Private Markets

April 18, 2024

Global Credit Weekly:

Transatlantic divergence

BlackRock

FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

Market insights contributors

Amanda Lynam, CPA

Head of Macro Credit Research,
Portfolio Management Group –
Private Markets

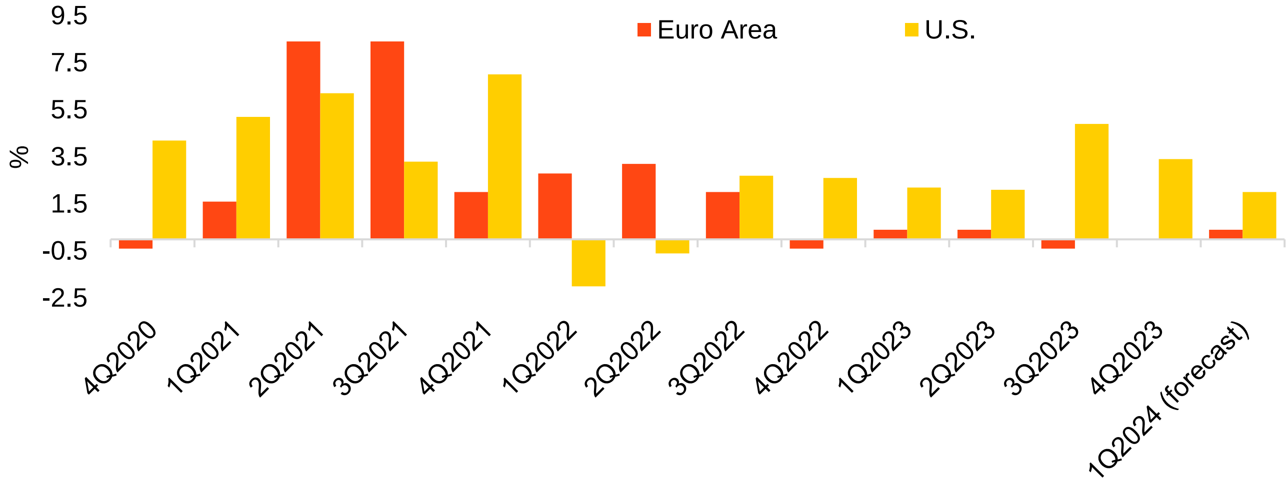
Dominique Bly

Macro Credit Research Strategist,
Portfolio Management Group –
Private Markets

Key takeaways

- The Federal Reserve (Fed) and European Central Bank (ECB) embarked on rate hiking cycles within a few months of each other in 2022 (May and July, respectively), and both central banks have been "on hold" at levels they view as restrictive since 3Q2023 (Exhibit 2). While these central bank tightening cycles have been similar, we see potential for divergence related to the (eventual) start of easing. Three factors underpin this view: (1) growth differentials between the U.S. and the Euro Area (Exhibit 1); (2) upside surprises in U.S. inflation data over the past three months, and (3) recent public commentary from central bank officials in both regions (outlined within).
- We see potential for the ECB to begin its rate cutting cycle in June. And while we still expect the Fed to begin its easing cycle in 2H2024, we no longer view the risks to that (relatively wide) timeframe as skewed to the earlier side. Rather, we now view them as more balanced.
- USD credit spreads have widened moderately over the past several sessions but remain well inside of their post-financial crisis average levels. As we outlined in the *2Q2024 Global Credit Outlook*, we expect the yield vs. spread "tug of war" will continue to be a dominant relative value theme in the medium-term. While scope for meaningful spread tightening is likely limited due to a range of factors (some renewed monetary policy uncertainty, geopolitical concerns, debt supply "re-starting" post-earnings), we expect many segments of corporate credit will be supported by yield-based buyers.
- Separately, the U.S. consumer remains quite strong in aggregate – as evidenced by stronger than anticipated March retail sales (and upward revisions to February). In early March, we highlighted the dispersion across the consumer credit landscape – both by credit *type* (auto, credit card, mortgage) and credit *risk* (subprime, near prime, prime). In this *Global Credit Weekly*, we utilize recent data to examine consumer perceptions of their financial situations, as well as the performance of consumer credit. The key takeaway: the trend of bifurcation continues.

Exhibit 1: U.S. growth continues to outpace its Euro Area peer
Quarter-on-quarter real GDP growth (%), seasonally adjusted at an annualized rate



Source: BlackRock, Bureau of Economic Analysis, Eurostat. 1Q2024 forecasts use the Bloomberg Contributor Composite as of April 17, 2024. Growth projections may not come to pass.

Transatlantic divergence

The Fed and ECB embarked on rate hiking cycles within a few months of each other in 2022 (May and July, respectively), and both central banks have been "on hold" at levels they view as restrictive since 3Q2023 (Exhibit 2). While these central bank tightening cycles have been similar, we see potential for divergence related to the (eventual) start of easing. Three factors underpin this view:

- The persistent growth differential between the U.S. and the Euro Area (Exhibit 1). At an April 17th speech hosted by the Council on Foreign Relations (CFR), ECB President Christine Lagarde attributed the EU's "mediocre" growth, in part, to a combination of lower productivity and the lack of a capital markets union to finance innovation.
- The upside surprises in U.S. inflation data over the past three months, as detailed last week, and
- Recent public commentary from central bank officials in both regions (outlined below)

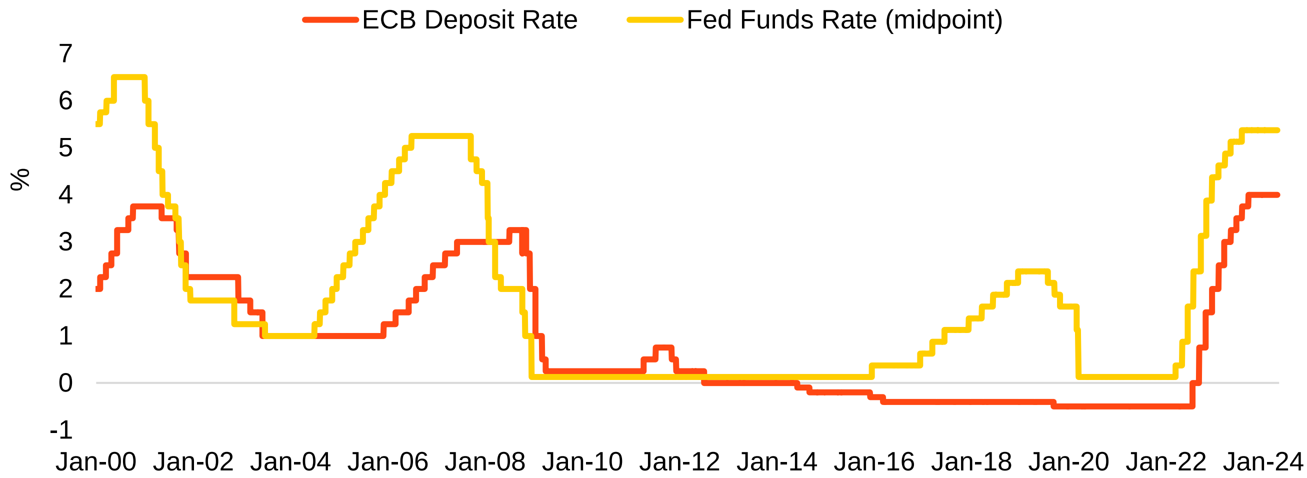
Fed: Additional signaling towards "high for longer"

Fed Chair Jerome Powell spoke at the Washington Forum on the Canadian Economy this week (April 16th), which followed stronger than expected U.S. March CPI data (released April 10th). As we highlighted last week, this inflation data reflected stalled progress on the inflation fight, in our view, as it (1) was the third consecutive month of an upside surprise, and (2) was broad based in terms of category contributions.

Indeed, at the April 16th event Chair Powell said that while recent U.S. economic data show solid growth and continued strength in the labor market, it also reflects "a lack of further progress so far this year on returning to our 2% inflation goal." He added that it is "likely to take longer than expected" to achieve confidence that inflation is moving sustainably toward 2%, which the FOMC has outlined as a precondition to beginning a rate cut cycle. Chair Powell remarked that "if higher inflation does persist, we can maintain the current level of restriction for as long as needed." He added that "given the strength of the labor market and progress on inflation so far, it is appropriate to allow restrictive policy further time to work and let the data and the evolving outlook guide us."

The comments from Chair Powell followed similar remarks from Vice Chair Philip Jefferson earlier that day, during a speech at the International Research Forum on Monetary Policy. He said that "while we have seen considerable progress in lowering inflation, the job of sustainably restoring 2% inflation is not yet done." The Vice Chair added that his "baseline outlook continues to be that inflation will decline further, with the policy rate held steady at its current level…if incoming data suggest that inflation is more persistent than I currently expect it to be, it will be appropriate to hold in place the current restrictive stance of policy for longer."

Exhibit 2: The hiking cycles of the Fed and ECB have been similar
Monetary policy rates for the European Central Bank and Federal Reserve



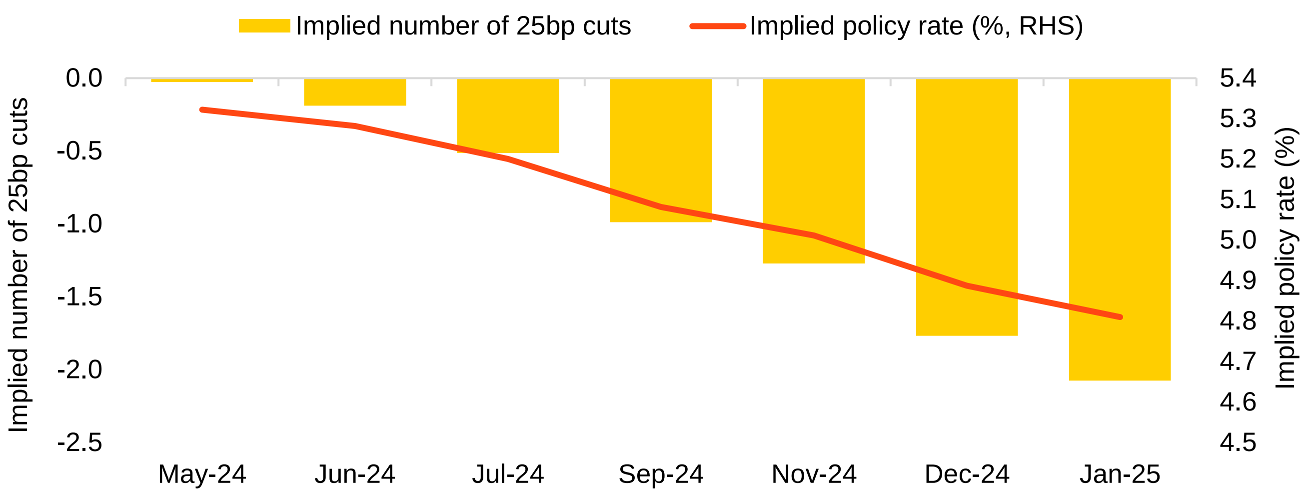
Source: BlackRock, European Central Bank, Federal Reserve, Bloomberg. As of April 17, 2024.

Some committee members are still directly pointing towards a potential rate cut this year, however. In an interview with Bloomberg this week (April 15th), New York Fed President John Williams said he does not see the stronger than expected inflation data in recent months as a "turning point," instead noting that "unusually low" inflation readings in 2H2023 are now being met with "unusually high" inflation readings in recent months. He acknowledged, however, that "inflation is coming down a little bit slower than expected."

Williams added that "monetary policy is in a good place" to drive continued progress on inflation, and that with inflation "gradually" declining, his view is that "the process to bring interest rates back to more normal levels…will likely start this year" – pointing to real rates in restrictive territory. That said, he noted that the "bumpy road" on inflation warrants a data dependent approach.

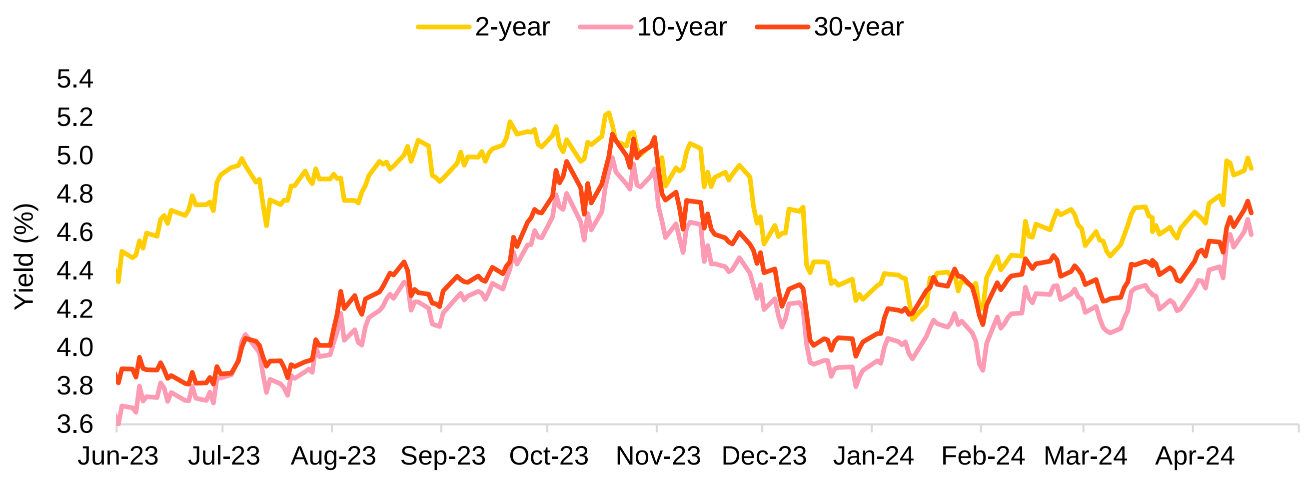
Taken together, the collection of Fed speak this week – coupled with stronger than expected U.S. March retail sales (+0.7% vs. Bloomberg consensus estimates for +0.4%) – caused the market to further temper its expectations for near-term rate cuts. Implied market pricing for rate cuts by early 2025 stood at roughly 50bp as of April 17th (Exhibit 3) – which is a long way from the six cuts priced at the start of the year. Beyond the market's (re)pricing of the policy rate, U.S. Treasury yields also drifted higher earlier in the week, before retracing a bit by mid-week (Exhibit 4).

Exhibit 3: In the U.S., two rate cuts are expected – per market pricing – by January 2025
The Federal Reserve monetary policy rate implied by Fed Funds Futures and the implied number of 25bp rate cuts, both through early 2025



Source: BlackRock, Bloomberg. As of April 17, 2024. Market pricing forecasts may not come to pass.

Exhibit 4: U.S. Treasury yields are hovering near their late 2023 levels
Yield-to-worst of the 2-year, 10-year and 30-year U.S. Treasuries (on-the-run securities, mid levels)



Source: BlackRock, Bloomberg. As of April 17, 2024.

ECB: We see potential for a rate cut in June

At the ECB's April 11th press conference, President Lagarde's statement included new language related to the Governing Council's reaction function, stating: "If our updated assessment of the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission were to further increase our confidence that inflation is converging to our target in a sustained manner, it would be appropriate to reduce the current level of monetary policy restriction."

Alongside this, President Lagarde noted some "further moderation in wage growth" from recent indicators, and (again) pointed to forthcoming data in June, as she has in prior conferences. The improvement on wages is important, in our view, given the persistently high domestic price pressures (which have been keeping services inflation elevated).

While President Lagarde stressed a data dependent approach and made clear that the ECB was "not pre-committing to a particular rate path," we nonetheless see potential for the first ECB rate cut to be delivered in June. As Exhibit 5 illustrates, market pricing largely reflects this view, as well.

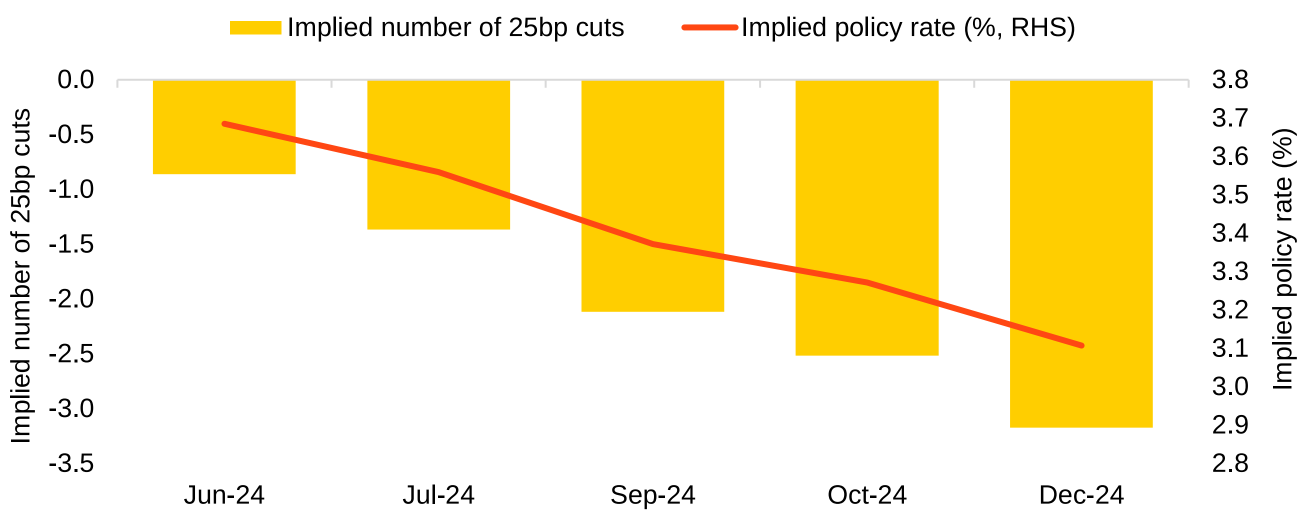
Monitoring the foreign exchange channel

President Lagarde was asked repeatedly about the potential interactions with U.S. monetary policy, specifically if the ECB were to cut rates before the Fed (as this may cause a weaker Euro vs. the U.S. Dollar). She noted that "we are data dependent, we are not Fed dependent" and added that she would not speculate what other central banks may or may not do. At the ECB conference and again at the CFR speech this week, President Lagarde noted that while the ECB does not target exchange rates, it monitors developments including the movement of currencies very carefully given the potential to cause "imported inflation". She said factors such as these are included in ECB projections, so as to not be "blindsided."

For his part, Chair Powell also acknowledged the importance of monitoring the foreign exchange channel when setting monetary policy decisions, given the U.S. Dollar's status as the principal reserve currency. He noted that this has the potential to strengthen the transmission of U.S. monetary policy throughout the global economy, and the resulting effects on global demand can then rebound to the U.S.

For this reason, Chair Powell noted that the Fed has a "special obligation" to be "transparent and predictable." While international spillovers are an important consideration according to Powell, he said the most important thing the Fed can do to support the global economy is to deliver on its dual mandate of price stability and maximum employment in the U.S.

Exhibit 5: Market pricing reflects slightly more than three ECB rate cuts by December 2024
The European Central Bank monetary policy rate implied by Overnight Index Swaps and the implied number of 25bp rate cuts, both through late 2024



Source: BlackRock, Bloomberg. As of April 17, 2024. Market pricing forecasts may not come to pass.

A temperature check on the U.S. consumer

The U.S. consumer - which represents approximately 68% of U.S. gross domestic product – has been a key driver of the resilient U.S. growth backdrop over the past several quarters. In early March, we highlighted the dispersion across the consumer credit landscape – both by credit *type* (i.e., auto, credit card, mortgage) and credit *risk* (i.e., subprime, near prime, prime).

In this *Global Credit Weekly*, we utilize recent data to examine consumer perceptions of their current and future financial situation. We also assess how higher rates and tighter bank lending standards are impacting consumer credit performance (delinquencies, credit scores, etc.).

To begin, we leverage the Federal Reserve Bank of New York's March 2024 Survey of Consumer Expectations, which is a monthly survey engaging 1,300 household heads (on a rotating panel) across the U.S., to better understand consumer sentiment. The survey dates back to 3Q2012, and monitors changes in consumer expectations of inflation, the labor market, and household finances, over time.

Consumers are more positive vs. one year ago

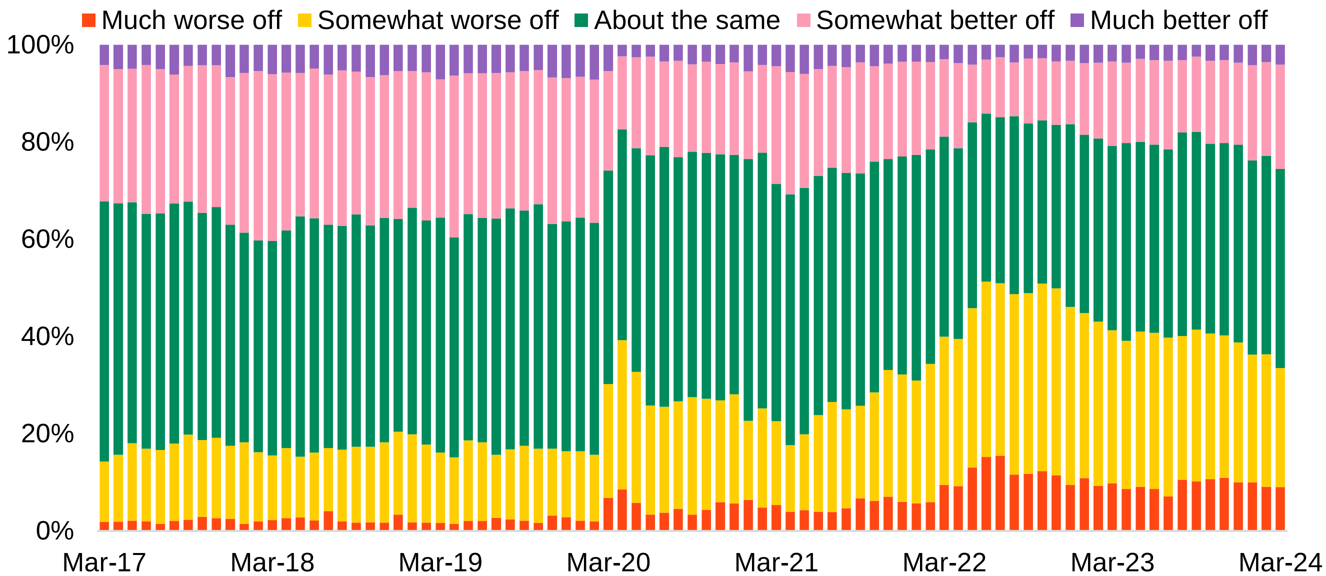
According to the March 2024 Survey of Consumer Expectations, consumers are (gradually) more positive about their financial situation today, versus their financial situation one year ago (Exhibit 6). For context, June 2022 marked the most negative reading on record (again, dating back to 3Q2012), with 51% of consumers perceiving that they were worse off (characterized by "much worse off" and "somewhat worse off") than the year prior.

Similarly, consumer expectations of the *future* are slowly transitioning to be more positive. The percentage of consumers who expect their financial situation in one year to be "much worse off" than their current financial situation fell to its lowest level since October 2020 (Exhibit 7). The percentage of consumers that were broadly negative about their financial futures (characterized by "much worse off" and "somewhat worse off") has also slowly declined from its peak in June 2022.

Peak negativity about financial situations (both current and future) coincided with the local peak in U.S. CPI (+9.1% year-over-year) in June 2022. Following this peak, both inflation and consumer negativity began to fall, suggesting that high inflation is a key contributor to negative consumer sentiment.

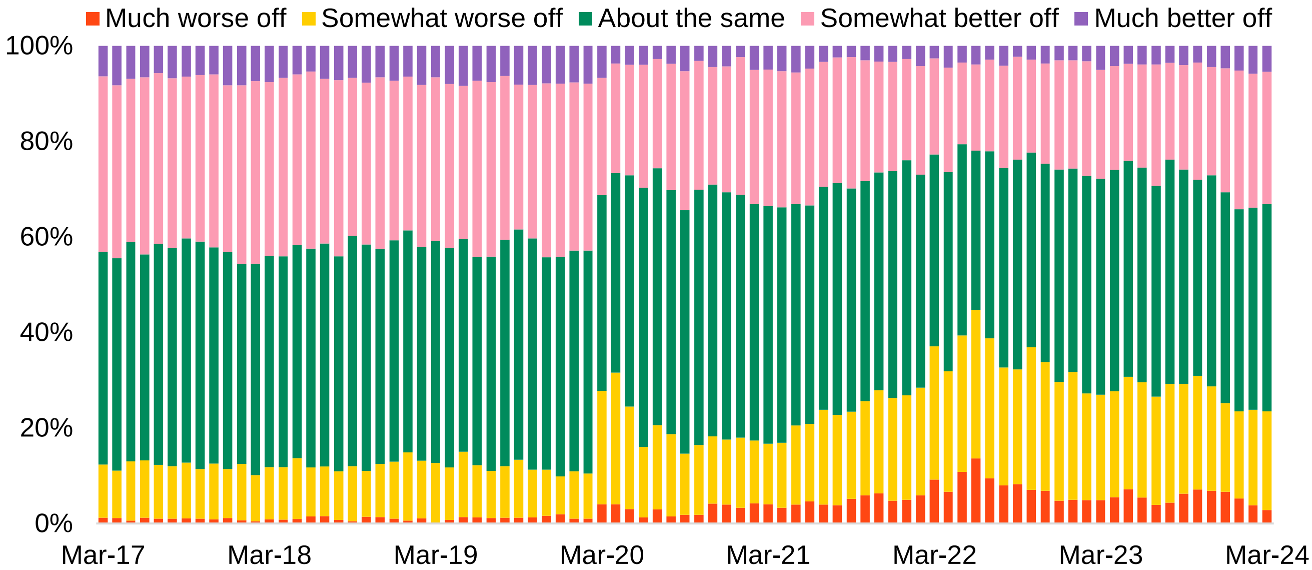
Despite progress toward more positive sentiment, however, there is still a ways to go to return to the pre-pandemic levels (again, Exhibits 6 and 7). A sustained reacceleration in inflation would likely derail this positive momentum, in our view.

Exhibit 6: Consumers believe their financial situation has improved vs. last year
Perception of current financial situation versus one year ago, as a percent of total responses



Source: BlackRock, New York Federal Reserve Bank Survey of Consumer Expectations. As of March 2024.

Exhibit 7: Consumers are more positive about their future financial situation
Expectation of future financial situation (one year from now) versus current financial situation, as a percent of total responses



Source: BlackRock, New York Federal Reserve Bank Survey of Consumer Expectations. As of March 2024.

(Improving) perceptions vs. (deteriorating) reality in consumer credit

While consumer *perceptions* of their current and future financial situation are gradually recovering, the data on the actual *performance* of outstanding consumer credit paint a more challenging picture – again highlighting dispersion we flagged several weeks ago.

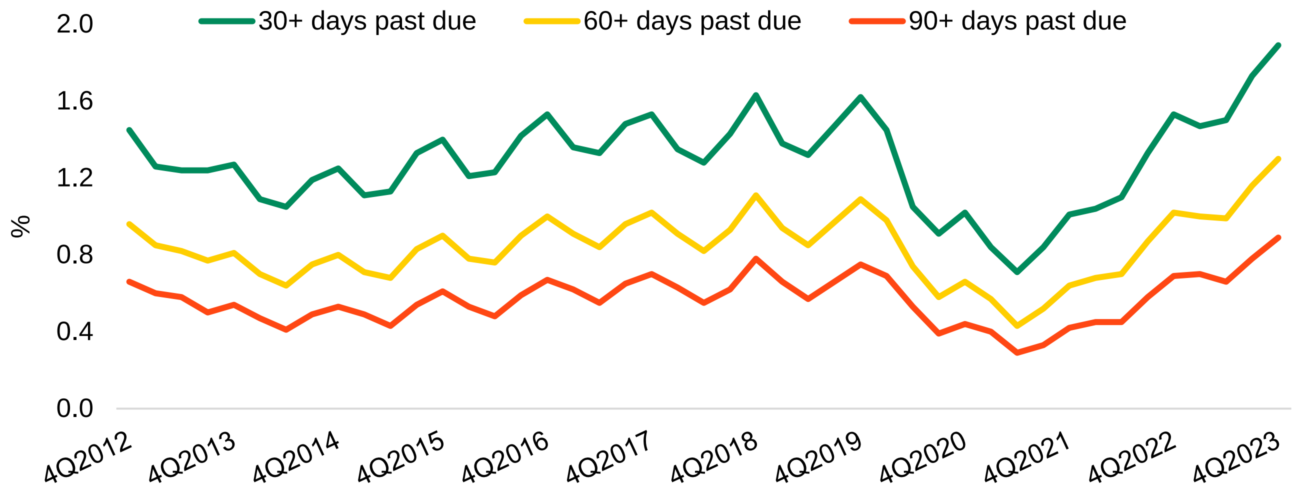
Large Bank Credit Card and Mortgage Data, aggregated by the Philadelphia Federal Reserve (Philadelphia Fed), provides a window into the health of the U.S. consumer by utilizing credit data from U.S. financial institutions.

Exhibit 8 illustrates an unprecedented uptick in accounts with overdue balances in 4Q2023, potentially signaling heightened consumer stress – at least in some pockets. While an increase in past due accounts is (seasonally) common in the fourth quarter (driven in part to holiday spending), the uptick in 30+ day and 60+ day delinquencies is the largest since records started in 2012. Further, the percentage of accounts making minimum payments rose to nearly 11% in 4Q2023, versus an average of 9.23% from 3Q2013 - 3Q2023.

The data also show that U.S. consumers are concerned about paying off debts in the coming months. According to the New York Federal Reserve Bank Survey of Consumer Expectations, the average perceived probability of missing a minimum debt payment over the next three months rose by 1.5 percentage points to 12.9%, the highest reading since April 2020 (Exhibit 9).

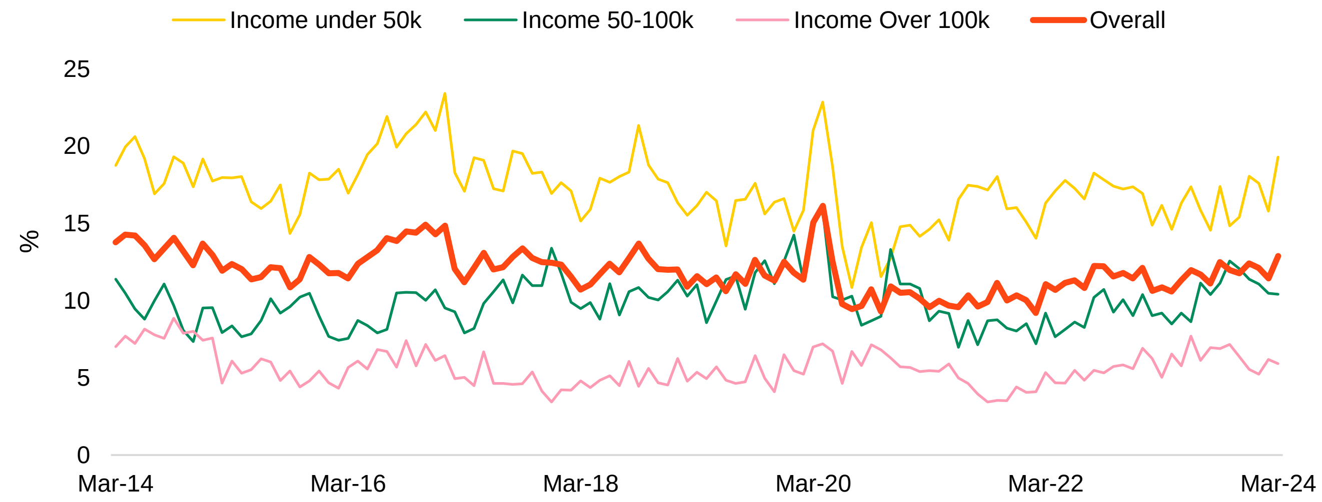
The increase is most pronounced among respondents with annual income below $50,000, of which 19.3% expect to miss the minimum debt payment over the next three months. The percentage of consumers expected to default in the lowest income cohort is roughly twice the middle-income group and more than three times for the highest earners, underscoring the dispersion that exists among consumers. Intuitively, lowest income consumers are under the most stress.

Exhibit 8: Credit card accounts past due reach new post-financial crisis highs
Percent of credit card accounts with past due balances, by days past due, as a percentage of total credit card accounts



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. Note: Credit card data include consumer bankcards only and exclude small business, corporate, and consumer charge cards. Credit card balances in the aggregate FR Y-14M data are estimated to represent roughly four-fifths of total U.S. bankcard balances.

Exhibit 9: Debt delinquency expectations tick up for the lowest income cohort
Mean probability of not being able to make minimum debt payment over the next three months



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. Note: Credit card data include consumer bankcards only and exclude small business, corporate, and consumer charge cards. Credit card balances in the aggregate FR Y-14M data are estimated to represent roughly four-fifths of total U.S. bankcard balances.

Credit standards for new consumer credit originations are tight

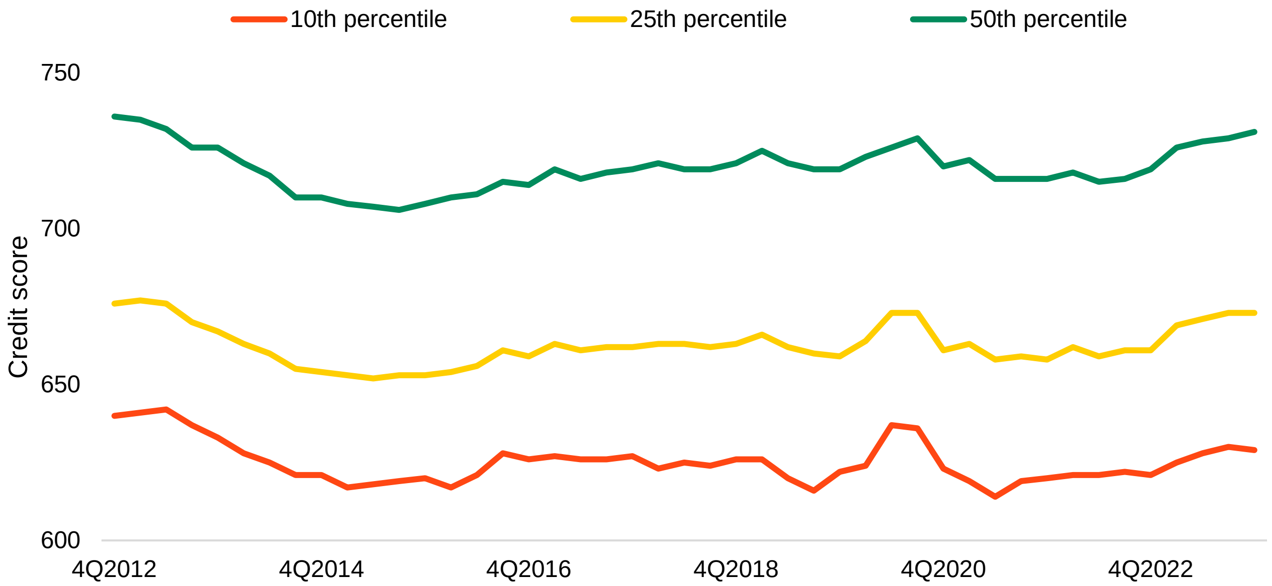
Multifaceted headwinds, including the deteriorating performance of consumer credit cards, have focused credit originators on reassessing lending standards. Indeed, the January 2024 Senior Loan Officer Opinion Survey (SLOOS) notes that U.S. banks expected additional tightening in consumer loan lending standards (including credit cards, new and used auto loans, and other consumer loans) going into the new year.

Understanding the profile of consumers receiving new credit can help characterize where underwriting standards (and lender appetite) exist today. Median credit scores at origination, as illustrated in Exhibit 10, jumped roughly 15 points across all rating percentiles from their post-pandemic lows, suggesting that lenders are being more selective in providing new financing to consumers.

Of those that gained access to new financing, the median credit limit at origination declined versus previous quarters, likely due to recent deteriorations in credit performance, according to the Philadelphia Fed (Exhibit 11).

Exhibit 10: Credit scores at origination increase as banks raise the bar for new borrowers

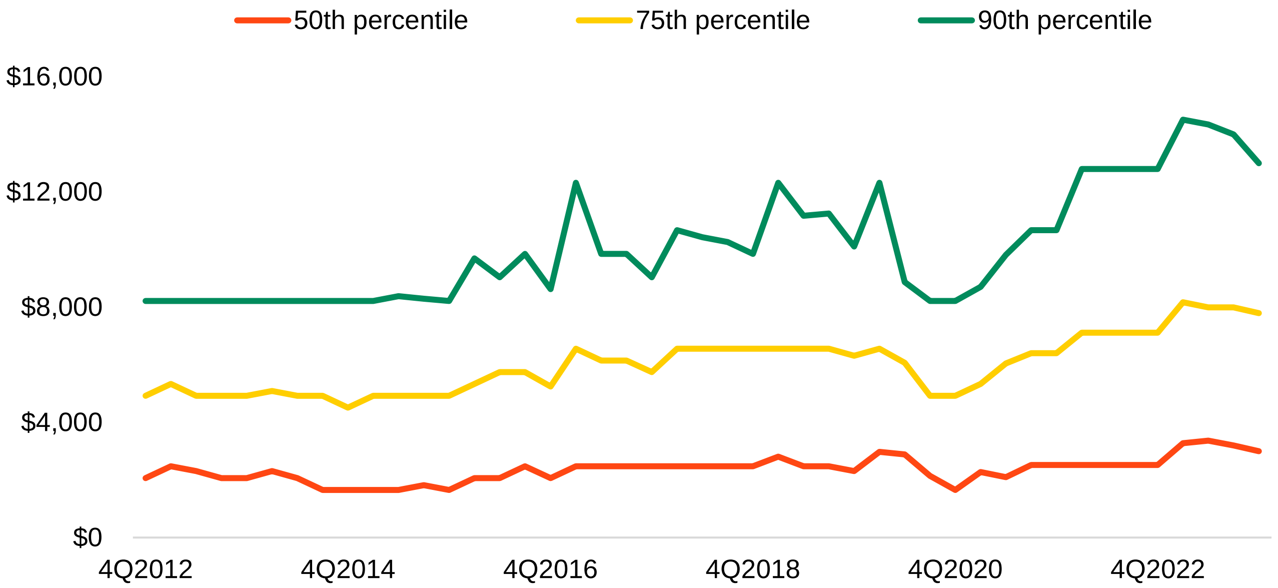
Median credit scores at origination, by percentile



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. Credit scores at origination defined as commercially available credit score for the primary account holder. As of 4Q2023. Note: Credit card data include consumer bankcards only and exclude small business, corporate, and consumer charge cards. Credit card balances in the aggregate FR Y-14M data are estimated to represent roughly four-fifths of total U.S. bankcard balances.

Exhibit 11: Origination credit limits continue to decline

Median credit limit at origination, by percentile



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. Credit limit at origination is the available credit limit at the time of origination. As of 4Q2023. Note: Credit card data include consumer bankcards only and exclude small business, corporate, and consumer charge cards.

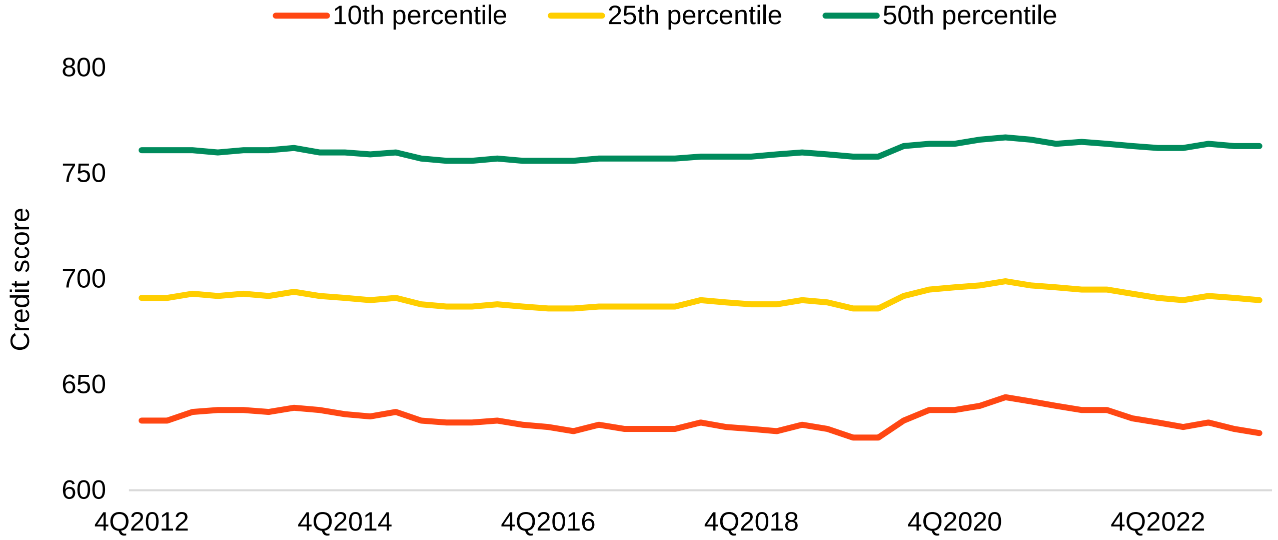
Lowest-scored borrowers face the largest decline in credit scores

Credit scores for the 10th and 25th percentiles of existing credit card account holders fell to their lowest levels since 1Q2020 in 4Q2023, indicating increased stress could be on the horizon, per the Philadelphia Fed.

Recent declines in credit scores, however, again highlight dispersion between different borrower groups. All consumer segments in Exhibit 12 reached the highest nominal credit scores on record in 2Q2021 (which may be due, at least in part, to the "credit score migration" trend we highlighted several weeks ago). Since then, credit scores for the lowest-scored borrowers (10th percentile) have meaningfully deteriorated (both nominally and on a relative basis) versus the 25th and 50th percentiles.

Exhibit 12: The lowest-scored borrowers experienced the most credit deterioration over the last two years

Change in current credit score of credit card account holders, by percentile



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. As of 4Q2023. Note: Credit card data include consumer bankcards only and exclude small business, corporate, and consumer charge cards. Credit card balances in the aggregate FR Y-14M data are estimated to represent roughly four-fifths of total U.S. bankcard balances.

Mortgage originations slow amid tighter lending standards

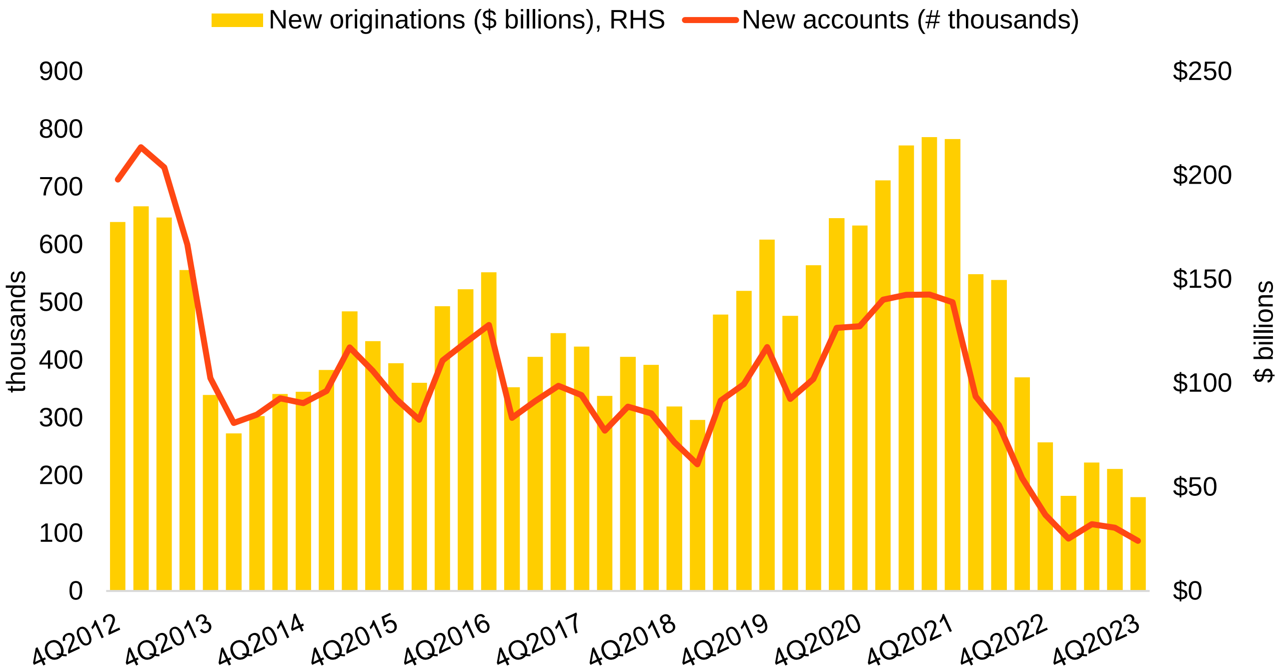
Mortgage originations fell to record lows in 4Q2023, by number of accounts and by dollar amount (Exhibit 13). The reasons behind the decline are likely multi-faceted, including a slowdown in both supply and demand.

According to the January 2024 SLOOS, the portion of U.S. banks tightening lending standards across residential real estate loans generally increased in 4Q2023, suggesting a lower supply of banks willing to lend (for example, at previous borrowing standards).

The SLOOS also reported that in 4Q2023, demand for all residential real estate loan categories weakened. One factor suppressing demand may be the cost of buying a home, given the sharp increase in mortgage rates. This has caused mortgage payments for new homes to represent a greater share of consumer income (Exhibit 14).

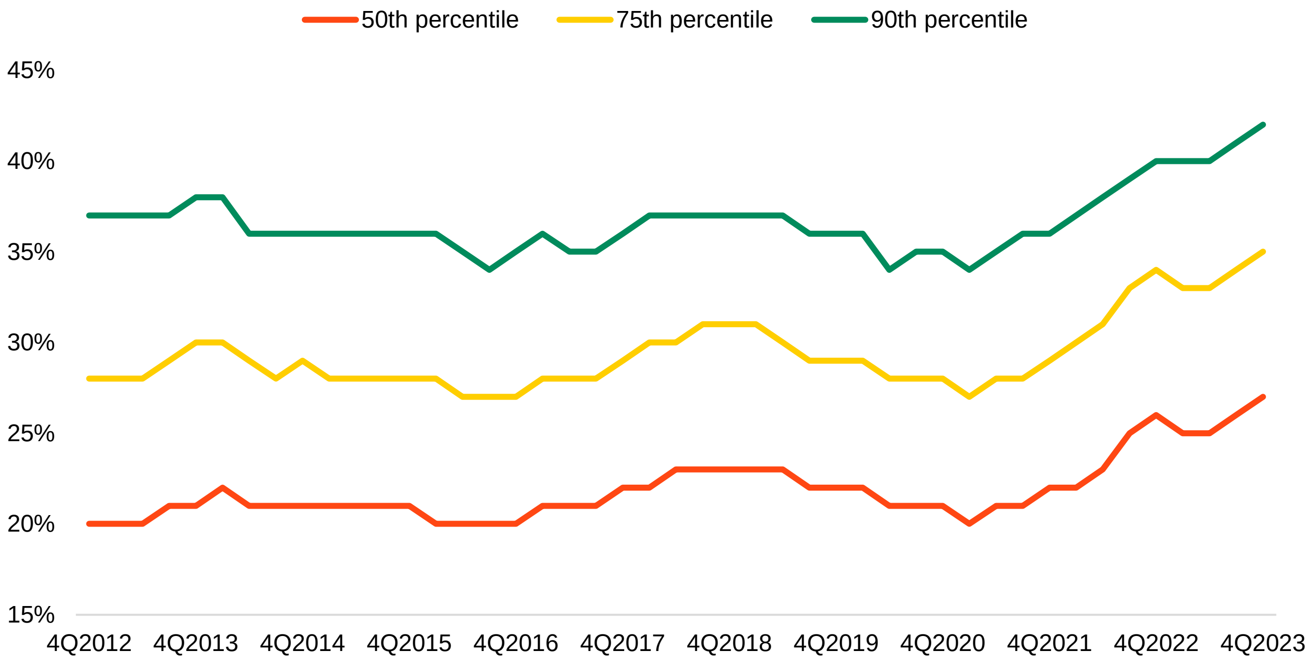
In 4Q2023, there was a small uptick in mortgage payments 30+ days past due, as a percentage of total accounts (Exhibit 15). Still, mortgage delinquencies remain near record lows, likely driven by the significant home price appreciation over the past few years, which has benefited those consumers who were already homeowners (instead of renters) and likely want to protect this asset.

Exhibit 13: Mortgage originations hit a new low
New mortgage originations by number of accounts and dollar amount



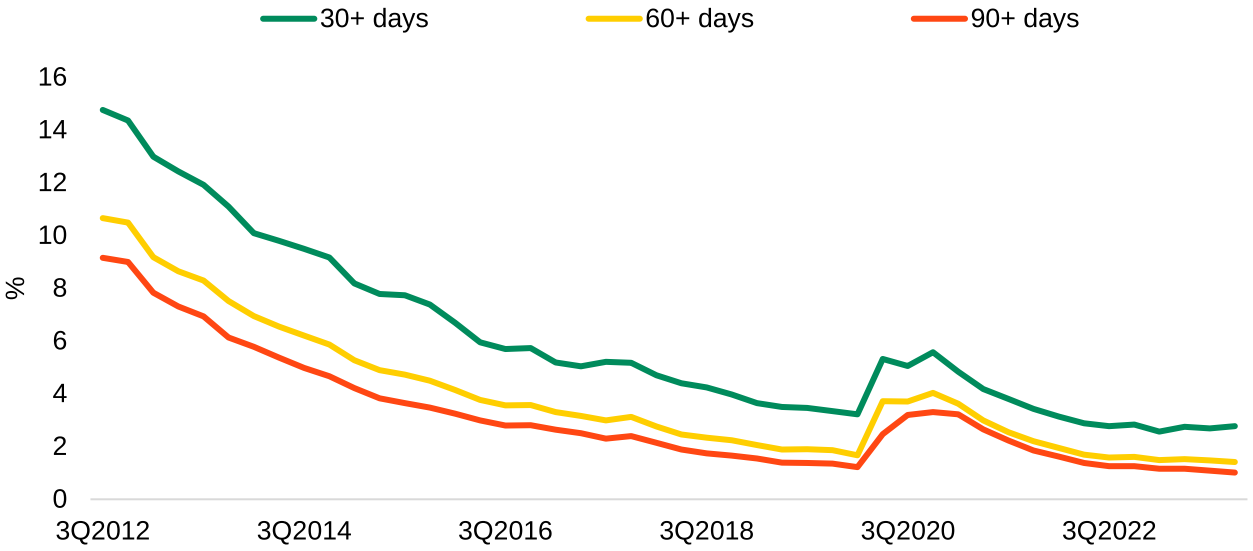
Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. As of 4Q2023. Note: First-lien mortgage portfolio loans in the aggregate FR Y-14M data are estimated to represent approximately one-eighth of total U.S. residential mortgage market debt.

Exhibit 14: Mortgage debt accounts for a larger percentage of consumer income
Front-end debt-to-income ratio (percentage of income going towards housing expenses) for originations, by percentile



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. As of 4Q2023. Note: First-lien mortgage portfolio loans in the aggregate FR Y-14M data are estimated to represent approximately one-eighth of total U.S. residential mortgage market debt. The 50th, 75th, and 90th percentile front-end debt-to-income ratios among first lien originations. The front-end debt-to-income (DTI) ratio is the percentage of a borrower's monthly income that would go toward housing expenses. The total housing liabilities of the borrower, including the monthly principal, interest, taxes, insurance, association dues, etc., are divided by the total monthly income of the borrower. Front-end DTI is reported at origination.

Exhibit 15: Past due mortgage payments remain near lows
Past due first-lien mortgage payments, by number of accounts as a percentage of total



Source: BlackRock, Federal Reserve Y-14M Data, Federal Reserve Bank of Philadelphia. As of 4Q2023. Note: Past-due rates include foreclosures. First-lien mortgage portfolio loans in the aggregate FR Y-14M data are estimated to represent approximately one-eighth of total U.S. residential mortgage market debt.

Unless otherwise stated, all reference to $ are in USD.

Risk Warnings:

Capital at risk. The value of investments and the income from them can fall as well as rise and are not guaranteed. You may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. Levels and basis of taxation may change from time to time.

In the U.S., this material is for institutional use only – not for public distribution.

For investors in the Caribbean, any funds mentioned or inferred in this material have not been registered under the provisions of the Investment Funds Act of 2003 of the Bahamas, nor have they been registered with the securities regulators of Bermuda, Dominica, the Cayman Islands, the British Virgin Islands, Grenada, Trinidad & Tobago or any jurisdiction in the Organization of Eastern Caribbean States, and thus, may not be publicly offered in any such jurisdiction. The shares of any fund mentioned herein may only be marketed in Bermuda by or on behalf of the fund or fund manager only in compliance with the provision of the Investment Business Act 2003 of Bermuda and the Companies Act of 1981. Engaging in marketing, offering or selling any fund from within the Cayman Islands to persons or entities in the Cayman Islands may be deemed carrying on business in the Cayman Islands. As a non-Cayman Islands person, BlackRock may not carry on or engage in any trade or business unless it properly registers and obtains a license for such activities in accordance . For Dominican Republic, any securities mentioned or inferred in this material may only be offered in a private character according to the laws of the Dominican Republic, falling beyond the scope of articles 1 numeral (31), 46 et al of Law 249-17 dated 19 December 2017, as amended and its Regulations. Since no governmental authorizations are required in such offering, any "securities" mentioned or inferred in this material have not been and will not be registered with the Stock Market Superintendency of the Dominican Republic (Superintendencia de Mercado de Valores de la República Dominicana), and these "securities" may only be circulated, offered and sold in the Dominican Republic in a private manner based on the criteria established under Dominican laws and regulations.

IMPORTANT INFORMATION:

In **Canada**, this material is intended for permitted clients as defined under Canadian securities law, is for educational purposes only, does not constitute investment advice and should not be construed as a solicitation or offering of units of any fund or other security in any jurisdiction.

In **China,** this material may not be distributed to individuals resident in the People's Republic of China ("PRC", for such purposes, not applicable to Hong Kong, Macau and Taiwan) or entities registered in the PRC unless such parties have received all the required PRC government approvals to participate in any investment or receive any investment advisory or investment management services.

In **Singapore**, this document is provided by BlackRock (Singapore) Limited (company registration number:200010143N） for use only with institutional investors as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.

In **Hong Kong**, this material is issued by BlackRock Asset Management North Asia Limited and has not been reviewed by the Securities and Futures Commission of Hong Kong. This material is for distribution to "Professional Investors" (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance.) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong.

In **Japan**, this is issued by BlackRock Japan. Co., Ltd. (Financial Instruments Business Operator: The Kanto Regional Financial Bureau. License No375, Association Memberships: Japan Investment Advisers Association, The Investment Trusts Association, Japan, Japan Securities Dealers Association, Type II Financial Instruments Firms Association) for Professional Investors only (Professional Investor is defined in Financial Instruments and Exchange Act).

In **South Korea**, this information is issued by BlackRock Investment (Korea) Limited. This material is for distribution to the Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations) and for information or educational purposes only and does not constitute investment advice or an offer or solicitation to purchase or sells in any securities or any investment strategies.

In **Australia** & **New Zealand**, issued by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975, AFSL 230 523 (BIMAL) for the exclusive use of the recipient, who warrants by receipt of this material that they are a wholesale client as defined under the Australian Corporations Act 2001 (Cth) and the New Zealand Financial Advisers Act 2008 respectively.

This material provides general information only and does not take into account your individual objectives, financial situation, needs or circumstances. Before making any investment decision, you should therefore assess whether the material is appropriate for you and obtain financial advice tailored to you having regard to your individual objectives, financial situation, needs and circumstances. Refer to BIMAL's Financial Services Guide on its website for more information. This material is not a financial product recommendation or an offer or solicitation with respect to the purchase or sale of any financial product in any jurisdiction. This material is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. BIMAL is a part of the global BlackRock Group which comprises of financial product issuers and investment managers around the world. BIMAL is the issuer of financial products and acts as an investment manager in Australia. BIMAL does not offer financial products to persons in New Zealand who are retail investors (as that term is defined in the Financial Markets Conduct Act 2013 (FMCA)). This material does not constitute or relate to such an offer. To the extent that this material does constitute or relate to such an offer of financial products, the offer is only made to, and capable of acceptance by, persons in New Zealand who are wholesale investors (as that term is defined in the FMCA).

BIMAL, its officers, employees and agents believe that the information in this material and the sources on which it is based (which may be sourced from third parties) are correct as at the date of publication. While every care has been taken in the preparation of this material, no warranty of accuracy or reliability is given and no responsibility for the information is accepted by BIMAL, its officers, employees or agents. Except where contrary to law, BIMAL excludes all liability for this information.

In **Brunei**, BlackRock does not hold a Capital Markets Services License and is therefore not licensed for conducting business in any regulated activity under the Securities Market Order, 2013. This document has been issued by BlackRock and is intended for the exclusive use of the recipient. The distribution of the information contained herein may be restricted by law and persons who access it are required to comply with any such restrictions. The information provided herein information is directed solely at persons who would be regarded as "Accredited Investors", "Expert Investors" or "Institutional Investors" in accordance with the Securities Market Order 2013

This material is for distribution to Professional Clients (as defined by the Financial Conduct Authority or MiFID Rules) only and should not be relied upon by any other persons.

In the UK and Non-European Economic Area (EEA) countries: this is Issued by BlackRock Investment Management (UK) Limited, authorised and regulated by the Financial Conduct Authority. Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Tel: + 44 (0)20 7743 3000. Registered in England and Wales No. 02020394. For your protection telephone calls are usually recorded. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock.

In the European Economic Area (EEA): This document is marketing material. This is Issued by BlackRock (Netherlands) B.V. and is authorised and regulated by the Netherlands Authority for the Financial Markets. Registered office Amstelplein 1, 1096 HA, Amsterdam, Tel: 020 – 549 5200, Tel: 31-20-549-5200. Trade Register No. 17068311 For your protection telephone calls are usually recorded

For Investors in **Switzerland**: This document is marketing material. This document shall be exclusively made available to, and directed at, qualified investors as defined in Article 10 (3) of the CISA of 23 June 2006, as amended, at the exclusion of qualified investors with an opting-out pursuant to Art. 5 (1) of the Swiss Federal Act on Financial Services ("FinSA"). For information on art. 8 / 9 Financial Services Act (FinSA) and on your client segmentation under art. 4 FinSA, please see the following website: www.blackrock.com/finsa.

In **Italy**: For information on investor rights and how to raise complaints please go to https://www.blackrock.com/corporate/compliance/investor-right available in Italian.

For investors in **Israel**: BlackRock Investment Management (UK) Limited is not licenced under Israel's Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 5755-1995 (the “Advice Law”), nor does it carry insurance thereunder.

The information contained in this document is intended strictly for Professional Clients as defined under the Dubai Financial Services Authority (“DFSA”) Conduct of Business (COB) Rules. The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock. The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public. The information contained in this document, may contain statements that are not purely historical in nature but are “forward-looking statements”. These include, amongst other things, projections, forecasts or estimates of income. These 44 forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser.

The information contained in this document is intended strictly for non-natural Qualified Investors as defined in the UAE Securities and Commodities Authority’s Board Decision No. 3/R.M of 2017 concerning Promoting and Introducing Regulations. The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock. The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public. The information contained in this document, may contain statements that are not purely historical in nature but are “forward-looking statements”. These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser.

The information contained in this document, may contain statements that are not purely historical in nature but are “forward-looking statements”. These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser.

The information contained in this document is intended strictly for Professional Clients as defined under the Dubai Financial Services Authority (“DFSA”) Conduct of Business (COB) Rules.

Blackrock Advisors (UK) Limited -Dubai Branch is a DIFC Foreign Recognised Company registered with the DIFC Registrar of Companies (DIFC Registered Number 546), with its office at Unit L15 - 01A, ICD Brookfield Place, Dubai International Financial Centre, PO Box 506661, Dubai, UAE, and is regulated by the DFSA to engage in the regulated activities of ‘Advising on Financial Products’ and ‘Arranging Deals in Investments’ in or from the DIFC, both of which are limited to units in a collective investment fund (DFSA Reference Number F000738).

In **Saudi Arabia**, the information contained in this document is intended strictly for sophisticated institutions. The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock. The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public. The information contained in this document, may contain statements that are not purely historical in nature but are "forward-looking statements". These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser.

Kuwait

The information contained in this document is intended strictly for sophisticated institutions that are 'Professional Clients' as defined under the Kuwait Capital Markets Law and its Executive Bylaws.

The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock.

The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public.

The information contained in this document, may contain statements that are not purely historical in nature but are "forward-looking statements". These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials.

For investors in **Central America**, these securities have not been registered before the Securities Superintendence of the Republic of Panama, nor did the offer, sale or their trading procedures. The registration exemption has made according to numeral 3 of Article 129 of the Consolidated Text containing of the Decree-Law No. 1 of July 8, 1999 (institutional investors). Consequently, the tax treatment set forth in Articles 334 to 336 of the Unified Text containing Decree-Law No. 1 of July 8, 1999, does not apply to them. These securities are not under the supervision of the Securities Superintendence of the Republic of Panama. The information contained herein does not describe any product that is supervised or regulated by the National Banking and Insurance Commission (CNBS) in Honduras. Therefore any investment described herein is done at the investor's own risk. This is an individual and private offer which is made in Costa Rica upon reliance on an exemption from registration before the General Superintendence of Securities ("SUGEVAL"), pursuant to articles 7 and 8 of the Regulations on the Public Offering of Securities ("Reglamento sobre Oferta Pública de Valores"). This information is confidential, and is not to be reproduced or distributed to third parties as this is NOT a public offering of securities in Costa Rica. The product being offered is not intended for the Costa Rican public or market and neither is registered or will be registered before the SUGEVAL, nor can be traded in the secondary market. If any recipient of this documentation receives this document in El Salvador, such recipient acknowledges that the same has been delivered upon his request and instructions, and on a private placement basis. For Guatemala Investors, This communication and any accompanying information (the "Materials") are intended solely for informational purposes and do not constitute (and should not be interpreted to constitute) the offering, selling, or conducting of business with respect to such securities, products or services in the jurisdiction of the addressee (this "Jurisdiction"), or the conducting of any brokerage, banking, or other similarly regulated activities ("Financial Activities") in the Jurisdiction. Neither BLACKROCK, nor the securities, products and services described herein, are registered (or intended to be registered) in the Jurisdiction. Furthermore, neither BLACKROCK, nor the securities, products, services, or activities described herein, are regulated, or supervised by any governmental or similar authority in the Jurisdiction. The Materials are private, confidential and are sent by BLACKROCK only for the exclusive use of the addressee. The Materials must not be publicly distributed and any use of the Materials by anyone other than the addressee is not authorized. The addressee is required to comply with all applicable laws in the Jurisdiction, including, without limitation, tax laws and exchange control regulations if any.

In **Latin America**, for institutional investors and financial intermediaries only (not for public distribution). This material is for educational purposes only and does not constitute investment advice or an offer or solicitation to sell or a solicitation of an offer to buy any shares of any fund or security and it is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of your relevant jurisdiction. If any funds are mentioned or inferred in this material, such funds may not been registered with the securities regulators of Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru, Uruguay or any other securities regulator in any Latin American country and thus, may not be publicly offered in any such countries. The securities regulators of any country within Latin America have not confirmed the accuracy of any information contained herein. No information discussed herein can be provided to the general public in Latin America. The contents of this material are strictly confidential and must not be passed to any third party.

In **Colombia**, the sale of each fund discussed herein, if any, is addressed to less than one hundred specifically identified investors, and such fund may not be promoted or marketed in Colombia or to Colombian residents unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign financial and/or securities related products or services in Colombia.

In **Chile**, the sale of each fund not registered with the CMF is subject to General Rule No. 336 issued by the SVS (now the CMF). The subject matter of this sale may include securities not registered with the CMF; therefore, such securities are not subject to the supervision of the CMF. Since the securities are not registered in Chile, there is no obligation of the issuer to make publicly available information about the securities in Chile. The securities shall not be subject to public offering in Chile unless registered with the relevant registry of the CMF.

IN MEXICO, FOR INSTITUTIONAL AND QUALIFIED INVESTORS USE ONLY. INVESTING INVOLVES RISK, INCLUDING POSSIBLE LOSS OF PRINCIPAL. THIS MATERIAL IS PROVIDED FOR EDUCATIONAL AND INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE AN OFFER OR SOLICITATION TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SHARES OF ANY FUND OR SECURITY. This information does not consider the investment objectives, risk tolerance or the financial circumstances of any specific investor. This information does not replace the obligation of financial advisor to apply his/her best judgment in making investment decisions or investment recommendations. It is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of Mexico. If any funds, securities or investment strategies are mentioned or inferred in this material, such funds, securities or strategies have not been registered with the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, the "CNBV") and thus, may not be publicly offered in Mexico. The CNBV has not confirmed the accuracy of any information contained herein. The provision of investment management and investment advisory services ("Investment Services") is a regulated activity in Mexico, subject to strict rules, and performed under the supervision of the CNBV. These materials are shared for information purposes only, do not constitute investment advice, and are being shared in the understanding that the addressee is an Institutional or Qualified investor as defined under Mexican Securities (Ley del Mercado de Valores). Each potential investor shall make its own investment decision based on their own analysis of the available information. Please note that by receiving these materials, it shall be construed as a representation by the receiver that it is an Institutional or Qualified investor as defined under Mexican law. BlackRock México Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversión ("BlackRock México Operadora") is a Mexican subsidiary of BlackRock, Inc., authorized by the CNBV as a Mutual Fund Manager (Operadora de Fondos), and as such, authorized to manage Mexican mutual funds, ETFs and provide Investment Advisory Services. For more information on the Investment Services offered by BlackRock Mexico, please review our Investment Services Guide available in www.blackrock.com/mx. This material represents an assessment at a specific time and its information should not be relied upon by the you as research or investment advice regarding the funds, any security or investment strategy in particular. Reliance upon information in this material is at your sole discretion. BlackRock México is not authorized to receive deposits, carry out intermediation activities, or act as a broker dealer, or bank in Mexico. For more information on BlackRock México, please visit: www.blackRock.com/mx. BlackRock receives revenue in the form of advisory fees for our advisory services and management fees for our mutual funds, exchange traded funds and collective investment trusts. Any modification, change, distribution or inadequate use of information of this document is not responsibility of BlackRock or any of its affiliates. Pursuant to the Mexican Data Privacy Law (Ley Federal de Protección de Datos Personales en Posesión de Particulares), to register your personal data you must confirm that you have read and understood the Privacy Notice of BlackRock México Operadora. For the full disclosure, please visit www.blackRock.com/mx and accept that your personal information will be managed according with the terms and conditions set forth therein.

In **Peru**, this private offer does not constitute a public offer, and is not registered with the Securities Market Public Registry of the Peruvian Securities Market Commission, for use only with institutional investors as such term is defined by the Superintendencia de Banca, Seguros y AFP.

Any research in this document has been procured and may have been acted on by BlackRock for its own purpose. The results of such research are being made available only incidentally. The views expressed do not constitute investment or any other advice and are subject to change. They do not necessarily reflect the views of any company in the BlackRock Group or any part thereof and no assurances are made as to their accuracy.

Any opinions, forecasts represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research, investment advice or a recommendation.

This document is for information purposes only and does not constitute an offer or invitation to anyone to invest in any BlackRock funds and has not been prepared in connection with any such offer.

If you are an intermediary or third-party distributor, you must only disseminate this material to other Professional Investors as permitted in the above-specified jurisdictions and in accordance with applicable laws and regulations.

Certain information contained herein has been obtained from published sources and from third parties, including without limitation, market forecasts, internal and external surveys, market research, publicly available information and industry publications. In addition, certain information contained herein may have been obtained from companies in which investments have been made by entities affiliated with BlackRock. Although such information is believed to be reliable for the purposes used herein, neither the Fund nor BlackRock assumes any responsibility for the accuracy or completeness of such information. Reliance upon information in this material is at the sole discretion of the reader. Certain information contained herein represents or is based upon forward-looking statements or information. BlackRock and its affiliates believe that such statements and information are based upon reasonable estimates and assumptions. However, forward-looking statements are inherently uncertain, and factors may cause events or results to differ from those projected. Therefore, undue reliance should not be placed on such forward-looking statements and information.