



FIDELITY STRATEGIC DISCIPLINES

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This brochure provides information about the qualifications and business practices of Fidelity Management & Research Company LLC ("FMR"). Throughout this brochure and related materials, FMR may refer to itself as a "registered investment adviser" or "being registered." These statements do not in any way imply a certain level of skill or training. If you have any questions about the contents of this brochure, please contact us at 617-563-7000. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission ("SEC") or by any state securities authority. Additional information about FMR also is available on the SEC's website at www.adviserinfo.sec.gov.

MATERIAL CHANGES

Material Changes

- The Fidelity Core Bond strategy now includes an allocation to an exchange-traded fund (“ETF”) managed by FMR or an affiliate that provides exposure to mortgage-backed securities and the disclosures in the “Advisory Business” and “Methods of Analysis, Investment Strategies and Risk of Loss” sections of the brochure have been updated accordingly.

Other Changes

- Two additional strategies in the Fidelity Strategic Disciplines Program sponsored by Fidelity Personal and Workplace Advisors LLC (“FPWA”) are now sub-advised by Fidelity Management & Research Company LLC (“FMR”), the Fidelity Limited Duration Municipal Strategy and Fidelity Limited Duration Bond Strategy, and the disclosures in the “Advisory Business” and “Methods of Analysis, Investment Strategies and Risk of Loss” sections of the brochure have been updated accordingly to reflect the new strategies.
- Disclosure in the “Other Financial Industry Activities and Affiliations” section has been updated to reflect the name change of Luminex Trading & Analytics, LLC to Kezar Trading, LLC.
- Disclosure regarding FIL Limited (“FIL”) and its subsidiaries has been deleted from the “Other Financial Industry Activities and Affiliations” section to more clearly reflect the relationship between FIL and FMR.

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ADVISORY BUSINESS

Fidelity Management & Research Company LLC (“FMR”), a wholly-owned subsidiary of FMR LLC, provides investment supervisory services, including sub-advisory services, to Fidelity's family of mutual funds and exchange-traded funds (the “Fidelity Funds” or the “Fidelity group of funds”), qualified tuition programs, as defined under Section 529 of the Internal Revenue Code (“Qualified Tuition Programs”), privately offered unregistered investment funds, separately managed account clients, and various other institutional accounts. FMR also provides non-discretionary investment advice to its affiliates or to third parties. This brochure provides information only about FMR's role with respect to Fidelity Strategic Disciplines (the “Program”). For information about the additional services that FMR provides, please see FMR's Form ADV Part 2A brochure.

Fidelity Management & Research Company (“FMR Co.”), a wholly-owned subsidiary of FMR LLC, has been registered with the Securities and Exchange Commission (“SEC”) since 1971. FMR Co. reorganized into FMR effective January 1, 2020.

Discretionary Advisory Services

FMR serves as a sub-advisor to its affiliate, Fidelity Personal and Workplace Advisors LLC (“FPWA”), in connection with the Program. As sub-advisor, FMR will make the day-to-day discretionary trading decisions with respect to Program accounts (“Program Accounts”) and will receive a portion of the advisory fees clients pay to FPWA in connection with the Program. Important information regarding FPWA and the Program can be found in FPWA's Fidelity Strategic Disciplines Program Fundamentals (“FPWA Program Fundamentals”).

As described in the FPWA Program Fundamentals, four of the investment strategies offered to clients in the Program are sub-advised by FMR:

- Fidelity® Intermediate Municipal Strategy
- Fidelity® Core Bond Strategy
- Fidelity® Limited Duration Municipal Strategy
- Fidelity® Limited Duration Bond Strategy

Prior to enrolling in the Program, FPWA will determine whether the relevant strategy is appropriate for a client based on a review of the client's investor profile and any other relevant information that the client provides to FPWA. Subject to the imposition of reasonable restrictions, FMR will apply its proprietary methodology to manage a client's Program Account to align with the selected strategy. FMR is responsible for portfolio management, trading, and supervision of Program Accounts.

Non-Discretionary Advisory Services

FMR also provides non-discretionary model portfolio services to its affiliate Strategic Advisers LLC in connection with the Program.

Regulatory Assets Under Management

As of December 31, 2023, FMR managed \$3,964,385,404,655 of client assets on a discretionary basis. As of December 31, 2023, FMR did not manage any client assets on a non-discretionary basis.

FEES AND COMPENSATION

Discretionary Advisory Services

Clients of the Program do not pay FMR for the services it provides under the Program. Instead, as compensation for its discretionary portfolio management services provided to Program Accounts, FMR receives a portion of the advisory fee paid to FPWA by Program clients through an agreement between FPWA and FMR. In certain circumstances, as further discussed below, FMR and its affiliates can receive compensation with respect to the mutual funds and exchange-traded products (“ETPs”) held in a client’s Program Account. However, the fee crediting applied by FPWA reduces the advisory fees by the amount of compensation, if any, FMR and its affiliates retain with respect to these mutual funds and ETPs that is derived as a direct result of investments by Program Accounts (the “Credit Amount”). Compensation that is not directly derived from Program Account assets is not included in the Credit Amount calculation. Please see the FPWA Program Fundamentals for information about Program fees and the application of the Credit Amount.

Non-Discretionary Advisory Services

FMR is compensated by Strategic Advisers in connection with the model portfolio services provided to Strategic Advisers for Program Accounts. Clients of the Program do not pay any compensation to FMR in connection with the model portfolio services.

Certain Fidelity Model Portfolios and certain Program Accounts include mutual funds and ETPs sponsored or managed by FMR or an affiliate (“Fidelity Funds”), which are subject to fees, as provided for in the prospectus for each such fund. The fees received from Fidelity Model Portfolios’ and Program Accounts’ investments in the Fidelity Funds will be shared by various affiliates of FMR involved in distributing and advising the Fidelity Funds, Fidelity Model Portfolios and Program Accounts. Each Fidelity Fund incurs advisory as well as other fees and expenses that it pays out of the assets of each fund, meaning such costs are indirectly borne by the shareholders of each applicable fund. Additional information about the expense ratio of any specific Fidelity Fund is available in the applicable prospectus. Within a given model portfolio or Program Account, the cost to shareholders and benefits to FMR’s affiliates across the Fidelity Funds varies. As a result, an economic incentive exists for FMR when constructing model portfolios or investing Program Account client assets that include allocations to underlying mutual funds to select Fidelity Funds that pay additional revenue to its affiliates. However, as further discussed below, FMR does not select the investment universe for Fidelity Model Portfolios that consist of underlying mutual funds, ETFs and ETPs and certain of the portfolios are constructed by FMR using a rules-based methodology. In addition, the amount paid to FMR and its employees under the services does not vary based on the Fidelity Funds selected when constructing the Fidelity Model Portfolios or investment Program Account assets and the compensation arrangements for FMR investment professionals do not vary based on the Fidelity Funds selected for such model portfolios or Program Accounts. For more information regarding conflicts of interests relating to the management of multiple funds and accounts, see “Code of Ethics, Participation or Interest in Client Transactions and Personal Trading” section herein.

PERFORMANCE-BASED FEES AND SIDE-BY-SIDE MANAGEMENT

Discretionary Advisory Services

FMR does not receive any performance-based fees for FPWA Program accounts.

The management of multiple funds and accounts (including proprietary accounts of FMR or one or more of its affiliates) gives rise to conflicts of interest, especially when the funds and accounts have different objectives, benchmarks, time horizons, and fees as the portfolio manager must allocate his or her time and investment ideas across multiple funds and accounts. Investment personnel are mindful of potentially

conflicting interests of our clients and take appropriate measures to ensure that the interests of all clients are taken into consideration.

Conflicts of interest also arise when fund or account orders do not get fully executed due to being aggregated with those of other funds or accounts managed by FMR or an affiliate. Portfolio orders for funds or accounts, when executed, may adversely impact the value of securities held by other funds and accounts. For example, short sales in one fund or account may have an adverse impact on the value of the shorted security held or traded by other funds or accounts. Although FMR or its affiliates monitor such transactions to attempt to ensure equitable treatment of both a fund or account holding a security and a fund or account that engages in short sales in the same or a similar security, there can be no assurance that the price of a security held by another fund or account is not impacted as a result. Also, securities selected for a particular fund or account may outperform the securities selected for other funds or accounts managed by the same portfolio manager. Portfolio managers are permitted to invest in the funds or accounts they manage even when, under certain circumstances, a fund or account is closed to new investors.

FMR also manages certain proprietary accounts or “pilot funds,” which are used to develop investment ideas, strategies, and management experience. These pilot funds or accounts are in some instances similar to other funds or accounts managed by FMR and trade in the same securities as other funds or accounts managed by FMR. FMR has oversight in place to ensure that trading and allocations for these funds and accounts are not favored over accounts managed for discretionary clients. For more information regarding trade allocation procedures, see “Trade Allocation Policies” in the “Brokerage Practices” section herein.

FMR’s use of multiple investment strategies presents additional conflicts. For example, a conflict of interest situation is presented when Fidelity’s client accounts may invest in securities or purchase a loan relating to different parts of the capital structure of a single issuer. In some cases, Fidelity may exercise rights, provide additional capital, or approve or disapprove of certain corporate actions for certain client accounts with respect to an issuer, or refrain from taking any such action or decision and such actions or decisions may adversely impact the value or rights of securities or loans held by other client accounts.

For example, if a client account holds loans, securities, or other positions in the capital structure of an issuer that ranks senior in preference to the holdings of other client accounts in the same issuer, and the issuer experiences financial or operational challenges, Fidelity, acting on behalf of the client account, may exercise its rights or provide additional capital in connection with a liquidation, reorganization, or restructuring of the issuer with terms that may have an adverse effect on or otherwise conflict with the interests of other client accounts. For example, in connection with any lending arrangements involving the issuer in which a client account participates, Fidelity, on behalf of certain client accounts, may seek to exercise rights under the applicable loan agreement or other document in a manner that may prove detrimental to positions held by other client accounts. Alternatively, in situations in which client accounts hold a more senior position as compared to positions held by other client accounts in the capital structure of an issuer experiencing financial or other difficulties, Fidelity may determine not to pursue actions and remedies available to the client account or enforce particular terms that might be unfavorable to the other client accounts holding the less senior position so long as such determination does not adversely affect the funds holding such rights to take action. Additionally, Fidelity may negotiate for a new investment to rank senior to an existing investment or negotiate for other terms that are advantageous to the clients making the new investment but disadvantageous to clients that only hold the existing investment.

In addition, if client accounts hold voting securities of an issuer in which other client accounts hold loans, bonds, or other credit-related assets or securities, Fidelity may vote on certain matters in a manner that has an adverse effect on the positions held by other client accounts. Conversely, client accounts may hold voting securities of an issuer in which other client accounts hold credit-related assets or securities, and Fidelity may determine on behalf of the client accounts not to vote in a manner adverse to the other client accounts (including by abstaining from the relevant vote or voting in line with other pari passu investors in the same debt tranche) so long as such vote does not adversely affect the funds exercising such voting rights.

These potential issues are examples of conflicts of interest that Fidelity will face when client accounts invest in different parts of the capital structure of a single issuer. Fidelity addresses these issues based on the facts and circumstances of each situation. This may result in the creation of separate advisory groups to consult with and represent the client accounts having potentially conflicting interests. Each of these separate groups will pursue options in the best interests of the client accounts they support without taking into consideration the other group's positions.

As a result of the conflicts presented in the examples above, client accounts could sustain losses or lower investment returns during periods in which other client accounts achieve gains or higher investment returns generally or with respect to particular holdings in the same issuer than would have been the case had the conflicts described above not existed.

FMR has adopted policies and procedures and maintains a compliance program designed to help manage conflicts arising from side-by-side management, which include trade allocation policies. These policies and procedures seek to ensure that trading for all funds and accounts is fair and equitable over time. There can be no assurance, however, that all conflicts have been addressed in all situations. For more information regarding conflicts of interests relating to the management of multiple funds and accounts, see "Code of Ethics, Participation or Interest in Client Transactions and Personal Trading" section herein.

Non-Discretionary Advisory Services

FMR does not receive any performance-based fees for non-discretionary services.

TYPES OF CLIENTS

FMR provides discretionary portfolio management services for clients' Program Accounts and non-discretionary model portfolio services to Strategic Advisers LLC in connection with its services to Program Accounts. Please see the FPWA Program Fundamentals for information about the types of clients eligible for the Program.

METHODS OF ANALYSIS, INVESTMENT STRATEGIES AND RISK OF LOSS

This section contains information about how FMR provides discretionary portfolio management services to Program Accounts and non-discretionary model portfolio services to Strategic Advisers.

Discretionary Advisory Services

The Fidelity® Intermediate Municipal Strategy and Fidelity® Limited Duration Municipal Strategy seek to generate federal tax-exempt interest income while limiting risk to principal over a full market cycle. A state-preference option is available for eligible clients. The strategies focus on investment grade municipal bonds across different market sectors (i.e., general obligation bonds of a state or bonds financing a specific project) and different maturities. They combine the fixed income experience, research, and execution capabilities of FMR with ongoing oversight by FPWA, the investment manager. The Fidelity Intermediate Municipal Strategy offers a state-preference option available for eligible clients. With the state-preference option, state tax-exempt interest income is emphasized over national diversification.

The Fidelity® Core Bond Strategy seeks to provide income while limiting risk to principal over a full market cycle. The strategy invests in investment-grade bonds, including U.S. Treasury, government-related bonds, corporate bonds, mortgage bonds, asset-backed bonds, taxable municipal bonds, and can invest in an exchange traded fund ("ETF") managed by FMR or an affiliate that provides exposure to mortgage-backed

securities. The Fidelity® Core Bond Strategy combines the fixed income experience, research and execution capabilities of FMR with ongoing oversight by FPWA, the investment manager.

The Fidelity® Limited Duration Bond Strategy seeks to generate interest income while limiting risk to the original investment over the long term. The strategy invests in investment-grade bonds, including corporate bonds and government-related bonds, and can invest in a mutual fund sponsored or managed by FMR or an affiliate that is designed for use in Program Accounts. The fund primarily holds securitized investments such as asset-backed securities and mortgage-backed securities. The Fidelity® Limited Duration Bond Strategy combines the fixed income experience, research, and execution capabilities of FMR with ongoing oversight by FPWA, the investment manager.

Investment Restrictions. A client has the ability to impose reasonable restrictions on the management of a Program Account. Any proposed restriction is subject to FMR's review and approval. Such a restriction can include prohibitions such as with respect to the purchase of a particular individual security or securities within an industry, provided such restriction is not inconsistent with the Program's stated investment strategy or philosophy, or is not fundamentally inconsistent with the nature or operation of the Program. If a restriction is accepted, assets will be invested in a manner that is appropriate given the restriction. Imposing an investment restriction can delay the start of discretionary management, and Program Accounts with client-imposed restrictions will experience different performance from Program Accounts without restrictions, possibly producing lower overall results. Program Account restrictions should be requested through a Fidelity representative.

Investment Practices. FMR uses a variety of methods of security analysis to select investments in managing Program Accounts including, as applicable: fundamental analysis (i.e., evaluating each issuer's financial condition, industry position, and the market and economic conditions impacting their profitability); quantitative analysis (i.e., mathematical and statistical modeling); technical analysis (i.e., statistical analysis of market activity); cyclical analysis (i.e., evaluating issuers based in part on their sensitivity to business cycles); and factor-based analysis (i.e., evaluating investment opportunities based on exposure to targeted characteristics). FMR also uses general macro-economic analysis as a component of its security analysis methods. In addition to relying on financial statement information, FMR uses extensive in-person and/or remote corporate visits and interviews with issuer management teams in conducting research, offering statements of various municipalities as a source of information, information and analysis relating to foreign sovereigns and currency markets, third-party research, and alternative data.

In managing Program Accounts, FMR invests in securities of companies engaged in a variety of economic sectors and industries that are domiciled in the U.S. and outside the U.S. and in companies with market capitalizations of all sizes. FMR invests across different asset classes, market sectors, maturities, and regions. With respect to money market funds, FMR observes industry-standard regulatory requirements for money market funds for the quality, maturity, liquidity, and diversification of investments.

With respect to strategies that consist of investing in underlying funds, the factors considered when making an investment include, but are not limited to, fund performance, a fund manager's experience and investment style, fund company infrastructure, and fund characteristics such as expense ratio, asset size, and portfolio turnover.

Risks. The strategies presented above pose risks, and many factors affect the performance of Program Accounts. The following risk factors are not a complete list of the risks involved in an investment in Program Accounts. These risk factors include only those risks we believe to be material. Past performance is not an indication of future performance or a guarantee of future results. An investment may be risky and may not be suitable for an investor's goals, objectives, and risk tolerance. Investors should be aware that an investment's value may be volatile, and a client in a Program Account could lose money by investing in the Program. Investments in a Program Account are not a deposit of a bank and are not insured or guaranteed by the Federal Deposit Insurance Corporation ("FDIC") or any other government agency.

Strategies that pursue investments in fixed-income securities will see values fluctuate in response to changes in interest rates. In general, the price of a debt security can fall when interest rates rise and can rise when interest rates fall. Securities with longer maturities can be more sensitive to interest rate changes, meaning the longer the maturity of a security, the greater the impact a change in interest rates could have on the security's price. Short-term and long-term interest rates do not necessarily move in the same amount or the same direction. Short-term securities tend to react to changes in short-term interest rates, and long-term securities tend to react to changes in long-term interest rates. Securities with floating interest rates can be less sensitive to interest rate changes, but may decline in value if their interest rates do not rise as much as interest rates in general.

Accounts that pursue strategies that concentrate in particular industries or are otherwise subject to particular segments of the market (e.g., municipal funds' exposure to the municipal bond market) are more significantly impacted by events affecting those industries or markets. Municipal securities can be significantly affected by political changes as well as uncertainties in the municipal market related to taxation, legislative changes, or the rights of municipal security holders. Because many municipal securities are issued to finance similar projects, especially those relating to education, health care, transportation, and utilities, conditions in those sectors can affect the overall municipal market. Budgetary constraints of local, state, and federal governments upon which the issuers may be relying for funding may also impact municipal securities. In addition, changes in the financial condition of an individual municipal insurer can affect the overall municipal market, and market conditions may directly impact the liquidity and valuation of municipal securities.

All strategies are ultimately affected by impacts to the individual issuers or counterparties, such as changes in an issuer's or counterparty's profitability and credit quality, or changes in tax, regulatory, market, economic or political conditions that affect a particular type of security or counterparty. Entities providing credit support or a maturity-shortening structure also can be affected by these types of changes, and if the structure of a security fails to function as intended, the security could decline in value. Municipal securities backed by current or anticipated revenues from a specific project or specific assets can be negatively affected by the discontinuance of the taxation supporting the project or assets or the inability to collect revenues for the project or from the assets. If the Internal Revenue Service (IRS) determines an issuer of a municipal security has not complied with applicable tax requirements, interest from the security could become taxable and the security could decline significantly in value. Generally, FMR purchases municipal securities whose interest, in the opinion of bond counsel, is free from federal income tax. FMR cannot guarantee that this opinion is correct, and there is no assurance that the IRS will agree with bond counsel's opinion. Issuers or other parties generally enter into covenants requiring continuing compliance with federal tax requirements to preserve the tax-free status of interest payments over the life of the security. If at any time the covenants are not complied with, or if the IRS otherwise determines that the issuer did not comply with relevant tax requirements, interest payments from a security could become federally taxable, possibly retroactively to the date the security was issued. For certain types of structured securities, the tax status of the pass-through of tax-free income may also be based on the federal tax treatment of the structure.

A decline in the credit quality of an issuer can cause the price of a security to decrease. Lower-quality debt securities (those of less than investment-grade quality, also referred to as high-yield debt securities or junk bonds) involve greater risk of default or price changes due to changes in the credit quality of the issuer. The value of lower-quality debt securities can be more volatile due to increased sensitivity to adverse issuer, political, regulatory, market, or economic developments. Accounts that invest in a smaller number of individual issuers can be more sensitive to these changes.

Additionally, accounts that pursue debt investments are subject to risks of prepayment, when an issuer of a security can repay principal prior to the security's maturity, or default, as well as changes to bankruptcy or debtor relief laws, which may impede collection efforts or alter timing and amount of collections. Securities subject to prepayment can offer less potential for gains during a declining interest rate environment and similar or greater potential for loss in a rising interest rate environment. In addition, the potential impact of prepayment features on the price of a debt security can be difficult to predict and result in greater volatility. Securitized debt securities, which include commercial mortgage-backed securities, are dependent on the cash flows generated by the underlying loans, receivables, or other assets, can be

significantly affected by changes in interest rates, the availability of information concerning the underlying assets and their structure, and the creditworthiness of the originators of the loans or other receivables or the entities providing credit support.

Nearly all accounts are subject to volatility in non-U.S. markets, either through direct exposure or indirect effects on U.S. markets from events abroad, including fluctuations in foreign currency exchange rates and, in the case of less-developed markets, currency illiquidity. Global economies and financial markets are becoming increasingly interconnected, which increases the possibilities that conditions in one country or region might adversely impact issuers or providers in, or foreign exchange rates with, a different country or region. Developments that disrupt global economies and financial markets, such as war, acts of terrorism, economic sanctions, the spread of infectious illness or other public health issues, recessions or other events may magnify factors that affect performance. In addition, some countries experience low or negative interest rates, from time to time, which may magnify interest rate risk for the markets as a whole and for the funds or accounts.

Strategies that lead accounts to invest in other funds, including ETFs, bear all the risks inherent in the underlying funds in which those funds invest, as described in that fund's registration statement. Unlike individual debt securities, which typically pay principal at maturity, the value of an investment in an underlying fund will fluctuate. In addition, ETF shares that are listed on an exchange can be bought and sold in the secondary market at market prices. The market prices of such shares will fluctuate in accordance with changes in NAV and supply and demand on the listing exchange. Although a share's market price is expected to approximate its NAV, it is possible that the market price and NAV will vary significantly. Shares of an exchange traded ETF, similar to shares of other issuers listed on a stock exchange, may be sold short and are therefore subject to the risk of increased volatility and price decreases associated with being sold short.

Additionally, Program Accounts are subject to operational risks, which can include risks of loss arising from failures in internal processes, people, or systems, such as routine processing errors or major systems failures, or from external events, such as securities exchange outages. While FMR has implemented a program to provide ongoing oversight of the sub-advisers it selects for multi-manager funds or other funds and accounts, the sub-advisers make the day-to-day investment decisions for the portions of the funds and accounts they manage.

Ultimately, an account's net asset value changes daily based on changes in market conditions, foreign currency exchange rates and interest rates, and in response to other economic, political, or financial developments. An account's reaction to these events will be affected by the types of securities in which the account invests; the financial condition, industry and economic sector, and geographic location of an issuer; and the account's level of investment in the securities of that issuer. An account's investment in such securities involves risk of loss that clients of the fund or account would, and should, be prepared to bear. An account owner could lose money due to a decline in the account's net asset value.

Due to regulatory and issuer-specific limits that apply to the ownership of securities of certain issuers, FMR and its affiliates limit investments in the securities of such issuers. In addition, FMR and/or its affiliates from time-to-time determine that, because of regulatory requirements that apply to FMR and/or its affiliates in relation to investments in a particular country or in an issuer operating in a particular regulated industry, investments in the securities of issuers domiciled or listed on trading markets in that country or operating in that regulated industry above certain thresholds is impractical or undesirable. The foregoing limits and thresholds may apply at the account level or in the aggregate across all accounts (or certain subsets of accounts) managed, sponsored, or owned by, or otherwise attributable to, FMR and its affiliates. For investment risk management and other purposes, FMR and its affiliates also generally apply internal aggregate limits on the amount of a particular issuer's securities that are owned by all such accounts, although such limits may vary for certain accounts established to develop performance track records. In connection with the foregoing limits and thresholds, FMR limits or excludes clients' investment in particular issuers, futures, derivatives and/or other instruments (or limits the exercise of voting or other rights) and investment flexibility may be restricted. In addition, to the extent that client accounts already own securities that directly or indirectly contribute to such an ownership threshold being exceeded, FMR generally sells

securities held in such accounts to bring account-level and/or aggregate ownership below the relevant threshold. If any such sales result in realized losses for client accounts, those client accounts may bear such losses depending on the particular circumstances.

FMR and its affiliates establish internal limits, and are subject to external limits, on how much the funds and accounts they manage can invest in any one other fund. Additionally, regulatory restrictions limit the amount that one fund can invest in another, which means that FMR is limited in the amount it can cause a fund it manages to invest in any particular fund.

The investment research process employed by FMR includes gathering, cleaning, culling and analysis of large amounts of data from external public sources and/or third-party data providers. It is not possible or practicable, however, to factor all relevant, available data into economic forecasts or trading decisions. In addition, due to the automated nature of this data gathering and the fact that much of this data comes from third-party sources, it is inevitable that not all desired or relevant data will be available to, or processed by, FMR at all times. Investors should be aware that there is no guarantee that the data utilized in generating forecasts or making trading decisions will be the most accurate data available or even free of errors. Investors should assume that the foregoing limitation and risks associated with gathering, cleaning, culling and analysis of large amounts of data from third-party and other external sources are an inherent part of investing. There may also be incidents where data fails to load or FMR's systems fail to retrieve or capture the data, for example, because of changes in the vendor's or FMR's system configurations due to upgrades, enhancements, maintenance or errors. Investors should assume that these data errors, like other system implementation errors, and their ensuing risks and impact are an inherent part of investing. Accordingly, unless otherwise required to do so, FMR does not expect to disclose discovered data errors to clients.

With the increased use of technologies to conduct business, FMR and its affiliates are susceptible to operational, information security and related risks. For example, computer, communications, data processing, networks, backup, business continuity or other operating, information or technology systems, including those outsourced to other providers, may fail to operate properly or become disabled, overloaded or damaged as a result of a number of factors. These factors could include events that are wholly or partially beyond our control and may have a negative effect on our ability to conduct business activities. We believe that we have taken reasonable steps to mitigate these risks, but do not believe that we can eliminate them altogether. In general, cyber incidents can result from deliberate attacks or unintentional events and may arise from external or internal sources. Cyber-attacks include, but are not limited to, gaining unauthorized access to digital systems (e.g., through "hacking" or malicious software coding) for purposes of misappropriating assets or sensitive information; corrupting data, equipment, or systems; or causing operational disruption. Cyber-attacks may also be carried out in a manner that does not require gaining unauthorized access, such as causing denial-of-service attacks on websites (i.e., efforts to make network services unavailable to intended users). Cyber incidents affecting FMR, its affiliates, or any other service providers (including, but not limited to, accountants, custodians, transfer agents and financial intermediaries used by a fund or account) have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, interference with the ability to calculate NAV, impediments to trading, the inability to transact business, destruction to equipment and systems, violations of applicable privacy and other laws, regulatory fines, penalties, reputational damage, reimbursement or other compensation costs, or additional compliance costs. Similar adverse consequences could result from cyber incidents affecting issuers of securities in which a fund or account invests, counterparties with which a fund or account engages in transactions, governmental and other regulatory authorities, exchange and other financial market operators, banks, brokers, dealers, insurance companies and other financial institutions (including financial intermediaries and service providers) and other parties.

Non-Discretionary Advisory Services

Strategic Advisers has retained FMR to provide **investment models** to be used by Strategic Advisers in rendering discretionary investment advisory services to Program Accounts. FMR provides Strategic Advisers with model portfolios (each, a "Model Portfolio" and together the "Model Portfolios") and provides periodic updates to each Model Portfolio. Model portfolios are constructed using fundamental and quantitative analysis to select stocks based on investment guidelines provided by Strategic Advisers. These

guidelines can change from time to time and include allocations to equity and fixed income securities in various markets, including the U.S. and foreign markets, and underlying mutual funds. FMR is not acting as investment adviser or portfolio manager with respect to Program Accounts managed by Strategic Advisers. Rather, Strategic Advisers is the portfolio manager and has the discretion to implement the models as provided by FMR or to make modifications as it deems appropriate. FMR could provide a similar Model Portfolio or manage accounts using a similar investment strategy for its other clients and could provide the model to such accounts or clients prior to providing it to Strategic Advisers. At any time, Strategic Advisers can determine to no longer receive a Model Portfolio from FMR, in which case Strategic Advisers can engage another investment firm to provide a model portfolio or manage Program Accounts without recommendations from a model portfolio provider. Strategic Advisers has designed investment guidelines for the Model Portfolios delivered by FMR. These guidelines can change from time to time. Please see Strategic Advisers' Program Fundamentals for Fidelity Strategic Disciplines for information about Strategic Advisers' model portfolio services and the risks associated with investing in such portfolios.

DISCIPLINARY INFORMATION

There are no legal or disciplinary events that are material to the evaluation of FMR's business or the integrity of its management.

OTHER FINANCIAL INDUSTRY ACTIVITIES AND AFFILIATIONS

Broker-Dealers

FMR has relationships or arrangements with the following broker-dealers:

Fidelity Distributors Company LLC ("FDC LLC"), a wholly-owned subsidiary of Fidelity Global Brokerage Group, Inc., is the principal underwriter and general distributor of shares in the Fidelity family of registered, open-end management investment companies and Fidelity exchange-traded funds. FDC LLC markets products such as mutual funds, ETFs, private funds, and commingled pools advised by FMR, its affiliates, or certain unaffiliated advisers to certain third-party financial intermediaries and institutional investors. On behalf of certain FDC LLC investment advisor affiliates, FDC LLC also solicits intermediaries, institutions and governmental entities who are interested in purchasing investment advisory services directly or for their clients. FDC LLC is a registered broker-dealer under the Securities Exchange Act of 1934 ("Exchange Act").

Fidelity Brokerage Services LLC ("FBS"), a wholly-owned subsidiary of Fidelity Global Brokerage Group, Inc., is a registered broker-dealer under the Exchange Act, and provides brokerage products and services including the sale of shares of investment companies advised by FMR to individuals and institutions including retirement plans administered by affiliates. Pursuant to referral agreements and for compensation, representatives of FBS refer customers to various services offered by FBS's related persons. In addition, FBS is the distributor of insurance products, including variable annuities, which are issued by FMR's related persons, Fidelity Investments Life Insurance Company ("FIL") and Empire Fidelity Investments Life Insurance Company ("EFIL"). FBS provides shareholder services to certain of FMR's or FMR's affiliates' clients.

Fidelity Global Brokerage Group, Inc. ("FGBG"), a wholly-owned subsidiary of FMR LLC, wholly-owns six broker-dealers: Fidelity Brokerage Services LLC, National Financial Services LLC, Fidelity Distributors Company LLC, Fidelity Prime Financing LLC, Digital Brokerage Services LLC and Green Pier Fintech LLC. FGBG and FMR Sakura Holdings, Inc., both wholly-owned subsidiaries of FMR LLC, along with other third-party members, also have membership interests in Kezar Markets, LLC. Transactions for clients of FMR or other entities for which FMR serves as adviser or sub-adviser or provides discretionary trading services, as well as clients of FMR's affiliates, are executed through two alternative trading systems, the Level ATS and Luminex ATS, both operated by Kezar Trading, LLC, a wholly-owned subsidiary of Kezar Markets, LLC.

Digital Brokerage Services LLC (“DBS”), a wholly owned subsidiary of Fidelity Global Brokerage Group Inc., is a registered broker-dealer under the Exchange Act. DBS operates a primarily digital/mobile application- based brokerage platform, which enables retail investors to open brokerage accounts via the mobile application and purchase and sell equity securities, including shares of investment companies advised by FMR. DBS receives remuneration from FMR for expenses incurred in servicing and marketing FMR products.

National Financial Services LLC (“NFS”) is a registered broker-dealer under the Exchange Act and is a fully disclosed clearing broker-dealer. As such, NFS provides clearing, settlement, and execution services for other broker-dealers, including its affiliate Fidelity Brokerage Services. Fidelity Capital Markets (“FCM”) is a division of NFS which provides trade executions for FMR and other advisory clients. Additionally, FCM operates CrossStream, an alternative trading system that allows orders submitted by its subscribers to be crossed against orders submitted by other subscribers. CrossStream is used to execute transactions for FMR or FMR’s affiliates’ investment company and other advisory clients. NFS provides transfer agent or sub transfer agent services and other custodial services to certain of FMR’s or FMR’s affiliates’ clients. NFS also provides securities lending services to certain of FMR’s or FMR’s affiliates’ clients. NFS is a wholly-owned subsidiary of Fidelity Global Brokerage Group Inc., a holding company that provides certain administrative services to NFS and other affiliates.

Kezar Trading, LLC, a registered broker-dealer and operator of alternative trading systems (“ATS”), operates the Luminex ATS and the Level ATS, which allow orders submitted by its subscribers to be crossed against orders submitted by other subscribers. Kezar Trading, LLC is a wholly owned subsidiary of Kezar Markets, LLC. FGBG and FMR Sakura Holdings, Inc., both wholly owned subsidiaries of FMR LLC, along with other third-party members, have membership interests in Kezar Markets, LLC. Kezar Trading, LLC charges a commission to both sides of each trade executed in the Luminex ATS and Level ATS. The Luminex ATS and Level ATS are used to execute transactions for FMR’s or FMR’s affiliates’ investment company and other advisory clients. NFS serves as a clearing agent for FMR transactions executed in the Luminex ATS and Level ATS.

FMR is authorized to place portfolio transactions with FCM and use CrossStream, an ATS operated by NFS, as well as Luminex ATS and Level ATS, which are operated by Kezar Trading, LLC, if it reasonably believes the quality of the transaction is comparable to what it would be with other qualified broker-dealers. In addition, FMR places client trades with broker-dealers that use NFS or FCC as a clearing agent.

In all cases, transactions executed by affiliated brokers on behalf of registered investment company clients are effected in accordance with Rule 17e-1 under the 1940 Act, and procedures approved by the Trustees of FMR’s or its affiliates’ clients in the Fidelity group of funds.

FCM and Kezar Trading, LLC cross transactions on an agency basis between clients of FMR or its affiliates, including investment company clients, non-investment company clients, and other non-advisory clients (agency cross transactions), as permitted by applicable rules and regulations. Such transactions will be executed, to the extent required by law, in accordance with (i) Rule 206(3)-2 under the Advisers Act, requiring written consent, confirmations of transactions and annual reporting, and (ii) procedures adopted by the Board of Trustees of FMR’s or FMR’s affiliates’ clients in the Fidelity group of funds pursuant to Rule 17e-1 under the 1940 Act.

Conflicts of interest that arise from dealings with affiliated brokers are governed by various policies adopted by the Fidelity Funds Boards of Trustees. For example, Section 10(f) of the 1940 Act is intended to prevent affiliated underwriters from “dumping” undesirable securities on funds or otherwise using fund purchases to benefit the underwriting syndicate. In accordance with Rule 10f-3, the Fidelity Funds Boards of Trustees have adopted procedures by which the funds are permitted to purchase securities in offerings for which FCM acts as a principal underwriter, provided that certain conditions are satisfied.

Additionally, Section 17(a) prevents affiliated brokers on their own behalf from selling securities to or buying securities from the funds, except to the extent allowed by law, to prevent those affiliated brokers from taking advantage of the funds. The Fidelity Funds Boards of Trustees have adopted policies and procedures

preventing affiliated brokers from engaging in such transactions, except to the extent allowed by law. Furthermore, Section 17(e) prevents affiliated brokers from charging excessive fees for transactions on behalf of the funds. Under Rule 17e-1, affiliated brokers are permitted to receive a “usual and customary brokerage commission” in connection with transactions effected on a securities exchange, and the Rule 17e-1 procedures adopted by the Fidelity Funds Boards of Trustees ensure that the fees do not exceed the usual and customary requirements.

In certain circumstances, trades are executed through alternative trading systems or national securities exchanges in which FMR or its affiliates have an interest. Any decision to execute a trade through an alternative trading system or exchange in which FMR or its affiliates have an interest would be made in accordance with applicable law, including best execution obligations. For trades placed on such a system or exchange, not limited to ones in which FMR or its affiliates have an ownership interest, FMR or its affiliates derive benefit in the form of increased valuation(s) of its equity interest, where it has an ownership interest, or other remuneration, including rebates.

Securities Lending Agent

NFS provides securities lending services to the Fidelity group of funds and certain other client accounts (lending accounts) that are advised by FMR or FMR’s affiliates under a securities lending agency agreement subject to a flat fee arrangement and a limit, or cap, on total daily compensation. An economic incentive exists for NFS to increase the amount of securities out on loan to generate income equal to the daily cap; however, FMR, not NFS, determines daily the securities that are eligible to participate in the securities lending program. NFS has established policies and procedures designed to help ensure that the information NFS receives about the lending accounts in its capacity as securities lending agent is used solely in connection with the agency securities lending program and is not accessed by trading personnel who effect transactions in NFS proprietary accounts or in the accounts of NFS’s other clients.

NFS also borrows securities from the Fidelity group of funds pursuant to SEC exemptive relief. NFS uses automated third-party software to allocate loans to a pre-approved list of borrowers provided by FMR to help ensure the fair allocation of lending opportunities between NFS and other borrowers. The above referenced policies and procedures help ensure that the information NFS receives in its capacity as securities lending agent is not used by NFS in its role as borrower.

If a borrower in a securities loan defaults, NFS would indemnify a lending account to the extent that the collateral deposited by the borrower is insufficient to make the lending account whole, which subjects NFS to collateral shortfall risk (“shortfall risk”). Management of the shortfall risk creates an incentive for NFS to limit the amount of securities lending activity NFS conducts on behalf of the lending accounts, which has the potential to reduce the volume of lending opportunities for certain types of loans. FMR has established policies and procedures that provide for FMR or its affiliates, as applicable, to compare loans entered into by NFS on behalf of the lending accounts with opportunities for securities loans that NFS passed over. Missed opportunities will be evaluated by FMR or its affiliates, as applicable, and reviewed with NFS. NFS has purchased insurance to mitigate shortfall risk.

Investment Companies

FMR provides portfolio management services for several investment companies, including investment companies in the Fidelity group of funds. FMR disclaims that it is a related person of the investment companies for which it provides investment management services.

Other Investment Advisers

FMR or its affiliates have relationships or arrangements with the following investment advisers:

FMR Investment Management (UK) Limited (“FMR UK”), an indirect wholly-owned subsidiary of FMR, is registered as an investment adviser under the Advisers Act and is authorized by the U.K. Financial Conduct Authority to provide investment advisory and portfolio management services. FMR UK provides investment

advisory and portfolio management services as a sub-adviser to certain of FMR's clients, including investment companies in the Fidelity group of funds, and provides trading services to FMR and its affiliates. FMR UK provides portfolio management services as an adviser or sub-adviser to clients of other affiliated and unaffiliated advisers. FMR UK is also authorized to undertake insurance mediation as part of its benefits consulting business. FMR UK is also registered with the Central Bank of Ireland.

Fidelity Management & Research (Japan) Limited ("FMR (Japan)"), a direct wholly-owned subsidiary of FMR, is a registered investment adviser under the Advisers Act and is authorized by the Japan Financial Services Agency (Kanto Local Finance Bureau) to provide investment advisory and discretionary investment management services. FMR (Japan) supplies investment research and investment advisory information and provides discretionary investment management services to certain clients of FMR and its affiliates, including investment companies in the Fidelity group of funds, and to clients of other affiliated and unaffiliated advisers.

Fidelity Management & Research (Hong Kong) Limited ("FMR (Hong Kong)"), a wholly-owned subsidiary of FMR, is a registered investment adviser under the Advisers Act and is authorized by the Hong Kong Securities and Futures Commission to advise on securities, dealing in futures contracts, provide asset management services, and conduct trading services. FMR (Hong Kong) provides investment advisory or portfolio management services as a sub-adviser with respect to certain clients of FMR and its affiliates, including investment companies in the Fidelity group of funds, and provides trading services to FMR and its affiliates. FMR (Hong Kong) provides portfolio management services as an adviser or sub-adviser to clients of other affiliated and unaffiliated advisers.

Fidelity Personal and Workplace Advisors LLC ("FPWA"), a wholly-owned subsidiary of Fidelity Advisory Holdings LLC, which in turn is wholly-owned by FMR LLC, is a registered investment adviser under the Advisers Act. FPWA provides non-discretionary investment management services and serves as the sponsor of investment advisory programs. FMR acts as sub-advisor to FPWA in providing discretionary portfolio management services to certain FPWA client accounts.

Fidelity Institutional Wealth Adviser LLC ("FIWA"), a wholly-owned subsidiary of FMR LLC, is a registered investment adviser under the Advisers Act. FIWA provides investment management services and sponsors the Fidelity Managed Account Xchange program. FMR acts as sub-advisor in providing discretionary portfolio management services to customized separately managed accounts offered by FIWA ("Fidelity Institutional Custom SMAS"). FMR also provides model portfolio construction services to FIWA in connection with FIWA's services to its intermediary clients and FIWA compensates FMR for such services.

Strategic Advisers LLC ("Strategic Advisers") is a wholly-owned subsidiary of Fidelity Advisory Holdings LLC, which in turn is wholly-owned by FMR LLC, and is a registered investment adviser under the Advisers Act. Strategic Advisers provides discretionary and non-discretionary advisory services and acts as the investment manager to registered investment companies that invest in affiliated and unaffiliated funds and as sub-adviser to various retail accounts, including separately managed accounts. Strategic Advisers acts as sub-advisor to FPWA in providing discretionary portfolio management services to certain FPWA client accounts, and assists FPWA in evaluating other sub-advisors. FMR provides model portfolio construction services to Strategic Advisers in connection with Strategic Advisers' provision of discretionary portfolio management services to certain clients. Strategic Advisers is registered with the CFTC as a commodity pool operator and is a member of the NFA.

FIAM LLC ("FIAM") is a wholly-owned subsidiary of FIAM Holdings LLC, which in turn is wholly-owned by FMR LLC, and provides investment management services, including sub-advisory services to FMR or its affiliates. FIAM is a registered investment adviser under the Advisers Act. FIAM is also registered with the Central Bank of Ireland.

Ballyrock Investment Advisors LLC ("Ballyrock") is a wholly-owned subsidiary of FMR LLC, and is registered as an investment adviser under the Advisers Act. Ballyrock provides investment advisory services to collateralized loan obligation ("CLO") issuers, with a focus on investments in high yield debt securities,

primarily including bank loans. FMR or its affiliates provides portfolio management services as a sub-adviser to clients of Ballyrock.

Impresa Management LLC (“Impresa”) is owned by trusts, the trustees of which are individuals, certain of whom are employees of FMR LLC. Impresa is a registered investment adviser under the Advisers Act and serves as (i) an investment adviser and general partner or manager for certain limited partnerships or limited liability companies (the “Investor Entities”); and (ii) an investment adviser and/or the ultimate general partner or manager (either directly or indirectly through subsidiary entities) to certain collective investment entities in which the Investor Entities invest and to funds or other special purpose vehicles that co-invest or hold investments alongside such collective investment vehicles. Impresa also provides investment advisory services as an adviser to other affiliated entities or sub-adviser to other affiliated or unaffiliated entities. Impresa generally invests, on behalf of its clients, in securities of private companies, purchased and sold in privately negotiated transactions, and generally does not purchase publicly traded securities. From time to time, Impresa clients acquire or hold publicly traded securities as a result of a private portfolio company’s initial public offering, the purchase of additional securities in such an initial public offering or through the acquisition of a portfolio company by a public company. Impresa from time to time invests in less established or early-stage companies, as well as later-stage private companies. For more information regarding conflicts of interests relating to proprietary trading, see “Code of Ethics, Participation or Interest in Client Transactions and Personal Trading” section herein.

Fidelity Diversifying Solutions LLC (FDS) is a wholly owned subsidiary of FMR LLC and a registered investment adviser under the Advisers Act. FDS is registered with the U.S. Commodity Futures Trading Commission (the “CFTC”) under the Commodity Exchange Act of 1936, as amended (the “CEA”), as a commodity pool operator (“CPO”) and a commodity trading adviser (“CTA”). FDS is a member of the National Futures Association (the “NFA”). FDS provides portfolio management services as an adviser and, where required, a CPO to registered investment companies unregistered investment companies (private funds), business development companies (“BDCs”) and separately managed accounts.

Fidelity Management & Research (Canada) ULC (“FMR-Canada”) is an indirect wholly-owned subsidiary of FMR. FMR-Canada is registered as a portfolio manager and commodity trading manager with the Ontario Securities Commission. FMR-Canada provides portfolio management services as a sub-adviser to certain of FMR’s and its affiliates’ clients.

FMR or its affiliates provide certain investment management personnel to or use the investment management personnel of certain of the foregoing investment advisors under personnel sharing arrangements or other inter-company agreements. In addition, FMR or its affiliates provide certain administrative services to certain of the foregoing investment advisers, including, but not limited to, securities and derivatives trade execution, investment compliance and proxy voting.

Banking or Thrift Institutions

FMR or its affiliates have relationships or arrangements with the following banking and trust institutions:

Fidelity Management Trust Company (“FMTC”), a limited-purpose trust company organized and operating under the laws of The Commonwealth of Massachusetts, provides non-discretionary trustee and custodial services to employee benefit plans and IRAs through which individuals invest in mutual funds managed by FMR or its affiliates, and discretionary investment management services to institutional clients and acts as trustee and investment manager of collective investment trusts. FMR or its affiliates provide portfolio management services as a sub-adviser to certain of FMTC’s clients. FMTC is a wholly-owned subsidiary of FMR LLC.

Fidelity Personal Trust Company, FSB (“FPTC”) is a federal savings bank that offers fiduciary services to its customers that include trustee or co-trustee services, custody, principal and income accounting, investment management services, and recordkeeping and administration. FPTC is a wholly owned subsidiary of Fidelity Thrift Holding Company, Inc., which in turn is wholly owned by FMR LLC.

Fidelity Institutional Asset Management Trust Company (“FIAM TC”), a non-depository trust company organized under the laws of the State of New Hampshire, provides investment management services principally for institutional clients, including employee benefit plans and acts as trustee and investment manager of collective investment trusts. FIAM TC is a wholly-owned subsidiary of FIAM Holdings LLC, which in turn is wholly-owned by FMR LLC.

FMR or its affiliates provide certain investment management personnel to certain of the foregoing banking and trust institutions under personnel sharing arrangements or other inter-company agreements. In addition, FMR or its affiliates provide certain administrative services to certain of the foregoing banking and trust institutions, including, but not limited to, securities and derivatives trade execution, investment compliance and proxy voting.

Insurance Companies or Agencies

FMR or its affiliates have relationships or arrangements with the following insurance companies and agency:

Fidelity Investments Life Insurance Company (“FIL”), a wholly-owned subsidiary of FMR LLC, is engaged in the distribution and issuance of life insurance and annuity products that may offer shares of investment companies managed by FMR or its affiliates.

Empire Fidelity Investments Life Insurance Company (“EFIL”), a wholly-owned subsidiary of FIL, is engaged in the distribution and issuance of life insurance and annuity products that may offer shares of investment companies managed by FMR or its affiliates to residents of New York.

Fidelity Insurance Agency, Inc., a wholly-owned subsidiary of FMR LLC, is engaged in the business of selling life insurance and annuity products of affiliated and unaffiliated insurance companies.

Fidelity Health Insurance Services LLC, a wholly owned subsidiary of FMR LLC, is an insurance licensed business entity (agency) under which certain workplace and individual insurance-related product and services are offered or sold. Product and services include Medicare-related products sold to individuals and employer-offered benefits such as broker/agent for certain group health plans, retiree transition to Medicare, and voluntary/optional insurance coverage.

Soteria Reinsurance Ltd (“Soteria Re”) is owned directly by Soteria Reinsurance Holdings, LLC which itself is a 100% owned subsidiary of FMR LLC. Soteria Re is a recently incorporated Bermuda exempted company. Soteria Re will focus on reinsurance of US retail annuities and other investment-oriented insurance products underwritten by Fidelity Investment Life Insurance Company (FIL).

Participating Affiliates

Fidelity Business Services India Private Limited (“FBS India”), with its registered office in Bangalore, is incorporated under the laws of India and is ultimately owned by FMR LLC through certain of its respective direct or indirect subsidiaries. Certain employees of FBS India (FBS India Associated Employees) from time to time provide certain research services for FMR and its affiliates, which FMR and its affiliates may use for their U.S. clients.

FBS India is not registered as an investment adviser under the Advisers Act and is deemed to be a “Participating Affiliate” (as this term has been used by the SEC’s Division of Investment Management in various no-action letters granting relief from the Advisers Act’s registration requirements for certain affiliates of registered investment advisers) of FMR. FMR deems FBS India and certain of its employees as associated persons within the meaning of Section 202(a)(17) of the Advisers Act, because FBS India, through such employees, contribute to FMR’s research process and may have access to information concerning which securities are being recommended to FMR’s U.S. clients prior to the effective dissemination of such recommendations. FBS India also provides certain affiliates of FMR with certain research relating to securities that are the subject of research it provides to FMR. As a Participating Affiliate of FMR, FBS India has agreed to submit itself to the jurisdiction of United States courts for actions arising

under U.S. securities laws in connection with investment advisory activities conducted for FMR's U.S. clients. FMR maintains a list of the employees of FBS India whom it has deemed associated persons, which it will make available to current and prospective U.S. clients upon request.

CODE OF ETHICS, PARTICIPATION OR INTEREST IN CLIENT TRANSACTIONS, AND PERSONAL TRADING

Code of Ethics

From time to time, FMR purchases or sells for the accounts of clients securities in which FMR or its affiliates' in-house accounts (including institutional accounts), affiliates, directors, officers or employees have a position. This situation results, in part, from the breadth of securities purchased by FMR's or its affiliates' varied clients and from FMR's and its affiliates' personnel being permitted to invest in securities for their personal accounts. The conflicts of interest involved in such transactions are governed by FMR's Code of Ethics for Personal Investing (the "Code"), which has been adopted and approved by the Board of Trustees of FMR's or its affiliates' investment company clients in the Fidelity group of funds in accordance with Rule 17j-1 under the 1940 Act, and which incorporates the Adviser's Code of Ethics ("Adviser's Code") adopted in accordance with Rule 204A-1 under the Advisers Act.

The Code applies to officers, directors, and employees (including certain contractors) of FMR, and certain employees of its affiliates ("Advisory Personnel") and requires that they place the interests of FMR's clients above their own. The Code establishes securities transactions requirements for all Advisory Personnel and their covered persons, including their spouses. More specifically, the Code: (i) requires that Advisory Personnel and their covered persons move their covered accounts to FBS unless an exception exists or prior approval is obtained; (ii) requires pre-clearance of transactions in covered securities with limited exceptions; (iii) requires reporting of transactions in covered securities on a quarterly basis with limited exceptions; (iv) requires reporting of securities accounts and holdings of covered securities at the time of hire and annually thereafter; (v) prohibits personal trading by a portfolio manager within seven days before or after a trade in any covered security of the same issuer by a fund managed by such portfolio manager except in limited circumstances; (vi) prohibits purchases of securities in initial public offerings unless an exception has been approved; (vii) restricts the selling short of a covered security; (viii) prohibits investments in limited offerings without prior approval; and (ix) requires disgorgement of profits from short-term transactions with limited exceptions. Violation of the Code's requirements may also result in the imposition of remedial action, including termination.

In addition, the Adviser's Code, as incorporated in the Code: (1) describes the fiduciary duty Advisory Personnel have to FMR's clients; (2) requires Advisory Personnel of FMR to comply with federal securities laws; (3) requires certain Advisory Personnel of FMR to report, and for FMR to review, such Advisory Personnel's and their covered persons' mutual fund share transactions and holdings periodically (core money market funds excepted) for funds advised by FMR or an affiliate and certain other funds specified in the Adviser's Code; (4) requires Advisory Personnel of FMR to report any violations of the Code to FMR's Ethics Office; and (5) requires FMR to provide each Advisory Personnel with a copy of the Code and any amendments, and requires Advisory Personnel to acknowledge their receipt and understanding of the Code.

FMR will provide a copy of its Adviser's Code, as integrated into the Code, to any client or prospective client upon request.

Conflicts of Interest

In certain instances, the purchase or sale of securities for the accounts of clients is restricted in connection with distributions of securities where FMR, its affiliates or their clients are proposing to act as selling shareholders in the distribution. Any such activity is evaluated in accordance with Regulation M under the Exchange Act, the 1940 Act and other applicable rules and regulations and from time-to-time results in

restrictions on the ability of client accounts to purchase or sell in the distribution and/or in the secondary market. From time to time, FCM, a division of NFS, an affiliated broker-dealer of FMR, acts as a selling agent or principal underwriter in underwritings of municipal, equity or other securities which FMR recommends to clients. The Trustees of FMR's or its affiliates' mutual fund clients in the Fidelity group of funds evaluate any such activity by FMR in accordance with Rule 10f-3 under the 1940 Act and procedures adopted pursuant to Rule 10f-3.

A conflict of interest situation is presented when a portfolio manager considers investing a client account in securities of an issuer in which FMR, its affiliates or their (or their fund clients') respective directors, officers or employees already hold a significant position for their own account, including positions held indirectly through certain funds or accounts managed by FMR or one of its affiliated advisers (collectively, "Proprietary Accounts"). Because the 1940 Act, as well as other applicable laws and regulations, restrict certain transactions between affiliated entities or between an advisor and its clients, client accounts managed by FMR or its affiliates, including accounts sub-advised by third parties, are, in certain circumstances, prohibited from participating in offerings of such securities (including initial public offerings and other offerings occurring before or after an issuer's initial public offering) or acquiring such securities in the secondary market. For example, ownership of a company by the Investor Entities advised by Impresa or other Proprietary Accounts has, in certain situations, resulted in restrictions on FMR's and its affiliates' client accounts' ability to acquire securities in the company's initial public offering and subsequent public offerings, private offerings, and in the secondary market, and additional restrictions could arise in the future; to the extent such client accounts acquire the relevant securities after such restrictions are subsequently lifted, the delay could affect the price at which the securities are acquired. A conflict of interest situation is presented when FMR or its affiliates acquire, on behalf of their client accounts, securities of the same issuers whose securities are already held in Proprietary Accounts, because such investments could have the effect of increasing or supporting the value of the Proprietary Accounts. A conflict of interest situation also arises when FMR investment advisory personnel consider whether client accounts they manage should invest in an investment opportunity that they know is also being considered by an affiliate of FMR for a Proprietary Account, to the extent that not investing on behalf of such client accounts improves the ability of the Proprietary Account to take advantage of the opportunity. FMR has adopted policies and procedures and maintains a compliance program designed to help manage such actual and potential conflicts of interest.

A conflict of interest situation is also presented if the funds' orders for the purchase or sale of securities do not get fully executed due to being aggregated with those of other accounts managed by FMR or an affiliate, including FMR's or its affiliates' in-house accounts. FMR has adopted policies and procedures (for example, trade allocation procedures) and maintains a compliance program designed to help manage these actual and potential conflicts. There can be no assurance, however, that all conflicts have been addressed in all situations. Trading in personal accounts, which gives rise to actual and potential conflicts of interest, is subject to certain restrictions by the Code.

From time to time, in connection with its business, FMR obtains material, non-public information. In compliance with applicable laws, FMR has adopted a comprehensive set of policies and procedures that prohibit the use of material, non-public information by investment professionals and other employees. FMR also has procedures addressing the use of third party paid research consultants.

In addition, FMR has implemented a Corporate Gifts & Entertainment Policy intended to set standards for business entertainment and the giving or receiving of gifts, help employees make sound decisions with respect to these activities, and ensure that the interests of FMR's clients come first. Similarly, to support compliance with applicable "pay-to-play" rules, FMR has implemented a Personal Political Contributions & Activities Policy which requires employees to pre-clear political contributions and activities. FMR also has a Global Anti-Corruption Policy regarding commercial bribery and bribery of government officials that prohibits directly or indirectly giving, offering, authorizing, promising, accepting, or receiving any bribe, facilitation payment, kickback, or payoff (whether in cash or any other form) with the intent to improperly obtain or retain business or any improper advantage.

BROKERAGE PRACTICES

Selection of Brokers and Dealers to Effect Client Transactions

Discretionary Advisory Services

FMR or its affiliates generally have authority to select brokers (whether acting as a broker or a dealer) to place or execute clients' portfolio securities transactions. FMR or its affiliates are responsible for the placement of portfolio securities transactions for certain client accounts for which an affiliate or related person has investment discretion. In selecting a broker or dealer for a specific securities transaction, FMR or its affiliates evaluate a variety of criteria and use good faith judgment in seeking to obtain execution of portfolio securities transactions at commissions or costs that are reasonable in relation to the brokerage and research services provided, where allowed under applicable law.

In selecting broker-dealers ("brokers"), including affiliates of FMR, to execute client portfolio securities transactions, FMR or its affiliates consider the factors they deem relevant in the context of a particular trade and in regard to FMR's or its affiliates' overall responsibilities with respect to the fund and other investment accounts including any instructions from the client's portfolio manager, which may emphasize, for example, speed of execution over other factors. Based on the factors considered, FMR or its affiliates may choose to execute an order using electronic channels, including broker-sponsored algorithms, internal crossing, or by verbally working an order with one or more brokers. Other possibly relevant factors include, but are not limited to, the following: price; costs; the size, nature and type of the order; speed of execution; financial condition and reputation of the broker; broker specific considerations (e.g., not all brokers are able to execute all types of trades); broker willingness to commit capital; the nature and characteristics of the markets in which the security is traded; the trader's assessment of whether and how closely the broker likely will follow the trader's instructions to the broker; confidentiality and the potential for information leakage; the nature or existence of post-trade clearing, settlement, custody and currency convertibility mechanisms; and the provision of brokerage and research products and services, if applicable and where allowed by law.

The trading desks through which FMR or its affiliates execute trades are instructed to execute portfolio transactions on behalf of their clients based on the quality of execution without any consideration of Research and Brokerage Services (as defined below) the broker or dealer provides. The administration of Research and Brokerage Services is managed separately from the trading desks, and traders have no responsibility for administering the research program, including the payment for research.

Please see the FPWA Program Fundamentals for further information about Program fees, brokerage commissions and additional fees for transactions in a Program Account.

Non-Discretionary Advisory Services

FMR does not execute transactions in connection with the provision of non-discretionary investment models to Strategic Advisers.

Identification and Resolution of Errors

As an investment adviser, FMR maintains policies and procedures that address the identification and correction of errors consistent with applicable standards of care and clients' investment management agreements. To the extent that an error occurs, FMR's policy is to identify and resolve the error as promptly as possible. FMR will address and resolve errors on a case-by-case basis, in its discretion, based on each error's facts and circumstances. FMR is not obligated to follow any single method of resolving errors.

An incident is any occurrence or event that interrupts normal investment-related activities or that deviates from applicable law, the terms of an investment management agreement, or applicable internal or external policies or procedures. Incidents can occur at FMR or at one of FMR's service providers and can be identified by any of the same.

The determination of whether an incident constitutes an error is made by FMR in its sole discretion based on the relevant facts and circumstances of each incident considered in light of the applicable standard of care. Errors include, without limitation: (i) purchases or sales that exceed the amount of securities intended to trade for a fund or account; (ii) the purchase (or sale) of a security when it should have been sold (or purchased); (iii) the purchase or sale of a security not intended for the fund or account, and/or contrary to investment guidelines or restrictions; and (iv) incorrect allocations of trades.

Situations that generally would be considered by FMR to be incidents but not errors include, without limitation, (i) failure by a portfolio manager to provide timely notification of an incorrect purchase of a security although the security purchased was appropriate for the fund or account; (ii) passive or active breach of an internal fund or account-level limit; (iii) failure to update a portfolio manager in a timely manner regarding an increase in shares outstanding or additional room to buy for a security that had been at an aggregate limit; and (iv) external events, such as securities exchange outages. Other situations that result from failures in internal processes, people or systems, such as other routine processing errors or major systems failures, may be deemed to be incidents and not errors depending on the facts and circumstances. For example, computer, communications, data processing, networks, cloud computing, backup, business continuity or other operating, information or technology systems, including those FMR outsources to other providers, may fail to operate properly or become disabled, overloaded or damaged as a result of a number of factors. These factors could include events that are wholly or partially beyond FMR's control and may have a negative impact on our ability to conduct business activities. Though losses arising from operating, information or technology systems failures could adversely affect a client account's performance, such losses would likely not be reimbursable under FMR's policies.

Additionally, incidents involving fund and account monitoring or aggregate monitoring compliance violations may or may not be deemed by FMR to be errors depending on the facts and circumstances. For example, an active breach of a client mandate or regulatory limit (e.g., due to an acquisition of additional securities for an account) may be deemed to be an error and may be compensable depending on the particular circumstances, but a passive breach of such a limit (e.g., due to a reduction in the issuer's outstanding securities) would not be considered an error and would not be compensable. Active breaches of issuer or regulatory limits, including poison pill limits, may be deemed to be errors and may be compensable depending on the circumstances, but passive breaches generally will not. Further, a passive breach of an aggregate limit on holdings of a security established internally by FMR and its affiliates, and instances where all available aggregate capacity on a security is not fully utilized, generally are not considered errors and are not compensable, but an active breach of an internal aggregate limit may be deemed to be an error and compensable depending on the particular circumstances. To the extent that client accounts already own securities that directly or indirectly contribute to certain ownership thresholds being exceeded, FMR may sell securities held in such accounts to bring account-level and/or aggregate ownership below the relevant threshold. If any such sales result in losses for client accounts, those client accounts may bear such losses depending on the particular circumstances.

FMR is responsible for notifying, when appropriate, the affected client of an error. FMR generally will not notify clients about incidents deemed not to be errors and non-compensable errors, unless otherwise agreed with particular clients. All errors requiring reimbursement to a Fidelity affiliated mutual fund or ETF of \$100,000 or more must be reported to the Compliance Committee (or other applicable Committee) of the fund's or ETF's Board of Trustees at its next scheduled meeting.

When FMR determines that reimbursement is appropriate, the account will be compensated as determined in good faith by FMR. Resolution of errors includes, but is not limited to, permitting client accounts to retain gains or reimbursing client accounts for losses resulting from the error. The calculation of the amount of any loss will depend on the facts and circumstances of the error, and the methodology used by FMR may vary. Unless prohibited by applicable regulation or a specific agreement with the client, FMR will net a client's gains and losses from the error or a series of related errors with the same root cause and compensate the client for the net loss. In general, compensation is expected to be limited to direct monetary losses and will not include any amounts that FMR deems to be speculative or uncertain, nor will it cover

investment losses not caused by the error. FMR may elect to establish an error account for the resolution of errors which could be used depending on the facts and circumstances.

Investment Research Products and Brokerage Services Furnished by Research Providers and Brokers

FMR and its affiliates have established policies and procedures relating to brokerage commission uses in compliance with Section 28(e) of the Exchange Act, the provisions of the 1940 Act, and various interpretations of the staff of the SEC thereunder, and with regard to FMR UK, where applicable, the revised Markets in Financial Instruments Directive in the European Union, commonly referred to as “MiFID II”, as implemented in the United Kingdom through the Conduct of Business Sourcebook Rules of the UK Financial Conduct Authority (the “FCA”). Not all FMR client accounts consume the same Research and Brokerage Services. For example, any research consumed by the portfolio management team that is responsible for managing Program accounts will not be generated or paid for by using client commissions or soft dollar credits.

For a full description of FMR’s policies and procedures that apply to FMR’s other clients when it uses brokerage commission to pay for research or services, please see FMR’s Form ADV Part 2A brochure.

Other Considerations and Brokerage Arrangements

Broker Restrictions

FMR or its affiliates recommend that clients do not request them to direct client portfolio transactions to specific brokers. Clients may nonetheless make such requests, subject to FMR’s or its affiliates’ attempt to seek quality execution and provided that the broker is an approved counterparty of FMR or its affiliates. Clients should be aware that if they require FMR or its affiliates to direct portfolio transactions to specific brokers, or if clients restrict trading with specific brokers (for example, because of affiliations) (a) FMR or its affiliates may be unable to achieve most favorable execution of such directed or restricted broker transactions; (b) the client may pay higher brokerage commissions on such directed or restricted broker transactions because FMR or its affiliates may be unable to aggregate such transactions with other orders; and (c) the client may receive less favorable prices on such directed or restricted broker transactions.

Transactions with Certain Brokers

FMR or its affiliates place trades with certain brokers, including NFS and Kezar Trading, LLC, with whom they are under common control or otherwise affiliated, provided FMR or its affiliates determine that these affiliates’ trade -execution abilities and costs are comparable to those of non-affiliated, qualified brokerage firms, and that such transactions be executed in accordance with applicable rules under the 1940 Act and procedures adopted by FMR’s clients or FMR’s affiliates’ other clients and subject to other applicable law.

In addition, from time to time, FMR or its affiliates place client trades with brokers that use NFS or FCC as a clearing agent.

Client trades placed by FMR or its affiliates are also executed through other alternative trading systems or exchanges in which FMR or its affiliates have an interest, such as Level ATS.

Transactions Among Clients

FMR or its affiliates execute transactions between mutual funds and other accounts they manage (either on an advisory or sub-advisory basis), as well as with certain other clients managed by their affiliates. Such transactions for clients in the Fidelity group of funds will be executed in accordance with applicable rules under the 1940 Act, the Advisers Act and procedures adopted by the Boards of Trustees or Directors (as applicable) of FMR’s or FMR’s affiliates’ clients in the Fidelity group of funds or other clients of FMR or its affiliates. FMR or its affiliates also execute transactions between other mutual fund and non-mutual fund clients, and such transactions will be executed in accordance with applicable rules under the Advisers Act and procedures adopted thereunder. When FMR or its affiliates engage in adviser cross transactions, where

FMR or its affiliates directly effect an agency transaction between advisory clients without involving a broker, FMR or its affiliates will receive no compensation (other than its advisory fee), directly or indirectly, for the transaction.

Non-U.S. Securities Transactions

To facilitate trade settlement and related activities in non-U.S. securities transactions, FMR or its affiliates effect spot foreign currency transactions with foreign currency dealers. In certain circumstances, due to local law and regulation, logistical or operational challenges, or the process for settling securities transactions in certain markets (e.g., short settlement periods), spot currency transactions are effected on behalf of clients by parties other than FMR or its affiliates, including clients' custodian banks (working through sub-custodians or agents in the relevant non-U.S. jurisdiction) or broker-dealers that executed the related securities transaction.

Trade Allocation Policies

Bunched Trades

It is generally FMR's or its affiliates' practice, when appropriate, to combine or "bunch" orders of various accounts, including those of its clients, its affiliates' clients, and, in certain instances, proprietary accounts for order entry and execution. Bunched orders are executed through one or more brokers. The allotment of trades among brokers is based on a variety of factors, which include price, order size, the time of order, the security and market activity. A bunched trade executed with a particular broker is generally allocated pro-rata among the accounts that are participating in the bunched trade until any account has been filled. After any account has been filled, the trade is allocated pro-rata among any remaining accounts. Each broker's execution of a bunched order will, at times, be at a price different than another broker's bunched order execution price for the same security. Additionally, as a result of accommodating the differing arrangements regarding the payment for research that is required by MiFID II, clients in a bunched trade will, at times, not pay a pro rata share of all costs associated with that bunched trade. While FMR is under no obligation to aggregate orders for Program Accounts, in general FMR will choose to aggregate trades of individual securities for Program Accounts and/or to aggregate Program Account trades with trades for other client accounts when, in FMR's judgment, aggregation is in the best interests of all clients involved and is operationally feasible to do so.

Allocation of Trades

FMR and its affiliates have established allocation policies for their various accounts (including proprietary accounts) and securities types (e.g., equity, fixed income and high income) to ensure allocations are appropriate given clients' differing investment objectives and other considerations. These policies also apply to initial and secondary offerings and to private security investments. When, in FMR's or its affiliates' opinion, the supply/demand is insufficient under the circumstances to satisfy all outstanding orders, across all securities types the amount executed generally is distributed among participating accounts based on account net asset size (for purchases) and security position size (for sales), or otherwise according to the allocation policies. With limited exceptions, the trading systems contain rules that allocate trades on an automated basis in accordance with these policies. Generally, any exceptions to FMR's and its affiliates' policies (i.e., special allocations) must be approved by senior trading and compliance personnel and documented.

FMR's and its affiliates' trade allocation policies identify circumstances under which it is appropriate to modify or deviate from the general allocation criteria and describe the alternate procedures. For allocations based on net assets, the trade allocation policies for each of fixed income, and high income define the method of calculating net assets to be used depending on particular circumstances. The trade allocation policies define net assets generally by reference to each account's assets managed by each of the fixed income, or high income divisions, and by reference to certain security and account types, such as high income, investment grade as summarized below;

Security and Account Type	Fixed Income Trading Desk	High Income Trading Desk
High Income	1% (except 100% if buying High Income security on Fixed Income desk)	100%
Fixed Income	100%	1% (except 100% if buying Fixed Income security on High Income desk)

The high income trade allocation policy also defines net assets similarly for bank loan and real estate accounts when acquiring bank loan and real estate securities, respectively. The high income policy generally provides that 100% of a bank loan account's net assets, but only 10% of net assets for other types of high income accounts, will be taken into account when allocating bank loans. Conversely, the high income trade allocation policy generally provides that only 10% of a bank loan account's net assets will be taken into account when allocating high income securities other than bank loans.

What constitutes net assets differs for certain specialized accounts. For portfolios that raise capital through private offerings, high income, and fixed income trade allocation policies define net assets based on expected, secured, and/or funded capital, or a combination thereof, depending upon the stage of the portfolio's fundraising process. The equity trade allocation policy also allows for accounts that invest their assets primarily in private company securities to receive an increased allocation by increasing the weightings of the accounts' net assets by a certain factor for investments in those types of securities. The high income policy defines net assets for collateralized loan obligation portfolios based on expected and total market exposure. Additionally, under the fixed income trade allocation policy, when defining what constitutes net assets for separately managed account (SMA) clients including the Program Accounts, when trading alongside other client accounts, the assets of SMAs that follow similar investment strategies are grouped into an omnibus trading account, where that omnibus trading account is treated as a single portfolio for allocation purposes. After a retail SMA omnibus trading account receives an allocation of a purchase or sale of a security or other investment, such allocation will generally be further allocated among the SMAs participating in the account on a pro rata basis based on the final order size of each SMA.

Alternate allocation methods other than net asset size (for purchases) and security position size (for sales) are employed under certain circumstances, including for specialized strategies or alternative asset classes such as private real estate. The fixed income trade allocation policy allows for several alternate allocation methods, in some cases only where the portfolio managers of all accounts involved in the allocation agree to the use of the alternate method(s) as follows:

- pro rata allocations based on the size of the accounts' orders;
- rotating investment opportunities among accounts that trade consistently on specific trading desks (e.g., taxable bond desks or money market desks);
- bunching securities or other investments that are deemed to be fungible and then allocating the bunched orders on a series basis so as to keep like-securities or other investments grouped together; and/or
- providing a priority allocation for trades the execution of which are contingent on the execution of other trades.

The fixed income trade allocation policy also provides for increased or priority allocations for accounts specializing in a particular type of security or other investment including the following:

- priority allocations for certain accounts for repurchase agreements;
- increased allocations of municipal securities to single state municipal money market and municipal bond accounts for obligations that are tax-exempt within their state; and

- a priority allocation of U.S. Treasury money market securities to Treasury-only money market accounts.

In addition, futures contracts are allocated based on order size.

All of the trade allocation policies generally provide for minimum allocations based on market-defined minimum denominations, or otherwise allow increased or decreased allocations in the following circumstances:

- to avoid a *de minimis* allocation
- to round to a trading round lot, or
- in the case of the high income trade allocation policy, to complete a sale of all holdings to avoid residual holdings in an amount less than a basic unit of trading.

Trade allocations are also impacted by various regulatory requirements depending on where the trade is executed and what types of accounts are included in the trade. In such circumstances, some accounts, at times, will be prioritized over others when supply/demand is insufficient. Client accounts receive priority of allocation over proprietary accounts. Accounts for which all the assets are those of FMR or its affiliates and are not otherwise used to seed new investment products or to meet potential claims of insurance policyholders are generally considered to be proprietary accounts. Accounts owned or managed for the benefit of individual employees of FMR or its affiliates or officers or trustees of various investment products are generally considered client accounts, subject to applicable law.

REVIEW OF ACCOUNTS

On a daily basis, FMR will evaluate Program Accounts with respect to a variety of factors to determine whether the account may benefit from trading that day. Common reasons clients experience trading in their accounts include changes in the model or index, market fluctuations, tax management opportunities, and client requested activities such as cash deposits or withdrawals. FMR does not anticipate that each Program Account will be traded each day. Each of the securities purchased in an account will appear on a client's account statement. Securities selected for Program Accounts may be individually tailored based on a client's existing holdings and unique financial situation and, where applicable, on the tax attributes of the assets in an account. A client can expect that the securities that compose his or her account vary, perhaps significantly, from the securities purchased for another client's account managed using the same strategy. Clients may receive periodic performance summaries or similar reports that detail the performance of a client's account(s) and summarize the market activity during the quarter. Industry standards are applied when calculating performance information. FPWA also makes account performance information for FPWA Program Accounts available on a password-protected website.

CLIENT REFERRALS AND OTHER COMPENSATION

FMR does not have client referral arrangements.

CUSTODY

FMR does not maintain custody for Program clients' assets in connection with the discretionary portfolio management services it provides to Program Accounts. To participate in the Program, clients must establish and maintain a brokerage account with FBS, a registered broker-dealer and an affiliate of FPWA and FMR. NFS, an affiliate of FBS, FPWA and FMR, has custody of client assets and will perform certain account services, including the implementation of trading instructions, as well as custodial and related services.

Certain personnel of FPWA, FMR, FBS, and NFS share premises and have common supervision. Clients should carefully review all statements and other communications received from FBS and NFS.

INVESTMENT DISCRETION

FMR's portfolio management services for Program Accounts include the discretionary authority to determine which securities to purchase or sell, the total amount of such purchases and sales, and the brokers or dealers through which transactions are effected in such accounts. Such discretionary authority is subject to certain limits, including the Program's investment objectives and policies, regulatory constraints, and those investment restrictions that are imposed based on a client's request in accordance with applicable laws.

VOTING CLIENT SECURITIES

Discretionary Advisory Services

FMR does not generally acquire authority for, or exercise, proxy voting on a client's behalf in connection with managing Program Accounts. Unless a client directs FMR otherwise pursuant to the paragraph below, the client will receive proxy materials directly from the issuer of the security (or its service provider). FMR will not advise clients on the voting of proxies. Clients must exercise any proxy voting directly.

FMR generally treats certain voluntary corporate actions as subject to the exercise of its discretion as an investment manager. Accordingly, FMR will make decisions with respect to voluntary corporate actions directly as part of the investment management services it provides to Program Accounts. However, clients retain the right to make elections with respect to voluntary corporate actions if they so choose; if a client would like to make an election with respect to a security subject to a voluntary corporate action, the client may contact Fidelity to transfer the security out of the client's Program Account.

Non-Discretionary Advisory Services

FMR does not vote proxies for any accounts in connection with the provision of non-discretionary advisory services.

FINANCIAL INFORMATION

FMR does not solicit prepayment of client fees. Furthermore, there are no financial conditions that are reasonably likely to impair FMR's ability to meet any of its contractual commitments to its clients.

REQUIREMENTS FOR STATE-REGISTERED ADVISERS

FMR is not registered with any state securities authority.



MICHAEL DANAHER

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September 1, 2023

This brochure supplement provides information about Michael Danaher that supplements the Fidelity Management & Research Company LLC ("FMR") brochure. You should have received a copy of that brochure. Please contact FMR's Compliance Officer if you did not receive FMR's brochure or if you have any questions about the contents of this supplement.

EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE

Michael Danaher, born in 1991, is a portfolio manager on the Personal Bond Management team for FMR and its affiliates. Prior to assuming his current position, Mr. Danaher was a portfolio analyst responsible for the implementation and execution of the investment strategy for Fidelity's fixed income separately managed accounts. Previously, he was a research associate covering state and local governments across the country. He has been in the financial industry since 2012.

Mr. Danaher earned his bachelor of arts degree in economics, with a minor in public policy, from Dartmouth College. He is also a Chartered Financial Analyst ("CFA") charterholder¹.

DISCIPLINARY INFORMATION

There are no legal or disciplinary events that are material to a client's or prospective client's evaluation of Mr. Danaher or his integrity.

OTHER BUSINESS ACTIVITIES

Mr. Danaher is not actively engaged in any other investment-related business or occupation.

ADDITIONAL COMPENSATION

Mr. Danaher does not receive any additional compensation for providing advisory services to any party who is not a client of FMR.

SUPERVISION

Rakesh Gupta, Chief Investment Officer, is responsible for supervising Mr. Danaher's advisory activities and can be reached at 603-791-3087. Mr. Gupta meets regularly with Mr. Danaher to evaluate the performance of his account(s) and to review the strategies employed since the last review period. Multiple data sources are available to Mr. Gupta to facilitate his ongoing monitoring of Mr. Danaher's portfolio management decisions and account performance.

REQUIREMENTS FOR STATE-REGISTERED ADVISERS

FMR is not registered with any state securities authority.

¹ The Chartered Financial Analyst (CFA) designation is offered by the CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management and security analysis, and must also have at least 4,000 hours of qualifying work experience completed in a minimum of 36 months, among other requirements. CFA® is a trademark owned by CFA Institute.



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September 1, 2023

This brochure supplement provides information about Fabian Weinstein-Jones that supplements the Fidelity Management & Research Company LLC (“FMR”) brochure. You should have received a copy of that brochure. Please contact FMR’s Compliance Officer if you did not receive FMR’s brochure or if you have any questions about the contents of this supplement.

EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE

Fabian Weinstein-Jones, born in 1983, is a portfolio manager on the Personal Bond Management team for FMR and its affiliates. Prior to rejoining Fidelity in 2021, Mr. Weinstein-Jones was a senior mortgage analyst at Bank of New York/Mellon. Prior to his role at Bank of New York/Mellon in 2018, Mr. Weinstein-Jones was a research analyst in the Fixed Income division at Fidelity Investments. He has been in the financial industry since 2005.

Mr. Weinstein-Jones earned his bachelor of science degree in management, with a concentration in finance, from the Massachusetts Institute of Technology. He is also a Chartered Financial Analyst (“CFA”) charterholder¹.

DISCIPLINARY INFORMATION

There are no legal or disciplinary events that are material to a client’s or prospective client’s evaluation of Mr. Weinstein-Jones or his integrity.

OTHER BUSINESS ACTIVITIES

Mr. Weinstein-Jones is not actively engaged in any other investment-related business or occupation.

ADDITIONAL COMPENSATION

Mr. Weinstein-Jones does not receive any additional compensation for providing advisory services to any party who is not a client of FMR.

SUPERVISION

Rakesh Gupta, Chief Investment Officer, is responsible for supervising Mr. Weinstein-Jones’ advisory activities and can be reached at 603-791-3087. Mr. Gupta meets regularly with Mr. Weinstein-Jones to evaluate the performance of his account(s) and to review the strategies employed since the last review period. Multiple data sources are available to Mr. Gupta to facilitate his ongoing monitoring of Mr. Weinstein-Jones’ portfolio management decisions and account performance.

REQUIREMENTS FOR STATE-REGISTERED ADVISERS

Neither FMR nor FIAM is registered with any state securities authority.

¹ The Chartered Financial Analyst (CFA) designation is offered by the CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management and security analysis, and must also have at least 4,000 hours of qualifying work experience completed in a minimum of 36 months, among other requirements. CFA® is a trademark owned by CFA Institute.