payable in respect of a Temporary Global Note except as described under "The Global Notes."

Definitive Notes will not be issued other than in the limited circumstances set out in the relevant Global Note, as described under "The Global Notes." Any Definitive Notes that are issued will be in registered form and represented by Certificates, one Certificate being issued in respect of each Noteholder's entire holding of Notes of one Series. "Definitive Notes" means, in relation to any Global Note, the definitive Notes for which such Global Note may be exchanged under certain limited circumstances as described under "The Global Notes."

See "The Global Notes."

The Notes will be issued on a syndicated or non-syndicated basis. The Notes will be issued in series (each, a "Series"), having one or more issue dates and on terms otherwise identical (or identical other than in respect of the issue date, issue price, first payment of interest and principal amount), the Notes of each Series being intended to be interchangeable with all other Notes of that Series. Each Series may be issued in tranches (each, a "Tranche") on the same or different issue dates. The specific terms of each Tranche (which will be completed, where necessary, with supplemental terms and conditions and, save in respect of the issue date, issue price, first payment of interest and principal amount of the Tranche, will be identical to the terms of other Tranches of the same Series) will be completed in the pricing supplement relating to such Tranche (the "Pricing Supplement").

Euroclear and Clearstream, Luxembourg.

In relation to any Tranche, the relevant Issuer may appoint an Alternative Clearing System as may be agreed among such Issuer, the Agent and the relevant Dealer(s).

**Denomination:** 

Form of Notes:

Method of Issue:

**Clearing Systems:** 

**Initial Delivery of Notes:** 

On or before the issue date for each Tranche, if the Global Note is intended to be held in a manner which would allow it to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations, the Global Note will be delivered to a Common Safekeeper for Euroclear and Clearstream, Luxembourg. On or before the issue date for each Tranche, if the Global Note is not intended to be held in a manner which would allow it to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations, the Global Note may be deposited with the Common Depositary. Global Notes may also be deposited with an Alternative Clearing System or Notes may be delivered outside any clearing system provided that the method of such delivery has been agreed in advance by the relevant Issuer, the Agent and the relevant Dealer(s). Notes that are to be credited to one or more clearing systems on issue will be registered in the name of nominees, common nominee or common safekeeper for such clearing systems.

**Fixed Rate Notes:** 

Fixed interest will be payable in arrear on the date or dates in each year specified in the relevant Pricing Supplement.

**Floating Rate Notes:** 

Floating Rate Notes will bear interest set separately for each Series by reference to a Reference Rate (as defined below) as set out in the relevant Pricing Supplement (or such other benchmark as may be agreed by the relevant Issuer and any Dealer or Dealers) as adjusted for any applicable margin. Interest periods will be specified in the relevant Pricing Supplement.

**Zero Coupon Notes:** 

Zero Coupon Notes may be issued at their principal amount or at a discount to it and will not bear interest except in the case of late payment as described in "Terms and Conditions of the Notes — Interest and Other Calculations."

**Interest Periods and Rates of Interest:** 

The length of the interest periods for the Notes and the applicable rate of interest or its method of calculation may differ from time to time or be constant for any Series. Notes may have a maximum rate of interest, a minimum rate of interest, or both. The use of interest accrual periods permits the Notes to bear interest at different rates in the same interest period. All such information will be set out in the relevant Pricing Supplement.

**Other Notes:** 

Terms applicable to high interest Notes, low interest Notes, step-up Notes and step-down Notes that the relevant Issuer and any Dealer(s) may agree to issue under the Program will be set out in the relevant Pricing Supplement.

**Optional Redemption:** 

The relevant Pricing Supplement issued in respect of each issue of Notes will state whether such Notes may be redeemed prior to their stated maturity at the option of the relevant Issuer (either in whole or in part) and/or the holders and, if so, the terms applicable to such redemption.

**Early Redemption:** 

Except as provided in "Optional Redemption" above, Notes will be redeemable at the option of the relevant Issuer prior to maturity only for tax reasons. See "Terms and Conditions of the Notes — Redemption, Purchase and Options."

Withholding Tax:

All payments with respect to the Notes will be made free and clear of withholding or deduction for or on account of any taxes or other charges imposed by any governmental authority or agency in the United States, except as required by law. In the event that any such withholding or deduction is required, the relevant Issuer will pay additional amounts as

provided in "Terms and Conditions of the Notes — Taxation," subject to the exceptions as are set out therein. See "Taxation of the Notes — United States Taxation."

The Senior Notes will constitute unsubordinated and unsecured obligations of the relevant Issuer, and the Subordinated Notes will constitute subordinated and unsecured obligations of the relevant Issuer, all as described in "Terms and Conditions of the Notes — Status" and "Terms and Conditions of the Notes — Subordination," respectively. If the Notes are specified to be Subordinated Notes, the obligations of the relevant Issuer under the Notes will be unsecured and will be subordinated in right of payment to all Senior Indebtedness (as defined in "Terms and Conditions of the Notes — Subordination — Definitions") of such Issuer, whether outstanding as of the relevant issue date or incurred thereafter.

The Notes are unsecured general obligations of the relevant Issuer and are not savings accounts, deposits or other obligations of such Issuer or any bank or non-bank subsidiary of such Issuer and are not insured by the FDIC, the Deposit Insurance Fund or any other governmental agency or instrumentality. Subordinated Notes issued by JPMorgan Chase Bank, N.A. are subordinated to claims of depositors and are ineligible as collateral for a loan by JPMorgan Chase Bank, N.A.

The obligations of each Issuer under Notes issued by it are the obligations of that Issuer and are not guaranteed by the other Issuer or by any other person.

None.

None.

Notes may be issued on an unlisted basis or may be admitted to trading on GEM or as otherwise specified in the relevant Pricing Supplement. The Program provides that Notes may be listed or admitted to trading, as the case may be, on such other or further stock exchanges or markets as may be agreed between the relevant Issuer and the relevant Dealer(s).

The Notes, and any claim, controversy or dispute arising under or related to the Notes, will be governed by and construed in accordance with the laws of the State of New York, United States of America.

Series of Notes issued under the Program may be rated or unrated. Where a Series of Notes is rated, such rating will be specified in the relevant Pricing Supplement. A credit rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Whether or not each credit rating applied for in relation to relevant Series of Notes will be issued by a credit rating agency established in the European Union and registered under Regulation (EU) No. 1060/2009 (the "CRA Regulation") will be disclosed in the Pricing Supplement. In general, European regulated investors are restricted from using a rating for regulatory purposes if such rating is not issued by a credit rating agency established in the European Union and registered under the CRA Regulation (or is endorsed and published or distributed by subscription by such a credit rating agency in accordance with the Regulation) unless the rating is provided by a credit rating agency operating in the European Union before June 7, 2010 which has submitted an application for registration with the CRA Regulation and such registration is not refused.

**Negative Pledge:** 

**Status of Notes:** 

**Cross Default:** 

Listing:

Governing Law:

**Credit Ratings:** 

### **Selling Restrictions:**

There are restrictions on the offer, sale and transfer of the Notes in the EEA, the United Kingdom, Italy, Australia, Japan, Hong Kong, Singapore, South Africa and such other restrictions as may be required in connection with a particular issue of Notes. The Notes will be sold outside the United States to non-U.S. persons pursuant to Regulation S. See "Subscription and Sale."

**Key Risks Specific to the Issuer(s):** 

Investors in the Notes are exposed to the creditworthiness of the relevant Issuer. JPMorgan Chase (including JPMorgan Chase Bank) is a major global financial services group and, as such, faces a variety of risks that are substantial and inherent in its businesses, and which may affect the relevant Issuer's ability to fulfil its respective payment, delivery or other obligations under the relevant Notes. These risks include regulatory risk, market risk, credit risk, liquidity risk, legal risk, business and operational risk, the adequacy of risk management disclosure controls or control over financial reporting, legal, regulatory and compliance risks, litigation and other contingent liabilities, competition risks, the financial condition of clients, customers and counterparties, adverse economic, monetary, political or legal developments, cross-border and foreign exchange risk, catastrophic events, risks from estimates and valuations, and risks relating to strategy. The results of operations of JPMorgan Chase and JPMorgan Chase Bank have in the past been, and may in the future be, adversely affected by unfavourable U.S. and international financial market and economic conditions.

### RISK FACTORS

The risk factors described below (including those contained in the documents incorporated by reference herein) (i) may affect the ability of the relevant Issuer to fulfill its obligations under the Notes issued under the Program and (ii) are material in assessing the market for Notes issued under the Program. The business, financial condition or results of operations of the relevant Issuer could be materially adversely affected by any of these risks. Each of the Issuers believes that the factors described below (including those contained in the documents incorporated by reference herein) represent the principal risks inherent in investing in Notes issued under the Program, but an Issuer may be unable to pay interest, principal or other amounts in connection with any Notes issued by it for other reasons which may not be considered significant risks by such Issuer based on information currently available to it or which such Issuer may not currently be able to anticipate. Please read the risk factors discussed below and in the documents incorporated by reference herein (including the "Risk Factors" in the JPMorgan Chase & Co. 2015 Annual Report (pages 8-18)), where certain additional uncertainties associated with the relevant Issuer's business that may affect such Issuer's financial condition and results of operation and the claims of certain debt holders are discussed.

For purposes of an issuance by JPMorgan Chase Bank, N.A., risk factors and forward-looking statements discussed below and contained in the documents incorporated by reference herein should be read to reference JPMorgan Chase Bank even where JPMorgan Chase is referenced. In the case of risk factors included below, references to the "Issuer" or the "relevant Issuer" shall mean the Issuer of the applicable Notes, whether JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A., except as otherwise specified.

Factors Which are Material for the Purpose of Assessing the Market Risks Associated with Notes Issued Under the Program

#### Risks Related to the Structure of a Particular Issue of Notes

A wide range of Notes may be issued under the Program. Some of these Notes may have features that contain particular risks for potential investors. Set out below is a description of certain such features:

Notes Subject to Optional Redemption by the Issuer

An optional redemption feature is likely to limit the market value of Notes. During any period when the relevant Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The relevant Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may be able to do so only at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

Inverse Floating Rate Notes

Inverse Floating Rate Notes have an interest rate equal to a fixed rate minus a rate based upon a reference rate such as LIBOR. The market values of such Notes typically are more volatile than market values of other conventional floating rate debt securities based on the same reference rate (and with otherwise comparable terms). Inverse Floating Rate Notes are more volatile because an increase in the reference rate not only decreases the interest rate of the Notes, but may also reflect an increase in prevailing interest rates, which further adversely affects the market value of these Notes.

Fixed/Floating Rate Notes

Fixed/Floating Rate Notes may bear interest at a rate that the relevant Issuer may elect to convert from a fixed rate to a floating rate, or from a floating rate to a fixed rate. The relevant Issuer's ability to convert the interest rate will affect the secondary market and the market value of such Notes since the relevant Issuer may be expected to convert the rate when it is likely to produce a lower overall cost of borrowing. If the relevant Issuer converts from a fixed rate to a floating rate, the spread on the Fixed/Floating Rate Notes may be less favorable than then prevailing spreads on comparable Floating Rate

Notes tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on other Notes. If the relevant Issuer converts from a floating rate to a fixed rate, the fixed rate may be lower than then prevailing rates on its Notes.

Notes Issued at a Substantial Discount or Premium

The market values of securities issued at a substantial discount or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing securities. Generally, the longer the remaining term of the securities, the greater the price volatility as compared to conventional interest-bearing securities with comparable maturities.

Subordinated Notes Have Limited Right of Acceleration

Upon an Event of Default (as defined in "Terms and Conditions of the Notes") or any event which, with notice or lapse of time or both, would become an Event of Default, holders of Senior Notes may declare those notes in default and accelerate the maturity of those notes. Holders of Subordinated Notes do not generally have that right; holders of Subordinated Notes issued by JPMorgan Chase & Co. may accelerate payment of principal only in the case of the bankruptcy, reorganization or insolvency of JPMorgan Chase & Co., and holders of Subordinated Notes issued by JPMorgan Chase Bank, N.A. may accelerate payment of principal only in the case of the insolvency or reorganization of JPMorgan Chase Bank, N.A. or the appointment of a conservator, receiver or liquidator of JPMorgan Chase Bank, N.A. or substantially all of its property.

Subordinated Notes Are Junior Debt Obligations

The Subordinated Notes are subordinate and junior in right of payment to all Senior Indebtedness (as defined in "Terms and Conditions of the Notes") of the relevant Issuer. The relevant Issuer will not make any payment of principal, premium, if any, or interest in respect of the Subordinated Notes unless all amounts then due on its Senior Indebtedness have been paid in full or there exists an event of default that permits the holders of such Senior Indebtedness to accelerate the maturity of such Senior Indebtedness. There is no limit on the ability of either Issuer to issue or incur Senior Indebtedness. The Subordinated Notes are not secured, are not guaranteed by either Issuer or any affiliate of either Issuer and are not subject to any other arrangement that legally or economically enhances the ranking of the Subordinated Notes in relation to more senior claims. In addition, holders of the Subordinated Notes may be fully subordinated to interests held by the U.S. government in the event that the relevant Issuer enters into a receivership, insolvency, liquidation or similar proceeding.

Subordinated Notes of JPMorgan Chase & Co.

None of JPMorgan Chase & Co.'s outstanding subordinated indebtedness (other than certain junior subordinated indebtedness and "capital efficient notes" issued in connection with the issuance of securities by capital trust subsidiaries) is subordinated to the Subordinated Notes. However, due to the subordination provisions of various series of subordinated indebtedness issued by JPMorgan Chase & Co. and its predecessor institutions, in the event of a dissolution, winding-up, liquidation, reorganization or insolvency of JPMorgan Chase & Co., holders of Subordinated Notes of JPMorgan Chase & Co. of any series may recover less, ratably, than holders of some series of its outstanding subordinated indebtedness and more, ratably, than holders of other series of its outstanding subordinated indebtedness.

Subordinated Notes of JPMorgan Chase Bank, N.A.

The OCC, or any receiver or conservator appointed by the OCC, will have the right in the performance of its legal duties, and as part of any transaction or plan of reorganization or liquidation designed to protect or further the continued existence of JPMorgan Chase Bank, N.A.'s obligations under its Subordinated Notes then outstanding to any U.S. national banking association, state bank or bank holding company selected by the OCC or such official that will expressly assume the obligation of the due and punctual payment of the unpaid principal, interest and premium, if any, on such Subordinated Notes and the due and punctual performance of all covenants and conditions, in each case without the consent of the holders of such Subordinated Notes. The completion of such transfer and assumption will serve to supersede and void any default, acceleration or subordination that may have occurred, or that

may occur, due or related to such transaction, plan, transfer or assumption, pursuant to the provisions of such Subordinated Notes of JPMorgan Chase Bank, N.A.

### Risks Related to Notes Generally

Set out below is a brief description of certain risks relating to the Notes generally:

Insolvency and Resolution Considerations

The Notes of JPMorgan Chase & Co. constitute "loss-absorbing capacity" within the meaning of the final rules (the "TLAC rules") issued by the Board of Governors of the Federal Reserve System (the "Federal Reserve") on December 15, 2016 regarding, among other things, the minimum levels of unsecured external long-term debt that eight U.S. top-tier bank holding companies identified as global systemically important bank holding companies, including JPMorgan Chase & Co., will be required to maintain, commencing January 1, 2019. Such debt must satisfy certain eligibility criteria under the TLAC rules. If JPMorgan Chase & Co. were to enter into proceedings under the U.S. Bankruptcy Code or a receivership administered by the FDIC under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act"), holders of the Notes of JPMorgan Chase & Co. would be at risk of absorbing losses of JPMorgan Chase & Co. and its affiliates.

Under Title I of the Dodd-Frank Act and applicable rules of the Federal Reserve and the FDIC, JPMorgan Chase & Co. is required to submit periodically to the Federal Reserve and the FDIC a detailed plan (the "resolution plan") for the rapid and orderly resolution of JPMorgan Chase & Co. and its material subsidiaries under the U.S. Bankruptcy Code and other applicable insolvency laws in the event of material financial distress or failure. JPMorgan Chase & Co.'s preferred resolution strategy under its resolution plan contemplates that only JPMorgan Chase & Co. would enter bankruptcy proceedings under Chapter 11 of the U.S. Bankruptcy Code pursuant to a "single point of entry" recapitalization strategy. JPMorgan Chase & Co.'s subsidiaries would be recapitalized as needed, using assets of JPMorgan Chase & Co., so that they could continue normal operations or subsequently be wound down in an orderly manner. As a result, JPMorgan Chase & Co.'s losses and any losses incurred by its subsidiaries would be imposed first on holders of JPMorgan Chase & Co.'s equity securities and thereafter on unsecured creditors, including holders of the Notes of JPMorgan Chase & Co. Claims of holders of the Notes of JPMorgan Chase & Co. would have a junior position to the claims of creditors of JPMorgan Chase & Co.'s subsidiaries and to the claims of priority (as determined by statute) and secured creditors of JPMorgan Chase & Co. Accordingly, in a resolution of JPMorgan Chase & Co. under Chapter 11 of the U.S. Bankruptcy Code, holders of the Notes of JPMorgan Chase & Co. would realize value only to the extent available to JPMorgan Chase & Co. as a shareholder of JPMorgan Chase Bank, N.A. and its other subsidiaries, and only after any claims of priority and secured creditors of JPMorgan Chase & Co. have been fully repaid. None of JPMorgan Chase & Co., the Federal Reserve or the FDIC is obligated to follow JPMorgan Chase & Co.'s preferred resolution strategy under its resolution plan.

The FDIC has similarly indicated that a "single point of entry" recapitalization model could be a desirable strategy to resolve a systemically important financial institution, such as JPMorgan Chase & Co., under Title II of the Dodd-Frank Act. Pursuant to that strategy, the FDIC would use its power to create a "bridge entity" for JPMorgan Chase & Co.; transfer the systemically important and viable parts of JPMorgan Chase & Co.'s business, principally the stock of JPMorgan Chase & Co.'s main operating subsidiaries and any intercompany claims against such subsidiaries, to the bridge entity; recapitalize those subsidiaries using assets of JPMorgan Chase & Co. that have been transferred to the bridge entity; and exchange external debt claims against JPMorgan Chase & Co. for equity in the bridge entity. Under a "single point of entry" recapitalization of JPMorgan Chase & Co. under Title II, the value of the stock of the bridge entity that would be redistributed to holders of the Notes of JPMorgan Chase & Co. may not be sufficient to repay all or part of the principal amount and interest on such Notes. It is also possible that the application of this Title II strategy could result in greater losses to holders of the Notes of JPMorgan Chase & Co. than the losses that would result from a different resolution strategy for JPMorgan Chase & Co. To date, the FDIC has not formally adopted a "single point of entry" resolution strategy and it is not obligated to follow such a strategy in a Title II resolution of JPMorgan Chase & Co.

### Events of Default Applicable to the Senior Notes

As specified in Condition 9, the occurrence and continuation of any one of the following events will be an Event of Default with respect to each Series of the Senior Notes:

- (1) default in the payment of principal of such Senior Notes and continuance of such default for 30 days;
- (2) default in the payment of interest or any Additional Amounts on such Senior Notes and continuance of such default for 30 days; and
- (3) specified events of bankruptcy, insolvency or reorganization of the relevant Issuer of such Senior Notes.

Senior debt securities issued by the Issuers prior to December 31, 2016, including senior notes issued under the Program (the "Pre-2017 Senior Debt"), contain events of default that are different from those set forth above. In particular:

- The events of default applicable to the Pre-2017 Senior Debt do not provide for a 30-day cure period with respect to any failure by the relevant Issuer to pay the principal of such senior debt securities;
- Most series of Pre-2017 Senior Debt contain an additional event of default that is applicable if the relevant Issuer
  fails to perform any of the covenants contained in the terms and conditions of, or the governing instrument for, such
  Pre-2017 Senior Debt and that failure continues for 90 days; and
- The events of default applicable to certain series of Pre-2017 Senior Debt provide that specified events of bankruptcy, insolvency or reorganization of JPMorgan Chase Bank, N.A. would constitute an event of default with respect to those senior debt securities.

In addition, certain series of senior debt securities which JPMorgan Chase & Co. assumed in connection with its merger with The Bear Stearns Companies Inc. include additional events of default.

Accordingly, if an Issuer fails to pay the principal of any series of Pre-2017 Senior Debt when due, the holders of such senior debt securities would be entitled to declare their securities due and payable immediately, whereas holders of a Series of the Senior Notes issued after December 31, 2016 would not be entitled to accelerate such Senior Notes until 30 days after the Issuer's failure to pay the principal of such Senior Notes. In addition, holders of the Senior Notes issued after December 31, 2016 will not have the benefit of the additional events of default described above that are applicable to the Pre-2017 Senior Debt.

# Market Making and Resale of the Notes

Affiliates of the relevant Issuer, including the Arranger, currently intend to make a market in the Notes. However, they are not obligated to make a market in the Notes, and any market making may be discontinued at any time at the sole discretion of such affiliates without notice. Under interpretations by the SEC staff, any resale within the United States by any such affiliate of the relevant Issuer of any Notes so acquired must be made pursuant to an effective registration statement filed with the SEC or pursuant to exemptions from, or in transactions not subject to, the registration requirements of the Securities Act. Specifically, any Notes issued under the Program may not, for the life of such Notes, be offered or sold at any time within the United States except pursuant to Rule 144A under the Securities Act. Notes may not be sold to U.S. investors pursuant to Rule 144 under the Securities Act.

### Modification and Waivers

The Agency Agreement (as defined in "Terms and Conditions of the Notes") contains provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders, including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the majority at the relevant meeting.

Certain modifications and amendments to the Terms and Conditions of the Notes may be made without the consent of Noteholders, including those which the relevant Issuer and the Agent may deem necessary or desirable and which will not materially adversely affect the interest of the Noteholders. Certain modifications and amendments to the Agency Agreement may be made without the consent of the holder of any Note so as to modify any provisions of the Agency Agreement which are of a formal, minor or technical nature or made to correct a manifest error or for the purpose of complying with any applicable laws or regulations.

### Change of Law

The Terms and Conditions of the Notes are based on laws of the State of New York, United States of America ("New York law") in effect as at the date of issue of the relevant Notes. No assurance can be given as to the impact of any possible judicial decision or change to New York law or administrative practice after the date of issue of the relevant Notes.

The Proposed Financial Transactions Tax

On February 14, 2013, the European Commission published a proposal (the "Commission's Proposal") for a Directive for a common financial transactions tax ("FTT") in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "participating Member States"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in the Notes (including secondary market transactions) in certain circumstances. Primary market transactions referred to in Article 5(c) of Regulation (EC) No 1287/2006 are exempt.

Under the Commission's Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between the participating Member States. It may therefore be altered prior to any implementation. Additional EU Member States may decide to participate.

Prospective holders of the Notes are advised to seek their own professional advice in relation to the FTT.

Notes Not Insured by the FDIC

The Notes are unsecured general obligations of the applicable Issuer and are not savings accounts, deposits or other obligations of such Issuer or any bank or non-bank subsidiary of such Issuer and are not insured by the FDIC, the Deposit Insurance Fund or any other governmental agency or instrumentality.

### Risks Related to the Market Generally

Set out below is a brief description of certain market risks, including liquidity risk, exchange rate risk and interest rate risk:

The Secondary Market Generally

Notes may have no established trading market when issued, and one may never develop. If a market does develop, it may not be liquid. Therefore, investors may not be able to sell their Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market. This is particularly the case for Notes that are especially sensitive to interest rate, currency or market risks, are designed for specific investment objectives or strategies, or have been structured to meet the investment requirements of limited categories of investors. These types of Notes generally

would have a more limited secondary market and more price volatility than conventional debt securities. Illiquidity may have a material adverse effect on the market value of Notes.

Exchange Rate Risks and Exchange Controls

As described in this Offering Circular, Notes may be denominated or payable in one of a number of currencies. For investors whose financial activities are denominated principally in a currency (the "Investor's Currency") other than the Specified Currency or where principal or interest on Notes is payable by reference to a Specified Currency index other than an index relating to the Investor's Currency, an investment in the Notes entails significant risks that are not associated with a similar investment in a security denominated in that Investor's Currency. Such risks include, without limitation, the possibility of significant changes in the rate of exchange between the Specified Currency and the Investor's Currency and the possibility of the imposition or modification of exchange controls by the country of the Specified Currency or the Investor's Currency. Such risks generally depend on economic and political events over which the relevant Issuer has no control. In recent years, rates of exchange have been highly volatile and such volatility may be expected to continue in the future. Fluctuations in any particular exchange rate that have occurred in the past are not necessarily indicative, however, of fluctuations that may occur in the future. Depreciation of the Specified Currency against the Investor's Currency would result in a decrease in the Investor's Currency equivalent yield on a Note denominated in that Specified Currency, in the Investor's Currency equivalent value of the principal payable at maturity of such Note and generally in the Investor's Currency equivalent market value of such Note. An appreciation of the Specified Currency against the Investor's Currency would have the opposite effect. In addition, depending on the specific terms of a Note denominated in, or the payment of which is related to the value of, a foreign currency, changes in exchange rates relating to any of the currencies involved may result in a decrease of such Note's effective yield and, in certain circumstances, could result in a loss of all or a substantial portion of the principal of a Note to the investor.

Governments have imposed from time to time, and may in the future impose or modify, exchange controls which could affect exchange rates as well as the availability of a specified foreign currency at the time of payment of principal of, premium, if any, or interest on a Note. Even if there are no actual exchange controls, it is possible that the Specified Currency for any particular Note may not be available when payments on such Note are due.

Interest Rate Risks

Investment in Fixed Rate Notes involves the risk that subsequent changes in market interest rates may adversely affect the value of Fixed Rate Notes.

As the Global Notes Are Held by or on Behalf of the Applicable Clearing Systems, Investors Will Have to Rely on the Procedures of Those Clearing Systems for Transfer, Payment and Communication with the Relevant Issuer

Notes will be represented by the Global Notes and, except in certain limited circumstances described under the "The Global Notes," investors will not be entitled to receive Definitive Notes. The Global Notes will be deposited with, and registered in the name of, a Common Depositary or Common Safekeeper, as applicable, on behalf of Euroclear and Clearstream, Luxembourg or deposited with, and registered in the name of a nominee of, an alternative Clearing System, as the case may be. Those clearing systems will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by the Global Notes, investors will be able to trade their beneficial interests only through Euroclear, Clearstream, Luxembourg or the Alternative Clearing System, as the case may be.

The relevant Issuer will discharge its payment obligations under the Notes by making payments to the Common Depositary or the common service provider (as appointed by the ICSDs (as defined below)), as applicable, for distribution to their account holders. A holder of a beneficial interest in a Global Note must rely on the procedures of the applicable clearing systems to receive payments under the Notes. The relevant Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Holders of beneficial interests in the Global Notes will not have a direct right to vote in respect of the Notes. Instead, such holders will be permitted to act only to the extent that they are enabled by Euroclear, Clearstream, Luxembourg or the

Alternative Clearing System to appoint appropriate proxies.

### TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions (the "Conditions") that, subject to completion and amendment and as supplemented or varied in accordance with the provisions of Part A of the relevant Pricing Supplement, shall be applicable to the Notes in definitive form (if any) issued in exchange for the Global Note(s) representing each Series. Either (i) the full text of these Conditions together with the relevant provisions of Part A of the Pricing Supplement or (ii) these Conditions as so completed, amended, supplemented or varied (and subject to simplification by the deletion of non-applicable provisions), shall be attached to each Global Note or endorsed on each Certificate representing Notes in definitive form. All capitalized terms that are not defined in these Conditions will have the meanings given to them in Part A of the relevant Pricing Supplement. Those definitions will be attached to or endorsed on each Global Note, or Certificate representing Notes in definitive form, as the case may be. References in the Conditions to "Notes" are to the Notes of one Series only, not to all Notes that may be issued under the Program.

JPMorgan Chase & Co. and JPMorgan Chase Bank, National Association (each an "Issuer" and together, the "Issuers") have established a Note Program (the "Program") for the issuance of up to U.S.\$10,000,000,000 (or the equivalent in other currencies) (in respect of Notes issued by JPMorgan Chase & Co.) and up to U.S.\$5,000,000,000 (or the equivalent in other currencies) (in respect of Notes issued by JPMorgan Chase Bank, N.A.) in aggregate principal amount of notes (the "Notes") at any time outstanding. The Notes are issued pursuant to an Amended and Restated Agency Agreement dated January 20, 2017 (as amended or supplemented as at the Issue Date, the "Agency Agreement") among the Issuers, The Bank of New York Mellon, as agent, paying agent, transfer agent, calculation agent and registrar, and the other agents named therein. The agent, the paying agents, the registrar, the transfer agents and the calculation agent(s) for the time being (if any) are referred to below respectively as the "Agent," the "Paying Agents" (which expression shall include the Agent), the "Registrar," the "Transfer Agents" (which expression shall include the Registrar) and the "Calculation Agent(s)." Copies of the Agency Agreement are available for inspection during usual business hours at the principal office of the Agent (currently at One Canada Square, London E14 5AL) and at the specified offices of the Paying Agents and the Transfer Agents.

The Noteholders are entitled to the benefit of, are bound by and are deemed to have notice of, all the provisions of the Agency Agreement.

In these Conditions, each clause or subclause enclosed by square brackets and marked with an asterisk (\*) is applicable only where JPMorgan Chase & Co. is the Issuer, and each clause or subclause enclosed by square brackets and marked with a dagger (†) is applicable only where JPMorgan Chase Bank, N.A. is the Issuer.

### 1. Form, Denomination and Title

The Notes are issued in registered form in the Specified Currencies and Specified Denomination(s) specified in the Pricing Supplement. All Notes of a Series shall have the same Specified Denomination.

This Note is a Fixed Rate Note, a Floating Rate Note or a Zero Coupon Note, a combination of any of the foregoing or any other kind of Note, depending upon the Interest and Redemption/Payment Basis specified in the Pricing Supplement.

Notes are represented by registered certificates (the "Certificates"), and, save as provided in Condition 2(b), each Certificate shall represent the entire holding of Notes by the same holder.

Title to the Notes shall pass by registration in the register that the Issuer shall procure to be kept by the Registrar in accordance with the provisions of the Agency Agreement (the "Register"). Except as ordered by a court of competent jurisdiction or as required by law, the holder (as defined below) of any Note shall be deemed to be and may be treated as its absolute owner for all purposes whether or not it is overdue and regardless of any notice of ownership, trust or an interest in it, any writing on the Certificate representing it, or the theft or loss of the related Certificate, and no person shall be liable for so treating the holder.

In these Conditions, "Noteholder" and "holder" means the person in whose name a Note is registered and capitalized terms have the meanings given to them in the Pricing Supplement, the absence of any such meaning indicating that such term is not applicable to the Notes.

## 2. Exchanges and Transfers of Registered Notes

### (a) Transfer of Notes:

Except as otherwise provided in Condition 2(e), one or more Notes may be transferred upon the surrender (at the specified office of the Registrar or any Transfer Agent) of the Certificate representing such Notes to be transferred, together with the form of transfer endorsed on such Certificate duly completed and executed and any other evidence as the Registrar or Transfer Agent may reasonably require. In the case of a transfer of only part of a holding of Notes represented by one Certificate, a new Certificate shall be issued to the transferred in respect of the part transferred and a further new Certificate in respect of the balance of the holding not transferred shall be issued to the transferor. In the case of a transfer of Notes to a person who is already a holder of Notes, a new Certificate representing the enlarged holding shall be issued only against surrender of the Certificate representing the existing holding.

### (b) Exercise of Options or Partial Redemption:

In the case of an exercise of the Issuer's or Noteholders' option in respect of, or a partial redemption of, a holding of Notes represented by a single Certificate, a new Certificate shall be issued to the holder to reflect the exercise of such option or in respect of the balance of the holding not redeemed. In the case of a partial exercise of an option resulting in Notes of the same holding having different terms, separate Certificates shall be issued in respect of those Notes of that holding that have the same terms. New Certificates shall be issued only against surrender of the existing Certificates to the Registrar or any Transfer Agent.

### (c) Delivery of New Certificates:

Each new Certificate to be issued pursuant to Condition 2(a) or (b) shall be available for delivery within three business days of receipt of the request for exchange, form of transfer or Exercise Notice or surrender of the Certificate for exchange. Delivery of the new Certificate(s) shall be made at the specified office of the Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such request for exchange, form of transfer, Exercise Notice or Certificate shall have been made or, at the option of the holder making such delivery or surrender as aforesaid and as specified in the relevant request for exchange, form of transfer, Exercise Notice or otherwise in writing, be mailed by uninsured post at the risk of the holder entitled to the new Certificate to such address as may be so specified, unless such holder requests otherwise and pays in advance to the relevant Agent the costs of such other method of delivery and/or such insurance as it may specify. In this Condition 2(c), "business day" means a day, other than a Saturday or Sunday, on which banks are open for business in the place of the specified office of the relevant Transfer Agent or the Registrar.

## (d) Exchange and Transfer Free of Charge:

Exchange and transfer of Notes and Certificates on registration, transfer, exercise of an option or partial redemption shall be effected without a charge imposed by or on behalf of the Issuer, the Registrar or the Transfer Agents, but upon payment by the transferee of any tax or other governmental charges that may be imposed in relation to it (or the giving by the transferee of such indemnity as the Registrar or the relevant Transfer Agent may require).

# (e) Closed Periods:

No Noteholder may require the transfer of a Note to be registered (i) during the period of 15 days ending on (and including) the due date for redemption of that Note, (ii) during the period of 15 days prior to any date on which Notes may be called for redemption by the Issuer at its option pursuant to Condition 5(d), (iii) after any such Note has been called for redemption or (iv) during the period of 7 days ending on (and including) any Record Date.

### 3. Status

#### (a) General:

The Notes are unsecured general obligations of the applicable Issuer and are not savings accounts, deposits or other obligations of such Issuer or any bank or non-bank subsidiary of such Issuer and are not insured by the U.S. Federal Deposit Insurance Corporation (the "FDIC"), the Deposit Insurance Fund or any other governmental agency or instrumentality. Subordinated Notes issued by JPMorgan Chase Bank, N.A. are subordinated to claims of depositors and are ineligible as collateral for a loan by JPMorgan Chase Bank, N.A. The obligations of each Issuer under Notes issued by it are the obligations of that Issuer and are not guaranteed by the other Issuer or by any other person.

### (b) Status of the Senior Notes:

If the Notes are specified to be Senior Notes (as defined in Condition 10(k)), the obligations of the Issuer under the Notes will constitute unsecured and unsubordinated obligations of the Issuer and shall at all times rank *pari passu*, and without any preference, with all other senior unsecured and unsubordinated obligations of the [Issuer.]\*[Issuer, except obligations, including domestic U.S. deposits, that are subject to any priorities or preferences by law. Under applicable U.S. law, claims of certain creditors of JPMorgan Chase Bank, N.A., including holders of domestic U.S. deposits, would be entitled to priority over claims of unsecured general creditors of JPMorgan Chase Bank, N.A., including holders of the Senior Notes, in the event of a liquidation or other dissolution of JPMorgan Chase Bank, N.A.]† The payment obligations of the Issuer under such Notes shall, save for such exceptions as may be provided by applicable legislation, at all times rank at least equally with all other unsecured and unsubordinated indebtedness and monetary obligations of the Issuer, present and future.

### (c) Status of Subordinated Notes:

- (i) If the Notes are specified to be Subordinated Notes, the obligations of the Issuer under the Notes will be unsecured and will be subordinated in right of payment to all Senior Indebtedness (as defined in Condition 10(k)) of the Issuer, whether outstanding as of the relevant Issue Date or incurred thereafter. [In the event of any insolvency proceeding, receivership, conservatorship, reorganization, readjustment of debt, marshalling of assets and liabilities or similar proceedings or any liquidation or winding-up of, or relating to, the Issuer, whether voluntary or involuntary, all such Senior Indebtedness shall be entitled to be paid in full before any payment shall be made on account of the principal of, or premium, if any, or interest on, the Subordinated Notes. In the event of any such proceedings, after payment in full of all sums owing on such Senior Indebtedness, the holders of the Subordinated Notes, together with any obligations of the Issuer ranking *pari passu* with the Subordinated Notes, shall be entitled to be paid from the remaining assets of the Issuer the unpaid principal thereof and any unpaid premium, if any, and interest before any payment or other distribution, whether in cash, property or otherwise, shall be made on account of any capital stock or any obligations of the Issuer ranking junior to the Subordinated Notes.]†
- (ii) No payment pursuant to the Subordinated Notes may be made and no holder of the Subordinated Notes shall be entitled to demand or receive any such payment (A) unless all amounts of principal, premium, if any, and interest then due on all Senior Indebtedness of the Issuer shall have been paid in full or duly provided for or (B) if, at the time of such payment or immediately after giving effect thereto, there shall exist with respect to any given Senior Indebtedness of the Issuer any event of default permitting the holders thereof to accelerate the maturity thereof or any event which, with notice or lapse of time or both, will become such an event of default.
- (iii) There is no limitation on the amount of Senior Indebtedness of the Issuer or indebtedness of the Issuer that ranks *pari* passu with, or otherwise senior to, the Subordinated Notes that the Issuer may subsequently incur.

### (iv) Limited Right of Acceleration:

[Payment of principal of the Subordinated Notes may be accelerated only in the case of the bankruptcy, reorganization or insolvency of the Issuer. There is no right of acceleration in the case of a default in the payment of principal of, premium, if any, or interest on, the Subordinated Notes or the performance of any other covenant of the Issuer contained

in these Conditions. In the event of a default in the payment of principal of, premium, if any, or interest on, the Subordinated Notes or the performance of any other covenant in these Conditions, Noteholders may, subject to certain limitations and conditions, seek to enforce payment of such principal, premium or interest or the performance of such covenant.]\*

[Payment of principal of the Subordinated Notes may be accelerated only in the case of the insolvency or reorganization of the Issuer or the appointment of a conservator, receiver or liquidator of the Issuer or substantially all of its property. There is no right of acceleration in the case of a default in the payment of principal of, premium, if any, or interest on, the Subordinated Notes or a default in the performance of any other covenant of the Issuer contained in these Conditions. In the event of a default in the payment of principal of, premium, if any, or interest on the Subordinated Notes or the performance of any other covenant in these Conditions, Noteholders may, subject to certain limitations and conditions, seek to enforce payment of such principal, premium, or interest or the performance of such covenant.]†

(v) In addition, holders of the Subordinated Notes may be fully subordinated to interests held by the U.S. government in the event that the Issuer enters into a receivership, insolvency, liquidation or similar proceeding.

See "Terms and Conditions of the Notes — Subordination" for additional terms of the Subordinated Notes.

#### 4. Interest and Other Calculations

(a) Rate of Interest and Accrual:

Each Note bears interest on its outstanding principal amount from the Interest Commencement Date at the interest rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrear on each Interest Payment Date. The amount of interest payable shall be determined in accordance with Condition 4(f).

### (b) Business Day Convention:

If any date referred to in these Conditions that is specified to be subject to adjustment in accordance with a Business Day Convention would otherwise fall on a day that is not a Business Day, then if the Business Day Convention specified is (i) the Floating Rate Convention, such date shall be postponed to the next day that is a Business Day unless it would thereby fall into the next calendar month, in which event (A) such date shall be brought forward to the immediately preceding Business Day and (B) each subsequent such date shall be the last Business Day of the month in which such date would have fallen had it not been subject to adjustment, (ii) the Following Business Day Convention, such date shall be postponed to the next day that is a Business Day, (iii) the Modified Following Business Day Convention, such date shall be postponed to the next day that is a Business Day, unless it would thereby fall into the next calendar month, in which event such date shall be brought forward to the immediately preceding Business Day or (iv) the Preceding Business Day Convention, such date shall be brought forward to the immediately preceding Business Day.

If any date on which any payment is due is brought forward or postponed as described in the immediately preceding paragraph, the relevant payment shall be made on that day, as brought forward or postponed, with the same effect as if paid on the original due date. Accordingly, the amount accrued and payable on that date will not be adjusted to reflect the longer or shorter Interest Accrual Period (*i.e.*, no additional interest will accrue in the case of a date that has been postponed, and no less interest will accrue in the case of a date that has been brought forward).

(c) Rate of Interest on Floating Rate Notes:

Screen Rate Determination

- (i) If the Interest Basis is specified as being Floating Rate, the Rate of Interest for each Interest Accrual Period will, subject as provided below, be either:
  - (x) the offered quotation; or

(y) the arithmetic mean of the offered quotations,

(expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date, as determined by the Calculation Agent. If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Calculation Agent for the purpose of determining the arithmetic mean of such offered quotations.

- (ii) If the Relevant Screen Page is not available, if sub-paragraph (i)(x) above applies and no such offered quotation appears on the Relevant Screen Page or if sub-paragraph (i)(y) above applies and fewer than three such offered quotations appear on the Relevant Screen Page in each case as at the Relevant Time, subject as provided below, the Calculation Agent shall request each of the Reference Banks to provide the Calculation Agent with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately the Relevant Time on the relevant Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Accrual Period shall be the arithmetic mean of such offered quotations as determined by the Calculation Agent.
- (iii) If paragraph (ii) above applies and the Calculation Agent determines that fewer than two Reference Banks are providing offered quotations, subject as provided below, the Rate of Interest shall be the arithmetic mean of the rates per annum (expressed as a percentage) as communicated to (and at the request of) the Calculation Agent by the Reference Banks or any two or more of them, at which such banks were offered at approximately the Relevant Time on the relevant Interest Determination Date, deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate by leading banks in, if the Reference Rate is LIBOR, the London inter-bank market, or if the Reference Rate is not LIBOR or EURIBOR, the inter-bank market in the Relevant Financial Center (as defined below) as the case may be.
- (iv) If paragraph (iii) above applies and the Calculation Agent determines that fewer than two of the Reference Banks provides the Calculation Agent with such offered rates, subject as provided below, the Rate of Interest shall be the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, at approximately the Relevant Time on the relevant Interest Determination Date, any one or more banks (which bank or banks is or are in the opinion of the Calculation Agent and the Issuer suitable for such purpose) informs the Calculation Agent it is quoting to leading banks in, if the Reference Rate is LIBOR, the London inter-bank market, or if the Reference Rate is EURIBOR, the Euro-zone inter-bank market, or if the Reference Rate is not LIBOR or EURIBOR, the inter-bank market in the Relevant Financial Center as the case may be.

Provided that, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this Condition 4(c), the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin, Rate Multiplier or Maximum or Minimum Rate of Interest is to be applied to the relevant Interest Accrual Period from that which applied to the last preceding Interest Accrual Period, the Margin, Rate Multiplier or Maximum or Minimum Rate of Interest relating to the relevant Interest Accrual Period, in place of the Margin, Rate Multiplier or Maximum or Minimum Rate of Interest relating to that last preceding Interest Accrual Period).

## (d) Rate of Interest on Zero Coupon Notes:

Where a Note, the Interest Basis of which is specified to be zero coupon, is repayable prior to the Maturity Date and is not paid when due, the amount due and payable prior to the Maturity Date shall be the Early Redemption Amount of such Note as determined in accordance with Condition 5(b). As from the Maturity Date, the Rate of Interest for any overdue principal of such a Note shall be a rate per annum (expressed as a percentage) equal to the Amortization Yield.

(e) Margins, Maximum/Minimum Rates of Interest and Redemption Amounts and Rounding:

- (i) If any Margin is specified in the Pricing Supplement (either (x) generally, or (y) in relation to one or more Interest Accrual Periods), an adjustment shall be made to all Rates of Interest, in the case of (x), or the Rates of Interest for the specified Interest Accrual Periods, in the case of (y), calculated in accordance with (c) above by adding (if a positive number) or subtracting the absolute value (if a negative number) of such Margin, subject always to the next paragraph.
- (ii) If any Maximum or Minimum Rate of Interest or Redemption Amount is specified in the Pricing Supplement, then any Rate of Interest or Redemption Amount shall be subject to such maximum or minimum, as the case may be.
- (iii) For the purposes of any calculations required pursuant to these Conditions, (x) all percentages resulting from such calculations shall be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with halves being rounded up), (y) all figures shall be rounded to seven significant figures (with halves being rounded up) and (z) all currency amounts that fall due and payable shall be rounded to the nearest unit of such currency (with halves being rounded up). For these purposes "unit" means, with respect to any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, with respect to euro, means 0.01 euro.

### (f) Calculations:

The amount of interest payable per Calculation Amount in respect of any Note for any Interest Accrual Period shall be equal to the product of the Rate of Interest, the Calculation Amount specified in the Pricing Supplement and the Day Count Fraction for such Interest Accrual Period, unless an Interest Amount (or a formula for its calculation) is applicable to such Interest Accrual Period, in which case the amount of interest payable per Calculation Amount in respect of such Note for such Interest Accrual Period shall equal such Interest Amount (or be calculated in accordance with such formula). Where any Interest Period comprises two or more Interest Accrual Periods, the amount of interest payable in respect of such Interest Period shall be the sum of the Interest Amounts payable in respect of each of those Interest Accrual Periods. In respect of any other period for which interest is required to be calculated, the provisions above shall apply save that the Day Count Fraction shall be for the period for which interest is required to be calculated.

(g) Determination and Publication of Rates of Interest, Interest Amounts, Final Redemption Amounts, Early Redemption Amounts and Optional Redemption Amounts:

The Calculation Agent shall, as soon as practicable on each Interest Determination Date, or such other time on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quote or make any determination or calculation, determine such rate and calculate the Interest Amounts for the relevant Interest Accrual Period, calculate the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount, obtain such quote or make such determination or calculation, as the case may be, and cause the Rate of Interest and the Interest Amounts for each Interest Accrual Period and the relevant Interest Payment Date and, if required to be calculated, the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount to be notified to the Issuer, the Agent, each of the Paying Agents, the Noteholders, any other Calculation Agent appointed in respect of the Notes that is to make a further calculation upon receipt of such information and, if the Notes are listed on a stock exchange and the rules of such exchange so require, such exchange as soon as possible after their determination, but in no event later than (i) the commencement of the relevant Interest Period, if determined prior to such time, in the case of notification to such exchange of a Rate of Interest and an Interest Amount, or (ii) in all other cases, the fourth Business Day after such determination. Where any Interest Payment Date or Interest Period Date is subject to adjustment pursuant to Condition 4(b), the Interest Payment Date so published may subsequently be amended without notice. If the Notes become due and payable under Condition 9, the accrued interest and the Rate of Interest payable in respect of the Notes shall nevertheless continue to be calculated as previously in accordance with this Condition, but no publication of the Rate of Interest or the Interest Amount so calculated need be made. The determination of each Rate of Interest, Interest Amount, Final Redemption Amount, Early Redemption Amount and Optional Redemption Amount, the obtaining of each quote and the making of each determination or calculation by the Calculation Agent(s) shall (in the absence of manifest error) be final and binding upon all parties.

### (h) Linear Interpolation

Where Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Paying Agent by straight line linear interpolation by reference to two rates based on the relevant Reference Rate (where Screen Rate Determination is specified as applicable in the applicable Pricing Supplement), one of which shall be determined as if the relevant period were the period of time for which rates are available next shorter than the length of the relevant Interest Period and the other of which shall be determined as if the relevant period were the period of time for which rates are available next longer than the relevant Interest Period, provided, however, that if there is no rate available for a period of time next shorter or (as the case may be) next longer, then the Paying Agent shall determine such rate at such time and by reference to such sources as it determines appropriate.

### (i) Calculation Agent:

The Issuer shall procure that there shall at all times be one or more Calculation Agents if provision is made for them in the Pricing Supplement and for so long as any Note is outstanding (as defined in the Agency Agreement). Where more than one Calculation Agent is appointed in respect of the Notes, references in these Conditions to the Calculation Agent shall be construed as each Calculation Agent performing its respective duties under the Conditions. If the Calculation Agent is unable or unwilling to act as such, or if the Calculation Agent fails duly to establish the Rate of Interest for an Interest Period or to calculate any Interest Amount, Final Redemption Amount, Early Redemption Amount or the Optional Redemption Amount or to comply with any other requirement, the Issuer shall appoint a leading bank or investment banking firm engaged in the inter-bank market (or, if appropriate, money, swap or over-the-counter index options market) that is most closely connected with the calculation or determination to be made by the Calculation Agent (acting through its principal London office or any other office actively involved in such market) to act as such in its place. The Calculation Agent may not resign its duties without a successor having been appointed.

#### (j) Definitions:

In these Conditions, unless the context otherwise requires, the following defined terms shall have the meanings set out below:

"BBSW" means the Australian Bank Bill Swap Rate.

"Business Day" means:

- (i) in the case of a Specified Currency other than euro, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments in the principal financial center for that currency; and/or
- (ii) in the case where euro is the Specified Currency, a day (other than a Saturday or Sunday) on which the TARGET2 System (as defined below) is operating (a "TARGET Business Day"); and/or
- (iii) in the case of a Specified Currency and/or one or more Business Centers, a day (other than a Saturday or a Sunday) on which commercial banks and foreign exchange markets settle payments in that currency in the Business Center(s) or, if no currency is specified, generally in each of the Business Centers so specified.

"Day Count Fraction" means, in respect of the calculation of an amount of interest on any Note for any period of time (whether or not constituting an Interest Period or Interest Accrual Period, the "Calculation Period"):

- (i) if "Actual/Actual" or "Actual/Actual ISDA" is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 365 (or, if any portion of that Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);
- (ii) if "Actual/365 (Fixed)" is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 365;

- (iii) if "Actual/360" is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 360:
- (iv) if "30/360", "360/360" or "Bond Basis" is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360 calculated on a formula basis as follows:

Day Count Fraction = 
$$\frac{\left[360 \times \left(Y_{(2)} - Y_{(1)}\right)\right] + \left[30 \times \left(M_{(2)} - M_{(1)}\right)\right] + \left(D_{(2)} - D_{(1)}\right)}{360}$$

where:

"Y<sub>(1)</sub>" is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $Y_{(2)}$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $\mathbf{M}_{(1)}$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $\mathbf{M}_{(2)}$ " is the calendar month, expressed as number, in which the day immediately following the last day included in the Calculation Period falls:

" $D_{(1)}$ " is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case  $D_{(1)}$  will be 30; and

" $D_{(2)}$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and  $D_{(1)}$  is greater than 29, in which case  $D_{(2)}$  will be 30;

(v) if "30E/360" or "Eurobond Basis" is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360 calculated on a formula basis as follows:

$$\frac{\left[360 \times \left(Y_{(2)} - Y_{(1)}\right)\right] + \left[30 \times \left(M_{(2)} - M_{(1)}\right)\right] + \left(D_{(2)} - D_{(1)}\right)}{360}$$
Day Count Fraction =

where:

"Y<sub>(1)</sub>" is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $\mathbf{Y}_{(2)}$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $\mathbf{M}_{(1)}$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $\mathbf{M}_{(2)}$ " is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls:

" $\mathbf{D}_{(1)}$ " is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case  $D_{(1)}$  will be 30; and

" $\mathbf{D}_{(2)}$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case  $D_{(2)}$  will be 30;

(vi) if "30E/360 (ISDA)" is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction =

 $\frac{\left[360 \times \left(Y_{(2)} - Y_{(1)}\right)\right] + \left[30 \times \left(M_{(2)} - M_{(1)}\right)\right] + \left(D_{(2)} - D_{(1)}\right)}{360}$ 

where:

" $Y_{(1)}$ " is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $Y_{(2)}$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $\mathbf{M}_{(1)}$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $\mathbf{M}_{(2)}$ " is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $\mathbf{D}_{(1)}$ " is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case  $\mathbf{D}_{(1)}$  will be 30; and

" $\mathbf{D}_{(2)}$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case  $\mathbf{D}_{(2)}$  will be 30; or

(vii) if "Actual/Actual — ICMA" is specified in the Pricing Supplement:

- (a) if the Calculation Period is the same as or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by (x) the number of days in such Determination Period times (y) the number of Determination Periods normally ending in any year; or
- (b) if the Calculation Period starts in one Determination Period and ends in another, the sum of (A) the number of days in such Calculation Period falling within the first Determination Period divided by (x) the number of days in such first Determination Period times (y) the number of Determination Periods normally ending in any year and (B) the calculation in (A), but substituting "second Determination Period" for "first Determination Period,"

where:

"Determination Date" means the date specified as such in the Pricing Supplement or, if none is so specified, the Interest Payment Date and

"Determination Period" means the period from and including a Determination Date in any year to but excluding the next Determination Date.

"EURIBOR" means the euro-zone inter bank offered rate.

"Euro-zone" means the region comprised of Member States of the European Union that adopt the single currency in accordance with the Treaty establishing the European Community, as amended.

"HIHD" means the Hong Kong dollar HIBOR fixings rate.

"HIBOR" means the Hong Kong inter-bank offered rate.

"Interest Accrual Period" means the period beginning on (and including) the Interest Commencement Date and ending on (but excluding) the first Interest Period Date and each successive period beginning on (and including) an Interest Period Date and ending on (but excluding) the next succeeding Interest Period Date.

"Interest Amount" means:

- (i) in respect of an Interest Accrual Period, the amount of interest payable per Calculation Amount for that Interest Accrual Period and which, in the case of Fixed Rate Notes, and unless otherwise specified in the Pricing Supplement, shall mean the Fixed Coupon Amount or Broken Amount specified in the Pricing Supplement as being payable on the Interest Payment Date ending the Interest Period of which such Interest Accrual Period forms part; and
- (ii) in respect of any other period, the amount of interest payable per Calculation Amount for that period.

"Interest Basis" means the basis of interest specified in the Pricing Supplement as being either fixed rate, floating rate or zero-coupon.

"Interest Commencement Date" means the Issue Date or such other date as may be specified in the Pricing Supplement.

"Interest Determination Date" means, with respect to a Rate of Interest and Interest Accrual Period, the date specified as such in the Pricing Supplement or, if none is so specified:

- (i) if the Reference Rate is LIBOR, the second London business day prior to the start of each Interest Accrual Period;
- (ii) if the Reference Rate is EURIBOR, the second day on which the TARGET2 System is open prior to the start of each Interest Accrual Period;
- (iii) if the Reference Rate is BBSW, the first day of each Interest Accrual Period;
- (iv) if the Reference Rate is HIHD, the first day of each Interest Accrual Period;
- (v) if the Reference Rate is HIBOR, the first day of each Interest Accrual Period;
- (vi) if the Reference Rate is JIBAR, the first day of each Interest Accrual Period;
- (vii) if the Reference Rate is NIBOR, the first day of each Interest Accrual Period; and

(viii) if the Reference Rate is STIBOR, the second day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in Stockholm prior to the start of each Interest Accrual Period.

"Interest Period" means the period beginning on (and including) the Interest Commencement Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date.

"Interest Period Date" means each Interest Payment Date unless otherwise specified in the Pricing Supplement.

"JIBAR" means the Johannesburg Interbank Agreed Rate.

"LIBOR" means the London Interbank Offered Rate.

"NIBOR" means the Norwegian Interbank Offered Rate.

"Rate of Interest" means the rate of interest payable from time to time in respect of a Note and that is either specified or calculated in accordance with the provisions in the Pricing Supplement.

"Reference Banks" means, in the case of a determination of LIBOR, the principal London office of four major banks in the London inter-bank market, in the case of a determination of EURIBOR, the principal Euro-zone office of four major banks in the Euro-zone inter-bank market and, in the case of any other Reference Rate, the principal office of four major banks in the inter-bank market in the respective Relevant Financial Center, in each case selected by the Calculation Agent or as specified hereon.

"Reference Rate" means (i) LIBOR, (ii) EURIBOR, (iii) BBSW, (iv) HIHD, (v) HIBOR, (vi) JIBAR, (vii) NIBOR, and (viii) STIBOR, in each case for the relevant currency and for the relevant period as specified in the Pricing Supplement.

"Relevant Financial Center" means:

- (i) if the Reference Rate is LIBOR, London;
- (ii) if the Reference Rate is EURIBOR, Brussels;
- (iii) if the Reference Rate is BBSW, Sydney;
- (iv) if the Reference Rate is HIHD or HIBOR, Hong Kong;
- (v) if the Reference Rate is JIBAR, Johannesburg;
- (vi) if the Reference Rate is NIBOR, Oslo; and
- (vii) if the Reference Rate is STIBOR, Stockholm.

"Relevant Screen Page" means such page, section, caption, column or other part of a particular information service as may be specified in the Pricing Supplement.

"Relevant Time" means such time as specified in the Pricing Supplement or, if none is so specified, 11.00 a.m. in the Relevant Financial Center.

"Specified Currency" means the currency specified in the Pricing Supplement or, if none is specified, the currency in which the Notes are denominated.

"STIBOR" means the Stockholm Interbank Offered Rate.

"TARGET2 System" means the Trans-European Automated Real-Time Gross Settlement Express Transfer System which utilises a single shared platform and which was launched on November 19, 2007 or any successor thereto.

# 5. Redemption, Purchase and Options

(a) Final Redemption:

Unless previously redeemed or purchased and cancelled as provided below, each Note shall be finally redeemed on the Maturity Date specified in the Pricing Supplement at its Final Redemption Amount (which, unless otherwise provided in the Pricing Supplement, shall be equal to 100 per cent. of its principal amount).

- (b) Early Redemption of Zero Coupon Notes:
- (i) The Early Redemption Amount payable in respect of any Note for which the Interest Basis is specified to be zero coupon, upon redemption of such Note pursuant to Condition 5(c), (d) or (e) or upon it becoming due and payable as provided in Condition 9 shall be the Amortized Face Amount (calculated as provided below) of such Note.

- (ii) Subject to the provisions of sub-paragraph (iii) below, the Amortized Face Amount of any such Note shall be the scheduled Final Redemption Amount of such Note on the Maturity Date discounted at a rate per annum (expressed as a percentage) equal to the Amortization Yield (which, unless otherwise specified in the Pricing Supplement, shall be such rate as would produce an Amortized Face Amount equal to the issue price of the Notes if they were discounted back to their issue price on the Issue Date), compounded annually. Where such calculation is to be made for a period of less than one year, it shall be made on the basis of the Day Count Fraction shown in the Pricing Supplement.
- (iii) If the Early Redemption Amount payable in respect of any such Note upon its redemption pursuant to Condition 5(c), (d) or (e) or upon it becoming due and payable as provided in Condition 9 is not paid when due, the Early Redemption Amount due and payable in respect of such Note shall be the Amortized Face Amount of such Note as defined in sub-paragraph (ii) above, except that such sub-paragraph shall have effect as though the reference therein to the date on which the Note becomes due and payable were replaced by a reference to the Relevant Date. The calculation of the Amortized Face Amount in accordance with this sub-paragraph shall continue to be made (as well after as before judgment) until the Relevant Date, unless the Relevant Date falls on or after the Maturity Date, in which case the amount due and payable shall be the scheduled Final Redemption Amount of such Note on the Maturity Date together with any interest that may accrue in accordance with Condition 4(d).

### (c) Redemption for Taxation Reasons:

The Notes may be redeemed at the option of the Issuer in whole, but not in part, on any Interest Payment Date (if this is a Floating Rate Note) or at any time (if this Note is not a Floating Rate Note), on giving not less than 30 nor more than 60 days' notice to the Noteholders, at their Early Redemption Amount, which, unless otherwise provided herein or in the Pricing Supplement, shall be equal to 100 per cent. of the outstanding principal amount of the Notes, together with interest accrued and unpaid to but excluding the date fixed for redemption and Additional Amounts, if any, if the Issuer determines that (A) as a result of any change in, or amendment to, the laws affecting taxation (or any regulations or rulings promulgated thereunder) of the United States or any political subdivision or taxing authority thereof or therein, or any change in the official application or interpretation of such laws, regulations or rulings, it has or will (or there is a substantial probability that it will) become obliged to pay Additional Amounts on the Notes as described under Condition 7 or (B) any action (including any of those specified in (A) above) has been taken by any taxing authority of, or any action has been brought in a court of competent jurisdiction in, the United States, whether or not such action was taken or brought with respect to the Issuer, or any change, amendment, application or interpretation shall be officially proposed on or after the date on which agreement is reached to issue the first Tranche of the relevant Series, which, in any such case, in the written opinion of independent legal counsel of recognized standing results in a substantial probability that the Issuer will be required to pay Additional Amounts on the Notes as described under Condition 7, and in the case of (A) or (B) above, such obligation cannot be avoided by the Issuer taking reasonable measures available to it which do not require undue effort or expense. Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Agent (1) a certificate of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and (2) if applicable, the written opinion of independent legal counsel referred to above.

# (d) Redemption at the Option of the Issuer (at Optional Redemption Amount or at Make-Whole Redemption Amount):

If so provided in the Pricing Supplement, the Issuer may, within the Issuer's Option Period specified in the Pricing Supplement, on giving not less than 30 nor more than 60 days' irrevocable notice to the Noteholders (or such other notice period as may be specified in the Pricing Supplement), redeem all or some of the Notes on any Optional Redemption Date. In case of a partial redemption, any such redemption must relate to Notes of a nominal amount at least equal to the Minimum Redemption Amount (if any) to be redeemed specified in the Pricing Supplement and no greater than the Maximum Redemption Amount (if any) to be redeemed specified in the Pricing Supplement.

(i) If Redemption at Optional Redemption Amount (Issuer Call Option) is specified as applicable in the relevant Pricing Supplement, then any such redemption of Notes shall be at their Optional Redemption Amount together with interest accrued and unpaid to but excluding the date fixed for redemption.

- (ii) If Redemption at Make-Whole Redemption Amount is specified as applicable in the relevant Pricing Supplement, then any such redemption of Notes shall be at the Make-Whole Redemption Amount as determined by the Make-Whole Calculation Agent. The "Make-Whole Redemption Amount" will be equal to the higher of:
  - (a) 100 per cent. of the principal amount outstanding of the Notes to be redeemed, or
  - (b) the sum of the then current values of the remaining scheduled payments of principal and interest, up to but not including the scheduled maturity date, discounted to the Optional Redemption Date on an annual basis (based on the relevant Day Count Basis specified in the relevant Pricing Supplement) at the Reference Dealer Rate (as defined below) plus the Redemption Margin, in each case as determined by the Make-Whole Calculation Agent;

provided that if the Make-Whole Exemption Period is specified as applicable in the relevant Pricing Supplement and the Issuer gives notice to redeem the Notes during the Make-Whole Exemption Period, then the Make-Whole Redemption Amount will be equal to 100 per cent. of the principal amount outstanding of the Notes to be redeemed together with interest accrued and unpaid to but excluding the date fixed for redemption.

All Notes in respect of which any notice of redemption is given shall be redeemed on the date specified in such notice in accordance with this Condition. Any notice of redemption given under Condition 5(c) will override any notice of redemption given (whether previously, on the same date or subsequently) under this Condition 5(d).

[The Issuer may not redeem or repurchase any Note that is part of its eligible external long-term debt for purposes of meeting its total loss absorbing capacity ("TLAC") and minimum long-term debt ("LTD") requirements without the prior approval of the Board of Governors of the U.S. Federal Reserve System (the "Federal Reserve") unless the Issuer would continue to meet its TLAC and LTD requirements notwithstanding such redemption or repurchase. In addition, to the extent that any Subordinated Note qualifies as part of the Issuer's Tier 2 capital under applicable capital regulations and guidance of the Federal Reserve, the Issuer may not generally redeem or repurchase such Subordinated Note prior to maturity without the Federal Reserve's prior approval.]\*

[In the case of Subordinated Notes, no repayment of principal hereof prior to maturity, including but not limited to, a payment pursuant to acceleration of maturity, redemption or repurchase, may be made without the prior written approval of the U.S. Office of the Comptroller of the Currency (the "OCC"), if so then required under applicable capital guidelines or policies of the OCC.]†

In the case of a partial redemption, the notice to Noteholders shall also specify the nominal amount of Notes drawn and the holder(s) of such Registered Notes to be redeemed, which shall have been drawn in such place as the Agent may determine and in such manner as it deems appropriate, subject to compliance with any applicable laws, stock exchange requirements and requirements of the relevant clearing system.

### In these Conditions:

"Make-Whole Calculation Agent" means a leading investment, merchant or commercial bank appointed by the Issuer for the purposes of calculating the Make-Whole Redemption Amount, and notified to the Noteholders in accordance with Condition 15.

"Make-Whole Exemption Period" will be as set out in the relevant Pricing Supplement.

"Redemption Margin" will be as set out in the relevant Pricing Supplement.

"Reference Dealers" means five (or, in the circumstances set out in the definition of "Reference Security" below, three or four) credit institutions or financial services institutions that regularly deal in bonds and other debt securities as selected by the Make-Whole Calculation Agent after consultation with the Issuer.

"Reference Dealer Rate" means, with respect to the Optional Redemption Date, the average of the quotations of the mid-market annual yield to maturity of the Reference Security at the Quotation Time as specified in the relevant Pricing Supplement on the third business day in the Quotation Jurisdiction as specified in the relevant Pricing Supplement preceding the Optional Redemption Date provided in writing to the Make-Whole Calculation Agent by the five Reference Dealers.

"Reference Security" means (a) the Reference Bond specified in the relevant Pricing Supplement or (b) if, at the Quotation Time on the third business day in the Quotation Jurisdiction as specified in the relevant Pricing Supplement preceding the Optional Redemption Date, the Reference Bond is no longer outstanding, such other central bank or government security that, in the majority opinion of three Reference Dealers (one of whom shall be the Make-Whole Calculation Agent) (i) has a maturity comparable to the remaining term of the Notes and (ii) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes. In the event that each such Reference Dealer selects a different central bank or government security, the Make-Whole Calculation Agent after consultation with the Issuer shall approach a fourth Reference Dealer and, from the three different central bank or government securities selected by the other Reference Dealers, such fourth Reference Dealer shall select as the Reference Security the central bank or government security which, in its opinion (i) has a maturity comparable to the remaining term of the Notes and (ii) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes. The central bank or government security so selected by the fourth Reference Dealer shall then be the Reference Security.

### (e) Redemption at the Option of Noteholders (Put Option):

If so provided in the Pricing Supplement, the Issuer shall, at the option of the holder of any such Note, redeem such Note on the Optional Redemption Date at its Optional Redemption Amount together with interest accrued to the date fixed for redemption.

To exercise such option, the holder must deposit, not less than 30 nor more than 60 days' prior to the relevant Optional Redemption Date, the Certificate representing such Note(s) with the Registrar or any Transfer Agent at its specified office together with a duly completed option exercise notice ("Exercise Notice"), in the form obtainable from any Paying Agent, the Registrar or any Transfer Agent (as applicable) within the Noteholders' Option Period. No Certificate so deposited and option exercised may be withdrawn without the prior consent of the Issuer, except that such Certificate will be returned to the relevant Noteholder by the Registrar or Transfer Agent with which it has been deposited if, prior to the due date for its redemption or the exercise of the option, the Note becomes immediately due and payable or if upon due presentation payment of the redemption moneys is not made or exercise of the option is denied.

The Subordinated Notes shall not be redeemable at the option of the holder of any such Note.

# (f) Purchases:

The Issuer and any of its subsidiaries will have the right at any time and from time to time to purchase Notes in any manner, on the open market or otherwise, at any price.

### (g) Cancellation:

All Notes redeemed by the Issuer shall be, and all Notes purchased by or on behalf of the Issuer or any of its subsidiaries may, at the Issuer's discretion, be surrendered for cancellation by surrendering to the Registrar the Certificate representing such Notes. Any Notes so surrendered for cancellation may not be reissued or resold and the obligations of the Issuer in respect of any such Notes shall be discharged.

## 6. Payments

# (a) Principal and Interest:

- (i) Payments of principal in respect of Notes shall be made against presentation and surrender of the relevant Certificates at the specified office of any of the Transfer Agents or of the Registrar to the person shown on the Register and in the manner provided in paragraph (ii) below.
- (ii) Interest shall be paid to the person shown on the Register at the close of business on the 15<sup>th</sup> day before the due date for payment thereof (the "Record Date"). Payments of interest on each Note shall be made in the currency in which such payments are due by check drawn on a bank in the principal financial center of the Specified Currency and mailed to the holder (or to the first named of joint holders) of such Note at its address appearing in the Register. Upon application by the holder to the specified office of the Registrar or any Transfer Agent before the Record Date and subject as provided in paragraph (i) above, such payment of interest may be made by transfer to an account in the relevant currency maintained by the payee with a bank in the principal financial center of the country or countries of that currency; provided, however, that (x) in the case of euro, the transfer may be to, or the check drawn on, a euro account (or any other account to which euro may be credited or transferred), specified by the payee, (y) in the case of Japanese yen, the transfer may be to a non-resident Japanese yen account with a foreign exchange bank, and (z) payment will not be made either by mail to an address in the United States (as defined in Condition 7) or by transfer to an account maintained in the United States.

# (b) Conversion, Substitution or Redenomination of Currency:

Unless otherwise specified in the applicable Pricing Supplement, in the event that the relevant currency (the "national currency unit") for payment of the Notes is converted into, or there is substituted for the national currency unit, another currency (the "new currency") pursuant to law having general and direct applicability in the country of the national currency unit (including, for the avoidance of doubt, European Community laws) ("Relevant Law"), any amount payable in respect of the Notes shall, subject to the following sentence, be made in the new currency at the conversion rate prescribed by Relevant Law at the time of such payment. If any such substitution or conversion occurs and, pursuant to Relevant Law, payments to be made under legal instruments stipulating the use of or denomination in a national currency unit may be performed in such country in either the national currency unit or in the new currency, the Issuer shall be entitled, at its option, to pay any amount payable in respect of the Notes either in the national currency unit or in the new currency at the conversion rate prescribed by Relevant Law at the time of such payment. The occurrence or non-occurrence of a currency conversion, replacement or introduction of a type described in this paragraph or any payment in a new currency in accordance with the terms of this provision shall not (i) constitute a default of the Issuer's obligations under the Notes, (ii) require any consent of any party or be deemed to be a modification or amendment of the terms or provisions of the Notes by the Issuer requiring any such consent, (iii) entitle the Issuer to avoid its obligations under the Notes or (iv) entitle the Issuer or any holder of a Note to rescission of the purchase and sale thereof or to reformation of any of the terms or provisions thereof on the grounds of impossibility or impracticability of performance, frustration of purpose or otherwise. Further, in the event of an official redenomination with respect to the national currency unit for payment of the relevant Notes by the government of the country of the national currency unit, the obligations of the Issuer with respect to payment on the Notes in such redenominated currency shall, in all cases, be adjusted to equal an amount of redenominated currency thereafter representing the amount of such obligations in the national currency unit immediately before such redenomination. Any payment made in accordance with the foregoing shall be a complete discharge of the Issuer's payment obligations in respect of the amount of the national currency unit which has been paid in the new currency or in the new denomination. The Agent will give prompt notice to the holders of the Notes of any such redenomination, conversion or replacement in accordance with Condition 15.

## (c) Impositions of Exchange Controls:

If the Issuer, after consultation with the Agent, reasonably determines that a payment on the Notes cannot be made in the Specified Currency due to restrictions imposed by the government of such currency or any agency or instrumentality thereof or any monetary authority in such country (other than as contemplated in the preceding paragraph (b)), such payment will be made outside the United States in U.S. dollars by a check drawn on, or by credit or transfer to, an account maintained by the holder with a bank located outside the United States. The Agent shall give prompt notice to the holders of the Notes if such a determination is made. The amount of U.S. dollars to be paid with respect to any such payment shall be the amount of U.S. dollars that could be purchased by the Agent with the amount of the Specified Currency payable on the date the payment is due, at the rate for sale in financial transactions of U.S. dollars (for delivery in the principal financial center of the Specified

Currency two Business Days later) quoted by such bank at 10:00 a.m. local time in the principal financial center of the Specified Currency, on the second Business Day prior to the date the payment is due.

# (d) Payments Subject to Fiscal Laws:

All payments are subject in all cases to any applicable fiscal or other laws, regulations and directives, but without prejudice to the provisions of Condition 7. No commission or expenses shall be charged to the Noteholders in respect of such payments.

# (e) Appointment of Agents:

The Agent, the Paying Agents, the Registrar, the Transfer Agents and the Calculation Agent currently appointed under the Program and their respective specified offices are listed below. The Agent, the Paying Agents, the Registrar, the Transfer Agents and the Calculation Agent act solely as agents of the Issuer and do not assume any obligation or relationship of agency or trust for or with the holder of any Note. The Issuer reserves the right at any time to vary or terminate the appointment of the Agent, any other Paying Agent, the Registrar, any Transfer Agent or the Calculation Agent and to appoint additional or other Paying Agents or Transfer Agents, provided that the Issuer shall at all times maintain (i) an Agent, (ii) a Registrar, (iii) a Transfer Agent, (iv) Paying Agents having specified offices in at least two major European cities, including London, so long as the Notes are admitted to the Official List of the Irish Stock Exchange and admitted to trading on the Irish Stock Exchange's Global Exchange Market and (v) such other agents in such city as may be required by the rules of any other Stock Exchange on which the Notes may be listed.

Notice of any such change or any change of any specified office shall promptly be given to the Noteholders in accordance with Condition 15.

#### (f) Non-Business Days:

If any date for payment in respect of any Note is not a business day, the holder shall not be entitled to payment until the next following business day nor to any interest or other sum in respect of such postponed payment. In this paragraph, "business day" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for business in the relevant place of presentation, in such jurisdictions as shall be specified as "Financial Centers" in the Pricing Supplement and:

- (i) (in the case of a payment in a currency other than euro) where payment is to be made by transfer to an account maintained with a bank in the relevant currency, on which foreign exchange transactions may be carried on in the relevant currency in the principal financial center of the country of such currency; or
- (ii) (in the case of a payment in euro) which is a TARGET Business Day.

### 7. Taxation

All payments of principal and interest on the Notes will be made without deduction or withholding for or on account of any present or future tax, assessment or other governmental charge, of whatever nature, imposed or levied by or within the United States or by or within any political subdivision or taxing authority thereof or therein, except as required by law. The Issuer will, subject to certain limitations and exceptions set forth below, pay to a holder of Notes such additional amounts ("Additional Amounts") as may be necessary so that every net payment by the Issuer or any of its Paying Agents of principal or interest with respect to the Notes after deduction or withholding for or on account of any such present or future tax, assessment or other governmental charge imposed upon such holder, will not be less than the amount provided for in such Notes to be then due and payable. However, the Issuer will not be required to make any payment of Additional Amounts for or on account of:

(a) any tax, assessment or other governmental charge which would not have been so imposed but for (i) the existence of any present or former connection between such holder or beneficial owner (or between a fiduciary, settlor, beneficiary,

member or shareholder of, or possessor of a power over, such holder or beneficial owner, if such holder or beneficial owner is an estate, a trust, a partnership or a corporation) and the United States, including, without limitation, such holder or beneficial owner (or such fiduciary, settlor, beneficiary, member, shareholder or possessor) being or having been present therein, being or having been a citizen or resident thereof, being or having been engaged in a trade or business therein or having or having had a permanent establishment therein, (ii) the failure of such holder or beneficial owner to comply with any certification, identification or other information reporting requirements under the income tax laws and regulations of the United States, without regard to any tax treaty, or any political subdivision or taxing authority thereof or therein to establish entitlement to an exemption from withholding or (iii) the presentation of a Note or Certificate for payment on a date more than 10 days after the Relevant Date or the date on which such payment is duly provided for, whichever occurs later;

- (b) any tax, assessment or other governmental charge if the holder or beneficial owner would have been able to avoid such withholding or deduction by satisfying any statutory or procedural requirements including, without limitation, the provision of information;
- (c) any estate, inheritance, gift, sales, transfer, personal property, or any similar tax, assessment or governmental charge;
- (d) any tax, assessment or other governmental charge which is payable other than by withholding from payments of principal of or interest on such Note;
- (e) any tax, assessment or other governmental charge imposed by reason of the holder's or beneficial owner's past or present status as a personal holding company, private foundation or other tax-exempt organization, passive foreign investment company, controlled foreign corporation with respect to the United States or as a corporation that accumulates earnings to avoid U.S. federal income tax;
- (f) any tax, assessment or other governmental charge required to be withheld by any Paying Agent from a payment of principal of or interest on any Note, if that payment can be made without such withholding by at least one other Paying Agent;
- (g) any tax, assessment or other governmental charge imposed by reason of the holder's or beneficial owner's past or present status as the actual or constructive owner of 10 per cent. or more of the total combined voting power of all classes of stock of the Issuer entitled to vote or as a controlled foreign corporation that is related directly or indirectly to the Issuer through stock ownership;
- (h) any withholding or deduction imposed as a result of the holder's or beneficial owner's failure, or the failure of any agent having custody or control over a payment, to establish its exemption from such withholding or deduction by complying with any requirements to report on its owners or holders of interests, or to enter into an agreement with a taxing authority to provide such information;
- (i) taxes imposed under Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended, any regulations promulgated thereunder or official interpretation thereof, or any agreement entered into in relation to the foregoing; or
- (j) any combination of items (a), (b), (c), (d), (e), (f), (g), (h) and (i),

nor shall Additional Amounts be paid with respect to a payment of principal of or interest on any Note to a holder that is not the beneficial owner of such Note to the extent that the beneficial owner thereof would not have been entitled to the payment of such Additional Amounts had such beneficial owner been the holder of such Note.

As used in these Conditions, the term "United States" 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. As used in these Conditions, the term "Relevant Date" in respect of any Note means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding

is made or (if earlier) the date seven days after that on which notice is duly given to the Noteholders that, upon further presentation of the Note or Certificate being made in accordance with these Conditions, such payment will be made, provided that payment is in fact made upon such presentation. References in these Conditions to (i) "principal" shall be deemed to include any premium payable in respect of the Notes, all Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts, Amortized Face Amounts and all other amounts in the nature of principal payable pursuant to Condition 5 or any amendment or supplement to it, (ii) "interest" shall be deemed to include all Interest Amounts and all other amounts payable pursuant to Condition 4 or any amendment or supplement to it and (iii) "principal" and/or "interest" shall be deemed to include any Additional Amounts that may be payable under this Condition.

#### 8. Prescription

Claims against the Issuer for payment in respect of the Notes shall be prescribed and become void unless made within 10 years (in the case of principal) or five years (in the case of interest) from the appropriate Relevant Date in respect of them.

#### 9. Events of Default

If one or more of the following events (herein referred to as "Events of Default") shall have occurred and be continuing:

- (a) failure on the part of the Issuer to pay when due the principal of any of the Notes as and when the same shall become due and payable, whether at maturity, upon redemption or otherwise, and such failure shall have continued for a period of 30 days;
- (b) failure on the part of the Issuer to pay when due any instalment of interest or any Additional Amounts upon any Notes as and when the same shall become due and payable, and such failure shall have continued for a period of 30 days;
- [(c) a court having jurisdiction in the premises shall enter a decree or order for relief in respect of the Issuer in an involuntary case under any applicable U.S. federal or state bankruptcy, insolvency or other similar law now or hereafter in effect, and such decree or order shall remain unstayed and in effect for a period of 90 consecutive days; or]\*
- [(c) a decree or order of a court or supervisory authority having jurisdiction in the premises for the appointment of a receiver, liquidator, trustee, assignee, custodian, sequestrator or other similar official of the Issuer, or of all or substantially all of the property of the Issuer, or for the winding up or liquidation of the affairs of the Issuer, shall have been entered, and such decree or order shall remain unstayed and in effect for a period of 90 consecutive days; or]†
- [(d) the Issuer shall commence a voluntary case under any applicable U.S. federal or state bankruptcy, insolvency or other similar law now or hereafter in effect or consent to the entry of an order for relief in an involuntary case under any such law,]\*
- [(d) the Issuer shall consent to the appointment of, or the taking possession by, a receiver, liquidator, trustee, assignee, custodian, sequestrator, or similar official of the Issuer, or of all or substantially all of the property of the Issuer,]†

then each Noteholder, at its option, may give written notice to the Issuer and the Agent declaring that any Notes held by such Noteholder are due and payable immediately upon the date written notice thereof is received by the Issuer, and unless all such defaults shall have been cured by the Issuer or waived prior to receipt of such written notice, such Notes shall become and be immediately due and payable.

Notwithstanding the foregoing, no such notice shall be required upon the occurrence of an Event of Default specified in subclause (c) or (d). If an Event of Default specified in subclause (c) or (d) with respect to Notes of the Issuer occurs, such Notes shall automatically, and without any declaration or other action on the part of any Noteholder, become immediately due and payable. Upon payment of such amount, all obligations of the Issuer in respect of the payment of principal and interest of the Notes shall terminate.

Notwithstanding the foregoing, Subordinated Notes may be accelerated only upon the events specified in subclause (c) or (d) above.

The amount payable in respect of the Notes upon an Event of Default shall be an amount equal to their Early Redemption Amount, any Additional Amounts and all unpaid interest accrued to such date.

[Notwithstanding anything to the contrary contained herein, in the event of an acceleration pursuant to an Event of Default in relation to a Series of Subordinated Notes, no payment of the principal of the Notes may be made without the prior written approval of the OCC.

Notwithstanding any other provisions of these Conditions, including those specifically set out in clauses relating to subordination, events of default and covenants of the Issuer, it is expressly understood and agreed that the OCC or any receiver or conservator of the Issuer appointed by the OCC shall have the right in the performance of its, his or her legal duties, and as part of liquidation designed to protect or further the continued existence of the Issuer or the rights of any parties or agencies with an interest in, or a claim against, the Issuer or its assets, to transfer or direct the transfer of the obligations of any Subordinated Note to any bank or bank holding company selected by such official which shall expressly assume the obligation of the due and punctual payment of the unpaid principal, and interest and premium, if any, on such Subordinated Note and the due and punctual performance of all covenants and conditions; and the completion of such transfer and assumption shall serve to supersede and void any default, acceleration or subordination which may have occurred, or which may occur due or related to such transaction, plan, transfer or assumption, pursuant to the provisions of such Subordinated Note, and shall serve to return the holder of such Subordinated Note to the same position, other than for substitution of the obligor, it would have occupied had no default, acceleration or subordination occurred; except that any interest and principal previously due, other than by reason of acceleration, and not paid shall, in the absence of a contrary agreement by the holder of such Subordinated Note, be deemed to be immediately due and payable as of the date of such transfer and assumption, together with the interest from its original due date at the rate provided for herein.]†

#### 10. Subordination

- (a) The Issuer, for itself, its successors and assigns, covenants and agrees, and each holder of Subordinated Notes likewise covenants and agrees, that the obligation of the Issuer to make any payment of principal of, and premium, if any, and interest (including Additional Amounts) on each and all of the Subordinated Notes is hereby expressly subordinated, to the extent and in the manner hereinafter set forth, to the prior payment in full of all Senior Indebtedness of the Issuer.
- (b) No payment of principal of, and premium, if any, or interest (including Additional Amounts) on the Subordinated Notes shall be made and no holders of the Subordinated Notes shall be entitled to demand or receive any such payment (i) unless all amounts of principal, and premium, if any, and interest then due on all Senior Indebtedness of the Issuer shall have been paid in full or duly provided for, or (ii) if, at the time of such payment or immediately after giving effect thereto, there shall exist with respect to any such Senior Indebtedness any event of default permitting the holders thereof to accelerate the maturity thereof or any event which, with notice or lapse of time or both, would become such an event of default.
- [(c)(i)Upon any distribution of the assets of the Issuer in connection with the dissolution, winding up, liquidation or reorganization of the Issuer (whether in bankruptcy, insolvency or receivership proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of the Issuer or otherwise), the holders of Senior Indebtedness of the Issuer shall first be entitled to receive payment in full in accordance with the terms of such Senior Indebtedness of the principal thereof, and premium, if any, and the interest due thereon before the holders of the Subordinated Notes are entitled to receive any payment on the Subordinated Notes; and, upon any such dissolution, winding up, liquidation or reorganization, any payment or distribution of assets of the Issuer of any kind or character, whether in cash, property or securities, to which the holders of the Subordinated Notes would be entitled except for the provisions of this Condition 10, including any such payment or distribution which may be payable or deliverable by reason of the payment of any other indebtedness of the Issuer being subordinated to the payment of the Subordinated Notes, shall be made by the liquidating trustee or agent or other person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the holders of Senior Indebtedness of the

Issuer or their representative or representatives or to the trustee or trustees under any indenture under which any instruments evidencing any of such Senior Indebtedness may have been issued, ratably according to the aggregate amounts remaining unpaid on account of the principal of and premium, if any, and interest (including interest accrued subsequent to the commencement of any proceeding for the bankruptcy or reorganization of the Issuer under any applicable bankruptcy, insolvency or similar law now or hereafter in effect) on the Senior Indebtedness of the Issuer held or represented by each, to the extent necessary to pay in full all such Senior Indebtedness remaining unpaid, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.

- (ii) If, in the event of any dissolution, winding up, liquidation or reorganization of the Issuer (whether in bankruptcy, insolvency or receivership proceedings or upon an assignment for the benefit of creditors or otherwise) tending toward liquidation of the business and assets of the Issuer, all of the holders of the Subordinated Notes, or any of them, shall fail to file a proper claim or proof of debt in the form required in such proceeding prior to 30 days before the expiration of the time to file such claim or claims, and such claim or claims are not filed by the Agent pursuant to the authority granted pursuant to the provisions contained herein prior to 15 days before such expiration, then the holder or holders of the Senior Indebtedness are thereby authorized to, and have the right to, file an appropriate claim for and on behalf of the holders of the Subordinated Notes in the form required in any such proceeding.
- (iii) In the event that, notwithstanding the foregoing, upon any such dissolution, winding up, liquidation or reorganization, any payment or distribution of assets of the Issuer of any kind or character, whether in cash, property or securities, including any such payment or distribution which may be payable or deliverable by reason of the payment of any other indebtedness of the Issuer being subordinated to the payment of the Subordinated Notes, shall be received by or for the benefit or account of the holders of the Subordinated Notes before all Senior Indebtedness of the Issuer is paid in full, such payment or distribution shall be held in trust for the benefit of and shall be paid over to the holders of such Senior Indebtedness or their representative or representatives or to the trustee or trustees under any indenture under which any instruments evidencing any of such Senior Indebtedness may have been issued, ratably as aforesaid for application to the payment of all Senior Indebtedness of the Issuer remaining unpaid until all such Senior Indebtedness shall have been paid in full, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.
- (iv) Subject to the payment in full of all Senior Indebtedness of the Issuer, the holders of the Subordinated Notes shall be subrogated (equally and ratably with the holders of all indebtedness of the Issuer which by its express terms is subordinated to indebtedness of the Issuer to substantially the same extent as the Subordinated Notes are subordinated and which is entitled to like rights of subrogation) to the rights of the holders of such Senior Indebtedness to receive payments or distributions of assets of the Issuer applicable to such Senior Indebtedness until the Subordinated Notes shall be paid in full, and none of the payments or distributions to the holders of such Senior Indebtedness to which the holders of the Subordinated Notes would be entitled except for the provisions of this Condition 10 or of payments over, pursuant to the provisions of this Condition 10, to the holders of such Senior Indebtedness by the holders of the Subordinated Notes shall, as between the Issuer and its creditors other than the holders of such Senior Indebtedness and the holders of the Subordinated Notes, be deemed to be a payment by the Issuer to or on account of such Senior Indebtedness; it being understood that the provisions of Condition 10(b) and this Condition 10(c) are and are intended solely for the purpose of defining the relative rights of the holders of the Subordinated Notes, on the one hand, and the holders of the Senior Indebtedness of the Issuer, on the other hand.
- (v) The Issuer shall give prompt written notice to the Agent and any Paying Agent, and to the holders of the Subordinated Notes pursuant to Condition 15 hereof, of any dissolution, winding up, liquidation or reorganization of the Issuer within the meaning of this Condition 10. The Agent and any Paying Agent shall be entitled to assume that no such event has occurred unless the Issuer or any one or more holders of the Senior Indebtedness of the Issuer or any trustee therefor (who shall have been certified by the Issuer or otherwise established to the satisfaction of the Agent or any such Paying Agent to be such a holder or trustee) has given written notice thereof to the Agent or such Paying Agent. Upon any distribution of assets of the Issuer referred to in this Condition 10, the Agent, any Paying Agent and the holders of the Subordinated Notes shall be entitled to rely upon any order or decree of a court of competent jurisdiction in which such dissolution, winding up, liquidation or reorganization proceedings are pending for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of the Senior Indebtedness of the Issuer, the amounts thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to

this Condition 10, and the Agent, any Paying Agent and the holders of the Subordinated Notes shall be entitled to rely upon a certificate of the liquidating trustee or agent or other person making any distribution to the holders of the Subordinated Notes for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of the Senior Indebtedness of the Issuer, the amounts thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Condition 10.]\*

- [(d) Nothing contained in this Condition 10 or elsewhere in these Conditions is intended to or shall impair, as between the Issuer and the holders of the Subordinated Notes, the obligation of the Issuer, which is absolute and unconditional (and which, subject to the rights under this Condition 10 of the holders of the Senior Indebtedness of the Issuer, is intended to rank pari passu with all other general obligations of the Issuer), to pay to the holders of the Subordinated Notes the principal of, and premium, if any, and interest (including Additional Amounts and interest accruing subsequent to the commencement of any proceeding for the bankruptcy or reorganization of the Issuer under any applicable bankruptcy, insolvency or similar law now or hereafter in effect) on the Subordinated Notes as and when the same shall become due and payable in accordance with these Conditions and when required pursuant to these Conditions, the Agency Agreement and any paying agency agreement, or is intended to or shall affect the relative rights of the holders of the Subordinated Notes and creditors of the Issuer other than the holders of the Senior Indebtedness of the Issuer, nor shall anything herein or therein prevent any holder of Subordinated Notes from exercising all remedies otherwise permitted by applicable law upon default under these Conditions, subject to the rights, if any, under this Condition 10 of the holders of the Senior Indebtedness of the Issuer in respect of cash, property or securities of the Issuer received upon the exercise of any such remedy.]\*
- [(e) Notwithstanding any of the provisions of this Condition 10, neither the Agent nor any Paying Agent shall at any time be charged with knowledge of the existence of any facts which would prohibit the making of any payment of moneys to or by the Agent or any such Paying Agent, when required pursuant to these Conditions, the Agency Agreement and any paying agency agreement unless and until the Agent or any such Paying Agent shall have received written notice thereof from the Issuer or from one or more holders of Senior Indebtedness of the Issuer or from any trustee therefor who shall have been certified by the Issuer or otherwise established to the reasonable satisfaction of the Agent or any such Paying Agent to be such a holder or trustee, and, prior to the receipt of any such written notice, the Agent or any Paying Agent shall be entitled in all respects to assume that no such facts exist; provided, however, that, if prior to the fifth Business Day preceding the date upon which by the terms hereof any such moneys may become payable for any purpose, the Agent or any Paying Agent shall not have received with respect to such moneys the notice provided for in this Condition 10(e), then, anything herein contained to the contrary notwithstanding, the Agent or any such Paying Agent may, in its discretion, receive such moneys and/or apply the same to the purpose for which they were received, and shall not be affected by any notice to the contrary, which may be received by it on or after such date; provided, however, that no such application shall affect the obligations under this Condition 10 of the persons receiving such moneys from the Agent or any Paying Agent.]\*
- [(f) Notwithstanding anything in these Conditions to the contrary, any deposit of moneys by the Issuer with the Agent or any Paying Agent for the payment of the principal, and premium, if any, and interest on the Subordinated Notes shall, except as provided in Condition 10(e), be subject to the provisions of Condition 10(a), (b) and (c).]\*
- [(g) No right of any present or future holders of any Senior Indebtedness of the Issuer to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Issuer or by any act or failure to act, in good faith, by any such holder, or by any non-compliance by the Issuer with the provisions hereof, regardless of any knowledge thereof which any such holder may have or be otherwise charged with. The holders of any Senior Indebtedness of the Issuer may at any time or from time to time and in their absolute discretion, change the manner, place or terms of payment, change or extend the time of payment of, or renew or alter, any such Senior Indebtedness, or amend or supplement any instrument pursuant to which any such Senior Indebtedness is issued or by which it may be secured, or release any security therefor, or exercise or refrain from exercising any other of their rights under such Senior Indebtedness including, without limitation, the waiver of default thereunder, all without notice to or assent from the holders of the Subordinated Notes and without affecting the obligations of the Issuer or the holders of the Subordinated Notes under this Condition 10.]\*

- [(h) The failure to make a payment pursuant to the Subordinated Notes by reason of any provision in this Condition 10 shall not be construed as preventing the occurrence of any default or Event of Default under these Conditions.]\*
- [(i) Subject to the provisions of this Condition 10, the Subordinated Notes shall rank *pari passu* in right of payment with the Issuer Subordinated Indebtedness.]\*
- [(j) Upon the occurrence of any of the events specified in Condition 10(c) herein, the provisions of that Condition 10(c) and the corresponding provisions of each indenture or other instrument or document establishing or governing the terms of any indebtedness of the Issuer which by its express terms is subordinated to indebtedness of the Issuer substantially to the same extent as the Subordinated Notes, shall be given effect to determine the amount of cash, property or securities which may be payable or deliverable as between the holders of the Senior Indebtedness, on the one hand, and the holders of such other subordinated indebtedness on the other hand.]\*

# (k) Definitions:

["Issuer Subordinated Indebtedness" means debt securities (i) issued under a Subordinated Indenture, dated as of March 14, 2014, between the Issuer and U.S. Bank Trust National Association, as trustee, as the same may be amended, supplemented or otherwise modified from time to time; (ii) issued under an Indenture, dated as of October 21, 2010, between the Issuer and U.S. Bank Trust National Association, as trustee, as the same may be amended, supplemented or otherwise modified from time to time; or (iii) issued under the Amended and Restated Indenture, dated as of December 15, 1992, as amended by the Second Supplemental Indenture, dated as of October 8, 1996, and the Third Supplemental Indenture, dated as of December 29, 2000, between the Company (as successor-by-merger to The Chase Manhattan Corporation, a Delaware corporation) and U.S. Bank Trust National Association (formerly known as First Trust of New York, National Association), a national banking association, as successor to Morgan Guaranty Trust Company of New York, a New York banking corporation, as the same may be further amended, supplemented or otherwise modified from time to time, and issued on or after December 15, 1992.

"Senior Indebtedness" of the Issuer is defined as the principal of, premium, if any, and interest on:

- (a) all indebtedness of the Issuer for money borrowed;
- (b) similar obligations of the Issuer arising from off-balance sheet guarantees and direct credit substitutes;
- (c) all obligations of the Issuer for claims in respect of derivative products such as interest rate and foreign exchange contracts, commodity contracts and similar arrangements (and for purposes of this definition, "claim" has the meaning assigned thereto in Section 101(4) of the U.S. Bankruptcy Code of 1978, as amended and in effect on January 20, 2017); and
- (d) any deferrals, renewals or extensions of any of the foregoing clauses (a), (b) or (c);

in each case, whether outstanding as of the relevant Issue Date of the Subordinated Notes or thereafter created, assumed or incurred; *provided* that in each case Senior Indebtedness will not include (A) Subordinated Notes issued under these Conditions; (B) any other subordinated debt securities of the Issuer issued under its Euro Medium Term Note program, as the same may be amended, supplemented or modified from time to time, which are subordinated to indebtedness of the Issuer to substantially the same extent as provided in these Conditions; (C) Issuer Subordinated Indebtedness; and (D) such other indebtedness of the Issuer as is by its terms expressly stated not to be senior in right of payment to, or to rank *pari passu* with, the Subordinated Notes or Issuer Subordinated Indebtedness.

The term "indebtedness of the Issuer for money borrowed" as used in the foregoing paragraph shall mean any obligation of, or any obligation guaranteed by, the Issuer for the repayment of borrowed money, whether or not evidenced by bonds, debentures, notes or other written instruments, and any deferred obligation for the payment of the purchase price of property or assets.]\*

["Senior Indebtedness" of the Issuer is defined as the principal of, premium, if any, and interest on (a) all indebtedness of the Issuer for money borrowed, whether outstanding on the relevant Issue Date of the Subordinated Notes or thereafter created, assumed or incurred, including (A) the Issuer's obligations to its depositors, obligations under bankers' acceptances and letters of credit; (B) the Issuer's obligations to its other creditors (including its obligations to any Federal Reserve Bank, the FDIC and any rights acquired by the FDIC as a result of loans made by the FDIC to the Issuer or the purchase or guarantee of any of the Issuer's assets by the FDIC pursuant to the provisions of 12 U.S.C. Section 1823(c), (d) or (e)); and (C) all other obligations of the Issuer other than obligations that are by their terms expressly stated to be junior in right of payment to, or to rank *pari passu* with, the Subordinated Notes; and (b) any deferrals, renewals or extensions of any such Senior Indebtedness; in each case (whether in (a) or (b)) other than obligations which by their express terms rank *pari passu* with, or junior to, the Subordinated Notes.

The term "indebtedness of the Issuer for money borrowed" as used in the forgoing paragraph shall mean any obligation of, or any obligation guaranteed by, the Issuer for the repayment of borrowed money, whether or not evidenced by bonds, debentures, notes or other written instruments, and any deferred obligation for the payment of the purchase price of property or assets.]†

"Senior Notes" means Notes that are specified as Senior Notes in the applicable Pricing Supplement.

"Subordinated Notes" means Notes that are specified as Subordinated Notes in the applicable Pricing Supplement.

#### 11. Consolidation or Merger

- [(a) The Issuer will not merge or consolidate with, or sell or convey all or substantially all of its assets to any other Person (other than a sale or conveyance to one or more Subsidiaries of the Issuer), unless (i) either (A) the Issuer shall be the surviving corporation, association or other entity in the case of a merger or (B) the surviving, resulting or transferee corporation, association or other entity (the "successor corporation") (I) shall be a U.S. corporation, association or other entity or, if not a U.S. corporation, association or other entity, shall agree to indemnify the holders of Notes against any tax, assessment or governmental charge thereafter imposed on or as a result of payments to each holder as a consequence of such consolidation, merger, sale or conveyance and (II) shall expressly assume the due and punctual payment of the principal of and interest (including Additional Amounts, if any, that may result due to withholding by any authority having the power to tax to which the Issuer's successor corporation is or may be subject) on all the Notes, according to their tenor, and the due and punctual performance of all of the covenants and obligations of the Issuer under the Notes and Agency Agreement, by such successor corporation becoming a party to the Agency Agreement, with any appropriate consequential amendments, as if it had been an original party to it and (ii) the Issuer or such successor corporation, as the case may be, shall not, immediately after such merger, consolidation, sale or conveyance, be in default in the performance of any covenants or obligations, of the Issuer under the Notes or Agency Agreement.
- (b) Upon any merger, consolidation, sale or conveyance as provided in paragraph (a) above, the successor corporation shall succeed to and be substituted for, and may exercise every right and power of and be subject to all the obligations of, the Issuer under the Notes and Agency Agreement, with the same effect as if the successor corporation had been named as the Issuer therein and herein and the Issuer shall be released from its liability as obligor under the Notes and Agency Agreement; provided that any successor corporation shall have the right to redeem the Notes pursuant to Condition 5(c) only as a result of circumstances which occur subsequent to such merger, consolidation, sale or conveyance and as a result of which the Issuer would have had such right if the Issuer had remained the obligor on the Notes.
- (c) For purposes of this Condition 11, (i) the term "Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof; (ii) the term "Subsidiary" means a corporation, association or other entity more than 50% of the outstanding Voting Stock of which is owned, directly or indirectly, by the Issuer or by one or more other Subsidiaries, or by the Issuer and one or more other Subsidiaries; and (iii) the term "Voting Stock" means stock of the class or classes having a general voting power under ordinary circumstances to elect at least a majority of the board of directors, managers or trustees of a corporation, association or other entity (irrespective of whether or not at the time stock of any other class or classes shall have or might have voting power by reason of the happening of any contingency).]\*

[There shall be no restriction on the ability of JPMorgan Chase Bank, N.A. to consolidate or merge with another entity or the ability of the Issuer to sell or transfer all, or substantially all, of its assets or liabilities.]†

#### 12. Modifications and Waivers; Noteholders' Meetings

#### (a) Modifications:

Certain modifications and amendments to these Conditions may be made without the consent of the holder of any Note, including for the purpose of curing any ambiguity, or of correcting or supplementing any defective provisions contained therein, adding covenants for the benefit of holders of the Notes, surrendering rights or powers conferred on the Issuer, effecting succession or assumption as a result of a merger or similar transaction, or in any other manner which the Issuer and the Agent may deem necessary or desirable and which will not materially adversely affect the interest of the holders of the Notes.

In addition, modifications and amendments to these Conditions may be made, and past defaults by the Issuer may be waived, with the written consent of the holders of at least a majority in aggregate principal amount of the Notes at the time outstanding, or of such lesser percentage as may act at a meeting of holders of the Notes held in accordance with these Conditions; provided that, in no event may the Issuer, without the written consent or the affirmative vote of the holder of each outstanding Note affected thereby,

- (i) extend the stated maturity of the principal of or any instalment of interest on any such Note;
- (ii) reduce the principal amount or redemption price of, or interest on, any such Note;
- (iii) change the obligation of the Issuer to pay Additional Amounts;
- (iv) change the currency of payment of such Note or interest thereon;
- (v) impair the right to institute suit for the enforcement of any such payment on or with respect to any such Note;
- (vi) reduce the percentage in aggregate principal amount of Notes outstanding necessary to modify or amend the Agency Agreement or to waive any past default; or
- (vii) reduce the voting or quorum requirements or the percentage of aggregate principal amount of Notes outstanding required to take any other action authorized to be taken by the holders of a specified principal amount of Notes.

Certain modifications and amendments to the Agency Agreement may be made without the consent of the holder of any Note so as to modify any provisions of the Agency Agreement which are of a formal, minor or technical nature or made to correct a manifest error or for the purpose of complying with any applicable laws or regulations.

Any modifications, amendments or waivers to the Agency Agreement or to these Conditions will be conclusive and binding on all holders of the Notes, whether or not they have given such consent or were present at such meeting, and on all future holders of Notes, whether or not notation of such modifications, amendments or waivers is made upon the Notes. Any instrument given by or on behalf of any holder of a Note in connection with any consent to any such modification, amendment or waiver will be irrevocable once given and will be conclusive and binding on all subsequent holders of such Note.

#### (b) Meetings:

The Agency Agreement contains provisions for convening meetings of Noteholders to consider matters affecting their interests, including Extraordinary Resolutions to, amongst others, modify, or obtain waiver of, or waive past default by the Issuer of, any covenant or condition set out in the Agency Agreement or these Conditions (other than those items specified in Condition 12(a)(i) through (vii)), or to sanction the exchange or substitution for the Notes of, or the conversion of the Notes

into, shares, bonds or other obligations or securities of the Issuer or any other entity. Such a meeting may be convened by the Issuer. At a meeting of the holders of the Notes for the purpose of approving an Extraordinary Resolution, persons entitled to vote a majority in aggregate principal amount of the Notes at the time outstanding shall constitute a quorum. In the absence of a quorum at any such meeting, within 30 minutes of the time appointed for such meeting, the meeting shall be adjourned for a period of not less than 14 days nor more than 42 days; the persons entitled to vote a majority in aggregate principal amount of the Notes at the time outstanding shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. At a meeting or an adjourned meeting duly convened and at which a quorum is present as aforesaid, any Extraordinary Resolution shall be effectively passed if passed by a majority consisting of at least 75 per cent. of the votes cast.

These Conditions may be amended, modified or varied in relation to any Series of Notes by the terms of the relevant Pricing Supplement in relation to such Series.

# 13. Replacement of Certificates

If a Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations and stock exchange regulations, at the specified office of the Registrar or such other Transfer Agent as may from time to time be designated by the Issuer for the purpose and notice of whose designation is given to Noteholders, in each case on payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security and indemnity (which may provide, *inter alia*, that if the allegedly lost, stolen or destroyed Certificate is subsequently presented for payment there shall be paid to the Issuer on demand the amount payable by the Issuer in respect of such Certificate) and otherwise as the Issuer may require. Mutilated or defaced Certificates must be surrendered before replacements will be issued. Upon the issuance of any substitute Certificate, the Issuer may require the payment of a sum sufficient to cover any tax or other governmental or insurance charge that may be imposed in relation thereto and any other expense (including the fees and expenses of the Agent) connected therewith.

#### 14. Further Issues

The Issuer may from time to time without the consent of the Noteholders create and issue further securities either having the same terms and conditions as the Notes in all respects (or in all respects except for the issue date, issue price, first payment of interest and principal amount) and so that such further issue shall be consolidated and form a single series with the outstanding securities of any series (including the Notes) or upon such terms as the Issuer may determine at the time of their issue. References in these Conditions to the Notes include (unless the context requires otherwise) any other securities issued pursuant to this Condition and forming a single series with the Notes.

# 15. Notices

(a) Notices to the Holders of Registered Notes in Definitive Form

Notices to the holders of Registered Notes in definitive form shall be mailed to them at their respective addresses in the Register and deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the date of mailing.

(b) Notices to the Holders of Interests in Global Notes

For Global Notes representing the Notes that are held in their entirety on behalf of Euroclear and Clearstream, Luxembourg, notices to such Noteholders may be made by delivery of the relevant notice to Euroclear and Clearstream, Luxembourg for communication by them to such Noteholders. Any such notice shall be deemed to have been given to the Noteholders on the day after the day on which such notice was given to Euroclear and Clearstream, Luxembourg.

(c) Notices to the Holders of Notes Admitted to the Official List of the Irish Stock Exchange and Trading on its Global Exchange Market

In relation to Notes admitted to the Official List of the Irish Stock Exchange and trading on its Global Exchange Market, notices to such Noteholders will be published in accordance with the rules of the Irish Stock Exchange.

(d) Notices to the Holders of Notes Listed on Any Other Stock Exchange

For so long as any Notes are listed on any other stock exchange or listing authority, notices shall be published in accordance with the rules of such stock exchange or listing authority.

(e) Notices to the Holders of Unlisted Notes

Notices to the holders of unlisted Notes may be published, as specified in the applicable Pricing Supplement, in newspapers, on a website or otherwise.

#### 16. The Agent

In acting under the Agency Agreement and in connection with the Notes, the Agent is acting solely as agent of the Issuer and does not assume any obligation towards or relationship of agency or trust for or with the owner or holder of any Note, except that any funds held by the Agent for payment of principal of or interest on, or Additional Amounts with respect to, any Note shall be held in trust by it and applied as set forth herein, but need not be segregated from other funds held by it, except as required by law. For a description of the duties and the immunities and rights of the Agent under the Agency Agreement, reference is made to the Agency Agreement, and the obligations of the Agent to the holders of the Notes are subject to such immunities and rights.

## 17. Governing Law

The Notes, and any claim, controversy or dispute arising under or related to the Notes, are governed by, and shall be construed in accordance with, the laws of the State of New York, United States of America.

#### THE GLOBAL NOTES

Notes represented by a Global Note will be registered in the name of a nominee, common depositary or common safekeeper for Euroclear or Clearstream, Luxembourg or deposited with a custodian for, and registered in the name of a nominee of, an Alternative Clearing System, as the case may be. Beneficial interests in the Global Notes will be shown on, and transfers thereof, will be effected only through records maintained by the applicable clearing system and its respective participants.

#### **Initial Issue of Global Notes**

If Notes are stated in the applicable Pricing Supplement to be held under the NSS, they are intended to be held in a manner which allows them to be recognised as eligible collateral for Eurosystem monetary policy, and the Global Notes will be delivered on or prior to the original issue date of the Tranche to a Common Safekeeper. Where the Pricing Supplement designates that the Notes are to be held under the NSS, the Notes are intended upon issue to be deposited with one of the International Central Security Depositories ("ICSDs") as common safekeeper and registered in the name of a nominee of one of the ICSDs acting as common safekeeper. Any such designation and deposit of the Global Notes with the Common Safekeeper does not necessarily mean that the Notes will be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the European Central Bank being satisfied that the Eurosystem eligibility criteria have been met.

Global Notes which are not held under the NSS may be delivered on or prior to the original issue date of the Tranche to the Common Depositary on behalf of Euroclear and Clearstream, Luxembourg.

In the case of a Global Note not issued under the NSS, upon the registration of the Global Note in the name of any nominee for Euroclear and Clearstream, Luxembourg and delivery of the Global Note to the Common Depositary, the applicable clearing systems will credit each subscriber with a principal amount of Notes equal to the principal amount thereof for which it has subscribed and paid. Regardless of whether the Notes are issued under the NSS, the Register shall be conclusive evidence of the nominal amount of Notes represented by the Global Note.

Notes that are initially deposited with the Common Depositary on behalf of Euroclear and Clearstream, Luxembourg may (if indicated in the relevant Pricing Supplement) also be credited to the accounts of other clearing systems through direct or indirect accounts with Euroclear and Clearstream, Luxembourg held by other clearing systems. Conversely, Notes that are initially deposited with any other clearing system may similarly be credited to the accounts of subscribers with Euroclear, Clearstream, Luxembourg or other clearing systems.

#### Relationship of Accountholders with Clearing Systems

For so long as any of the Notes are represented by a Global Note, each person who is shown in the records of Euroclear, Clearstream, Luxembourg or an Alternative Clearing System, as applicable, as the holder of a particular principal amount of Notes shall be treated by the relevant Issuer, the Agent and any other Paying Agent as the holder of such principal amount of such Notes for all purposes other than with respect to quorum requirements, voting and the payment of principal or interest on the Notes, the rights to which shall be vested, as against the relevant Issuer, the Agent and any other Paying Agent, solely in the registered holder of the relevant Global Note in accordance with and subject to its terms (and the expressions "Noteholder" and "holder of Notes" and related expressions shall be construed accordingly). Any certificate or other document issued by Euroclear, Clearstream, Luxembourg or an Alternative Clearing System, as applicable, as to the principal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes except in the case of manifest error.

Each of the persons shown in the records of Euroclear, Clearstream, Luxembourg or an Alternative Clearing System as the holder of a Note represented by a Global Note must look solely to such clearing system for such holder's share of each payment made by the relevant Issuer to the registered holder of a Global Note and in relation to all other rights arising under the Global Notes, subject to and in accordance with the respective rules and procedures of such clearing system. Such persons shall have no claim directly against the relevant Issuer in respect of payments due on the Notes for so long as the Notes are represented by such Global Note, and such obligations of the relevant Issuer will be discharged by payment to the

registered holder of the Global Note in respect of each amount so paid.

# Exchange

### 1. Temporary Global Notes

Each Temporary Global Note will be exchangeable, free of charge to the holder, on or after its Exchange Date in whole or in part upon certification as to non-U.S. beneficial ownership in the form set out in the Agency Agreement for interests in a Permanent Global Note.

#### 2. Global Notes

Each Global Note will be exchangeable, free of charge to the holders of beneficial interests in such Global Note, on or after its Exchange Date in whole but not (except as provided below) in part for Definitive Notes only,

- (i) if the Global Note is held on behalf of Euroclear, Clearstream, Luxembourg or an Alternative Clearing System, and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or in fact does so; or
- (ii) if an Event of Default occurs in relation to the Notes represented by such Global Note, by any holder giving notice to the Agent of its election for such change.

In the event that a Global Note is exchanged for Definitive Notes, such Definitive Notes shall be issued in Specified Denomination(s) only. A Noteholder who holds a principal amount of less than the minimum Specified Denomination will not receive a definitive Note in respect of such holding and would need to purchase a principal amount of Notes such that it holds an amount equal to one or more Specified Denominations.

Exchanges or transfers of the Notes represented by any Global Note pursuant to Condition 2(a) may be made in part only:

- (i) if the Notes represented by the Global Note are held on behalf of Euroclear, Clearstream, Luxembourg or an Alternative Clearing System and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so; or
- (ii) if principal in respect of any Notes is not paid when due; or
- (iii) with the consent of the relevant Issuer,

provided that, in the case of the first transfer of part of a holding pursuant to (i) or (ii) above, the Registered Holder has given the Registrar not less than 30 days' notice at its specified office of the Registered Holder's intention to effect such transfer.

Definitive Notes represented by Certificates will be printed in accordance with any applicable legal and stock exchange requirements in or substantially in the form set out in the Schedules to the Agency Agreement.

# 3. Delivery of Notes

If the Global Note is not issued under the NSS, on or after any due date for exchange, the holder of a Global Note may surrender such Global Note or, in the case of a partial exchange, present it for endorsement to or to the order of the Agent. In exchange for any Global Note, or the part thereof to be exchanged, the relevant Issuer will (i) in the case of a Temporary Global Note exchangeable for a Permanent Global Note, deliver, or procure the delivery of, a Permanent Global Note in an aggregate principal amount equal to that of the whole or that part of a Temporary Global Note that is being exchanged or, in the case of a subsequent exchange, endorse, or procure the endorsement of, a Permanent Global Note to reflect such exchange or (ii) in the case of a Global Note exchangeable for Definitive Notes, deliver, or procure the delivery of, an equal

aggregate principal amount of duly executed and authenticated Definitive Notes represented by Certificates or (iii) if the Global Note is issued under the NSS, procure that details of such exchange be entered pro rata in the records of the relevant clearing system. On exchange in full of each Global Note, the relevant Issuer will, if the holder so requests, procure that it is cancelled and returned to the holder together with the relevant Definitive Notes.

#### 4. Exchange Date

"Exchange Date" means, in relation to a Temporary Global Note, the day falling after the expiry of 40 days after its Issue Date and, in relation to any other Global Note, 40 days after the date upon which notice requiring exchange is given.

#### **Amendment to Conditions**

The Temporary Global Notes and Permanent Global Notes contain provisions that apply to the Notes that they represent, some of which modify the effect of the terms and conditions of the Notes set out in this Offering Circular. The following is a summary of certain of those provisions:

#### 1. Payments

No payment falling due after the Exchange Date will be made on any Temporary Global Note unless exchange for an interest in a Permanent Global Note or for Definitive Notes is improperly withheld or refused. Payments on any Temporary Global Note before the Exchange Date will be made only against presentation of certification as to non-U.S. beneficial ownership in the form set out in the Agency Agreement. All payments in respect of Global Notes not issued under the NSS will be made against presentation for endorsement and, if no further payment falls to be made in respect of the Notes, for surrender of that Global Note to or to the order of the Agent or such other Paying Agent which has been appointed for such purpose. If the Global Note is not held under the NSS, a record of each payment so made will be endorsed on the Global Note, which endorsement will be *prima facie* evidence that such payment has been made in respect of the Notes. Condition 7(c)(i) will apply to the Definitive Notes only. If the Global Note is held under the NSS, the relevant Issuer shall procure that details of each such payment shall be entered *pro rata* in the records of the relevant clearing system and the nominal amount of the Notes recorded in the records of the relevant clearing system and represented by the Global Note will be reduced accordingly. Each payment so made will discharge the relevant Issuer's obligations in respect thereof. Any failure to make the entries in the records of the relevant clearing system shall not affect such discharge. No payment with respect to the Temporary Global Notes, Permanent Global Notes or Definitive Notes, as applicable, will be made by mail to the United States or its possessions or by transfer to an account maintained therein.

All payments in respect of Notes represented by a Global Note will be made to the person shown as the registered holder in the Register at the close of business (in the relevant clearing system) on the Clearing System Business Day before the due date for such payment (the "Record Date") where "Clearing System Business Day" means a day on which each clearing system for which the Global Note is being held is open for business.

### 2. Prescription

Claims against the relevant Issuer in respect of Notes that are represented by a Global Note will become void unless presented for payment within a period of ten years (in the case of principal) and five years (in the case of interest) from the appropriate Relevant Date (as defined in Condition 7).

# 3. Meetings

The holder of a Global Note shall (unless such Global Note represents only one Note) be treated as holding the aggregate principal amount represented by such Global Note for the purposes of any quorum requirements of a meeting of Noteholders. Holders of interests in a Global Note will not have a direct right to vote in respect of the relevant Notes. Instead, such Holders will be permitted to act only to the extent that they are enabled by Euroclear, Clearstream, Luxembourg or any other relevant Alternative Clearing System to appoint appropriate proxies.

#### 4. Cancellation

Cancellation of any Note represented by a Global Note that is required by the Conditions to be cancelled (other than upon its redemption) will be effected by reduction in the principal amount of the relevant Global Note.

#### 5. Purchase

Notes represented by a Global Note may be purchased only by the Issuer or any of its subsidiaries if they are purchased together with the rights to receive all future payments of interest thereon.

#### 6. Issuer's Option

Any option of the relevant Issuer provided for in the Conditions of any Notes while such Notes are represented by a Global Note shall be exercised by the relevant Issuer giving notice to the Noteholders within the time limits set out in and containing the information required by the Conditions, except that the notice shall not be required to contain the serial numbers of Notes drawn in the case of a partial exercise of an option and accordingly no drawing of Notes shall be required. If any option of the relevant Issuer is exercised in respect of some but not all of the Notes of any Series, the rights of accountholders with a clearing system in respect of the Notes will be governed by the standard procedures of Euroclear, Clearstream, Luxembourg or any Alternative Clearing System (as the case may be) (such partial redemption to be reflected in the records of Euroclear and Clearstream, Luxembourg or any Alternative Clearing System (as the case may be) as either a pool factor or a reduction in nominal amount, at their discretion). Where the Global Note is issued under the NSS, the relevant Issuer shall procure that details of such exercise shall be entered pro rata in the records of the relevant clearing system and the nominal amount of the Notes recorded in those records will be reduced accordingly.

#### 7. Noteholders' Options

Any option of the Noteholders provided for in the Conditions of any Notes while such Notes are represented by a Global Note may be exercised by the holder of the Global Note giving notice to the Agent within the time limits relating to the deposit of Notes with a Paying Agent set out in the Conditions substantially in the form of the notice available from any Paying Agent, except that the notice shall not be required to contain the serial numbers of the Notes in respect of which the option has been exercised, and stating the principal amount of Notes in respect of which the option is exercised and at the same time, where the Global Note is not issued under the NSS, presenting the Global Note to the Agent, or to a Paying Agent acting on behalf of the Agent, for notation. Where the Global Note is issued under the NSS, the relevant Issuer shall procure that details of such exercise shall be entered pro rata in the records of the relevant clearing system and the nominal amount of the Notes recorded in those records will be reduced accordingly.

#### 8. Nominal Amount

Where the Global Note is issued under the NSS, the relevant Issuer shall procure that any exchange, payment, cancellation, exercise of any option or any right under the Notes, as the case may be, shall be entered in the records of the relevant clearing systems and upon any such entry being made, the nominal amount of the Notes represented by such Global Note shall be adjusted accordingly.

## 9. Agent's Powers

In considering the interests of Noteholders while any Global Note is held on behalf of, or registered in the name of any nominee for, a clearing system, the Agent may have regard to any information provided to it by such clearing system or its operator as to the identity (either individually or by category) of its accountholders with entitlements to such Global Note and may consider such interests as if such accountholders were the holders of the Notes represented by such Global Note.

# 10. Notices

So long as any Notes are represented by a Global Note and such Global Note is held on behalf of, or registered in the name of a nominee for, a clearing system, notices to the holders of Notes of that Series may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for notice as required by the Conditions.

#### **USE OF PROCEEDS**

JPMorgan Chase & Co. will contribute the net proceeds that it receives from the issue of the Notes to its "intermediate holding company" subsidiary, which will use such net proceeds for general corporate purposes. General corporate purposes may include investments in JPMorgan Chase & Co.'s subsidiaries, payments of dividends to JPMorgan Chase & Co., extensions of credit to JPMorgan Chase & Co. or its subsidiaries or the financing of possible acquisitions or business expansion. Interest on JPMorgan Chase & Co.'s debt securities (including interest on the Notes) and dividends on its equity securities, as well as redemptions or repurchases of its outstanding securities, will be made using amounts JPMorgan Chase & Co. receives as dividends or extensions of credit from its "intermediate holding company" subsidiary.

JPMorgan Chase Bank, National Association will use the net proceeds that it receives from the issue of the Notes for general corporate purposes.

Net proceeds may be temporarily invested pending application for their stated purpose.

#### JPMORGAN CHASE & CO.

# History, Development and Organizational Structure

JPMorgan Chase is a leading global financial services firm and one of the largest banking institutions in the United States, with operations worldwide. JPMorgan Chase had \$2.5 trillion in assets and \$254.2 billion in total stockholders' equity as of December 31, 2016. JPMorgan Chase is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the J.P. Morgan and Chase brands, JPMorgan Chase serves millions of customers in the United States and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase & Co. is a corporation incorporated under the General Corporation Law of the State of Delaware, U.S.A. JPMorgan Chase & Co. was incorporated on October 28, 1968 with file number 0691011. JPMorgan Chase & Co.'s principal bank subsidiaries are JPMorgan Chase Bank, National Association, a national bank with branches in 23 states in the United States, and Chase Bank USA, National Association, a national bank that is JPMorgan Chase's credit-card issuing bank. JPMorgan Chase & Co.'s principal nonbank subsidiary is J.P. Morgan Securities LLC, its U.S. investment banking firm. The bank and nonbank subsidiaries of JPMorgan Chase operate throughout the United States as well as through overseas branches and subsidiaries, representative offices and subsidiary foreign banks. One of JPMorgan Chase's principal operating subsidiaries in the United Kingdom is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A. As a holding company, JPMorgan Chase & Co. relies on the earnings of its subsidiaries for its cash flow and, consequently, its ability to pay dividends and satisfy its debt and other obligations.

The principal executive office of JPMorgan Chase & Co. is located at 270 Park Avenue, New York, New York 10017, U.S.A. and its telephone number is +1-212-270-6000.

#### **Principal Activities**

JPMorgan Chase's activities are organized, for management reporting purposes, into four major reportable business segments, as well as a Corporate segment. JPMorgan Chase's consumer business is the Consumer & Community Banking segment. The Corporate & Investment Bank, Commercial Banking, and Asset Management segments comprise JPMorgan Chase's wholesale businesses. The following is a description of each of JPMorgan Chase's business segments, and the products and services they provide to their respective client bases.

# Consumer & Community Banking

Consumer & Community Banking serves consumers and businesses through personal service at bank branches and through automated teller machines, online, mobile and telephone banking. Consumer & Community Banking (including Consumer Banking/Chase Wealth Management and Business Banking) is organized into Consumer & Business Banking, Mortgage Banking (including Mortgage Production, Mortgage Servicing and Real Estate Portfolios) and Card, Commerce Solutions & Auto. Consumer & Business Banking offers deposit and investment products and services to consumers, and lending, deposit, and cash management and payment solutions to small businesses. Mortgage Banking includes mortgage origination and servicing activities, as well as portfolios consisting of residential mortgages and home equity loans. Card, Commerce Solutions & Auto issues credit cards to consumers and small businesses, offers payment processing services to merchants, and provides auto loans and leases and student loan services.

#### Corporate & Investment Bank

The Corporate & Investment Bank, which consists of Banking and Markets & Investor Services, offers a broad suite of investment banking, market-making, prime brokerage, and treasury and securities products and services to a global client base of corporations, investors, financial institutions, government and municipal entities. Banking offers a full range of investment banking products and services in all major capital markets, including advising on corporate strategy and structure, capital-raising in equity and debt markets, as well as loan origination and syndication. Banking also includes

Treasury Services, which provides transaction services, consisting of cash management and liquidity solutions. Markets & Investor Services is a global market-maker in cash securities and derivative instruments, and also offers sophisticated risk management solutions, prime brokerage and research. Markets & Investor Services also includes Securities Services, a leading global custodian which provides custody, fund accounting and administration, and securities lending products principally for asset managers, insurance companies and public and private investment funds.

#### Commercial Banking

Commercial Banking delivers extensive industry knowledge, local expertise and dedicated service to U.S. and U.S. multinational clients, including corporations, municipalities, financial institutions and nonprofit entities with annual revenue generally ranging from \$20 million to \$2 billion. In addition, Commercial Banking provides financing to real estate investors and owners. Partnering with JPMorgan Chase's other businesses, Commercial Banking provides comprehensive financial solutions, including lending, treasury services, investment banking and asset management to meet its clients' domestic and international financial needs.

#### Asset Management

Asset Management is a global leader in investment and wealth management. Asset Management clients include institutions, high-net-worth individuals and retail investors in many major markets throughout the world. Asset Management offers investment management across most major asset classes including equities, fixed income, alternatives and money market funds. Asset Management also offers multi-asset investment management, providing solutions to a broad range of clients' investment needs. For Global Wealth Management clients, Asset Management also provides retirement products and services, brokerage and banking services including trusts and estates, loans, mortgages and deposits. The majority of Asset Management's client assets are in actively managed portfolios.

In addition to the four major reportable business segments outlined above, the following is a description of the Corporate segment.

#### Corporate

The Corporate segment comprises Private Equity, Treasury and Chief Investment Office, and Other Corporate, which includes corporate staff units and expense that is centrally managed. Treasury and Chief Investment Office are predominantly responsible for measuring, monitoring, reporting and managing JPMorgan Chase's liquidity, funding and structural interest rate and foreign exchange risks, as well as executing JPMorgan Chase's capital plan. The major Other Corporate units include Real Estate, Enterprise Technology, Legal, Compliance, Finance, Human Resources, Internal Audit, Risk Management, Oversight & Control, Corporate Responsibility and various Other Corporate groups. Other centrally managed expense includes JPMorgan Chase's occupancy and pension-related expenses that are subject to allocation to the businesses.

#### **Executive Officers and Directors**

#### Executive Officers

The following persons are the Executive Officers of JPMorgan Chase & Co. as at the date of this Offering Circular. The business address of each Executive Officer is 270 Park Avenue, New York, New York 10017-2070, U.S.A.

Name	Title
James Dimon	Chairman of the Board and Chief Executive Officer
Ashley Bacon	Chief Risk Officer
Stacey Friedman	General Counsel
John L. Donnelly	Head, Human Resources
Mary Callahan Erdoes	Chief Evecutive Officer, Asset Management

Marianne Lake Chief Financial Officer

Douglas B. Petno Chief Executive Officer, Commercial Banking

Daniel E. Pinto Chief Executive Officer, Corporate & Investment Bank Gordon A. Smith Chief Executive Officer, Consumer & Community Banking

Matthew E. Zames Chief Operating Officer

#### Directors

The following persons are the members of the Board of Directors of JPMorgan Chase & Co. as at the date of this Offering Circular. The business address of each Director is JPMorgan Chase & Co., 270 Park Avenue, New York, New York 10017, U.S.A.

#### Name Principal Occupation

James Dimon Chairman of the Board and Chief Executive Officer of JPMorgan Chase & Co.

Linda A. Bammann Former Deputy Head of Risk Management of JPMorgan Chase & Co.

James A. Bell Retired Executive Vice President of The Boeing Company

Crandall C. Bowles Chairman of The Springs Company

Stephen B. Burke Chief Executive Officer of NBCUniversal, LLC
Todd A. Combs Investment Officer at Berkshire Hathaway Inc.
James S. Crown President of Henry Crown and Company
Timothy P. Flynn Retired Chairman of KPMG International

Laban P. Jackson, Jr. Chairman and Chief Executive Officer of Clear Creek Properties, Inc.

Michael A. Neal Retired Chairman and Chief Executive Officer of GE Capital

Lee R. Raymond Retired Chairman and Chief Executive Officer of Exxon Mobil Corporation William C. Weldon Chairman and Retired Chief Executive Officer of Johnson & Johnson

#### Conflicts of Interest

There are no material potential conflicts of interest between the duties to JPMorgan Chase & Co. of each of the Executive Officers and Directors named above and his/her private interests and/or other duties.

For information concerning other positions held by the Directors of JPMorgan Chase & Co. and concerning JPMorgan Chase's policies and procedures for reviewing and approving transactions with its Directors and Executive Officers, see "Nominees' qualifications and experience" on pages 13 to 19 and "Additional information about our directors and executive officers" on pages 77 to 78 of the JPMorgan Chase & Co. 2016 Proxy Statement, which is incorporated by reference into this Offering Circular.

#### **Financial Information**

JPMorgan Chase & Co. prepares annual and quarterly financial statements in accordance with U.S. GAAP. In addition, where applicable, the accounting and financial reporting policies of JPMorgan Chase conform to the accounting and reporting guidelines prescribed by U.S. bank regulatory authorities.

#### **Additional Information**

The periodic reports that JPMorgan Chase & Co. files with the SEC, including its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as they become available, can be viewed on the SEC's website at www.sec.gov. Those reports and additional information concerning JPMorgan Chase & Co. can also be viewed on JPMorgan Chase & Co.'s investor relations website at http://investor.shareholder.com/jpmorganchase/.

#### JPMORGAN CHASE BANK, N.A.

#### History, Development and Organizational Structure

JPMorgan Chase Bank, N.A. is one of the principal bank subsidiaries of JPMorgan Chase & Co. JPMorgan Chase Bank offers a wide range of banking services to its customers both in the United States and internationally, including investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the J.P. Morgan and Chase brands, JPMorgan Chase Bank serves millions of customers in the United States and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase Bank, N.A. is a national banking association organized under U.S. federal law. JPMorgan Chase Bank, N.A. was initially organized as a New York banking corporation on November 26, 1968, and converted into a national banking association on November 13, 2004. JPMorgan Chase Bank, N.A. is chartered and its business is subject to examination and regulation by the OCC, a bureau of the U.S. Department of the Treasury. JPMorgan Chase Bank, N.A. is a member of the U.S. Federal Reserve System and its U.S. domestic deposits are insured by the FDIC. Its U.S. Federal Reserve Bank Identification Number is 852218. One of JPMorgan Chase Bank, N.A.'s principal operating subsidiaries in the United Kingdom is J.P. Morgan Securities plc.

The registered office of JPMorgan Chase Bank, N.A. is located at 1111 Polaris Parkway, Columbus, Ohio 43240, U.S.A. JPMorgan Chase Bank, N.A.'s principal place of business is located at 270 Park Avenue, New York, New York 10017-2070, U.S.A. and its telephone number is +1 212 270 6000.

#### **Principal Activities**

JPMorgan Chase Bank's activities are organized and integrated with the businesses of JPMorgan Chase. See "JPMorgan Chase & Co. – Principal Activities" for further information.

#### **Executive Officers and Directors**

Executive Officers

The following persons are the Executive Officers of JPMorgan Chase Bank, N.A. as at the date of this Prospectus. The business address of each Executive Officer is 270 Park Avenue, New York, New York 10017-2070, U.S.A.

Name Title James Dimon Chief Executive Officer and President Ashley Bacon Chief Risk Officer John L. Donnelly Head, Human Resources Mary Callahan Erdoes Chief Executive Officer, Asset Management Stacey Friedman General Counsel Marianne Lake Chief Financial Officer Douglas B. Petno Chief Executive Officer, Commercial Banking Daniel E. Pinto Chief Executive Officer, Corporate & Investment Bank

Gordon A. Smith Chief Executive Officer, Consumer & Community Banking Matthew E. Zames Chief Operating Officer

#### Directors

The following persons are the members of the Board of Directors of JPMorgan Chase Bank, N.A. as at the date of this Offering Circular. The business address of each Director is JPMorgan Chase Bank, N.A., 270 Park Avenue, New York, New York 10017-2070, U.S.A.

Name	Principal Occupation
Linda B. Bammann	Former Deputy Head of Risk Management of
	JPMorgan Chase & Co.
James A. Bell	Retired Executive Vice President of The Boeing
	Company
Crandall C. Bowles	Chairman of The Springs Company
Stephen B. Burke	Chief Executive Officer of NBCUniversal, LLC

Todd A. CombsInvestment Officer at Berkshire Hathaway Inc.James S. CrownPresident of Henry Crown and CompanyJames DimonChairman of the Board and Chief Executive

Officer of JPMorgan Chase & Co.

Timothy P. Flynn Retired Chairman of KPMG International Laban P. Jackson, Jr. Chairman and Chief Executive Officer of Clear

Creek Properties, Inc.

Michael A. Neal Retired Chairman and Chief Executive Officer

of GE Capital

Lee R. Raymond Retired Chairman and Chief Executive Officer

of Exxon Mobil Corporation

William C. Weldon, Retired Chairman and Chief Executive Officer

Non-Executive Chairman of of Johnson & Johnson

the Board

# Conflicts of Interest

There are no material potential conflicts of interest between the duties to JPMorgan Chase Bank, N.A. of each of the Executive Officers and Directors named above and his/her private interests and/or other duties.

For information concerning other positions held by the non-executive Directors of JPMorgan Chase Bank, N.A. and concerning JPMorgan Chase's policies and procedures for reviewing and approving transactions with its Directors and Executive Officers, see "Nominees' qualifications and experience" on pages 13 to 19 and "Additional information about our directors and executive officers" on pages 77 to 78 of the JPMorgan Chase & Co. 2016 Proxy Statement, which is incorporated by reference into this Offering Circular.

#### **Financial Information**

JPMorgan Chase Bank, N.A. prepares annual and semi-annual consolidated financial statements in accordance with U.S. GAAP. In addition, where applicable, the accounting and financial reporting policies of JPMorgan Chase Bank, N.A. conform to the accounting and reporting guidelines prescribed by U.S. bank regulatory authorities. JPMorgan Chase Bank, N.A.'s annual and semi-annual consolidated financial statements, as they become available, can be viewed on the websites of the Irish Stock Exchange (www.ise.ie), the Luxembourg Stock Exchange (www.bourse.lu) and the U.K. National Storage Mechanism (www.morningstar.co.uk/uk/nsm). JPMorgan Chase Bank, N.A. also prepares Call Reports as described under the section "Documents Incorporated by Reference; Available Information".

#### TAXATION OF THE NOTES

#### **United States Federal Income Taxation**

The following is a discussion of certain U.S. federal income tax consequences of the ownership and disposition of the Notes by Non-U.S. Holders (as defined below) that hold Notes as capital assets within the meaning of the U.S. Internal Revenue Code of 1986, as amended (the "Code"). This discussion is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations as of the date of this document, changes to any of which, subsequent to the date hereof, may affect the tax consequences described herein, possibly with retroactive effect.

For purposes of the following discussion, you are a "Non-U.S. Holder" if you are a beneficial owner of a Note that is for U.S. federal income tax purposes:

- a nonresident alien individual;
- a foreign corporation; or
- a foreign estate or trust.

You are not a "Non-U.S. Holder" for purposes of this discussion if you are an individual who is present in the United States for 183 days or more in the taxable year of disposition, if you are a former citizen or former resident of the United States, or if your income with respect to a Note is effectively connected with the conduct of a trade or business in the United States. In these circumstances, you should consult your own tax adviser regarding the U.S. federal income tax consequences of the ownership and disposition of a Note.

At the time of the relevant offering, we may seek an opinion of counsel regarding the tax consequences of owning and disposing of the Notes. The relevant Pricing Supplement may indicate whether such an opinion has been obtained and any special U.S. federal income tax considerations that may apply to a particular offering of Notes.

This discussion does not address the U.S. tax consequences of owning and disposing of Notes that are not indebtedness for U.S. federal income tax purposes, and assumes the relevant Series of Notes will constitute indebtedness for U.S. federal income tax purposes. The relevant Pricing Supplement will discuss the treatment of Notes that might not be indebtedness for U.S. federal income tax purposes.

#### Payments on the Notes

Except as otherwise indicated in the relevant Pricing Supplement and subject to the discussion below under "FATCA", payments of principal and interest (including original issue discount, if any) on the Notes to you will not be subject to U.S. federal income or withholding tax, provided that, in the case of interest:

- you do not own, actually or constructively, 10 per cent. or more of the total combined voting power of all classes of stock of the Issuer entitled to vote;
- you are not a controlled foreign corporation related, directly or indirectly, to the Issuer through stock ownership;
- the interest is not considered contingent interest under Section 871(h)(4)(A) of the Code and the Treasury regulations thereunder; and
- you certify on a properly executed Internal Revenue Service ("IRS") Form W-8BEN or W-8BEN-E (or applicable successor form) under penalties of perjury, that you are not a United States person.

If one of the requirements described above is not satisfied, payments of interest on the Notes to you will be subject to withholding tax at a rate of 30 per cent., or a lower rate specified by an applicable treaty.

Sale or Other Taxable Disposition of the Notes

Subject to the discussion below under "FATCA", you generally will not be subject to U.S. federal income or withholding tax on gain realized on a sale, redemption or other taxable disposition of Notes, although any amounts attributable to accrued interest will be treated as described above under "Payments on the Notes."

Backup Withholding and Information Reporting

If you are a Non-U.S. Holder, information returns are required to be filed with the IRS in connection with payments of interest on the Notes. Unless you comply with certification procedures to establish that you are not a U.S. person, information returns may also be filed with the IRS in connection with the proceeds from a sale or other disposition of a Note. You may be subject to backup withholding on payments on the Notes or on the proceeds from a sale or other disposition of the Notes unless you comply with certification procedures to establish that you are not a U.S. person or otherwise establish an exemption. The certification procedures required to claim the exemption from withholding tax on interest, described above, will avoid backup withholding as well.

Amounts withheld under the backup withholding rules are not additional taxes, and may be refunded or credited against your U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

#### **FATCA**

Legislation commonly referred to as "FATCA," and regulations promulgated thereunder, generally will impose a 30 per cent. withholding tax on payments to certain foreign entities (including financial intermediaries) with respect to debt instruments such as the Notes, unless various U.S. information reporting and due diligence requirements have been satisfied. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. This regime will apply to payments of interest and, if your Notes mature after December 31, 2018, to the payment on your Notes at maturity, as well as to the proceeds of any sale or other disposition of a Note after December 31, 2018. If FATCA withholding is required, the Issuer will not be required to pay any additional amounts with respect to any amounts so withheld. If FATCA withholding is imposed, and you are not a foreign financial institution, you generally will be entitled to a refund of any amounts withheld by filing a U.S. federal income tax return (which may entail significant administrative burden). You should consult your tax adviser regarding the effects of FATCA on your investment in the Notes.

#### **United Kingdom Taxation**

The following is a summary of certain United Kingdom taxation issues at the date hereof in relation to payments of principal and interest in respect of the Notes.

The comments set out below do not deal with other United Kingdom tax aspects of acquiring, holding or disposing of Notes. The comments are based on the assumption that the relevant Issuer will not merge or consolidate with, or sell or convey substantially all of its assets to any other corporation [whether pursuant to Condition 11 of the Notes or otherwise]<sup>1</sup>.

The comments relate only to the position of persons who are absolute beneficial owners of the Notes. Prospective Noteholders should be aware that the particular terms of issue of any series of Notes as specified in the relevant Pricing Supplement may affect the tax treatment of that and other series of Notes.

The following is a general guide and should be treated with appropriate caution. Noteholders who are in any doubt as to their tax position should consult their professional advisors.

Noteholders who may be liable to taxation in jurisdictions other than the United Kingdom in respect of their acquisition, holding or disposal of the Notes are particularly advised to consult their professional advisors as to whether they are so liable

<sup>&</sup>lt;sup>1</sup> Only applicable where JPMorgan Chase is the Issuer.

(and if so under the laws of which jurisdictions), since the following comments relate only to certain United Kingdom taxation aspects of payments in respect of the Notes. In particular, Noteholders should be aware that they may be liable to taxation under the laws of other jurisdictions in relation to payments in respect of the Notes even if such payments may be made without withholding or deduction for or on account of taxation under the laws of the United Kingdom.

#### United Kingdom Withholding Tax

Interest on Notes may be paid by the relevant Issuer without withholding or deduction for or on account of United Kingdom income tax except in any particular circumstances which cause such interest to have a UK source ("UK Interest"). For example, interest on Notes issued by JPMorgan Chase Bank, N.A. acting through its London branch or interest secured on assets situated in the United Kingdom may have a United Kingdom source.

Payments of UK Interest may be made free of withholding tax so long as at least one of the exemptions set out below applies.

- (i) Where an Issuer is a "bank" within the meaning of section 991 Income Tax Act 2007 (the "Act") it is entitled to make payments of UK Interest on the Notes without deduction or withholding for or on account of United Kingdom income tax provided that the UK Interest on the Notes is paid in the ordinary course of its business.
- (ii) Payments of UK Interest made in respect of Notes which carry a right to interest and are listed on a "recognized stock exchange" within the meaning of section 1005 of the Act may also be made without withholding or deduction for or on account of United Kingdom income tax.

Section 1005(3) of the Act provides that securities will be listed on a recognized stock exchange if (and only if) they are admitted to trading on that exchange, and either they are included in the United Kingdom official list (within the meaning of Part 6 of the Financial Services and Markets Act 2000 ("FSMA")) or they are officially listed, in accordance with provisions corresponding to those generally applicable in European Economic Area states, in a country outside the United Kingdom in which there is a recognized stock exchange. The list of stock exchanges designated as recognized stock exchanges for the purpose of section 1005 and published by H.M. Revenue & Customs includes the Irish Stock Exchange and securities listed on the Global Exchange Market operated and regulated by the Irish Stock Exchange are treated as listed on a recognized stock exchange.

In addition, UK Interest on Notes issued for a term of less than one year (and which are not issued under arrangements the effect of which is to render the Notes part of a borrowing with a total term of one year or more) may be paid by the relevant Issuer without withholding or deduction for or on account of United Kingdom income tax.

UK Interest on Notes with a term of one year or more which do not qualify for any of the above exemptions will generally be paid under deduction of United Kingdom income tax at the basic rate (currently 20 per cent.), subject to any direction to the contrary by H.M. Revenue & Customs under the provisions of an applicable double taxation treaty or any other applicable exemptions or reliefs.

If Notes are issued at a discount to their principal amount, any such discount element is not subject to any United Kingdom withholding tax. If Notes are redeemed at a premium to principal amount (as opposed to being issued at a discount) then, depending on the circumstances, such premium may constitute a payment of interest for United Kingdom tax purposes and hence be subject to the same United Kingdom withholding tax rules outlined above as applicable to interest payments on such Notes.

The references to "interest" above mean "interest" as understood in United Kingdom tax law. The statements above do not take any account of any different definitions of "interest" or "principal" which may prevail under any other law or which may be created by the terms and conditions of the Notes or any related documentation.

#### **CERTAIN ERISA MATTERS**

The Notes may, subject to certain legal restrictions, be held by (i) an "employee benefit plan" (as defined in Section 3(3) of the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA")) that is subject to Title I of ERISA, (ii) a "plan" that is subject to Section 4975 of the Code, (iii) a plan, account, fund, program or other arrangement that is subject to provisions under other federal, state, local, non-U.S. or other laws or regulations that are similar to any such provisions of the fiduciary responsibility or prohibited transaction provisions of Title I of ERISA or Section 4975 of the Code ("Similar Laws") and (iv) an entity whose underlying assets are considered to include "plan assets" of any such plan, account, fund, program or arrangement (each of the foregoing described in clauses (i), (ii), (iii) and (iv) being referred to as a "Plan"). A fiduciary of any Plan must determine that the purchase, holding and disposition of an interest in the Notes is consistent with its fiduciary duties under applicable law and will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code, or a violation under any applicable Similar Laws. By acceptance of a Note, each purchaser and subsequent transferee of a Note or any interest therein will be deemed to have represented and warranted that either (i) no portion of the assets used by such purchaser or transferee to acquire or hold the notes constitutes assets of any Plan or (ii) the acquisition and holding of the Notes (or any interest therein) by such holder or transferee will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a similar violation under any applicable Similar Laws.

Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries or other persons considering acquiring the Notes (or any interest therein) on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Code and any applicable Similar Laws to such investment, and whether an exemption therefrom would be applicable to the acquisition and holding of the Notes or any interest therein.

#### SUBSCRIPTION AND SALE

Subject to the terms and on the conditions contained in the Amended and Restated Program Agreement dated January 20, 2017 (the "Program Agreement"), between the Issuers and J.P. Morgan Securities plc, the Notes will be offered from time to time by the Issuers to the Permanent Dealer(s). However, each of the Issuers has reserved the right to issue Notes directly on its own behalf to Dealers that are not Permanent Dealers and who agree to be bound by the restrictions below. The Notes may be resold at prevailing market prices, or at prices related thereto, at the time of such resale, as determined by the relevant Dealer. The Notes may also be sold by each of the Issuers through the Dealer(s), acting as agents of the relevant Issuer. The Program Agreement also provides for Notes to be issued in syndicated Tranches that are jointly and severally underwritten by two or more Dealers.

Each of the Issuers will pay each relevant Dealer a commission as agreed between the relevant Issuer and the Dealer in respect of Notes subscribed by it. Each of the Issuers has agreed to reimburse the Arranger for its expenses incurred in connection with the update of the Program and the Dealer(s) for certain of their activities in connection with the Program. The commissions in respect of an issue of Notes on a syndicated basis will be stated in the relevant Pricing Supplement.

Each of the Issuers has agreed to indemnify the Dealer(s) against certain liabilities in connection with the offer and sale of the Notes. The Program Agreement entitles the Dealer(s) to terminate any agreement that they make to subscribe Notes in certain circumstances prior to payment for such Notes being made to the relevant Issuer.

#### **United States**

The Notes have not been and will not be registered under the Securities Act, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. The Notes will be offered outside the United States to non-U.S. persons in accordance with Regulation S.

JPMorgan Chase & Co. is a Category 2 issuer for the purposes of Regulation S. JPMorgan Chase Bank, N.A. is a Category 3 issuer for the purposes of Regulation S. The Notes issued by JPMorgan Chase Bank, N.A. in accordance with Regulation S are being offered and sold in reliance upon an exemption provided in Section 3(a)(2) of the Securities Act, have not been registered with the OCC and are being offered and sold only outside the United States in compliance with Regulation S (as such Regulation is incorporated into the regulations of the OCC pursuant to 12 C.F.R. Section 16.5(g)). Terms used in this paragraph have the meanings given to them by Regulation S.

Each Dealer has agreed that, except as permitted by the Program Agreement, it will not offer or sell Notes of any identifiable Tranche (i) as part of its distribution at any time or (ii) otherwise until 40 days after completion of the distribution of such Tranche as determined, and certified to the Dealer, by the Agent, or in the case of Notes issued on a syndicated basis, the Lead Manager, within the United States or to, or for the account or benefit of, U.S. persons. Accordingly, neither the Dealers, their affiliates (if any) nor any person acting on their behalf have engaged or will engage in any directed selling efforts with respect to the Notes, and the Dealers, their affiliates (if any) and any person acting on their behalf have complied and will comply with the offering restrictions requirements of Regulation S (in the case of Notes issued by JPMorgan Chase Bank, N.A., as they are incorporated into the OCC's regulations by 12 C.F.R. Section 16.5(g)).

In addition, until 40 days after the completion of the distribution of all Notes of the Tranche of which such Notes are a part, an offer or sale of such Notes within the United States by any dealer (whether or not participating in the offering of such Tranche of Notes) may violate the registration requirements of the Securities Act.

By purchasing Notes of any Tranche, holders will be deemed to have represented that they are not an affiliate (as defined in Rule 144 under the Securities Act) of the applicable Issuer, that they are not acting on behalf of the applicable Issuer and that they are not a U.S. person (as defined in Regulation S) or purchasing such Notes for the account or benefit of a U.S. person, other than a distributor, and they are purchasing such Notes in an offshore transaction in accordance with Regulation S.

Each Dealer has further agreed that it will have sent to each Dealer to which it sells Notes of any identifiable Tranche pursuant to Regulation S during the Resale Restriction Period (as defined below) a confirmation or other notice substantially to the following effect:

As to Notes issued by JPMorgan Chase & Co., "The Notes covered hereby have not been and are not required to be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or with any securities regulatory authority of any state or other jurisdiction of the United States. The Notes may not be offered, sold or otherwise transferred in the absence of such registration or unless such transaction is exempt from, or not subject to, such registration. The Notes are being offered and sold outside the United States in compliance with Regulation S promulgated under the Securities Act. The Notes may not be offered, sold or otherwise transferred within the United States or to or for the account or benefit of U.S. persons (i) as part of their distribution at any time, or (ii) until 40 days after the completion of the distribution of all Notes of the Tranche of which those Notes are a part, as determined and certified to the Dealers or, in the case of Notes issued on a syndicated basis, the Lead Manager, by the Agent, except in either case in accordance with Regulation S under the Securities Act. Terms used above have the meanings given to them by Regulation S."

As to Notes issued by JPMorgan Chase Bank, N.A., "The Notes covered hereby have not been and are not required to be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or with any securities regulatory authority of any state or other jurisdiction of the United States. In addition, the Notes covered hereby have not been registered under the regulations of the U.S. Comptroller of the Currency ("Comptroller's Regulations") relating to securities offerings by national banks (12 C.F.R. Part 16). The Notes may not be offered, sold or otherwise transferred in the absence of such registration or unless such transaction is exempt from, or not subject to, such registration. The Notes are being offered and sold outside the United States in compliance with Regulation S, as such Regulation is incorporated into the Comptroller's Regulations by 12 C.F.R. Section 16.5(g). The Notes may not be offered, sold or otherwise transferred within the United States or to, or for the account or benefit of, U.S. persons (i) as part of their distribution at any time, or (ii) until 40 days after the completion of the distribution of this Tranche of Notes, as determined and certified to each relevant Dealer or, in the case of a syndicated issue, the Lead Manager, by the Agent, except in either case in accordance with Regulation S under the Securities Act, as such Regulation is incorporated into the Comptroller's Regulations by 12 C.F.R. Section 16.5(g). Terms used above have the meanings given to them by Regulation S."

The restrictions on resale set forth in the two immediately preceding paragraphs will apply from the applicable issuance date of Notes issued in accordance with Regulation S by the relevant Issuer until the date that is 40 days after the later of the applicable issuance date and when such Notes or any predecessor of such Notes are first offered to persons other than distributors (as defined in Rule 902 of Regulation S) in reliance on Regulation S (the "Resale Restriction Period").

In the case of any Notes issued by JPMorgan Chase Bank, N.A. in accordance with Regulation S during the Resale Restriction Period, beneficial interests in such Notes will be represented by a Temporary Global Note. After the Resale Restriction Period ends, beneficial interests in such temporary global certificate may be exchanged for beneficial interests in a Permanent Global Note upon certification that those interests are owned by non-U.S. persons.

This Offering Circular has been prepared by the Issuers for use in connection with the offer and sale of Notes outside the United States. Each of the Issuers reserves the right to reject any offer to purchase the Notes issued by such Issuer, in whole or in part, for any reason, and each of the Dealers reserves the right to reject any offer to purchase any of the Notes, in whole or in part, for any reason. This Offering Circular does not constitute an offer to any person in the United States or to any U.S. person. Distribution of this Offering Circular by any non-U.S. person outside the United States to any U.S. person or to any other person within the United States, other than those persons, if any, retained to advise such non-U.S. person with respect thereto, is unauthorized and any disclosure without the prior written consent of the relevant Issuer of any of its contents to any such U.S. person or other person within the United States, other than those persons, if any, retained to advise such non-U.S. person, is prohibited.

### European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), each Dealer has represented and agreed, and each further Dealer appointed under the Program

will be required to represent and agree, that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date") it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to the public in that Relevant Member State except that it may, with effect from and including the Relevant Implementation Date, make an offer of such Notes to the public in that Relevant Member State:

- (1) at any time to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (2) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the relevant Issuer for any such offer; or
- (3) at any time in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Notes referred to in (1) to (3) above shall require the relevant Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression "an offer of Notes to the public" in relation to any Notes in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

#### United Kingdom

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that:

- (1) in relation to any Notes which have a maturity of less than one year, (a) 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 (b) it has not offered or sold and will not offer or sell any Notes other than to persons (i) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or (ii) 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 Notes would otherwise constitute a contravention of Section 19 of the FSMA by the relevant Issuer;
- (2) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any 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 any Notes in circumstances in which section 21(1) of the FSMA does not apply to the relevant Issuer; and
- (3) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

Italy

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that:

the offering of the Notes has not been registered pursuant to Italian securities legislation and, accordingly, no Notes may be offered, sold or delivered, nor may copies of the Offering Circular or any other document relating to the Notes be distributed in the Republic of Italy, except:

- (1) to qualified investors (investitori qualificati) ("Qualified Investors"), as defined under Article 34-ter, paragraph 1, letter b), of CONSOB Regulation No. 11971 of May 14, 1999, as amended ("Regulation 11971/1999"); or
- (2) in circumstances which are exempted from the rules on offers of securities to be made to the public pursuant to Article 100 of Legislative Decree No. 58 of February 24, 1998 (the "Financial Services Act") and Article 34-ter, first paragraph, of Regulation 11971/1999.

Any offer, sale or delivery of the Notes in the Republic of Italy or distribution of copies of the Offering Circular or any other document relating to the Notes in the Republic of Italy under (1) and (2) above must be:

- (i) made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with the Financial Services Act, CONSOB Regulation No. 16190 of October 29, 2007 (as amended from time to time) and Legislative Decree No. 385 of September 1, 1993, as amended; and
- (ii) in compliance with any other applicable laws and regulations.

Please note that, in accordance with Article 100-bis of the Financial Services Act, where no exemption under (2) above applies, the subsequent distribution of the Notes on the secondary market in Italy must be made in compliance with the rules on offers of securities to be made to the public provided under the Financial Services Act and the Regulation 11971/1999. Failure to comply with such rules may result, inter alia, in the sale of such Notes being declared null and void and in the liability of the intermediary transferring the Notes for any damages suffered by the investors.

#### Australia

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that in connection with the distribution of the Notes it:

- (1) will not make any offer or invitation in Australia or any offer or invitation which is received in Australia in relation to the issue, sale or purchase of any Notes unless the offeree is required to pay at least A\$500,000 for the Notes or its foreign currency equivalent (in either case disregarding moneys, if any, lent by the relevant Issuer or other person offering the Notes or its associates (within the meaning of those expressions in Part 6D.2 of the Corporations Act 2001 (Cth) of Australia (the "Corporations Act"))), or it is otherwise an offer or invitation for which by virtue of section 708 of the Corporations Act no disclosure is required to be made under Part 6D.2 of the Corporations Act and is not made to a retail client (as defined in section 761G or 761GA of the Corporations Act); and
- (2) has not circulated or issued and will not circulate or issue a disclosure document relating to the Notes in Australia or received in Australia which requires lodging under Division 5 of Part 6D.2 or under Part 7 of the Corporations Act.

# Japan

The Notes have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law no. 25 of 1948, as amended) and, accordingly, each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that none of the Notes nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit, of any Japanese person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese person except under circumstances which will result in compliance with all applicable laws, regulations and guidelines promulgated by the relevant Japanese governmental and regulatory authorities and in effect at the relevant time. For this purpose, a "Japanese person" means any person resident in Japan, including any corporation or other entity organised under the laws of Japan.

#### Hong Kong

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that:

- (1) it has not offered or sold, and will not offer or sell, in Hong Kong, by means of any document, any Notes (except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "Securities and Futures Ordinance")) other than (i) to "professional investors" within the meaning of the Securities and Futures Ordinance and any rules made under that Ordinance; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and
- (2) 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 Notes which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance and any rules made under that Ordinance.

#### Singapore

This Offering Circular has not been registered as an Offering Circular with the Monetary Authority of Singapore and, accordingly, each Dealer has represented, warranted and agreed that this Offering Circular and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes 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 (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (1) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor under Section 274 of the SFA or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA:
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

#### South Africa

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that it has not and will not offer or solicit any offers for sale or subscription or sell any Notes, in each case except in accordance with the South African exchange control regulations, the South African Companies Act, 2008 and any other applicable laws and regulations of South Africa in force from time to time. In particular, each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that it will not offer Notes for subscription, or otherwise sell any Notes, to any person who, or which, is a Resident (as defined in the South African exchange control regulations) other than in strict compliance with the South African exchange control regulations in effect from time to time, and, without prejudice to the foregoing, that it will take all reasonable measures available to it to ensure that no Note will be purchased by, or sold to, or beneficially held or owned by, any Resident (as defined in the South African exchange control regulations) other than in strict compliance with the South African exchange control regulations in effect from time to time.

#### General

These selling restrictions may be modified by the agreement of the relevant Issuer and the Dealer(s) following a change in a relevant law, regulation or directive. Any such modification will be set out in the Pricing Supplement issued in respect of the issue of Notes to which it relates or in a supplement to this Offering Circular.

No representation is made that any action has been or will be taken in any jurisdiction that would permit a public offering of any of the Notes, or possession or distribution of the Offering Circular or any other offering material or any Pricing Supplement, in any country or jurisdiction where action for that purpose is required.

Each Dealer has agreed that it will, to the best of its knowledge and belief, comply with all applicable securities laws, regulations and directives in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes the Offering Circular, any other offering material or any Pricing Supplement and neither the Issuers nor any other Dealer shall have responsibility therefor.

Certain of the Dealers and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may provide services to, JPMorgan Chase & Co., the JPMorgan Chase Group, JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank Group in the ordinary course of business. J.P. Morgan Securities plc, the Arranger and a Dealer, is an affiliate of JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. and, as such, may be deemed to have a potential conflict of interest as an affiliate of the Issuers in connection with an offering of Notes.

# FORM OF PRICING SUPPLEMENT

# **Pricing Supplement**

# [JPMORGAN CHASE & CO. LOGO]

# [JPMORGAN CHASE & CO./ JPMORGAN CHASE BANK, NATIONAL ASSOCIATION]

[Title of Relevant Series] issued pursuant to

# [U.S.\$10,000,000,000/U.S.\$5,000,000,000] Note Program

SERIES N TRANCHE I Brief Description and	NO: [ ]
Issue Price: [	] per cent.
[Name(s) of I	Manager(s)]

#### PART A — CONTRACTUAL TERMS

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Offering Circular dated January 20, 2017 [and the supplementary Offering Circular[s] dated [ ] ([together,] the "Offering Circular"). This Pricing Supplement must be read in conjunction with such Offering Circular [as so supplemented]. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Offering Circular. [The Offering Circular [and the supplementary Offering Circular[s]] (including all documents incorporated by reference) [is] [are] available in electronic form on the Irish Stock Exchange's website at www.ise.ie.]

Neither this Pricing Supplement nor the Offering Circular constitutes a "prospectus" for the purposes of Article 5.4 of Directive 2003/71/EC (as amended by Directive 2010/73/EU, the "Prospectus Directive"), and the Pricing Supplement and the Offering Circular have been prepared on the basis that no prospectus shall be required under the Prospectus Directive in relation to any Notes (as described below) to be offered and sold hereby. Any person making or intending to make an offer to the public of the Notes in any Relevant Member State may only do so in circumstances in which no obligation arises for the Issuer[s] or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer. Neither the Issuer[s] nor any Dealer has authorised, nor do they authorise, the making of any offer of Notes in any other circumstances.

[[The Issuer will apply to the Irish Stock Exchange for admission of the Notes to the Official List of the Irish Stock Exchange and trading on its Global Exchange Market] [The Issuer will apply to [name of listing authority] for admission of the Notes to [specify list] and to the [name of stock exchange] for admission of the Notes to [trading/quotation] on [specify exchange or quotation system]], subject to meeting the applicable admission requirements. [The Irish Stock Exchange/name of stock exchange] assumes no responsibility for the correctness of any of the statements or opinions made or reports contained in this document. Admission to [the Official List of the Irish Stock Exchange and trading on its Global Exchange Market] is not to be taken as an indication of the merits of the Issuer or the Notes.]

[The following alternative language applies if the first tranche of an issue which is being increased was issued under an Offering Circular with an earlier date.

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Offering Circular dated [original date][and the supplementary Offering Circular[s] dated [ ]]. This document constitutes the Pricing Supplement relating to the issue of Notes described herein and must be read in conjunction with the Offering Circular dated [current date] [and the supplementary Offering Circular[s] dated [ ]]. The Conditions shall be the terms and conditions of the Notes as set out in the section entitled "Terms and Conditions of the Notes" of the Offering Circular dated [original date] which are incorporated by reference into the Offering Circular dated [current date]. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Offering Circular dated [current date] [and the supplementary Offering Circular[s] dated [ ]]. The Offering Circular [and the supplemental Offering Circular[s]] (including all documents incorporated by reference) [is] [are] available in electronic form on the Irish Stock Exchange's website at www.ise.ie.]

1. Issuer: [JPMorgan Chase & Co./JPMorgan Chase Bank, National Association] [(i)] Series Number: 2. [(ii) Tranche Number: [(iii) Date on which the Notes become fungible:] Not Applicable/The Notes shall be consolidated to form a single series and be interchangeable for trading purposes with [[which is expected to occur on or about [ the [ ] on [ ].] Specified Currency or Currencies: 3. 4 Aggregate Nominal Amount of Notes: [(i)] Series: [(ii) Tranche: 5. per cent. of the Aggregate Nominal Amount [plus accrued] Issue Price: interest from [ 6. Specified Denominations: 1 (ii) Calculation Amount: ] 70

7.	<ul><li>(i) Issue Date:</li><li>(ii) Interest Commencement Date:</li></ul>	[ ] [[ ]/Issue Date/Not Applicable]	
8. 9.	Maturity Date: Interest Basis:	[ ] [[ ] per cent. Fixed Rate] [[ ] +/- [ ] per cent. Floating Rate] [Zero Coupon] Subject to any purchase and cancellation or early redemption the Notes will be redeemed on the Maturity Date at [100] per	
10.	Redemption/Payment Basis:		
11.	Change of Interest or Redemption/Payment Basis:	cent. of their Nominal Amount. [[ ]/Not Applicable]	
12.	Put/Call Options:	[Investor Put]/[Issuer Call]/[Not Applicable]	
13.	<ul><li>[(i)] Status of the Notes:</li><li>[(ii) Date Board approval for issuance of Notes obtained:</li></ul>	[Senior/[Dated/Perpetual]/Subordinated] [ ]	
Provis	sions Relating to Interest (if any) Payable		
14.	Fixed Rate Note Provisions	[Applicable/Not Applicable]	
	(i) Rate[(s)] of Interest:	[ ] per cent. per annum [payable [annually/semi-annually/quarterly/monthly] in arrear on each Interest Payment Date]	
	(ii) Interest Payment Date(s):	[ ] in each year [adjusted in accordance with [ ] /not adjusted]	
	<ul><li>(iii) Fixed Coupon Amount[(s)]:</li><li>(iv) Broken Amount(s):</li></ul>	[ ] per Calculation Amount [ ] per Calculation Amount payable on the Interest Payment Date falling [in/on] [ ]	
	(v) Day Count Fraction:	[30/360 / Actual/Actual (ICMA/ISDA) / Actual/365 (Fixed) / Actual/360 / 360/360 / 30E/360 / Eurobond Basis]	
	(vi) Determination Dates:	[[ ] in each year ][Not Applicable]	
15.	Floating Rate Note Provisions	[Applicable/Not Applicable]	
	<ul><li>(i) Interest Period(s):</li><li>(ii) Specified Interest Payment Dates:</li></ul>	[ ] [[ ] in each year, subject to adjustment in accordance with the Business Day Convention set out in (v) below]	
	<ul><li>(iii) First Interest Payment Date:</li><li>(iv) Interest Period Date:</li></ul>		
	(v) Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention]	
	<ul><li>(vi) Business Center(s):</li><li>(vii) Manner in which the Rate(s) of Interest is/are to be determined:</li></ul>	[ ] [Screen Rate Determination/[ ]]	
	(viii) Party responsible for calculating the Rate(s) of Interest and Interest Amount(s) (if not the Calculation Agent):		
	(ix) Screen Rate Determination:  — Reference Rate:	[[ ] month] [LIBOR/EURIBOR/BBSW/HIHD/HIBOR/JIBAR/NIBOR/ STIBOR]	
	<ul> <li>Interest Determination Date(s):</li> <li>Relevant Screen Page:</li> <li>Relevant Time:</li> <li>(x) Margin(s):</li> <li>(xi) Minimum Rate of Interest:</li> <li>(xii) Maximum Rate of Interest:</li> <li>(xiii) Day Count Fraction:</li> </ul>	[ ] [ ]/[As per the Conditions] [+/-][ ] per cent. per annum [ ] per cent. per annum [ ] per cent. per annum [ 30/360 / Actual/Actual (ICMA/ISDA) / Actual/365 (Fixed) /	
		71	

16.	<ul><li>(xiv) Linear Interpolation:</li><li>Zero Coupon Note Provisions</li><li>(i) Amortization Yield:</li></ul>	Actual/360 / 360/360 / 30E/360 / Eurobond Basis] [Not Applicable]/[Applicable. The Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation]. [Applicable/Not Applicable] [ ] per cent. per annum	
	(ii) Day Count Fraction in relation to Early Redemption Amounts:	[30/360 / Actual/Actual (ICMA/ISDA) / Actual/365 (Fixed) / Actual/360 / 360/360 / 30E/360 / Eurobond Basis]	
Provis	sions Relating to Redemption		
17.	Redemption at the Option of the Issuer	[Applicable/Not Applicable]	
	<ul> <li>(A) Redemption At Optional Redemption</li> <li>Amount (Issuer Call Option)</li> <li>(i) Optional Redemption Date(s):</li> <li>(ii) Optional Redemption Amount(s) of each</li> </ul>	[Applicable/Not Applicable]  [	
	Note: (iii) If redeemable in part: (a) Minimum Redemption Amount: (b) Maximum Redemption Amount: (iv) Notice period (if different from that set out in the Conditions): (v) Issuer's Option Period:	[[Not Applicable]/[ ] per Calculation Amount] [[Not Applicable]/[ ] per Calculation Amount] [ ]	
	(B) Redemption At Make-Whole Redemption	[Applicable/Not Applicable]	
	Amount (i) Optional Redemption Date(s): (ii) Make-Whole Amount:	[ ]	
	<ul> <li>(a) Reference Bond: Redemption Margin: Quotation Time: Quotation Jurisdiction:</li> <li>(b) Day Count Basis</li> <li>(c) Make-Whole Exemption Period:</li> </ul>	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	
	<ul><li>(iii) Notice period (if different from that set out in the Conditions):</li><li>(iv) Issuer's Option Period:</li></ul>		
18.	Redemption at the Option of the Noteholder (Put Option)	[Applicable/Not Applicable]	
	<ul> <li>(i) Optional Redemption Date(s):</li> <li>(ii) Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s):</li> </ul>	[ ] per Calculation Amount	
	(iii) Notice period (if different from that set out in the Conditions):	[ ]	
19. 20.	(iv) Noteholders' Option Period: Final Redemption Amount of each Note Early Redemption Amount	[ ] per Calculation Amount	
	Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default or other early redemption:	[[Yes, as set out in the Conditions/[ ] per Calculation Amount]	
General Provisions Applicable to the Notes:			
21.	Form of Notes:	[Temporary Global Note in registered form exchangeable for	

22. 23. 24.	NSS (New Safekeeping Structure) Financial Center(s): Redenomination, renominalization and reconventioning provisions:	[Yes] [No] [Not Applicable]/[ ] [Not Applicable/The provisions in Condition 6(b) apply]
25.	Consolidation provisions:	[Not Applicable/[ ]
Distril	oution	
<ul><li>26.</li><li>27.</li><li>28.</li></ul>	(i) If syndicated, names of Managers and underwriting commitments, and names of the entities agreeing to place the issue without a firm commitment or on a "best efforts" basis if such entities are not the same as the Managers: (ii) [Date of [Subscription] Agreement: (iii) Stabilising Manager(s) (if any): If non-syndicated, name and address of Dealer: Additional Selling Restrictions:	[Not Applicable/give names[, addresses and underwriting commitments]] [(Include names and addresses of entities agreeing to underwrite the issue on a firm commitment basis.)]  [•]] [Not Applicable/[ ]] [Not Applicable/[ ]] [Not Applicable/[ ]]
[THIR	RD PARTY INFORMATION	
[ ] has been extracted from [ ]. The Issuer confirms that such information has been accurately reproduced and that, so far as it is aware and is able to ascertain from information published by [ ], no facts have been omitted which would render the reproduced information inaccurate or misleading.]		
Signed on behalf of the Issuer:		
	uthorized	

Global Note]

Global Note]

and Clearstream, Luxembourg

a Permanent Global Note in registered form which is exchangeable for Definitive Notes represented by Certificates in the limited circumstances specified in the Permanent

[Permanent Global Note in registered form, which is exchangeable for Definitive Notes represented by Certificates in the limited circumstances specified in the Permanent

The Global Notes will be registered in the name of a [nominee]/[common safekeeper]/[depositary] for Euroclear

# PART B — OTHER INFORMATION

1.	Listing and Admission to Trading	
	(i) Admission to trading:	[Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to the Official List of the Irish Stock Exchange and trading on its Global Exchange Market with effect from [ ].] [Not Applicable.]
	(ii) Estimate of total expenses related to admission to trading:	[ ]
2.	Ratings	
	Ratings:	[The Notes to be issued [have been]/[are expected to be] rated as follows:] [S & P: [ ]] [Moody's: [ ]] [Fitch: [ ]] [The Notes to be issued have not been rated.]
3.	[Interests of Natural and Legal Persons Involved in the	Issue/Offer]
	Save as discussed in ["Subscription and Sale"] so far as the Notes has an interest material to the offer.] [The Manager(sengage, in investment banking and/or commercial banking the Issuer and its affiliates in the ordinary course of business.	s) and their affiliates have engaged, and may in future transactions with, and may perform other services for
4.	[Fixed Rate Notes only — Yield	
	Indication of yield:	[ ] per cent. per annum. The yield is calculated at of the Issue Date on the basis of the Issue Price. It is not an indication of future yield.]
5.	Operational Information	
	ISIN Code: Common Code: Clearing system(s) and the relevant identification number(s): Delivery: Names and addresses of initial Paying Agent(s) (if not the Principal Paying Agent): Names and addresses of additional Paying Agent(s) (if any):	[ ] [ ] [Euroclear Bank SA/NV][Clearstream Banking S.A Delivery [against/free of] payment [ ] [ ]
6.	Distribution	
	U.S. Selling Restrictions:	Reg. S Category [2]/[3]

#### **GENERAL INFORMATION**

- 1. It is expected that admission of the Notes to the Official List and admission of the Notes to trading on GEM will be admitted separately as and when issued, subject only to the issue of a Global Note or one or more Certificates in respect of each Tranche. The listing of the Program in respect of the Notes is expected to be granted on or about January 20, 2017.
- 2. For so long as Notes may be issued pursuant to this Offering Circular, the following documents will be available from the date hereof in physical or electronic form, during usual business hours on any weekday, for inspection at the offices of the Paying Agent in London, England and the Paying Agent in Luxembourg: (a) the Restated Certificate of Incorporation of JPMorgan Chase & Co.; (b) the By-Laws of JPMorgan Chase & Co.; (c) the Articles of Association of JPMorgan Chase Bank, N.A.; (d) the By-Laws of JPMorgan Chase Bank, N.A.; (e) each of the documents incorporated by reference in this Offering Circular; (f) the Agency Agreement (incorporating the forms of the Temporary Global, Permanent Global and Definitive Notes); (g) this Offering Circular and each Pricing Supplement and other supplements to this Offering Circular; (h) the Consolidated Financial Statements of JPMorgan Chase & Co. as at December 31, 2015 and 2014; and (i) the Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at December 31, 2015 and 2014. This Offering Circular and any Pricing Supplement for Notes that are listed on the Official List and admitted to trading on GEM and other supplements to this Offering Circular can also be viewed on the website of the Irish Stock Exchange at www.ise.ie.
- 3. The Consolidated Financial Statements of JPMorgan Chase & Co. as at December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015, which appear in the JPMorgan Chase & Co. 2015 Annual Report incorporated by reference in this Offering Circular, and the effectiveness of internal control over financial reporting as of December 31, 2015, have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report dated February 23, 2016 appearing on page 175 therein. PricewaterhouseCoopers LLP is an independent registered public accounting firm within the meaning of the applicable rules and regulations adopted by the SEC and the Public Company Accounting Oversight Board (United States) (the "PCAOB"). PricewaterhouseCoopers LLP is a member of the American Institute of Certified Public Accountants and is registered with the PCAOB.
- 4. The unaudited Consolidated Financial Statements of JPMorgan Chase & Co. as at March 31, 2016 and for the three months ended March 31, 2016 and March 31, 2015, as at June 30, 2016 and for the three months and six months ended June 30, 2016 and June 30, 2015, and as at September 30, 2016 and for the three months and nine months ended September 30, 2016 and September 30, 2015, are contained in the JPMorgan Chase & Co. March 2016 Form 10-Q, the JPMorgan Chase & Co. June 2016 Form 10-Q and the JPMorgan Chase & Co. September 2016 Form 10-Q, respectively, each of which is incorporated by reference into this Offering Circular. PricewaterhouseCoopers LLP reported that they have applied limited procedures in accordance with professional standards for a review of the JPMorgan Chase & Co. unaudited financial information for the three-month periods ended March 31, 2016 and March 31, 2015 contained in the JPMorgan Chase & Co. March 2016 Form 10-Q and for the three-month and six-month periods ended June 30, 2016 and June 30, 2015 contained in the JPMorgan Chase & Co. June 2016 Form 10-Q and for the three-month and nine-month periods ended September 30, 2016 and September 30, 2015 contained in the JPMorgan Chase & Co. September 2016 Form 10-Q. However, their separate reports dated April 29, 2016, August 3, 2016 and November 1, 2016, which are contained on page 149 of the JPMorgan Chase & Co. March 2016 Form 10-Q, on page 166 of the JPMorgan Chase & Co. June 2016 Form 10-Q and on page 169 of the JPMorgan Chase & Co. September 2016 Form 10-Q, respectively, state that they did not audit and they do not express an opinion on the unaudited financial information. Accordingly, the degree of reliance on their reports on such information should be restricted in light of the limited nature of the review procedures applied.
- 5. The Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015 incorporated by reference in this Offering Circular, have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report dated February 24, 2016 appearing on page 1 therein.
- 6. PricewaterhouseCoopers LLP reported that they have applied limited procedures in accordance with professional standards for a review of the unaudited Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at June 30, 2016 and for the six months ended June 30, 2016 and June 30, 2015 incorporated by reference in this Offering Circular. However, their separate report dated August 3, 2016, which is contained on page 83 of such unaudited Consolidated Financial Statements, states that they did not audit and they do not express an opinion on the unaudited

financial information. Accordingly, the degree of reliance on their reports on such information should be restricted in light of the limited nature of the review procedures applied.

- 7. PricewaterhouseCoopers LLP has not audited, reviewed, compiled, or performed any procedures with respect to either (i) the Current Report on Form 8-K of JPMorgan Chase & Co. filed with the SEC on January 13, 2017 containing the earnings press release of JPMorgan Chase & Co. for the quarter ended December 31, 2016, or (ii) the Consolidated Reports of Condition and Income for A Bank With Domestic and Foreign Offices of JPMorgan Chase Bank, N.A. for the quarters ended December 31, 2015, March 31, 2016, June 30, 2016, and September 30, 2016, filed with the U.S. Federal Financial Institutions Examinations Council. Accordingly, PricewaterhouseCoopers LLP does not express an opinion or any other form of assurance with respect thereto.
- 8. The updating of the Program, the aggregate principal amount of Notes that may be issued under the Program and the authority to issue Notes under the Program were approved or ratified pursuant to resolutions adopted by (a) the Board of Directors of JPMorgan Chase & Co. on January 19, 2017 and by the Borrowings Committee of JPMorgan Chase & Co. on January 19, 2017 and (b) the Board of Directors of JPMorgan Chase Bank, N.A. on January 19, 2017 and by the Borrowings Committee of JPMorgan Chase Bank, N.A. on January 19, 2017.
- 9. There has been no material adverse change in the prospects of (a) JPMorgan Chase & Co. or the JPMorgan Chase Group or (b) JPMorgan Chase Bank, N.A. or the JPMorgan Chase Bank Group since December 31, 2015.
- 10. There has been no significant change in the financial or trading position of (a) JPMorgan Chase & Co. or the JPMorgan Chase Group since December 31, 2016 or (b) JPMorgan Chase Bank, N.A. or the JPMorgan Chase Bank Group since June 30, 2016, the most recent dates as of which JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A., respectively, have published unaudited interim consolidated financial information.
- 11. There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which JPMorgan Chase & Co. is aware) during the 12 months preceding the date of this Offering Circular which may have, or have had in the recent past, significant effects on the financial position or profitability of JPMorgan Chase & Co. and/or its subsidiaries, in each case except as disclosed in "Note 23 Litigation" to the unaudited Consolidated Financial Statements of JPMorgan Chase & Co. as of and for the quarter ended September 30, 2016 contained in the JPMorgan Chase & Co. September 2016 Form 10-Q incorporated by reference in this Offering Circular.
- 12. There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which JPMorgan Chase Bank, N.A. is aware) during the 12 months preceding the date of this Offering Circular which may have, or have had in the recent past, significant effects on the financial position or profitability of JPMorgan Chase Bank, N.A. and/or its subsidiaries, in each case except as disclosed in "Note 24 Litigation" to the unaudited Consolidated Financial Statements of JPMorgan Chase Bank, N.A. as at June 30, 2016 and for the six months ended June 30, 2016 and June 30, 2015 incorporated by reference in this Offering Circular.
- 13. The issue price and the amount of the relevant Notes will be determined at the time of the offering of each Tranche based on then prevailing market conditions. Neither Issuer intends to provide any post-issuance information in relation to any issues of Notes.
- 14. The Notes have been accepted for clearance through the Euroclear and Clearstream, Luxembourg systems. The appropriate Common Code and ISIN for each Tranche allocated by Euroclear and Clearstream, Luxembourg and details of any other agreed clearance system will be contained in the relevant Pricing Supplement. Transactions will normally be effected for settlement not earlier than three days after the date of the transaction.
- 15. The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy L-1855 Luxembourg. The address of any alternative clearing system will be specified in the applicable Pricing Supplement.
- 16. No websites that are cited or referred to in this Offering Circular shall be deemed to form part of, or to be incorporated by reference into, this Offering Circular.

# PRINCIPAL OFFICE OF JPMORGAN CHASE & CO.

## PRINCIPAL OFFICE OF JPMORGAN CHASE BANK, NATIONAL ASSOCIATION

270 Park Avenue New York, New York 10017-2070, U.S.A. 270 Park Avenue New York, New York 10017-2070, U.S.A.

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# $Price waterhouse Coopers\ LLP$

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CALCULATION AGENT

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