Comptroller of the Currency
Administrator of National Banks

Washington, DC 20219

Interpretive Letter #1110
February 2009
15 USC 6712
12 USC 24(7)

January 30, 2009

Mr. John J. Vollkommer
Managing Director and Associate General Counsel
JP Morgan Chase Bank, N.A.
270 Park Avenue
New York, New York 10017-2070

Re: Authority of a National Bank to Engage in Financial Intermediation Transactions

Dear Mr. Vollkommer:

This responds to your request that the Office of the Comptroller of the Currency ("OCC") confirm that it is permissible for JPMorgan Chase Bank, N.A. ("Bank") to engage in customer-driven,[1] perfectly matched, cash-settled derivative transactions on longevity[2] indices. The Bank's role in the transactions is to negotiate a specific financial contract referencing a longevity index with one customer and an offsetting, perfectly matched contract with a second customer. The transactions serve the needs of Bank customers to hedge certain types of risk. Acting as a financial intermediary, the Bank transfers the matching contractual payment obligations of the customers when the transactions settle. The payment obligations are not based on any party's actual losses from longevity risks and the Bank is not obligated on any of the underlying risks of the derivative transactions.

For the reasons discussed below, based on the facts and representations provided by the Bank, we believe that the proposed activities are permissible for the Bank. Before the Bank may engage in the transactions, however, the Bank must notify its examiner-in-charge ("EIC"), in writing, of the proposed activities and must receive written notification of the EIC's supervisory no-objection, based on the EIC's evaluation of the adequacy of the Bank's risk measurement and management systems and controls to enable the Bank to engage in the proposed activities on a safe and sound basis, and the EIC's evaluation of any other supervisory considerations relevant to the particular proposal.

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[1] A "customer-driven" transaction is one entered into for a customer's valid and independent business purpose. *See* OCC Interpretive Letter No. 892 (Sept. 13, 2000).

[2] Longevity refers to life expectancy with respect to designated groups within a given population, or an entire population. As life expectancy rates increase, for example, pension funds and other companies may experience higher than expected financial payout obligations. This is longevity risk. As developed below, derivative transactions based on those changes in longevity may help manage this risk.

I. Background

The OCC has long permitted national banks, including the Bank, to act as a financial intermediary in customer-driven, perfectly matched, cash-settled derivative transactions on a wide range of reference assets and indices as part of its financial intermediation business.[3] Perfectly matched derivative transactions are financial arrangements involving exchanges of payments, with the Bank acting as a financial intermediary between customers, a traditional banking function. In these transactions the Bank first negotiates the type, size, and price of the transaction with the customer. Then, if the Bank reaches agreement with the customer, the Bank concurrently will execute an offsetting, perfectly matched transaction with a counterparty. The Bank's transactions with a counterparty will match all the economic terms of the transaction between the Bank and its customer (e.g., index, amount, maturity, and underlying reference asset or index). The Bank will not take an ownership interest in any asset or instrument underlying, or related to an index referenced in, a perfectly matched financial intermediation derivative transaction. Rather, these financial arrangements will settle in cash. These transactions assist customers in managing financial risks associated with a particular commodity, asset or instrument, and in meeting other financial needs.

The Bank now proposes to act as a financial intermediary in customer-driven, perfectly matched, cash-settled derivative transactions on longevity indices as part of its customer-driven financial intermediation business. Under the proposal, the Bank will offer cash-settled swaps, forwards, and options to customers to assist them in managing financial risks associated with longevity risk.

A longevity index derivative, as described here, is simply a contractual payment obligation that involves making payments based on the performance of indices that track the mortality and longevity data of national populations, or other specified populations of substantial size.[4] For example, the Bank may offer a forward transaction referencing a longevity index for a designated age group (e.g., 60-69 years) within a reference population (e.g., males in England). The payments obligations between the counterparties would be based on the degree by which the reference population's mortality rate is lower or exceeds a stipulated level over a specified future time period.[5]

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[3] *See, e.g.*, OCC Interpretive Letter No. 1065 (July 24, 2006); OCC Interpretive Letter No. 1059 (Apr. 13, 2006); OCC Interpretive Letter No.1039 (Sept. 13, 2005).

[4] For example, a standardized longevity index of national life expectancy levels and mortality data may be broken down by country, age, and gender. Other examples would be standardized longevity indices of state or regional populations, specified age groups and/or genders across multiple national populations, and populations of large numbers of individuals employed in certain industries or within other identifiable groups.

[5] Like other financial derivatives, these instruments will have contingent payoffs linked to the performance of certain reference indices, with index values calculated by third parties. The contracted for payment obligations will not bear any relationship to specific losses by any party to the contract.

The payment obligations under these derivatives, which have maximum exposures that are limited and ascertainable, exist regardless of the parties' actual exposure, if any, to the risk referenced in the instrument. The parties' payment obligations are not contingent upon any person having actually suffered an economic loss in order for contingent payment obligations to arise under the contract.[6]

The longevity index derivatives generally will have an agreed notional amount and the maximum payment will be calculable at the inception of each transaction. The Bank, as an intermediary, will receive fees or spreads for arranging the exchange of contractual payment obligations between the counterparties.[7] The reference indices will include the LifeMetrics longevity index (or sub-indices of that index),[8] and other similar broad-based longevity indices.[9]

Under the proposal, the Bank will offer cash-settled longevity index derivatives to customers to assist them in managing financial risks associated with life expectancy and mortality, and meeting other financial needs and related payment obligations. Customers may include pension plans, corporate sponsors of pension plans, insurance companies, structured products investors, and hedge funds. Longevity index derivatives can be used by customers to either take exposure, or hedge exposure, to the longevity and mortality experience of a given population of individuals.[10] These transactions may be used by customers as a cost effective means to

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[6] Specifically, in its role as a financial intermediary the Bank proposes to offer several structures of longevity derivative products that involve exchanges of payments linked to the level of an index. A longevity index forward, referred to by the Bank as a "q-Forward," for example, is a zero-coupon swap structure that exchanges payments based on the fixed mortality rate of a population agreed to at the contract's inception and the actual (realized) mortality rate observed at a future date.

[7] In some instances, the Bank may be recovering its fee through a spread. The transactions are matched, but there will be one economic difference that is fixed at the onset of the transaction and designed as the way the Bank captures its intermediation fee, e.g., through a spread of Libor + 20. In this context, the terms "fee" and "spread" are synonymous.

[8] The "LifeMetrics Index" is an index based on life expectancy and mortality data released by government agencies responsible for recording national statistics. The index currently publishes values for the United States, England and Wales, the Netherlands, and Germany. The Bank's holding company, JPMorgan Chase & Co., along with the Bank and other advisors, developed the index as part of the overall LifeMetrics platform aimed at measuring and managing longevity and mortality risks. *See* News Release: *JPMorgan Launches Longevity Index* (Mar. 13, 2007). The methodology for creating LifeMetrics Index data from the raw data is transparent and documented in the Technical Document available publicly from the LifeMetrics website. Index calculations are performed by an independent third party calculation agent. *See* http://www.lifemetrics.com.

[9] In anticipation of customer demand, the Bank also requests permission to reference future indices of a nature similar to the LifeMetrics Index, including other newly developed broad-based longevity indices based on national population data for different countries or other large populations within or across nations. The Bank's request only encompasses the future development of other indices that would be based on data compiled on a large number of people, originated from credible sources, compiled in a consistent and robust manner, and of high quality. Likewise, any future published index would meet the guiding requirements of the LifeMetrics Index, which include: transparency, objectivity, clarity of calculation, broad scope, and integrity.

[10] For example, changes in the corporate pension plan landscape with increased life expectancies, improved healthcare, and pension regulation and accounting changes, are driving an increasing need for the transfer of longevity risk. Pension plans, their advisers, and finance professionals, are seeking capital markets products for

diversify their investment portfolios. The Bank represents that it will not be entering into these longevity transactions with retail customers. Representative examples of the proposed transactions are described below.

Example 1: A pension plan is interested in hedging its longevity risk ten years into the future. To mitigate that exposure, the pension plan enters into a forward transaction with the Bank. Under the longevity index forward, the pension plan will make a payment to the Bank if the actual mortality rate of the relevant LifeMetrics Index for the reference age group exceeds an agreed upon fixed rate at a future date. The Bank will make a payment to the pension plan if the actual mortality rate is lower than the fixed rate (i.e., mortality rates have fallen). The Bank offsets the transaction with a perfectly matched longevity index forward with a counterparty. The Bank's role, for which it is paid a fee, is purely one of a financial intermediary between the financial positions of the two parties.

Example 2: An asset manager takes on longevity risk exposure by entering into a longevity index forward with the Bank. The asset manager wants to enter into transactions where it has the ability to earn a risk premium in exchange for taking on longevity risk. The asset manager will make a payment to the Bank if the actual mortality rate of the reference population is lower than the agreed upon fixed rate at a future date (i.e., more people live longer). The Bank will make a payment to the asset manager if the actual mortality rate exceeds the agreed upon fixed rate. The Bank offsets the transaction by entering into a perfectly matched forward with a counterparty, such as the corporate sponsor of a pension plan. The Bank's role, for which it is paid a fee, is purely one of a financial intermediary between the financial positions of the two parties.

Example 3: An investment fund is interested in diversifying its portfolio with longevity exposure. The investment fund obtains exposure to longevity risk by entering into a longevity index swap with the Bank. Under the swap, the investment fund will receive an amount tied to increases in the actual mortality rate of a given population reflected by the longevity index. The Bank will receive an amount tied to decreases in the actual mortality rate. The Bank offsets the transaction by entering into a perfectly matched swap transaction with a counterparty, such as an insurance company. The Bank's role, for which it is paid a fee, is purely one of a financial intermediary between the financial positions of the two parties.

The Bank will manage legal, compliance, and counterparty credit risk in the transactions, in part, by the use of ISDA Master Agreements, including Credit Support Annexes, where appropriate, to evidence and govern the transactions.[11] The Bank will further manage credit risk with respect to its counterparties through approved credit lines. The Bank operates extensive credit risk

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managing longevity risk going forward. *See, e.g.*, F. Kabbaj and G. Coughlan, *Managing Longevity Risk Through Capital Markets* (Sept. 2007).

[11] The Bank represents that there currently is no industry standard form for confirming longevity risk derivatives, thus the Bank plans to use its own form that will substantively reflect similar information as is provided in ISDA confirmations used for other instruments.

management policies, which require counterparties, including affiliates,[12] to post collateral where appropriate. Those policies also will apply to the proposed transactions. Also, because the derivatives will expose the Bank to operational risk under the Basel II Advanced Approaches rule, the operational risk data and assessment systems and operational quantification systems established by the Bank for that rule will need to include the risks posed by these derivatives. All longevity index derivative transactions will be subject to the Bank's Appropriateness Policy, and may be subject to review by the Bank's Reputation Risk Committee.[13]

The Bank states that its ability to engage in the proposed transactions will enable it to compete more effectively, deliver a complete suite of customer-driven products, and capitalize on its financial intermediation expertise. The Bank represents that it has identified two-way demand for longevity risk derivatives, and that in conducting this activity it will use the extensive financial intermediation knowledge and expertise that it has acquired in relation to other derivatives businesses. The major difference between the perfectly matched financial intermediation transactions currently engaged in by the Bank and the proposed activities is that the derivative transactions here will reference longevity indices.

The Bank represents that the terms and circumstances of all transactions between the Bank and its affiliates in conducting these transactions will be at least as favorable to the Bank as those prevailing at the time for comparable transactions between the Bank and similarly situated counterparties or will be such that the Bank, in good faith, would offer to, or that would apply to, such entities. The Bank states that it will comply with the requirements of sections 23A and 23B of the Federal Reserve Act, the Federal Reserve Board's Regulation W, and the Bank's policies designed to ensure compliance with these requirements when engaging in the proposed longevity index derivative transactions.

II. Discussion

For the reasons discussed below, based on the facts and representations provided by the Bank, we conclude that the bank may engage in customer-driven, perfectly matched, cash-settled longevity index derivative transactions as described in this letter. Before the Bank may engage in the transactions the Bank must notify its EIC, in writing, of the proposed activities and must receive written notification of the EIC's supervisory no-objection. The no-objection is based on the EIC's evaluation of the adequacy of the Bank's risk measurement and management systems and controls to enable the Bank to engage in the proposed activities on a safe and sound basis, and the EIC's evaluation of any other supervisory considerations relevant to the proposal.

The proposed longevity index derivative transactions are permissible for the Bank under OCC precedent finding national banks may engage in customer-driven index derivative transactions as

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[12] The Bank may act as financial intermediary in customer-driven, perfectly matched, cash-settled longevity derivative transactions where a counterparty is a Bank affiliate.

[13] The Bank will not assume market risk in connection with the proposed transactions since it will perfectly match all of the proposed longevity transactions.

permissible financial intermediation activity under 12 U.S.C § 24(Seventh). The OCC previously has concluded that national banks may engage in index derivative transactions and hedges, such as options, forwards, and swaps, as part of a bank permissible financial intermediation business.[14] These derivative and hedging activities involve exchanges of payments with the bank acting as a financial intermediary between customers, which is a traditional and permissible banking function. For example, a bank may enter into a swap transaction involving the exchange of fixed payments for payments based on a property index,[15] and then assume an offsetting swap position or hedge. In assuming an offsetting swap, the bank acts as a financial intermediary interposing itself between customers who initiate swaps and counterparties providing offsetting cash flows or returns. The derivative transactions assist bank customers in managing financial risks or meeting other financial needs.

Banks have long served as financial intermediaries between customers, most traditionally by taking deposits and making loans, to facilitate the flow of funds in the economy and meet various customer financial needs. National bank derivative activities may extend beyond traditional deposit taking and lending, but these activities are, at their essence, modern forms of financial intermediation. Through intermediated exchanges of payments, banks facilitate the flow of funds within our economy and serve important financial risk management and other financial needs of bank customers.[16]

Based on these principles, in Interpretive Letter No. 1065, the OCC concluded that national banks may engage as a financial intermediary in customer-driven, perfectly matched, cash-settled derivative transactions with payments based on indices related to a number of commodities.[17] Other indices the OCC has approved for national bank financial intermediary activity include transactions on equity indices, credit derivative indices, and inflation indices, among others.[18]

The Bank currently engages in a variety of financial intermediation transactions involving a wide range of reference assets and indices. In OCC Interpretive Letter No. 1039, the OCC determined

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[14] *See, e.g.,* OCC Interpretive Letter No. 1089 (Oct. 15, 2007); OCC Interpretive Letter No. 1081 (May 15, 2007); OCC Interpretive Letter No. 1079 (Apr. 19, 2007); OCC Interpretive Letter No. 1065 (July 24, 2006); and OCC Interpretive Letter No. 1039 (Sept. 13, 2005).

[15] *See, e.g.,* OCC Interpretive Letter No. 1081, *supra*.

[16] The OCC has permitted national banks to engage in a variety of financial intermediation transactions, where a bank notifies its EIC, in writing, of the proposed activities and receives written notification of the EIC's supervisory no-objection. The no-objection is based on the EIC's evaluation of the adequacy of the Bank's risk measurement and management systems and controls to enable the Bank to engage in the proposed activities on a safe and sound basis, and the EIC's evaluation of any other supervisory considerations relevant to the particular proposal.

[17] *See* OCC Interpretive Letter No. 1065, *supra* (derivative transactions on reference assets and related indices such as agricultural oils, grains, seeds, fibers, foodstuffs, livestock/meat products, wood products, plastics, fertilizer).

[18] *See, e.g.,* OCC Interpretive Letter No. 949 (Sept. 19, 2002) (equity indices); OCC Interpretive Letter No. 1064 (July 13, 2006) (credit derivative index); and OCC Interpretive Letter No. 1079, *supra* (inflation indices). *See also* OCC Interpretive Letter No. 1101 (July 7, 2008) (risk indices associated with natural events and catastrophes).

that the Bank may engage in customer-driven, perfectly matched, cash-settled derivative transactions with payments tied to a range of reference assets and indices identified in that letter as part of bank permissible financial derivative transactions.[19] Similarly, in OCC Interpretive Letter Nos. 1081 and 1089, the OCC specifically determined that a national bank may engage in customer-driven, perfectly matched, cash-settled derivative transactions on property-related indices as bank permissible financial intermediation transactions. More recently, in OCC Interpretive Letter No. 1101, the OCC permitted a national bank to engage in transactions referencing risk indices associated with designated types of natural events and catastrophes.[20]

On the basis of the legal analysis set forth in prior OCC interpretive letters, including OCC Interpretive Letter Nos. 1039, 1079, 1081, and 1101, we conclude that the Bank may act as a financial intermediary in customer-driven, perfectly matched, cash-settled derivative transactions on longevity indices as described in this letter.[21] The proposed transactions involve payments analogous to those under swaps and other derivative transactions that the OCC has determined national banks may engage in as financial intermediaries. The expansion of the Bank's derivatives business to include the proposed activities is a natural extension of the Bank's financial intermediation businesses.

The Bank's role in the proposed transactions will be the same financial intermediation activity already approved by the OCC with respect to other types of risks and indices. The Bank will exchange payments with one customer and then exchange offsetting payments with another counterparty, based, in part, on the performance of a longevity index, rather than an already authorized index related to, for example, coal or property, but, still serving as a financial intermediary facilitating the flow of funds in the economy.

By engaging in the described activities, the Bank will not be providing insurance in a state as principal, as generally prohibited by section 302 of the Gramm-Leach Bliley Act of 1999 ("GLBA").[22] The Bank's role essentially is that of a middleman in arranging the exchange of

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[19] *See* OCC Interpretive Letter No. 1039, *supra* (derivative transactions on reference assets and related indices such as jet fuel, naphtha, ethane, propane, butane, coal, benzene, dairy cattle, coffee, rubber, cobalt, and freight). *See also* OCC Interpretive Letter No. 1040 (Sept. 15, 2005) (emissions allowances derivatives transactions).

[20] OCC Interpretive Letter No. 1101 (July 7, 2008) (catastrophe risk derivatives transactions).

[21] We note that while there is a connection between the Bank and the LifeMetrics Index, the LifeMetrics Index values are calculated by an independent calculation agent from the raw death and population data released by government agencies, and the Index is overseen by an international advisory committee whose members include experienced consultants, leading academics, industry practitioners, and Bank employees. *See supra* at footnote 7. The LifeMetrics platform is transparent with methodology, algorithms, and calculations fully documented and freely available. *See, e.g.,* LifeMetrics Technical Document at http://www.jpmorgan.com/Lifemetrics.

[22] Pub. L. No. 106-102, 113 Stat. 1338, § 302 (Nov. 12, 1999). Section 302 does not apply to products that are not "insurance" under the section's definition. *See* 15 U.S.C. § 6712(c). In particular, the proposed transactions fall within the plain meaning of a "qualified financial contract" ("QFC") as defined in the Federal Deposit Insurance Act, and as specifically excluded from the GLBA's section 302(c)(2) definition of insurance for products first offered after January 1, 1999. *See* 12 U.S.C. § 1821(e)(8)(D)(i) (QFCs include swap agreements, forwards, and other similar agreements). The Bank represents to the best of their knowledge that the described products under review here were not offered prior to January 1, 1999.

payments related to financial contracts. The Bank also represents it will not enter into any longevity index transactions with an insurer referencing losses on an insurer's own policies.

The proposed transactions will not result in any substantive change in the type or nature of financial intermediation activities provided by the Bank, but only in its underlying basis (i.e., longevity indices). As illustrated above, the offering of these longevity-indexed derivative products will enable bank customers to manage their exposure to longevity risk and meet other financial risk management needs. Accordingly, we conclude that the Bank's proposed transactions constitute permissible financial intermediation activities, and therefore the Bank may engage in the proposed activities subject to safety and soundness requirements and a written no-objection from its EIC.

III. Safety and Soundness Requirements and EIC No-Objection

For the Bank to permissibly engage in the proposed activities, the Bank's risk measurement and management capabilities must be of appropriate sophistication to ensure that the activity can be conducted in a safe and sound manner and in accordance with applicable law. Consequently, in order for the OCC to conclude that this activity is permissible for the Bank, the Bank must provide written notice of the proposed activities to its EIC and must demonstrate to the satisfaction of its EIC, that the Bank has established an appropriate risk measurement and management process for its proposed activity. As detailed further in the *OCC Handbook: Risk Management of Financial Derivatives*[23] and Banking Circular 277,[24] an effective risk measurement and management process includes board supervision, managerial and staff expertise, comprehensive policies and operating procedures, risk identification and measurement, and management information systems, as well as an effective risk control function that oversees and ensures the appropriateness of the risk management process. Consistent with 12 C.F.R. Part 3, Appendix C, Section 22(h), the Bank will establish and maintain operational risk data and assessment and operational quantification systems, and other appropriate management processes, reflecting the risk and controls over longevity index derivatives. The Bank's risk control processes should include the Bank's compliance with accounting, reporting, and capital as stipulated by the instructions for the Consolidated Reports of Condition and Income and generally accepted accounting principles.

In addition to a satisfactory risk management program, the Bank's process must include an independent compliance monitoring program to ensure ongoing compliance with the specific commitments made by the Bank relating to new derivatives activities, including the commitment to continue to conduct its financial intermediation activities as a customer-driven business. In addition, the compliance-monitoring program should ensure that the Bank has a supervisory framework that protects against manipulative practices of any kind. An adequate and effective

[23] OCC Handbook: *Risk Management of Financial Derivatives* (Jan. 1997).

[24] OCC Banking Circular No. 277 (Oct. 27, 1993).

compliance-monitoring program will include policies, training, independent surveillance and well-defined exception approval and reporting procedures.

The Bank may not commence the proposed activities unless and until its EIC concludes that the foregoing standards are met and provides a written supervisory no-objection to the Bank. Provided these standards are met, the Bank may commence the proposed activities.

IV. Conclusion

We conclude that the Bank may act as a financial intermediary in customer-driven, perfectly matched, cash-settled derivative transactions on longevity indices as described above. Before the Bank may engage in the transactions, the Bank must notify its EIC, in writing, of the proposed activities and must receive written notification of the EIC's supervisory no-objection, based on the EIC's evaluation of the adequacy of the Bank's risk measurement and management systems and controls to enable the Bank to engage in the proposed activities on a safe and sound basis, and the EIC's evaluation of any other supervisory considerations relevant to the particular proposal. Our conclusions are specifically based on the Bank's representations and written submissions describing the facts and circumstances of the subject transactions. Any change in the facts or circumstances could result in different conclusions. If you have any questions concerning this letter, please contact Suzette H. Greco, Senior Counsel, Securities and Corporate Practices Division, at (202) 874-5210.

Sincerely,

signed

Julie L. Williams
First Senior Deputy Comptroller
And Chief Counsel